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Eight human skulls in a dung heap and more

Nieuwhof, Antje

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Document Version

Publisher's PDF, also known as Version of record

Publication date:

2015

[Link to publication in University of Groningen/UMCG research database](#)

Citation for published version (APA):

Nieuwhof, A. (2015). Eight human skulls in a dung heap and more: Ritual practice in the terp region of the northern Netherlands, 600 BC - AD 300. [Groningen]: University of Groningen.

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Eight human skulls in a dung heap and more

Ritual practice in the terp region of the northern Netherlands

600 BC - AD 300

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VOLUME 29

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Prof. dr. S. Voutsaki

Groningen Institute of Archaeology
Poststraat 6
NL-9712 ER Groningen
the Netherlands
gia@rug.nl
Website
www.gas.ub.rug.nl

Layout: author

Cover design: author and ColtsfootMedia, Nynke Tiekstra, Rotterdam

Production: Roelf Barkhuis, www.barkhuis.nl

Financial support for this publication was generously provided by:

- Stichting Nederlands Museum voor Anthropologie en Praehistorie
- Vereniging voor Terpenonderzoek

ISBN (dissertation edition) 9789036778282

ISBN (digital edition) 9789036778275

The commercial edition of this thesis will be published with ISBN 9789491431845.

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rijksuniversiteit
groningen

Eight human skulls in a dung heap and more

Ritual practice in the terp region of the northern Netherlands,
600 BC - AD 300

Proefschrift

ter verkrijging van de graad van doctor aan de
Rijksuniversiteit Groningen
op gezag van de
rector magnificus prof. dr. E. Sterken
en volgens besluit van het College voor Promoties.

De openbare verdediging zal plaatsvinden op

maandag 8 juni 2015 om 12.45 uur

door

Antje Nieuwhof

geboren op 5 november 1956
te Alkmaar

Promotores

Prof. dr. D.C.M. Raemaekers

Prof. dr. S. Voutsaki

Prof. dr. J. Bazelmans

Copromotor

Dr. E. Taayke

Beoordelingscommissie

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Prof. dr. R.H.A. Corbey

Whereof one cannot speak, thereof one must be silent.

Ludwig Wittgenstein
Tractatus Logico-Philosophicus 1922, proposition 7

*History makes little sense without prehistory,
and prehistory makes little sense without biology.*

Edward O. Wilson
The meaning of human existence 2014, p. 9

To Rutger,
my husband and great sparring partner

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1

Introduction

1.1 A curious find

The terp of Englum is one of a series of artificial dwelling mounds on the left bank of the river Reitdiep, in a former salt marsh region in the northwestern part of the most northern Dutch province of the Netherlands: Groningen. A large part of this terp was destroyed during the 1920s, owing to commercial quarrying of the fertile terp soil. Only about half of the original terp remained. In the year 2000, the authorities of the province of Groningen decided to restore the terp of Englum to its original size, using dredging spoil from the nearby river. Groundwork for this project would destroy any remaining archaeological features in the levelled area, so it was decided that an excavation was to be carried out prior to restoration.

In the late summer of 2000, a group of around 25 students, volunteers and staff of the Groningen Institute of Archaeology (University of Groningen) assembled at Englum to excavate what was left of the archaeological record after levelling. That turned out to be rather more than was expected. At the foot of the steep side of the remainder of the terp, substantial terp layers were still intact, containing features from all habitation periods. One of the features was a large dung heap. Potsherds in it demonstrated that it was to be dated to the pre-Roman Iron Age. The first curious thing in this dung heap were spots of ashes. Then a human skull was found, a pile of animal bones, and then several more human skulls, eight in total. The finds seemed to have been placed in a circle.

The find was curious and puzzling and immediately gave rise to more or less serious interpretations. There was talk about 'the headhunters of Englum', or the skulls were said to be thrown on the dung heap after clearing graves. No one could believe that the skulls had been part of a ritual, since they were found in a dirty dung heap. None of the participating archaeologists had seen anything like it before or knew of any parallels elsewhere. The finds could not be compared to normal burial customs, since these are not hardly known in the terp region.

Since the analysis of the excavation's results did not fit the schedule of any of the participating archaeologists, the finds and documentation set were stored for the time being. The skulls were sent to a physical anthropologist, who wrote a small report, and then found another job. In 2004, I accidentally found the skulls in good condition on a shelf in the office of his successor. As a 4th-year student with an interest in the archaeology of the terp region, I had been in charge of the daily management of

the excavation in Englum. When I retrieved the skulls, I was planning a PhD-research project that would connect the two studies I had done, theology and archaeology. I decided that the skulls from Englum, which I thought were the remainders of a ritual, would be perfect as a starting point for the study of ritual practice in the past, in particular in the terp region during the first phases of habitation, the pre-Roman and Roman Iron Age.

1.2 Research questions

Although the practicalities of life in the terp region in the pre-Roman and Roman Iron Age are rather well known, the study of the remains of rituals in the terp region is a largely unexplored area. Even common burial customs, though an important area of attention in archaeology, are hardly known. A number of associated research questions naturally emerge:

- Can we distinguish different types of ritual in the archaeological record of the terp region, and if so, what are these types?
- What role did ritual practice play in daily life?
- What role did ritual practice play in social contacts?
- What was the common way to deal with the dead and what was the role of human remains, such as the skulls found in Englum, in ritual practice?
- Can we say something about beliefs or religion or cosmological views on the basis of the remains of rituals that can be identified?
- Can we trace changes in ritual practices through time and relate them to social, cultural, political or environmental changes?

These questions can, of course, not be answered without taking the specific context of the finds into consideration.

1.3 The research area and period

Ritual practice is not an isolated phenomenon, but functions in the contexts of society, culture and the natural environment. A thorough description of the natural, social, political and cultural contexts of the society that is being studied, in this case the population of the terp region in the northern Netherlands during the pre-Roman and Roman Iron Age, therefore is an important building block of a study of ritual. It provides an archaeological and chronological framework against which the finds can be assessed.

1.3.1 Archaeological framework

The terp region of the northern Netherlands (fig. 1.1) is a very uncommon, even extreme, natural environment from the perspective of human occupation; at least it was before dikes were built in the Middle Ages. Despite the fact that the salt marsh area was frequently flooded because it was open to the sea, the area was colonized around the 6th century BC. The colonists adapted to this marine environment by building their houses on artificially raised areas, known as platforms in modern terp archaeology. The population expanded and increased, while continually adapting to this dynamic natural environment. The early platforms developed into large, artificial dwelling mounds, which are called *terpen* (plural) in the province of Friesland and *wierden* (plural) in the province of Groningen. Since *terp* and the English plural *terps* are the terms commonly used in international publications, they will be used here for the artificial dwelling mounds of both Friesland and Groningen.

After centuries of prosperity, the terp region was virtually abandoned at the end of the Roman Iron Age. During the 4th century AD, only a very small, reduced population lived in the area. In the 5th century AD, Anglo-Saxon newcomers with a new material culture and new customs settled in the area. From then on, the population slowly increased again. The 4th century AD hiatus in the habitation history is a natural boundary of the research period of this study. The research period thus covers 900 years, starting with the colonization of the marsh area, and ending when it was abandoned, ca. AD 300.

The archaeology of the terp region is a specialized research area. Excavating the complicated stratigraphy of terps requires other techniques than excavating settlements on the sandy soils inland. Preservation conditions are also very different. Terp archaeology is wetland archaeology, with excellent preservation of organic material, whereas in the dry, sandy, acidic soils of the Pleistocene inland areas, organic materials have usually disappeared. That implies that it is difficult to compare

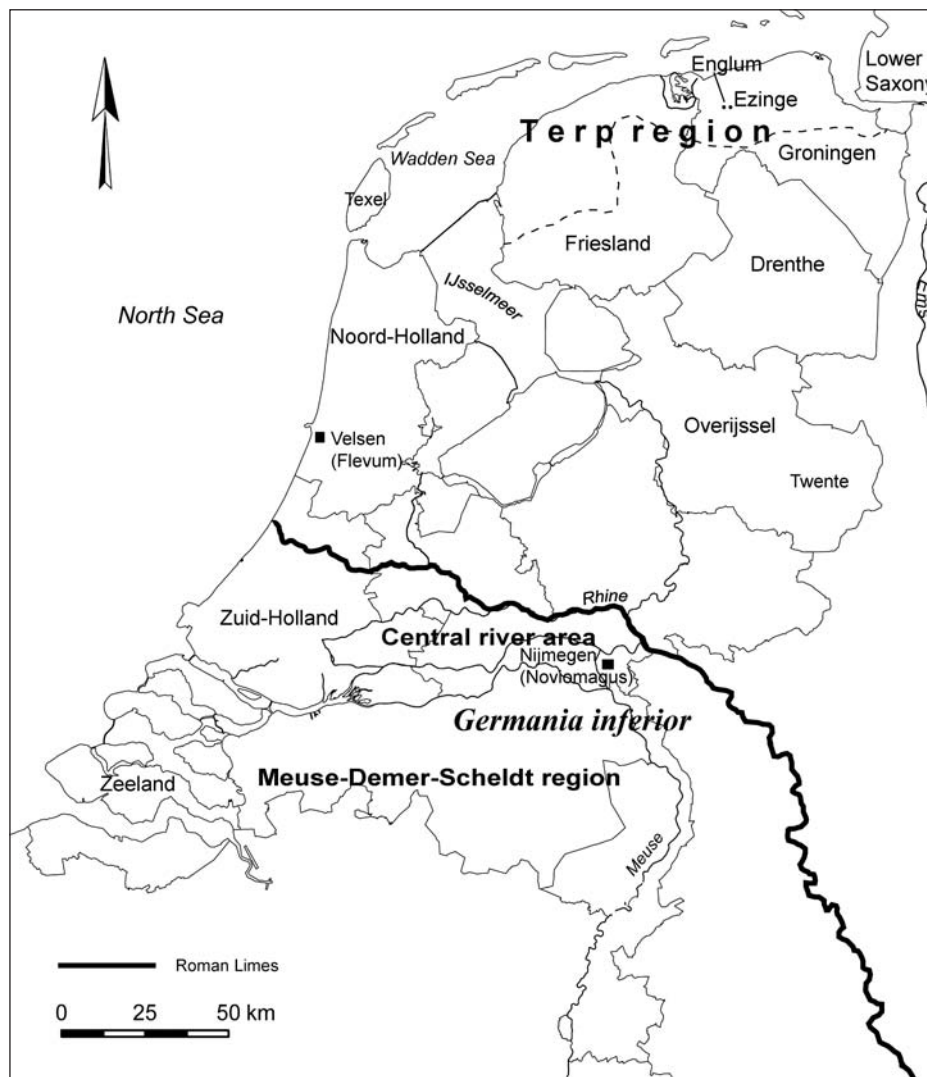


Fig. 1.1 Map of the present geography of the Netherlands with provinces, some Roman names and research areas mentioned in the text.

the results of terp excavations with the results of excavations of inland settlements. The research area of this study is therefore limited to the terp region of the present provinces of Friesland and Groningen.

The archaeology of the terp region has a history of its own. Large-scale destruction of the archaeological record of this area, which occurred in the second half of the 19th century and the first half of the 20th century, did not only have negative effects. It also acted as an early incentive of archaeological research and was accompanied by the collection of a vast corpus of data. These data have enabled early and later archaeologists to form a fairly reliable image of the habitation history of the entire region.

The chapters of Part 1 of this book are devoted to terp archaeology and to the archaeological and historical context of the finds that are the subject of this study. These chapters are elaborate, because terp archaeology and its results are not very well known outside the small circle of archaeologists who are dealing with it. Without a thorough understanding, not only of life in this area in the past, but also of the history of research, the remains of rituals that were identified here cannot be understood

well. The research history is a major factor in the quality and quantity of the available archaeological sources from this area. Besides archaeological sources, historical sources and their use are discussed chapter 2. The results of terp archaeology are covered in chapters 3 and 4. They are dealing with the occupation history, with daily life in the terp region, and with what is known of social and of spiritual life, including ritual practice and burial customs. The last chapter of Part 1, chapter 5, provides an impression of ritual practice and of burial customs in areas surrounding the terp region: northwestern Germany, and the eastern and western regions of the Netherlands.

1.3.2 Chronological framework

Some attention needs to be paid to the chronological framework of this study. In Dutch archaeology, the pre-Roman Iron Age is usually just called Iron Age; this period is divided in an early, middle and late Iron Age. The Iron Age is followed by the Roman Period, which is also divided in three. To avoid confusion, for instance with Scandinavian usage, the Iron Age before the beginning

Central Europe	Northern Netherlands			Scandinavia
			900 AD	
	EMA2	Early Middle Ages: Carolingian Period	800	Viking Period
			700	
	EMA1	Early Middle Ages: Merovingian Period	600	Vendel Period / Late Germanic Iron Age
			500	
	MP	Migration Period	400	Migration Period / Early Germanic Iron Age
			300	
			(250) 300	Late Roman Iron Age
	LROM	Late Roman Iron Age	200	
			100 (150)	
	MROM	Middle Roman Iron Age	100 (150)	Early Roman Iron Age
			0	
	EROM	Early Roman Iron Age	0	
La Tene D	LPROM	Late pre-Roman Iron Age	100	Late pre-Roman Iron Age
La Tene C			200	
La Tene B			300	
La Tene A	MPROM	Middle pre-Roman Iron Age	400	Early pre-Roman Iron Age
Hallstatt D			500	
Hallstatt C	EPROM	Early pre-Roman Iron Age	600	
			700	
Hallstatt B		Late Bronze Age	800 BC	Late Bronze Age

Table 1.1 Chronology of the northern Netherlands with abbreviations used in this study. For comparison, the chronologies of Central Europe and Scandinavia are included.

of our era will be called *pre-Roman Iron Age* here, while the Roman Period will be referred to as *Roman Iron Age*.

Within this basic framework, the chronology of the northern coastal area slightly differs from other Dutch regions. The chronology of the northern coastal area is not based on La Tène periods or events related to the Roman Empire, but on regional, partly radiocarbon dated pottery series. All pottery from the pre-Roman Iron Age and the far majority of pottery from the Roman Iron Age in the terp region is hand built. Regional variety and shapes of pots and rims have been assembled in a comprehensive chrono-typology by Ernst Taayke.¹ This typology shows that repertoire changes occur ca. 500/400 BC, 200 BC, the beginning of our era, AD 100/150 and AD 250/300. In this study, periods follow pottery-phases.

At the end of the Roman Iron Age, from ca. AD 400 or perhaps somewhat earlier, a new pottery style, the 'Anglo-Saxon' style, is introduced. This traditionally marks the beginning of the Migration Period, and this name will be used here despite objections that have been forwarded against its use.² The transition from the end of the middle Roman Iron Age to the early Middle Ages is a confusing episode in the habitation history of the coastal area; migrations almost certainly occurred in this period. The use of Migration Period reflects some of the uncertainties and does not lead to inaccurate assumptions in this case. The early Middle Ages start with the Merovingian period (ca. 500-700). The resulting chronology, including the abbreviations used in tables throughout this book, is shown in table 1.1.

1.4 The study of ritual

In archaeology, the study of ritual practice in the past has for a long time been considered a tricky subject that is actually asking too much of the available data. That was certainly the case in the archaeology of the northern Netherlands until recently, but it applies to a far wider area. As Richard Bradley put it: "Deposits that might have appeared enigmatic were explained in common-sense terms, and until recently any interpretation that relied too heavily on ideas of 'ritual' activity was regarded with suspicion."³

Insofar as ritual was taken seriously as a meaningful category in the interpretation of finds in archaeology, it was hampered by two major weaknesses. These weaknesses were diagnosed already in the early 1980s. In 1982, Ian Hodder noticed that "archaeologists use the term ritual for the two closely connected reasons that what is observed is non-functional and is not understood."⁴ The second weakness was articulated by Bryony Orme: "the

real abuse [of the term ritual] has been to use the word without exploring its meanings, to use it as a final explanation of the data when it should have been no more than an initial classification."⁵ Apparently, it is hard to find positive criteria to identify the remains of rituals, and if they are identified, it is thought that the designation ritual is a sufficient interpretation in itself.

These objections to the use of ritual as an interpretative category were made over 30 years ago. Still, despite all the attention paid to ritual in the archaeology of the last decades in northwestern Europe⁶, the same weaknesses still apply to archaeology today. Although archaeologists do not hesitate to use ritual as an interpretative category anymore, the identification of ritual is still often based on negative criteria ("we don't know what else it can be"), and 'ritual' is still thought to be a sufficient explanation in many cases. Even in 2008, one of the sessions at the 30th conference of the Theoretical Archaeology Group in Southampton, titled *Beyond Meta-level Explanations of Ritual*, focused on the need not to settle for the interpretation that a certain finds assemblage is ritual, but to go further and to explore why and how a ritual was actually performed on the basis of the material evidence.⁷

Whoever wants to study the role of ritual in any society in past or present needs to know what is meant by the term *ritual*, as it is often misunderstood. For instance, ritual practice is often implicitly or explicitly considered an aspect of religion, ignoring that ritual does not need to have a religious meaning. It is also often seen as a separate activity that is not directly connected to daily affairs, but ritual can often not be separated from other, practical and functional aspects of everyday life.⁸ And ritual is often thought to involve special people, special places or a special material culture, rather than ordinary people, places and objects.⁹

For the study of ritual practice, a theoretical framework that covers the nature of ritual and its role in human life, as well as the variability of ritual phenomena, is indispensable. Also needed are positive criteria that help to identify the remains of rituals in the archaeological record, rather than the negative criteria that are commonly applied. Religious studies and social anthropology provide those who are interested in ritual practice with many theories and usable insights, but it is impossible to make an informed choice from this corpus of -isms without a critical attitude and without a basic comprehension of the nature of ritual. That also is the case for the ideas

1 Taayke 1996a.

2 Bazelmans *et al.* 2009.

3 Bradley 1990, 16.

4 Hodder 1982, 164.

5 Orme 1981, 218.

6 In the Netherlands e.g. Derks 1998; Fontijn 2002; Gerritsen 2003; Therkorn 2004; Groot 2008; Kok 2008; Thilderkvist 2013.

7 The session was organized by James Morris and Clare Randall.

8 Hill 1995; Brück 1999a; Bradley 2003; 2005; cf. Fogelin 2007.

9 Bradley 2003, 13.

about ritual that circulate within the archaeological discipline.

For the purpose of this study, I felt that, if I wanted to make a contribution to the study of ritual practice in the past, I should not settle for standard theories, but assemble a personal and integrated theory on ritual. Such a fresh theory can serve as a framework that helps to identify and interpret the remains of rituals in the past. In Part 2 of this study, my personal theory on ritual is expounded. It is based on insights from cognitive and evolutionary psychology, as I think that ritual and also religion have their basis in the human mind. That position has coloured this personal theory of ritual, and also the analysis and interpretation of the finds. It is concerned with the role of ritual in human experience, rather than with, for instance, ritual as a reflection of the structures of the social order. Social mechanisms and structures were of course not ignored if the opportunity to learn more about them presented itself. The chapter on the theory of ritual itself (chapter 6) is followed by two chapters on aspects of ritual practice, diversity and meaning, that are important for the interpretation of rituals (chapters 7 and 8). A chapter on the application of this theory in archaeology, and on the identification of the remains of rituals in the archaeological record, in particular in the research area, completes this part (chapter 9).

1.5 Method

The initial scheme of this study was to make an inventory of all finds assemblages¹⁰ from the terp region that can be identified as the remains of rituals, and then order and interpret them. It soon became clear that this not only was an impossible task, but also a naïve idea. In the first place, the number of finds assemblages that might be related to ritual practice was far too large for an inventory. In the second place, information on the context and completeness of most of these finds was not available. Most finds date from the period of quarrying, when many terps were completely or partially destroyed. The vast number of ‘goodies’ in archaeological collections is therefore not usable as a starting point for the study of past ritual practices, although many of these objects may well have been deposited during a ritual of some sort.

The skulls found in Englum offered the opportunity to use a case study in order to better understand ritual practices (chapter 10). Not only were these skulls a peculiar case which had not been solved yet. As a participant in the excavation, I also had first-hand information on the contexts and circumstances of these and other finds at my disposal.

Case study research in the first place involves a thorough description of a certain case, and in the second place

reflection on the case with the purpose of interpreting it.¹¹ However, that is not the sole purpose. A case study is usually intended as a tool, which is not only aimed at the interpretation of the case itself. The interpretations and causes of a specific case are applicable to other cases too, or lead to new hypotheses or models that can be tested. The Englum case study has a dual purpose; it not only means to explain the curious finds from this specific terp, but it is also meant to generate an understanding of the causes and meanings of ritual practice and its remains in the archaeological record that are applicable in a far wider area.

To what extent the conclusions from the Englum case study are really applicable elsewhere, can only be assessed if we can test them in other situations. An opportunity for such a test presented itself in the form of a research project on the finds from another excavation, that of the terp of Ezinge only 2 km from Englum. The terp of Ezinge had been excavated in the 1920s and 1930s by one of the founding fathers of terp archaeology, Albert Egges van Giffen. This research project was funded by the *Netherlands Organisation for Scientific Research* (NWO), and was executed in 2011. It resulted in an overview of all finds and features in a terp settlement from the same period as Englum.¹² Many of these finds and features were identified as the result of ritual practices, following the criteria of chapter 9. These results serve as a second case study, to which the conclusions based on the Englum case study can be compared (chapter 11).

The case study of Ezinge differs from the case study of Englum in several respects. While the Englum case study is primarily a narrative, the case study of Ezinge is characterized by a quantitative approach, which is possible because of the large number of finds. Ezinge is not only a test case for the conclusions from the Englum case, but provides valuable new insights on changing ritual practices. While Englum allows for close reading of a small number of features and associated finds, Ezinge allows for an analysis of ritual practices in a settlement. As a case study, it may be used to understand ritual practice in settlements in the terp region and elsewhere. The two cases of Englum and Ezinge are complementary in many ways.

The danger of a case study is that it is primarily qualitative research and therefore tends to be subjective. A rich description, a detailed narrative, is always part of it¹³; that not only applies to Englum, but also to Ezinge. In the Ezinge case study, the quantitative approach is meant to bring some order in the data, but it remains subordinate to the narrative. The quality and usability of a case study depend on the thoroughness and observational qualities of the researcher in the narrative part, and on his or her

¹⁰ *Finds assemblage* as used in this study refers to all the finds from one feature.

¹¹ The following is largely based on Stake 1995.

¹² Nieuwhof 2014a.

¹³ Flyvbjerg 2006, 237ff.

intuition in the reflexive and interpretative part. In the Englum and Ezing case studies, this potential danger is obviated by a description and analysis that is as thorough and transparent as possible, so that the reader has the same information as the researcher and can form his or her own opinion.

The use of human remains is a conspicuous part of ritual practice in both case studies. To provide these practices with a framework, burial customs and the use of human remains in the terp region are dealt with in a separate chapter. In this chapter (12), an inventory of all human remains from the terp region forms the basis of an analysis of burial customs and of the use of human remains in ritual practice in this area.

The case studies and the analysis of human remains, chapters 10, 11 and 12, together form Part 3 of this study. The associated data sets are contained in three appendices, A, B and C. In Part 4, the conclusions that emerge from these chapters are combined in an account of ritual practice in the terp region in chapter 13. In the short final chapter, some recommendations are made in view of excavation practice (chapter 14).

1.6 The human nature bias

One final note needs to be made in this introduction, before we can start with the ins and outs of terp archaeol-

ogy. During this research, I noticed that interpretations of ritual deposits are often biased by preconceptions of which researchers, including myself, are not always fully aware. They concern the use of 'dirty' materials, the use of materials with or without an economic value, and the use of human remains. In particular the latter category is important in this study, since a major part of it is aimed at a better understanding of human remains. Discussions with other researchers and responses to papers I presented made me aware that my insights were not accepted by some colleagues, because of the gap between our views on human nature. Such implicit views influence the interpretation of human remains considerably. The preconceptions that stem from a researcher's view on human nature therefore became a special area of attention. The interpretative bias caused by these preconceptions is termed the *human nature bias* in this study; the concept is explained in chapter 8.

I gradually learned that, in order to avoid misunderstandings and rejection based on one of the sides of the human nature bias, I would need to make my arguments very clear. The human nature bias thus heavily influenced the direction this study has taken, starting with the description of terp archaeology in the chapters of Part 1.

Part 1

The archaeological context

Part 1 is meant to provide a framework against which the finds from the terp region discussed in Part 3 can be assessed. It starts with the history of terp archaeology, because that history has influenced the representativeness of the finds to a considerable extent. This opening chapter also discusses written sources and the information that can be derived from it (Chapter 2).

In chapter 3, the results of terp archaeology with respect to the occupation history and the practical aspects of living in the terp region are set forth. Chapter 4 goes into more elusive aspects of human life in the past in the research area, and presents and discusses the information that we have and the theories that exist on social life and organization and on religion and ritual practice, including burial customs.

Part 1 is concluded with an overview of ritual practice in areas surrounding the terp region, in chapter 5.

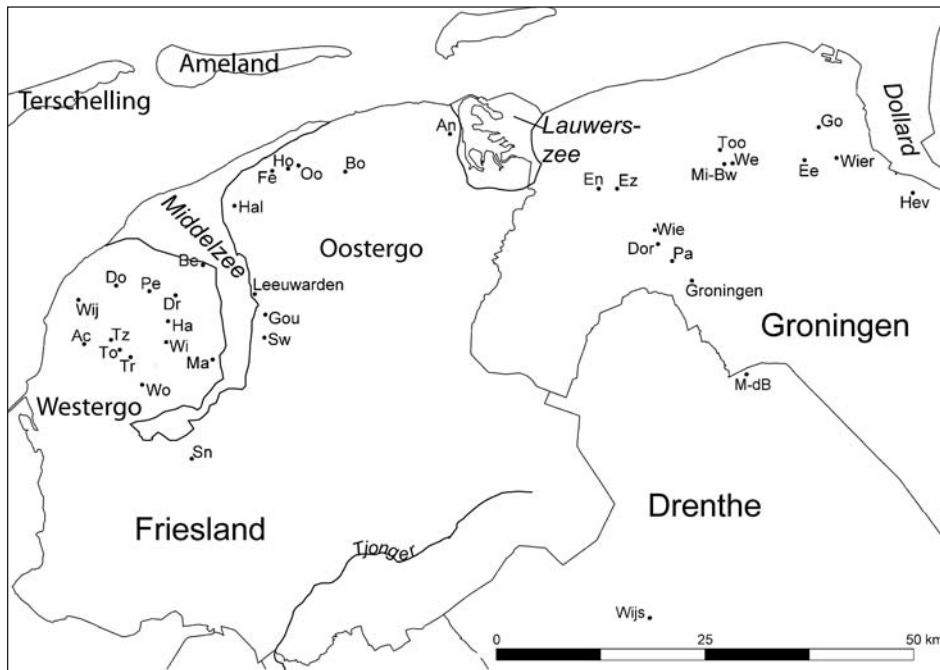


Fig. 2.1 The northern Netherlands with names of settlements mentioned in the text. Abbreviations: Ac: Achlum; An: Anjum; Be: Beetgum; Bo: Bornwird; Do: Dongjum; Dor: Dorkwerd; Dr: Dronrijp; Ee: Eenum; En: Englum; Ez: Ezinge; Fe: Ferwerd; Go: Godlinze; Gou: Goutum; Ha: Hatsum; Hal: Hallum; Hev: Heveskesklooster; Ho: Hogebeintum; Ma: Mantgum; M-dB: Midlaren-de Bloemert; Mid-Bw: Middelstum-Boerdamsterweg; Oo: Oosterbeintum; Pa: Paddepoel; Pe: Peins; Sn: Sneek; Sw: Swichum; To: Tolsum; Too: Toornwerd; Tr: Tritsum; Tz: Tzum; We: Westerwijtwerd; Wi: Winsum; Wie: Wierum; Wier: Wierhuizen; Wij: Wijnaldum; Wijs: Wijster; Wo: Wommels.

2

Terp archaeology and the use of historical sources

2.1 Introduction

What we know about the occupation history of the coastal area of the northern Netherlands and of the life of its inhabitants during the pre-Roman and Roman Iron Age mainly comes from archaeological sources. The archaeology of the area has a history of its own. Without knowledge of this history, the results of archaeological research in this area cannot be valued properly. The first part of this chapter is therefore intended to elucidate the history of the archaeology of the area, so that its results can be understood against their historical background.

Historical sources have been used to interpret archaeological finds and features from the beginning of terp research. These sources are essential when studying relations with the Romans, or later Christianization, but they are often used to learn about many other aspects of life of the inhabitants of the coastal area as well. What we know about ethnic identity of the peoples that inhabited Europe in the pre-Roman and Roman Iron Age comes from few historical sources. Although these sources undoubtedly provide us with valuable information, it is clear that not everything in the texts should be taken at face value. The second part of this chapter presents the historical information on names and events that can be derived from the texts, after discussing some of the problems that are connected to their use.

2.2 History of terp archaeology

2.2.1 Pioneers¹

The landscape of the coastal area of the northern Netherlands (the provinces of Groningen and Friesland) is the location of the dwelling mounds, which are known as terps. The archaeology of this region is terp archaeology. Well into the 19th century, there were doubts as to the nature of these mounds. Many terps were several metres high, so that the landscape appeared slightly hilly (fig. 2.2). The artificial character of the terps was not acknowledged by everyone.² In 1852, G. Acker Stratingh, a physician from a small town in the province of Groningen, gave an account of around 100 small excavations that he and his colleague dr. R. Westerhoff had carried out in terps in Groningen as well as in Friesland since 1827. Based

on the numerous artefacts that were found in the terps, he concluded that there was no doubt that these mounds had been made by the early inhabitants of the coastal regions.³ During their investigations, Acker Stratingh and Westerhoff had also collected data for a geological map of the province of Groningen. This map, which was completed in 1837 by Acker Stratingh and Smit van der Vegt, not only showed soil types and watercourses, but also the location of terps and their heights. In the province of Friesland, Eekhoff published a series of maps forming a topographical atlas of this province with all terps that were known to him, between 1849 and 1859. The maps of Acker Stratingh and Eekhoff constitute the basis of all later terp research.

2.2.2 A destructive phase

It was not only discovered that the terps were man-made dwelling mounds, but also that the soil of terps, consisting mainly of clay, dung and organic waste, was highly fertile and could be used to improve the fertility of sandy and peaty soils. This discovery proved to be extremely profitable for the owners of terps. From ca. 1840 until the middle of the 20th century, many terps wholly or partly disappeared because of quarrying of the fertile terp soil (fig. 2.3).⁴ The soil was transported inland through an extensive network of canals that existed in the northern Netherlands already in the 17th century.⁵

The actual number of commercially levelled terps is not known; the most accurate estimate is made for the province of Groningen. Klok counted 268 wholly or partly levelled terps out of 587 known terps in Groningen (46%).⁶ In the province of Friesland, the number of terps is, and was, considerably higher, though not known precisely. In the first inventory by Herre Halbertsma made in 1944, 697 terps (73%) were counted as wholly or partly levelled, out of a total of 955.⁷ Halbertsma's total number of terps, however, is too low since he only counted terps that were still visible in the landscape.

The actual number of terps (levelled or complete), not only in Friesland but also in Groningen, is even higher than these numbers suggest. New terp locations are still discovered now and then. These are, of course, not the

1 For the history of terp research, see also Jensma & Knol 2005 and Knol 2005.

2 Cf. Waterbolk 1970.

3 Acker Stratingh 1852, 200-201; Reinders 2001.

4 Halbertsma 1963, 3ff; Arjaans 1991.

5 Vollmer *et al.* 2001, 243.

6 Klok 1979, 460.

7 Halbertsma 1963, 265.



Fig. 2.2 The terp of Ezinge in 1772; water colour by Aart Schouman (1710-1792). Groningen Museum, photo John Stoel.

terps that are easily visible in the landscape, but terps that were left quite early in their history and have since been covered by sediment, or terps that had been levelled before being noticed by an inventory-maker.⁸ The number of terps in both provinces prior to commercial quarrying, including small terps that are invisible because they are covered by younger sediment, may be well over 2000.

Commercial quarrying, although incredibly destructive to the archaeological record, at the same time made an important contribution to archaeology as a science in the Netherlands. The many finds stimulated early terp archaeology. Moreover, a growing interest in the relation between the location of terps and the landscape, which had started with the maps of Acker Stratingh and Eekhoff, kindled an interest in the relation between human occupation and the landscape in general. It influenced the direction, not only of terp archaeology but also of Dutch archaeology at large, to the present day.

2.2.3 The collection of objects

At the time commercial quarrying of the terp soil started, hardly anyone was interested in the objects and bones that were uncovered. They were often just thrown away; many small objects were shipped with the terp soil and spread over inland fields, where they can still be

found (sometimes to the confusion of archaeologists). In the course of the 19th century, however, these objects started to attract attention, first of individuals, but soon also of regional scientific societies. These societies formed important meeting places for members of the intellectual elite with an interest in history and science. In Groningen, the *Natuur- en Scheikundig Genootschap* ('Natural Sciences Society'), founded in 1801, came to be important for terp research. In Friesland, the *Friesch Genootschap voor Geschied-, Oudheid- en Taalkunde* ('Frisian Society for History and Culture'), was founded in 1827. Members of these societies started to collect and study finds from terps. This resulted in large collections, which led to the foundation of provincial museums at the end of the century: the Frisian Museum in Leeuwarden and the Groningen Museum in the city of Groningen.⁹ Some specific find categories were collected and studied separately; an important example in the context of this study is the work of the physician Folmer, a member of the 'Committee for the Ethnography of the Netherlands', who collected human skulls from terps in order to study racial differences.¹⁰

The museums pursued an active collection policy, especially the curator of the Frisian Museum, the jurist P.C.J.A. Boeles (1873-1961). He had contacts all over the province, and stimulated those who were involved in

⁸ Such as the Roman period terp of Mantgum-Hoxwier (Nieuwhof & Prummel 2007), or a number of settlement sites discovered near Goutum (Exaltus 2002).

⁹ Jensma & Knol 2005; Verhart 2012; 2013.

¹⁰ Knol 1986a; Jensma 2003.



Fig. 2.3 Commercial quarrying in the terp of Eenum (province of Groningen), 1910. Photo RUG/GIA.

terp-quarrying to collect objects and hand them over to the Frisian Museum. Boeles wrote catalogues and other publications about the finds from Frisian terps and became a leading expert on the material culture of the terp region. His work is read even now, especially his magnum opus *Friesland tot de elfde eeuw* ('Friesland until the 11th century').¹¹

Although the provincial museums thus acquired large collections of finds from the early commercial quarrying phase, it does not necessarily follow that the collections are representative for what can be found in terps, or that they represent the entire terp area. The composition of the collections was determined by many factors, such as:

- the courtesy of terp-owners and contractors;
- the perceptivity of local workers;
- intellectuals with an interest in terps living in the vicinity of quarried terps;
- the activities of scientific societies and the energy of individual researchers;
- the accessibility of the terp on foot, by bicycle or by bus or train;
- preferences for certain objects (e.g. Roman imports) at the cost of others.

Moreover, not all objects that were collected, ended up in a museum collection. Many artefacts were sold to visitors; this was even recommended to day trippers in a contemporary article on the Groningen terp region.¹² Thus, the find material of entire terps is missing in mu-

seum collections. Many terps are represented by a few objects, but only a small number of terps is represented by a number of finds that is large enough to suggest a thorough local collection policy.

Among the finds that were collected are many complete pots, but relatively few fragments; urns have usually been emptied of their cremation contents. Easily recognizable imports such as *terra sigillata* are certainly over-represented. Human skulls were sometimes collected but hardly any other human bones, since these were not considered informative. Animal bones were also collected selectively, with a preference for worked bone. Precious metal objects did not always reach a museum collection; finds were sometimes even sold to jewellers for remelting.¹³ Despite this considerable bias, the collected finds are at the basis of terp research. Several important studies consist of inventories of these early, unstratified finds, trying to make the most of them and thus undo some of the damage done to the archaeological record by quarrying.¹⁴ Although these studies are valuable and widely used, they do need to be complemented by the results of scientific excavations.

¹¹ Boeles 1927; 1951.

¹² Blaupot ten Cate 1916, 65.

¹³ For example, a treasure of over 3 kg of silver (including worked Roman silver bowls and plates), found in Winsum-Bruggeburen (Friesland), was largely sold to a jeweller (Boeles 1951, 142).

¹⁴ Roes 1963 (worked animal bone); Miedema 1983; 1990; 2000 (inventories of finds from the province of Groningen, combined with an extensive coring programme); Knol 1993 (early medieval finds and sites); Taayke 1996a (indigenous pottery, including finds from later excavations); Erdrich 2001b (Roman imports).



Fig. 2.4 Well preserved remains of houses from the middle pre-Roman Iron Age in Ezinge (house 2, 3 and 4, see Chapter 11). Photo RUG/GIA.

2.2.4 From finds to context

In the early 20th century, it had become clear that not only ancient objects, but also the context of finds might be interesting, although the understanding and recognition of features in terps remained difficult for a long time. Many intellectuals were worried about the rapid disappearance of terps because of quarrying. A better understanding of the terps was required before they would all be destroyed. In 1905, the *Friesch Genootschap* appointed an observer, J.P. Wiersma, at the quarrying activities in the high terp of Hogebeintum. Supervised by Boeles, Wiersma made notes of the location of conspicuous finds, including their height above sea level; he also recorded the finds from the early medieval cemetery that was found during quarrying.¹⁵

In 1908, the *Centraal Bureau voor de kennis van de provincie Groningen en omgelegen streken*, a subdivision of the Natural Sciences Society, appointed a biology student, Albert van Giffen, to document archaeological features during commercial quarrying in the terp of Dorkwerd,

near the city of Groningen.¹⁶ His description and section drawings were probably inspired by the beautiful section drawings of the terp of Toornwerd, published one year earlier by father and son Elema.¹⁷ Dorkwerd was the start of Van Giffen's career in archaeology. In the years after, he visited many terps that were being quarried, documented what he saw and started a large collection of finds. He also became acquainted with German researchers and visited many *Wurten* (the German equivalent of terps) in north-western Germany. While Boeles became an expert on the material culture of the terp region, Van Giffen was more interested in landscape, ecology and terp structure. He applied what he had learned as a biologist, for instance combining cross- and long-sections of plants, to terps, which proved successful. After 1908, his understanding of the structure and stratigraphy of terps and of their surrounding landscape gradually increased. In 1913, he took his doctoral degree on the German language thesis *Die Fauna der Wurten* ('The fauna of the terps').

¹⁵ Boeles 1906.

¹⁶ Knol 2008.

¹⁷ Knol *et al.* 2008; Elema & Elema 1907.

2.2.5 The start of modern terp research

In 1916, the *Vereniging voor Terpenonderzoek* ('Association for Terp Research') was founded to support Van Giffen's work. Financed by this association, Van Giffen conducted excavations in several terps.¹⁸ These excavations often concerned the last remainders of terps that would soon be levelled completely. The results were published in the annual reports of the association.¹⁹ In 1921, a new institute was founded as part of the University of Groningen: the *Biologisch-Archeologisch Instituut* (now the Groningen Institute of Archaeology). Van Giffen was first made director of BAI, later professor. From the start, terp research was one of the areas of special attention of BAI. The ecological approach remained one of the cornerstones of the institute.

In 1923, the impressive structures that were uncovered during quarrying in the terp of Ezinge caught the attention of Van Giffen. In the years 1923-1930, he studied sections and excavated small areas while commercial quarrying of the terp continued. From 1931 until 1934, commercial digging made way to a large-scale excavation. The excavation attracted much international attention because of the well-preserved organic remains; especially the many impressive remainders of large, 3-aisled farmhouses were striking, unknown until then and, on this scale, unparalleled in Dutch terp-excavations (fig. 2.4). In Ezinge, it became clear that prehistoric houses were not simple huts, but well-built, spacious farmhouses.²⁰ Van Giffen published only some preliminary accounts of the excavation. One of these was an article in *Germania* (1936), with reconstruction drawings of the terp settlement in the salt marsh landscape, which became very influential and created high expectations. The longhouses of Ezinge came to be seen as typical for the terp-region and more in general for northwestern Europe. A full study of the find material and publication of all finds and features was not accomplished by Van Giffen, nor by his successors, although small studies of find categories or new insights in, for instance, chronology have been published since.²¹ Full study of the find material was only accomplished in 2011.²² The results of that investigation, as far as they are relevant to the present research topic, will be discussed in chapter 11.

The results of early Dutch terp-research and of a number of excavations in German *Wurten* were the incentive to the foundation of the *Institut für Marschen-*

und Wurtenforschung (now the *Niedersächsisches Institut für historische Küstenforschung*) in Wilhelmshaven in Germany, in 1938. This institute executed several large-scale excavations in German terps; the complete excavation of the Feddersen Wierde in the 1950s by Werner Haarnagel became most famous.²³ The German excavations broadened the scope of Dutch terp research, and placed its results in a supra-regional perspective.

After Van Giffen retired, the Biological-Archaeological Institute excavated several more terp-sites: Tritsum (1958-1961), Paddepoel (1964), Middelstum-Boerdamsterweg (1970-1973), Heveskesklooster (1982-1988), Oosterbeintum (1988-1989) and Wommels-Stapert (1994).²⁴ Virtually all terp research in this period combined an interest in landscape and ecology with the study of the spatial organization of settlements (as far as this was possible on the basis of the scarce house plans in the terp area). Artefacts other than animal bones and botanical remains were often not studied systematically; some were used to date layers and features or served as illustrations.²⁵

2.2.6 New approaches

In the 1990s, terp research changed quite drastically. There are several reasons for this change. While the interest in ecology and landscape remained vital, other approaches were added. The overviews of Marijke Miedema (especially 1983), Gilles de Langen (1992) and Egge Knol (1993) provided terp research with a firm background. The study of the common indigenous, hand-built pottery by Ernst Taayke resulted in a usable typo-chronology for the most common find category, which made it much easier to date finds and features.²⁶ The influence of other disciplines (social anthropology, philosophy) and of new, international research topics brought fresh insights and research questions, especially on political and social organization and elite networks.²⁷ And finally, to be able to meet the requirements of the Valetta Treaty of 1992, commercial archaeology was introduced into the Netherlands, which entailed a significant increase in the number of excavations.

In 1991-1993, the Frisian terp Wijnaldum-Tjitsma was excavated, induced by the now famous 7th century disc-on-bow brooch that had been found there in the 1950s.²⁸

18 E.g. Wierhuizen 1916-1917; Godlinze 1919; Hatsum 1921-1922.

19 Van Giffen 1917; 1918; 1920; 1922; 1924.

20 Waterbolk 2001.

21 E.g. Van Giffen 1963; Miedema 1983; De Langen & Waterbolk 1989; Waterbolk 1991; Boersma 1999.

22 The Netherlands Organisation for Scientific Research (NWO) awarded a one-year grant to study the find material from Ezinge in 2011 (the so-called Odyssey project "*De grondsporen van Ezinge*", Nieuwhof 2014a).

23 Haarnagel 1979.

24 Paddepoel: Van Es 1970; Knol 1983; Van Zeist 1974. Oosterbeintum: Knol *et al.* 1996. Wommels-Stapert: Bos *et al.* 2000. Middelstum-Boerdamsterweg: Boersma 1983; Van Gelder-Ottway 1988; Van Zeist 1989. Heveskesklooster: Boersma 1988; Cappers 1994.

25 With the exceptions of Paddepoel and Oosterbeintum, see previous footnote.

26 Taayke 1996a. Hand-built is used here in contrast with wheel-thrown, to describe the indigenous pottery that was generally made in a coiling technique.

27 E.g. Bazelmans 1999; cf. Taayke 2008.

28 Besteman *et al.* 1999; Schoneveld & Zijlstra 1999.

The style and craftsmanship of this brooch was quite similar to finds from Sutton Hoo, and it was suggested that Wijnaldum had been an elite or perhaps even a royal residence in the early Middle Ages.²⁹ This excavation was the start of a large regional project (the 'Frisia-project') by the universities of Groningen and Amsterdam.³⁰ The project aimed at understanding the hypothetical position of Wijnaldum as a central place by comparing it to other terp sites in the same region (Westergo) and elsewhere. After excavations in Westergo at Dongjum (1998) and Peins-Oost (1999), the scope of the project was widened to the province of Groningen. In 2000, the terp of Englum in Groningen was excavated.³¹ Although it soon became clear that these excavated terps were of a different character compared to Wijnaldum, they had many interesting features of their own, such as early dikes (Dongjum and Peins) or remarkable ritual deposits (Englum). These finds inspired new research questions. Meanwhile, the question of Wijnaldum as a central place or even a royal residence is still under discussion.³² In present terp research, international elite networks, Frisian kingship and central places are important issues, especially in the work of Johan Nicolay.³³ While the Frisia-project concentrated on the early Middle Ages in particular, the excavations in Winsum-Bruggeburen (1997-1998), Englum (2000) and Leeuwarden-Oldehoofsterkerkhof (2005-2006) drew attention to earlier periods.³⁴

A new approach was also introduced in excavation method, profiting from the damage commercial quarrying had done. During quarrying, terps were not levelled top down in layers; rather, wedge-shaped parts were taken out, leaving so-called *steilkanten* (the escarpments of the terp remainders, which form cross sections through terps) and *terpzolen* (lit. 'terp soles', the deepest layers or features that remained after quarrying). Quarrying did not fully erase all settlement traces from the levelled areas. Even if all terp layers have been dug away, the lower parts of many features (e.g. ditches, pits, wells) may still be *in situ*.³⁵ Efficient excavations, which entail cleaning and documenting escarpments and terp soles, and which do not cause more damage to the terps than already has been done by quarrying, have been carried out since the 1990s.³⁶

29 Besteman *et al.* 1999; Gerrets 1999.

30 Heidinga 1997.

31 Nieuwhof 2008a.

32 Van Es 2001; Bazelmans *et al.* 2002; Taayke 2008; Bazelmans *et al.* 2009.

33 Nicolay 2005; 2006a; 2010a and b; 2014b.

34 Bos *et al.* 1998; Galestin 2000; 2002 a and b; Nieuwhof 2008a; Dijkstra & Nicolay 2008.

35 Bos 1995b.

36 Nicolay 2014a.

2.2.7 Conclusion

From the above, it will be clear that it is important to take the historical background of terp archaeology into account, not only when theories from the past are evaluated, but also when working with artefacts that were found a long time ago, or when old excavation results are assessed. The historical background of excavations and finds, the people who were involved, and the often long period since objects were taken from the archaeological record, must all be considered when old finds and results are included in modern research. Terp archaeology, which is especially marked by a destructive first phase, is perhaps even more demanding in this respect than other types of archaeology.

2.3 Historical sources, ethnic identity and historical events

2.3.1 Historical sources

Written sources cannot simply be taken as a factual account of a historical reality. They rather are a biased account of reality, based on the authors' interpretation of incomplete information and on his conscious or unconscious intentions and ideas. Interpretation of texts is not only about what authors describe, but also about their historical context, about why and how they describe it. Information from written texts can never be taken at face value. Nevertheless, if used with care, historical sources can give a valuable historical background to archaeological finds. This section will present a short overview of historical sources concerning the terp region, and of the insights in early history and the life of the inhabitants of the coastal area they provide.³⁷ Since the research period of this study ends ca. AD 300, early medieval sources are not included in this overview.

Early historical sources are either historical writings that provide information about historical events or descriptions of landscapes, peoples and their habits. Usable historical information concerns, for example, the military campaigns of the Romans in northwestern Europe. Descriptions of people (in this case the inhabitants of northwestern Europe that were called *Germani* by the Romans) are usually rather short remarks, for instance on physical appearance or political organization. The authors whose writings have been most influential in the archaeology of our area are Julius Caesar, Plinius the Elder, and Tacitus. Part of their work goes beyond historical account and seems to originate in a sincere scientific interest in remote places and people. However, al-

37 An extensive overview on classical writers that have written about our part of the world is compiled by Byvanck (1931). A still usable selection of translated texts concerning Frisians and Chauks was provided by Jacobi (1895). See also Hiddink (1999), Gerrets (2010, Ch. 6) and Lanting & Van der Plicht (2012, 31-81) for recent analyses of the available historical sources.

though first-hand or second-hand observations are at the basis of their work, it usually is not entirely trustworthy as a source of information on the life of the Germanic peoples.

Julius Caesar (100-44 BC) wrote his *Commentarii de Bello Gallico* while campaigning in Gaul, from 58 to 52 BC. His comments are written in a very lively style that suggests it is just a plain account of what happened during these campaigns. However, Julius Caesar had a political agenda and used his *Commentaries* as a tool in his military and political career. That implies that this account of *The Gallic War* is selective and subjective; events are presented in a way that conceals Caesar's real political and economic motives. Military actions are described as necessary for the defence of Roman interests, rather than for Caesar's own good.³⁸ It may be clear that an objective description of the tribes he fought is not to be expected. The Gauls are usually described as deceivable and unreliable barbarians, the Germans as well-trained, sturdy cattle breeders, famous for their bravery.³⁹ It is certain that both descriptions are no more than biased stereotypes.⁴⁰

Julius Caesar's campaigns did not go beyond the area of the tribe of the *Eburones* in the southern Netherlands, but his book is informative about the Roman conquest in general. About the inhabitants of the Rhine delta, he wrote: "But when it (the Rhine) reaches the Ocean it separates into several channels, thus forming a large number of sizable islands, before it flows from many mouths into the Ocean. Most of the islands are inhabited by fierce barbarian peoples, some of which are thought to live on fish and birds' eggs"⁴¹ From this description, Caesar does not seem to count them as Germanic tribes.

Plinius the Elder (AD 23-79) was an army and naval officer, serving in the Roman province of *Germania inferior*. As a young officer in AD 47, he took part in a campaign against the *Chauci* (see below). Plinius had an interest in geography and natural history. He wrote the *History of the German Wars* in twenty volumes, a work that is now lost, but was used as a source by Tacitus when writing *Germania*.⁴² Plinius is famous for his encyclopaedic *Naturalis Historia*, containing 37 volumes. In the *Naturalis Historia*, he used many of his own observations, resulting in an extremely interesting work for historians and archaeologists. However, even eyewitnesses may be wrong in the interpretation of their observations. This is also the case in Plinius' famous account of the dwellings of the inhabitants of the northern coastal area that he visited while campaigning against the *Chauci* in AD 47:

"There, twice in each period of a day and a night the ocean with its vast tide sweeps in a flood over a measureless expanse, covering up Nature's age-long *controversial region, disputed* as belonging whether to the land or to the sea. There, this miserable *people* occupy *high hills* or platforms built up by hand above the level of the highest tide experienced, living in huts erected on the sites so chosen, and resembling sailors in ships when the water covers the surrounding land, but shipwrecked people when the tide has retired, and round their huts they catch the fish escaping with the receding tide. It does not fall to them to keep herds and live on milk like the neighbouring tribes, nor even to have to fight with wild animals, as all woodland growth is banished far away. They twine ropes of sedge and rushes from the marshes for the purpose of setting nets to catch the fish, and they scoop up mud in their hands and dry it by the wind more than by sunshine, and with earth as fuel warm their food and so their own bodies, frozen by the north wind. Their only drink is supplied by storing rainwater in *pits* in the forecourts of their homes. And these are the *people* that if they are nowadays vanquished by the Roman nation say that they are reduced to slavery! That is indeed the case: Fortune oft spares men as a punishment"⁴³

Plinius clearly describes life on terps, but the details cannot all be right. Although some archaeologists, taking Plinius' account at face value, claim that he described specialized ways of fishing on terps in the Wadden Sea itself⁴⁴, it is unlikely that terps could endure flooding twice a day; they would have been washed away quickly. Moreover, it is certain that the terp dwellers owned domestic animals and had much more than fish to eat. It is possible that Plinius visited the region during spring tide or storm tide, when the animals were inside. Romans had separate byres for their cattle and were unfamiliar with the habit of stalling cattle inside the family residence⁴⁵, so Plinius may not have recognized the built-in byres. This account may well be based on Plinius' personal observation, but he did not really understand what he saw.

The third author who wrote about our area was Tacitus (AD 56-117). Three of his works are important in this context: the *Annals* and the *Histories*, which cover a major part of the history of the Roman Empire during the 1st century, and *Germania* (AD 98), a description of the Germanic tribes and their customs. Tacitus gives an account of the history of the Roman Empire based on facts, but his description of corruption and other excrescences of Roman politics and society implic-

38 Hunink 1997, 323ff.

39 Gallic War VI, 11-28.

40 Bazelmans 1991, 105.

41 Gallic War IV, 10.

42 Rives 1999, 58-59.

43 Plinius, *Natural History* 16, 1-4; based on the translation by H. Rackham (1952). Some changes I made in the translation are in italics.

44 Wenskus 1981, 395; Gerrets 2010, 117.

45 Roymans 1999.

itly shows a deeply pessimistic view on his own society. *Germania* is not based on Tacitus' own observations, but on the stories of others. It does give the impression of being rather accurate and some details have been verified by archaeological research (for example, on the size of cattle, see 3.3.3). But despite its factualness, it is a carefully composed work of art, in which the otherness of the Germanic world is explored.⁴⁶ Reading *Germania*, one cannot help noticing that Tacitus presented his contemporaries with an image of an innocent world in which uncorrupted Germans lead their simple and authentic lives, contrasting the corruption and decadency of his own society. The most explicit is a remark in *Germania* 19: "... no one there is amused at vice, nor calls the corruption of others and oneself 'modern life'". The reader is presented with the image of a noble savage, with admirable qualities such as courage, loyalty to leaders, generosity and chastity, although some of their customs were incomprehensible to the author and his Roman audience.

Tacitus gives an overview of Germanic tribes, highlighting some aspects (e.g., they do not value precious metals; they live sober lives; they are serious gamblers). It results in a prototype German, while ignoring the differences between groups in the large area that was called *Germania* by the Romans. Moreover, Tacitus was a Roman author who shared common "opinions concerning the limited intellectual and social capacities of barbarians".⁴⁷ His savage German may be noble, but is never depicted as the intellectual equal of a Roman. It may be clear that *Germania* cannot be taken as an objective, ethnographic account of the Germanic tribes. It represents life of the Germanic tribes in a selective and biased way.⁴⁸

2.3.2 Germani, Frisii and Chauci and their history

Ethnic identity has long been an important issue in archaeological research. What we know of the ethnic identity of the European peoples in the Roman period is largely based on the writings of classical authors. Since ethnic identity might be a relevant concept when studying ritual, it is worth examining what these authors have written on this subject, although we may doubt whether ethnic identity was as important to the peoples inhabiting northwestern Europe as these texts suggest.

During the Roman period, it was more or less agreed that Europe north and east of the Rhine, outside the Roman Empire, was inhabited by *Germani*, with the Rhine as a natural border between two different ethnic entities, Germans and Gauls. There has been much debate on the origin and meaning of these designations and these ethnic concepts have had a profound influence on

modern political nationalism.⁴⁹ Although the discussion and arguments do not need to be repeated here, it is important to note that the concepts 'Germans' and 'Gauls' are "largely Roman creations that had little value as self-ascriptive, emic concepts for individuals or groups".⁵⁰ It is quite certain that these names did not coincide entirely with groups speaking Celtic or Germanic languages.

Tacitus considers the Germans as an ethnic group, not only with similar customs but also with a common genetic background: "... the inhabitants of *Germania* have not been tainted by any intermarriage with other tribes, but have existed as a distinct and pure people, resembling only themselves."⁵¹ A description of their mythical ancestry is included (see 4.4.2). In the same section, Tacitus claims that *Germani* was originally the name of one of the tribes, which was used for the whole group by the Romans and only later was used by these people themselves.

While pure and unmixed genetic ethnic identity and mythical ancestry are to be mistrusted, the latter remark might well be true. It is not unlikely that the people north of the Rhine were called 'German' at first only in dealings with the Romans, without considering themselves as belonging to an ethnic group with that name. The situation probably changed over time, when contacts became more common. Ethnic groups "are subjective, dynamic and culturally determined constructs that are shaped through interaction with a cultural 'other'", as Nico Roymans writes in his study on Batavian identity.⁵² The Roman image of the Germans may have united groups that did not feel to be related beforehand. Heiko Steuer argues that tribes as territorial units only emerged as a reaction to pressure from outside.⁵³

Several classical authors wrote about the two tribal groups that inhabited the northern coastal area, the *Frisii* and the *Chauci*. Tacitus mentions *Frisii* and *Chauci minores* and *maiores*.⁵⁴ In the 2nd century AD, Ptolemaeus wrote that the *Frisii* inhabited the land near the ocean "up to the river Ems; beyond them lived the lesser Chaucans up to the river Weser, then the greater Chaucans up to the river Elbe."⁵⁵ *Chauci minores* and *maiores* are also mentioned by Plinius.⁵⁶ *Minores* and *maiores* in both descriptions of *Frisii* and *Chauci* is probably referring to the size of their groups. The *Frisiavones* that are mentioned by several authors were a different group; they lived in

46 Bazelmans 1991, 94ff.

47 Bazelmans 1999, 8.

48 Cf. Bazelmans 1991, 94ff; 1999, 5-8.

49 Cf. Rives 1999; cf. Berke *et al.* 2009.

50 Roymans 2004, 5.

51 *Germania* 4.

52 Roymans 2004, 258.

53 Steuer 2006.

54 *Germania* 34; 35.

55 Ptolemaeus, *Geographia* 2,11,7; translation by Galestin (2008a, 689).

56 *Nat. Hist.* 16, 2.

the southern part of the present Netherlands, within the Empire.⁵⁷

Most authors now agree on the territories of these groups.⁵⁸ *Frisii minores* lived along the western coast of the Netherlands, the present province of Noord-Holland, *Frisii maiores* in the present provinces of Friesland and Groningen. *Chauci minores* lived in northwestern Germany, between Ems and Weser, while *Chauci maiores* lived between Weser and Elbe. An influence on material culture from the east, possibly involving migration as well, can be discerned in the Groningen and northern-Drenthe areas from the early 1st century AD (see 3.2.2).⁵⁹ Groningen was included in the area of the *Chauci minores* by Bloemers⁶⁰, but this was probably not the case before the Roman Iron Age, if at all.

Frisians and Chauks played a role in several events that were related by Roman authors. Most of these events took place in the early 1st century AD, the period of the Roman conquest of Germania. Although the small number of references to Frisians and Chauks cannot be considered as representative for all aspects of the relations between Romans and inhabitants of the coastal area, they do give a historic context to many archaeological finds.

Julius Caesar only reached the southernmost parts of the present Netherlands, but his successors also explored more northern parts. In ca. 15 BC, a Roman legion settled on a strategic location in the eastern river area that was later called Noviomagus (present Nijmegen). In 12 BC, the Roman general Drusus started a series of campaigns against the Germanic peoples (among them *Frisii* and *Chauci*), aimed at conquering the area between Rhine, Main and Elbe.⁶¹ Cassius Dio (2nd/3rd century AD) reports that the Frisians became allies, and that the area of the *Chauci* was invaded via 'the lake'. Apparently, the army used the route over water to the north via Lake Flevum (predecessor of the present IJsselmeer) and the Wadden Sea. There, they got into trouble when their ships stranded at low tide. Newly recruited Frisian foot soldiers, which had followed the same route over land, came to their rescue, enabling the Roman soldiers to withdraw (because it had become winter, as Dio adds). Velleius Paterculus, who was an officer in the army of Tiberius, mentions the submission of the *Chauci* in AD 4, stressing their large number, their impressive stature and the inaccessibility of their settlements.⁶²

In September of AD 9, the famous Varus-battle brought victory to the Germanic tribes; three Roman legions under the command of Varus were ambushed and killed off by Germans under the command of

Arminius, a Cherusk who had served in the Roman army and was a Roman citizen. The event is related by Velleius Paterculus.⁶³ Afterwards, the Romans organized a number of campaigns to revenge the defeat. Tacitus describes how army units under the command of Germanicus went back to the location of the battle in AD 15 to bury the dead and to retrieve the lost legion's standards.⁶⁴ Nevertheless, the conquest of Germania came to a halt for the time being. It seems that the *Frisii* and *Chauci* had remained faithful to the Romans. In AD 15, the *Chauci* promised military help and were included in the Roman army.⁶⁵ The Romans had established some army posts in the areas occupied by the *Frisii* and *Chauci*. The location and nature of these posts is disputed. There probably was an army post on the left bank of the river Ems, the river that is mentioned several times as the waterway by which to enter or to leave the Germanic territory.⁶⁶ A Roman outpost may have been situated near Winsum-Bruggeburen in present Friesland, a region that was traversed by Roman army units several times.⁶⁷ On the Noord-Holland coast, the *castellum* Flevum (present Velsen) was built, probably during one of Germanicus' expeditions, in AD 15-16.⁶⁸

After an alliance of 40 years, the Frisians rose in rebellion against the Romans in AD 28. Tacitus blamed the greed of the Romans for it.⁶⁹ Since the days of Drusus, the Frisians had to pay a number of cattle skins as tax, which had not posed a problem before. The military administrator Olennius, however, decided that the size of the hides was too small; he demanded larger hides. The Frisians could not meet these demands. When the Romans appeared impervious to arguments, the Frisians started their rebellion, which ended in the death of at least 1300 Roman soldiers. This did not lead to a Roman punitive expedition, since in Rome Tiberius and the senate were distracted by other affairs at the time.⁷⁰ Still, relations between the Frisians and the Romans were not so friendly anymore afterwards.⁷¹

This was still not the end of the Roman military actions in the area between Rhine and Elbe. It is reported that the *Chauci* were defeated in AD 41.⁷² In AD 47, the ambitious commander Corbulo successfully started to restore Roman control over the area. The *Frisii* were forced

57 Galestin 2008a.

58 Galestin 2008a.

59 Taayke 1996d, 191.

60 Bloemers 1980, fig. 2.

61 Cassius Dio, Roman History 54.32.2.

62 *Historiae* 2.106.

63 *Historiae* 2.117-119.

64 *Annales* I, 60-62.

65 Tacitus, *Annales* I, 60.

66 Tacitus, *Annales*, a.o. II 8 and 23. This camp was possibly situated near Bentumersiel (Ulbert 1977; cf. Strahl 2003).

67 Galestin 2000; 2002a and b. Winsum-Bruggeburen as well as Bentumersiel (see previous note) have been interpreted as the residences of regional leaders who served as *praefecti* for the Romans by Nicolay (2010a), rather than as military posts.

68 Bosman 1997, 24.

69 Tacitus, *Annales* IV, 72-73.

70 Tacitus, *Annales* IV, 74.

71 Tacitus, *Annales* XI, 19.

72 Cassius Dio, Roman History 60.8.7.

to accept a senate, an administration and laws, to which they complied.⁷³ The *Chauci*, however, are reported to have raided the coast of Gallia in this period.⁷⁴ Corbulo had their commander killed and was making an army camp in *Chauci* territory, when he unexpectedly received a message from the emperor Claudius that he was to retreat from his successful expedition.⁷⁵ This event marks the end of the Roman conquest of Germania. From then on, the northern border of the Empire was established at the Old Rhine (fig. 1.1).

The inhabitants of the coastal area were still mentioned in historical sources now and then after the end of the Roman conquest. For instance in AD 58, two Frisian leaders, Verritus and Malorix, visited Rome and the emperor Nero, to ask him permission for their people to settle on the right bank of the Rhine, in an area that was used by the Roman army. Permission was not granted and when the group did not clear the area voluntarily, they were driven away by force.⁷⁶ In AD 69, *Frisii* and *Chauci* chose the side of the Batavians in their revolt.⁷⁷ *Chauci* possibly kept raiding the coast of Gallia; an attack is mentioned for ca. AD 170⁷⁸, but there may have been more since their raid of AD 47. In the second part

of the third century, the *limes* was breached by Germanic groups who raided the area, but we do not know whether Frisians or Chauks were involved. *Chauci* are still mentioned by Zosimus in the 4th century AD, as belonging to the Saxons.⁷⁹ By then the name of the *Frisii* had disappeared from the historical sources, to reappear in the early Middle Ages.⁸⁰

2.3.3 Conclusion

The inhabitants of the salt marsh area of the northern Netherlands were not literate themselves, but lived in a period that people from the Mediterranean area took an interest in them, inspired by political and military motives, and sometimes by a genuine interest in the otherness of distant peoples, compared to Roman society. In the short period that this interest lasted, a small number of classical authors wrote some lines about this part of the world, but the information is sparse and disconnected. These sources are not to be considered reliable sources of information on the inhabitants of the northern Netherlands. In the following, historical sources therefore only play a minor role, secondary to archaeological sources.

73 Tacitus, *Annales* XI, 19.

74 Tacitus, *Annales* XI, 18.

75 Tacitus, *Annales* XI, 20.

76 Tacitus, *Annales* XIII, 54.

77 Tacitus, *Historiae* IV, 15-7; 16-3; 18-9; 56-7; 79-4.

78 The attack is mentioned in *Scriptores Historiae Augustae, Didius Julianus* I, 7-8 (Hiddink 1999, 192).

79 Jacobi 1895, 6.

80 Bazelmans 2000; 2002; 2009.

3

Occupation history, landscape and subsistence

3.1 Introduction

In modern archaeology, ecological determinism is rightly not accepted as an explanatory model for changes in human occupation and material culture. Human adaptability and inventiveness and the role of culture are not accounted for if the natural environment is considered as the primary motive of human behaviour. Nevertheless, it cannot be denied that the natural environment is an important factor in human life, either by imposing limitations or by providing opportunities. That is especially so in the salt marsh area of the northern Netherlands, where opportunities went hand in hand with limitations. The people who colonized this landscape profited from it, but also had to find solutions for the problems they encountered when they came to live there. It is quite possible that the landscape also influenced ritual practice.

Another unpopular model to explain changes in modern archaeology, at least until very recently, is migration. Migration as an explanation for changes in material culture was common in the traditional cultural-historical paradigm, when material culture was directly associated with ethnicity. However, it has since become clear that contacts between different cultures may take on many different forms, which may all leave traces in the archaeological record. To put it briefly, pots cannot be equated with people, and migration should not be the first explanation when changes in the material culture occur. Nevertheless, migrations do occur, as we know from historical sources and from modern experience, and they may well leave traces in the archaeological record. In the coastal area, migration plays a role in the interpretation of the changes that occur during several periods.

This chapter covers the occupation history of the coastal area in relation to the development of the landscape and to the possibilities to make a living in the salt marsh area. Habitation of the coastal salt marsh area started in the early pre-Roman Iron Age, with the arrival of small groups of colonists. The colonization process is clearly related to environmental changes, in particular new possibilities that were brought about by the developing salt marshes in the area. After first colonization, the population grew and spread, following the expanding salt marshes. This growth was gradual in most periods, but a sudden growth of finds and sites in some areas has been observed for the beginning of the Roman Iron Age. Another noticeable period is the end of the Roman Iron Age, when the area was largely abandoned. This break in

habitation is the reason that this study does not go beyond AD 300.

This chapter will start with these three important phases in the habitation history of the coastal area: the early colonization period; the sudden growth of the population in the 1st century AD; and the temporary end of habitation at the end of the Roman Iron Age.

3.2 Occupation history

3.2.1 Colonization

That migration may play a role is the most obvious, of course, at the beginning of the habitation of the salt marsh area, probably in the 7th or 6th century BC.¹ An area that had only just become habitable came to be colonized by small groups of immigrants, settlers who had left their original places of residence. They brought with them their animals, household objects, and specific architecture. It should not be hard to find out where they came from, but the question has as yet not been solved in an entirely satisfactory way.² Although an origin in the adjacent Pleistocene inland seems self-evident and middle pre-Roman Iron Age pottery from the coastal salt marsh area closely resembles pottery made inland³, there are arguments for other areas as well. The earliest pottery appears to be more closely related to pottery from north-western Lower-Saxony than to the pottery of the Drenthe Plateau.⁴ This evidence suggests that the first colonists came from the area near the river Ems. Other areas, such as Texel or the old dune landscape of Noord-Holland, may have supplied colonists as well.⁵ Nevertheless, it is likely that inhabitants of the adjacent Pleistocene inland soon followed, perhaps after an initial phase in which

1 The early date is based on a number of radiocarbon dates and a wiggle-match date of an oak post found in one of the earliest settlements in Friesland, Wommels-Stapert, but the post might be older than the settlement itself. Calibrated dates of radiocarbon dated samples from this period cannot be more precise than 8th-5th century BC; the same goes for radiocarbon samples in the earliest known settlement in the province of Groningen, Middelstum-Boerdamsterweg (Lanting & Van der Plicht 2006, 275-276; 334-340).

2 Stable isotope analysis has not yet been used to establish the origins of the early settlers, partly because the number of human remains from that phase is very small. For later periods, see chapter 12.4.3.

3 The Ruinen-Wommels types defined by Waterbolk (1959; 1962).

4 Taayke 1996d, 190.

5 Wolterling 2001, 375-376.

they used the salt marsh to graze their cattle in summer.⁶ An extensive overview of the various positions was presented by Woltering.⁷

3.2.2 Changes in the 1st century AD

Around the beginning of the 1st century AD, a sudden change seems to occur in the Groningen part of the research area, after centuries of gradual population growth. The number of sites strongly increased, as well as the number of 1st century pottery finds within older settlements in this area.⁸ At the same time, a change in style occurred. The earlier pottery of this area was rather similar to the pottery used in the Frisian terp region. In the beginning of the 1st century AD, the earlier style was replaced by new forms that were closely related to pottery used in the east, the area between the Ems and the Elbe. Taayke called this style 'Wierum-style pottery', after one of the Groningen sites.⁹

The new style in itself shows an influence from the east, resulting in the adoption of new stylistic elements. However, the remarkable increase in the number of settlements and in the number of finds within older settlements suggests that the pottery style was not the only thing that changed. An increase in finds within a settlement might be caused by an increase in pottery 'consumption' or in family size, but the increase in the number of settlements shows that this may not be the only explanation. An increase in family size could have resulted in an increase in satellite settlements after a generation, but the increase is so considerable that this explanation does not seem to be sufficient.¹⁰ A seeming increase in the number of settlements might also have been caused by resettlement of people from the same area, for example because of local worsening of natural conditions. However, we do not know of settlements that were abandoned in this period. Conditions seem to have been favourable everywhere at the time.

To explain these changes, Taayke suggested that in the 1st century AD, part of the Chauks migrated to the Groningen area.¹¹ Since the area was already inhabited, the question arises whether this was one of the outcomes of Chaucian raiding and aggressive territorial expansion, for which we have some historical evidence (see chapter 2.3). The Chauks not only raided the Gallic coast, but also drove the *Amsivarii* from their territory in the Ems area in the middle of 1st century, according to Tacitus.¹²

This may not only be taken as an indication of the aggressiveness of the Chauks (as it usually is), but also as a sign that part of the Chaucian population was in search of new living areas.

From the evidence of Groningen terps such as Englum and Ezinge, however, it may be inferred that an influx must have been friendly rather than aggressive, if it occurred at all.¹³ The replacement of pottery styles in the Groningen area was gradual. Pottery fabric and temper (usually organic, often with some grog) remained the same. The Wierum style seems to be inspired by influences from the east, rather than introduced by groups of immigrants. Traditional pottery was in use together with pottery in the new style until well into the 1st century AD; there are transitional forms, and new types were sometimes decorated with older patterns. Moreover, in Ezinge, the number of houses only slightly increased while the number of pots more than doubled. If we allow for a slightly earlier introduction of Wierum-style pottery in Groningen settlements, which is in accordance with some early radiocarbon dates, the extreme peak in the number of finds is somewhat reduced and the increase of pottery and settlements around the beginning of the 1st century AD does not appear so striking anymore. It might mirror the culmination of population density in this part of the terp region because of natural population growth and favourable conditions, rather than an influx of Chauci immigrants.¹⁴

That migration is probably not the cause for the undeniable increase in population size, is corroborated by a series of recent excavations in Friesland. Pottery research shows that a 1st-century peak in the amount of pottery can also be established there, although it is less extreme than in Ezinge or Englum.¹⁵ A new pottery style was not introduced in Friesland, and there is no reason whatsoever to contribute the population increase there to an influx of immigrants.

3.2.3 Cultural influences from the east

In his overview of trends in pottery styles in the northern Netherlands and northern Germany, Taayke showed that pottery styles spread from the east to the west from the beginning of the habitation of the salt marsh region.¹⁶ At the end of our research period, in the 3rd century AD, the whole area, including Noord-Holland, had adopted a similar style, albeit with regional variations.¹⁷

These changes in pottery style are in line with a more general picture of continuous cultural influence coming from the east, which has often been termed

6 Van Gijn & Waterbolk 1984.

7 Woltering 2001, 370-376.

8 Taayke 1996b, 68. Compare Englum and Ezinge (Nieuwhof 2008b; 2014b).

9 Taayke 1996d, 175.

10 For example, in part of the western Groningen area the number of settlements doubles, in part of northeastern Groningen the number is multiplied by five (Taayke 1996b, 68).

11 Taayke 1996d, 191.

12 *Annales* XIII, 55.

13 Nieuwhof 2008b; 2014b.

14 Nieuwhof 2014b.

15 Unpublished *steilkant*-research; pers. comm. M. Bakker and T. Varwijk (University of Groningen).

16 Taayke 1996d, 170-181.

17 Taayke 1996d, 180.

Germanization. The term fits in the cultural-historical paradigm in archaeology and was introduced for the so-called *Nordwestblock* (the area between Rhine and Weser) by Kuhn and others.¹⁸ The term *Germanization* implies that the changes involved more than the adoption of new pottery styles; a change in language, even a new ethnic identity accompanied changes in material culture according to this theory. However, as Henk Hiddink pointed out (*ibid.*), the *Nordwestblock*-hypothesis ignores the character of the interaction between different groups in the pre-Roman and Roman Iron Age. While *Germanization* suggests a dominant culture which influenced peripheral groups, interaction rather was bilateral; the material culture of different groups (whether called Germanic, Celtic or *Nordwestblock*) indicates exchange rather than unilateral influence. For example, *streepband* decoration on pottery, which is thought to have its origins in the northern Netherlands, is also found in Lower Saxony, for example on the Feddersen Wierde.¹⁹ The term *Germanization* therefore is misleading and should be avoided.

3.2.4 The end of habitation

The research period of this study ends ca. AD 300, on the ground of the alleged break in habitation. Immigrants from the northeast are thought to settle in this area from ca. AD 400 onwards. It is assumed that they were (Anglo-)Saxons, part of a migration wave to the west that ended on the British coast. Several changes that occurred in this period are at the basis of the emigration- and immigration-hypothesis.²⁰

The idea of an invasion of new, Anglo-Saxon inhabitants was already brought forward by Boeles.²¹ He assumed that the original population had suffered from an aggressive Anglo-Saxon invasion and that the remaining population was absorbed by the immigrants, thus forming a new Anglo-Frisian population. His ideas were based on the new material culture (in particular pottery and cruciform brooches) found in mixed cremation and inhumation cemeteries during commercial levelling of terps. The new pottery and brooches were recognized by him as coming from the lower Elbe region.

For a long time, Boeles' ideas were not widely accepted, partly because of nationalistic tendencies in Friesland and partly because his ideas appeared to equate material culture with ethnic identity.²² However, new evidence was presented in the 1990s, which supported Boeles'

ideas of an Anglo-Saxon immigration, though not of an aggressive invasion. It became clear that the area had been abandoned prior to the arrival of Anglo-Saxon immigrants. The new evidence came from the study of indigenous hand-built pottery by Taayke and from the excavations in Wijnaldum (1991-1993).²³ From the virtual absence of 4th century pottery and of transition types, Taayke inferred that the terp area was gradually abandoned in the course of the 3rd century AD and that habitation had come to an end in the 4th century almost everywhere. In Wijnaldum, the orientation of houses and other structures in the settlement appeared to have changed after a break in the occupation during the 4th century. There are several other arguments for discontinuity and later immigration, such as a general and strong decline in finds from the middle Roman Iron Age onwards, or the introduction of formal cemeteries with cremations and inhumations in the 5th century AD.²⁴

Additional evidence is provided by pottery development in areas where a break in habitation is not assumed, in particular nearby northern Drenthe in the Pleistocene interior. In this area, that had shared its pottery style for some centuries with northwestern Germany and with the Groningen coastal area, pottery continued to be made during the 4th century. Just like in neighbouring northwestern Germany, it gradually developed into 'Anglo-Saxon'-style pottery, but that is largely an indigenous development in this area.²⁵ If we compare the pottery of northern Drenthe to the finds from most settlements in the coastal area, it is clear that there is no continuous development of pottery in the coastal area, with the exception of some terps in the province of Groningen such as Ezinge²⁶; habitation must have ended almost everywhere.

The abandonment of the coastal area was a process that started in the middle Roman Iron Age.²⁷ The remaining population left in the early 4th century at the latest. This relatively late date applies, for instance, to Wijnaldum, where habitation is thought to have ended in the first quarter of the 4th century.²⁸ In most areas, an end date cannot be established so accurately. The area was reoccupied from the early 5th century. Since there are considerable regional and local differences, it is not possible to give a general date for the occupation hiatus.

The western part of Friesland, Westergo, was almost entirely abandoned. Perhaps one of the terps near

18 Cf. Hiddink 1999, 35ff.

19 Schmid 2006, 26-27.

20 Contributions to the discussion on this subject have been made by Gerrets 1995; 1996; Gerrets & De Koning 1999; Taayke 1996a; 1999; 2000; 2003; 2008; Bazelmans 2002; 2009; De Koning 2003; Bos & Brouwer 2005; Nicolay 2005; 2006a; Knol 2009; Nieuwhof 2011; 2013a.

21 A.o. Boeles 1906; 1919; 1951.

22 Cf. Bazelmans 2000.

23 Taayke 1996a; Gerrets & De Koning 1999.

24 Knol 2009; 2011.

25 Taayke 1996d, 180; 1999, 199; Nieuwhof 2008e; 2011; 2013a.

26 Nieuwhof 2013a.

27 For example Sneek (Elzinga 1962); the 'frustrated terps' of Paddepoel in Groningen (Van Es 1970); Mantgum-Hoxwier in Westergo (Nieuwhof & Prummel 2007).

28 Gerrets & De Koning 1999, 99.

Dronrijp was still inhabited.²⁹ The eastern part of Friesland, Oostergo, was the most densely populated area in the terp region in the 3rd century and again in the 5th century, but a 4th-century finds horizon is virtually absent. In Groningen, too, most terps seem to have been deserted, but there is evidence that a small population remained on some terps; that certainly applies to Ezinge.³⁰ The situation in Germany is somewhat different. A break in habitation is assumed for parts of the coastal area of northwestern Germany as well, but there are significant regional, chronological differences.³¹

In the Dutch part of the coastal area, it was the occupation of the Holocene salt marsh landscape that virtually came to an end, while it continued in the Pleistocene inland. This suggests that it may have been caused by changes in the landscape. Nevertheless, various other push-and-pull factors may also have played a role: epidemics; (political) pressure coming from the east; tribal unrest and raiding of the vulnerable settlements along the coast; an economic crisis caused by the collapse of the Roman Empire; or the attraction of the Roman Empire when it collapsed.

If natural causes indeed played a role, a period of marine transgression at the end of the Roman Iron Age, which in the past has often been mentioned as a reason for the abandonment of the area³², can be excluded. People in the terp region had been accustomed to living in an environment that was regularly flooded by seawater for centuries. Their terp settlements were well protected against floods. However, drainage of inland parts of the salt marsh area became increasingly problematic in the middle Roman Iron Age, due to the high cap ridges that had formed along the northern coast.³³ As long as the area had been drained well, floods did not pose a major problem. A permanently waterlogged landscape and prolonged periods of inundation, however, must have been much more difficult to cope with. This may have been the incentive of the emigration that started in the 3rd century or even earlier if we take the diminishing number of finds from the middle Roman Iron Age into account. It must have been a combination of social, political, natural and economic factors, which subsequently made the inhabitants of terps in well-drained areas leave as well.

It might be asked why in Groningen a small number of terp settlements remained inhabited. The answer probably lies in the social environment. Although natural conditions in Groningen did not differ much from

those in Friesland, people living in the Groningen area had for centuries been part of a socio-cultural network that included northern Drenthe and northwestern Germany. These areas were not abandoned in this period. Habitation of terps in well-drained areas in Groningen could continue, because the social network, in which the inhabitants participated, had remained intact.

In Friesland, the situation was quite different. The population of Friesland, especially in Westergo, did not participate in a social network that largely remained intact, even though the terp region was abandoned. On the contrary, the region with which they primarily maintained contacts (if we take pottery style as a lead), Noord-Holland, was probably largely abandoned in this period as well.³⁴ It is assumed that the reasons for the end of the habitation there were the worsening political-military situation, the economic decline and the deterioration of the natural environment because of overcropping. These causes are directly related to the collapse of the Roman Empire at the end of the 3rd century.³⁵

It is not clear where the inhabitants of the terp area went after they left the area. There are not many traces found of them. In Belgian Flanders, some 3rd century pottery from the terp region was found, suggesting that some northern emigrants went to northern Gaul.³⁶ As from the 5th century, the coastal area was repopulated. The general view is that new settlers came from the east, the home areas of the 'Anglo-Saxons'. It has recently been argued that is at least as likely that the area was repopulated from the Pleistocene inland.³⁷ As we have seen, Northern Drenthe developed its own 'Anglo-Saxon'-style pottery, and had followed changes in material culture from the east for a long time. However, the population of northern Drenthe and of the few terps in Groningen that remained inhabited was not large enough to repopulate the entire salt marsh area. It is still most likely that new settlers came from the coastal areas of Niedersachsen and Schleswig-Holstein.

3.2.5 Summary

The habitation history of the salt marsh region of the northern Netherlands is characterized by different episodes in which major changes occurred. Migration is the obvious explanation for the changes during the period of first colonization in the early pre-Roman Iron Age, and the most likely explanation for the abandonment of the terp region in the late Roman Iron Age. The stylistic changes of the 1st century AD and the strong population increase in this same period, however, were probably not caused by immigration but by natural population growth and favourable conditions, combined with stylistic influ-

29 For the date of a *terra nigra*-like pot found in Dronrijp, which has been used as evidence of continuity (Taayke 1996d, 195), see chapter 12 and Appendix C.

30 Taayke 1996d, 195; Nieuwhof 2013a.

31 Bärenfänger 2001.

32 Cf. Knol 1993, 19-23.

33 Vos 1999. These high cap ridges can still be recognized in the landscape today, e.g. the Groningen *Hogeland*.

34 De Koning 2003; Bazelmans *et al.* 2004.

35 Bazelmans *et al.* 2004, 16.

36 De Clercq & Taayke 2004.

37 Lanting & Van der Plicht 2010, 131.

ences from the east. These influences are not a symptom of *Germanization*, as they have often been interpreted. Rather than coming from a dominant, Germanic, culture in the east, which is the traditional interpretation from the cultural-historical paradigm, these influences are the result of bilateral exchange and contacts. That conclusion will play a prominent role in the case study of Ezinge.

These important episodes in the habitation history of the salt marsh region define the research period, which starts when the area was colonized in the early pre-Roman Iron Age and ends around AD 300, when the area was abandoned. We will return to the theme of population growth and the 1st century peak in the case studies of Englum and Ezinge; as will be shown, they both influenced ritual practice.

In the above, it was established when the salt marsh region was colonized, but not why it was colonized; nor was it established how the colonists and their descendants could maintain themselves in this marine environment. That is the subject of the remainder of this chapter.

3.3 Life in the salt marsh landscape

3.3.1 Settling in a dynamic landscape

At first sight, before medieval dike building the Wadden Sea area does not seem suitable for permanent residence. The salinity of the area and the threat of flooding combined to create an environment that seems unfit for human habitation. Still, people did occupy the salt marshes in prehistoric times and their occupation was so successful that the area came to be one of most densely populated in northwestern Europe. During the Roman Iron Age, the salt marsh covered an area of approximately 2000 km² with an estimate number of 30,000-40,000 inhabitants, that is 15-20/km².³⁸ This, of course, raises some questions. What was it that attracted the first settlers, where did they settle, and how did they manage to survive?

The history of the coastal area is directly related to the worldwide sea level rise during the Holocene.³⁹ After the end of the last ice age, about 11,700 years ago, the area of the present North Sea was largely dry land. Due to the rapid sea level rise of the early Holocene, however, the coastal line receded at a great pace. The rate of the sea level rise declined ca. 6000 years ago. By then, the former Pleistocene valley systems in the northern Netherlands had become tidal basins. Because of the declining relative sea level rise⁴⁰, combined with sufficient sediment supply, the large tidal basins of the rivers Boorne, Hunze and Fivel started to be filled-in with sediment. As from the Bronze Age, salt marshes formed that gradually ex-

panded to the north and finally filled up the tidal basins.⁴¹ Salt marshes also formed along the coast of the relatively high parts of the Pleistocene area between the tidal basins that bordered on the sea, such as the northeastern part of Friesland (Oostergo), and partly covered them. At the same time, the rising groundwater level caused the formation of an extensive peat area bordering on the coastal salt marshes and separating them from the inland sandy areas.

As was already mentioned above, the first settlers came to the salt marsh area in the early pre-Roman Iron Age. The attraction of the area to the early colonists must have been the 'nearly unlimited potentialities for grazing', as Van Zeist phrased it.⁴² There is ample evidence that cattle were of major importance for the occupants of the salt marshes. It has been argued that permanent occupation of the salt marsh was preceded by a transhumant stage during which cattle were tended on the salt marshes during summer⁴³, but this seems rather unlikely for the remote salt marshes of Westergo and Oostergo. Once the first colonists had settled, occupation expanded to the north, following the growing salt marsh. This northwards expansion of both the salt marshes and human occupation continued well into the early Middle Ages (figs. 3.1-3). After medieval dike building, deliberate land reclamation replaced natural silting up; this was only brought to a halt in the 20th century, when the coastal line had reached its present form.

The salt marsh landscape was not a homogenous, stable landscape, but a dynamic environment. The salt marshes were flooded regularly, causing continuous sedimentation. Heavy clays were deposited where water stagnated; sandy deposits on the salt marsh edges became relatively high salt marsh ridges or levees.⁴⁴ Another important aspect of the landscape was its salinity; there were significant fluctuations in salinity, caused by the inflow of fresh water from the inland. In some areas, massive erosion affected the landscape. Already at the end of the pre-Roman Iron Age, a large part of the original salt marsh between the present island of Texel and the province of Friesland had disappeared; the inland lake that is now the IJsselmeer came to be connected to the Wadden Sea. Human interventions such as peat cutting and drainage, which already started around the beginning of the 1st century AD⁴⁵, greatly enhanced the effects of natural erosive processes and contributed to the later formation of the Middelzee, the Lauwerszee and the Dollard.

The colonists chose the highest parts of the salt marsh for their first settlements. Recent geophysical research has established that in many places, habitation already

38 Bazelmans *et al.* 2009.

39 Vos & Knol 2005; Vos *et al.* 2011.

40 The sea level rise in the Netherlands is not only caused by an absolute rising sea level, but also by a subsiding land level, caused by tectonic crustal movements and isostatic effects (Kiden *et al.* 2002).

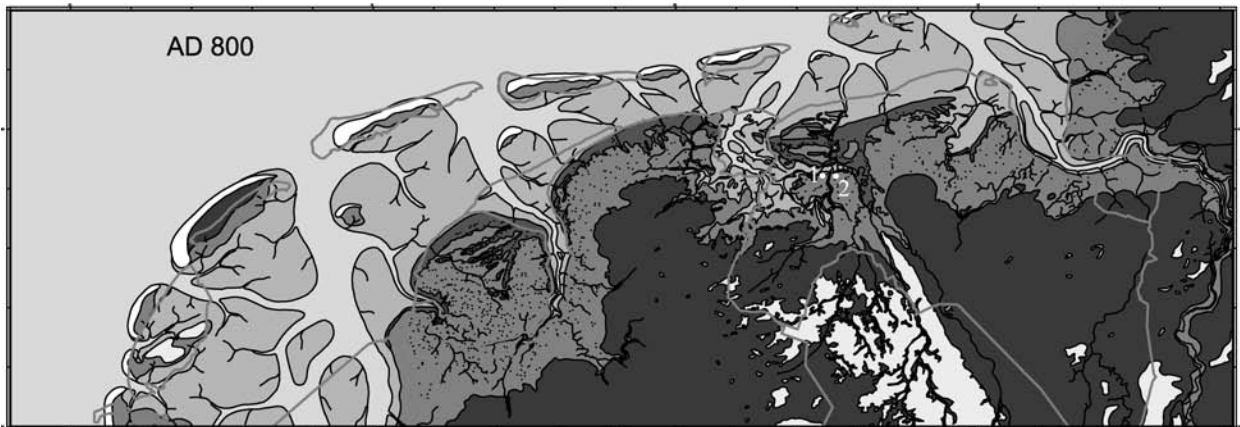
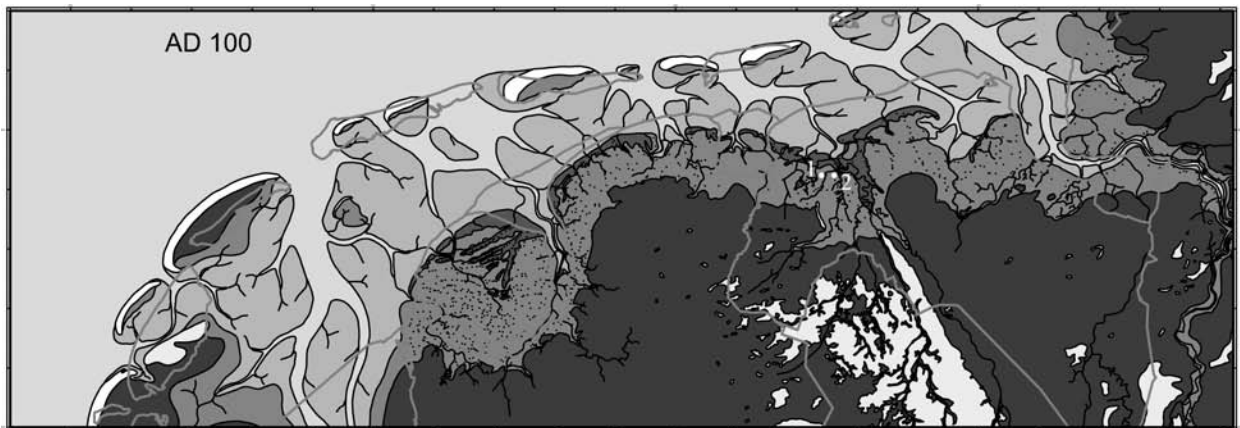
41 Vos & Van Kesteren 2000.

42 Van Zeist 1974, 333.

43 Van Gijn & Waterbolk 1984.

44 Vos 1999.

45 Vos *et al.* 2011, 24.



- North Sea, tidal inlets, tidal basins
- Sand and mud flats
- Salt marsh
- Salt marsh ridges, natural levees
- Peat
- Pleistocene soils at surface
- Terps mounds on salt marsh
- Creeks, rivers
- Present geography, provincial boundaries

Fig. 3.1-3 Palaeo-geographical maps of the Northern Netherlands, 500 BC, AD 100 and AD 800. 1: Englum; 2: Ezinge. After Vos & Knol 2005.

started when the salt marsh had only reached the level of a middle marsh.⁴⁶ A middle marsh is defined as a salt marsh that is flooded several times a year, not only during winter storm floods, but also during high spring tides in summer. That implies that living on the salt marsh surface, in a *Flachsiedlung* (G.), was not possible there. It was necessary to raise the living area from the start. During habitation, flooding and sedimentation continued, as can often be observed at the sides of terps.⁴⁷

The *Flachsiedlung* is part of the traditional model of the development of terp settlements. It implies that the first inhabitants settled on the surface of the high salt marsh. In time, flooding made it necessary to raise the living area: the first podia or platforms were made. These platforms then coalesced because waste landed between the platforms and because intentional heightening layers were applied. Thus, terps were created (fig. 3.4). Although this model is undoubtedly correct for the later phases, the earliest *Flachsiedlung*-phase might actually not be as common as is often assumed.⁴⁸ It is quite possible that some of the excavated remains in the salt marsh surface have not been recognized for what they were: features that belonged to small and low early platforms with houses. The initial platforms were only slightly larger than the houses that were built on them.⁴⁹ Early settlements not only included one or several houses on their platforms, but also structures on and in the salt marsh surface that did not need the protection of a raised area. A wide area around the settlements was used regularly for all kinds of activities. So-called *off-site* features such as ditches and pits were found during many excavations.

The platforms were often made of salt marsh sods. Dung was also used, although there is some regional variety in its use. It is hardly ever encountered in terps in northwestern Friesland. The core of a platform usually consisted of sods arbitrarily placed⁵⁰, sometimes covered with layers of clay and dung⁵¹, or of massive dung.⁵² The platform was usually consolidated with a broad lining of horizontally placed sods.⁵³ Ditches drained the area around the platforms. During habitation, the inhabitants adjusted to continuing flooding and sedimentation by raising and expanding their living area when necessary. Thus, the oldest, deepest parts of many terps are hidden by surrounding, younger sediment layers, while only a minor elevation is visible in the present landscape.

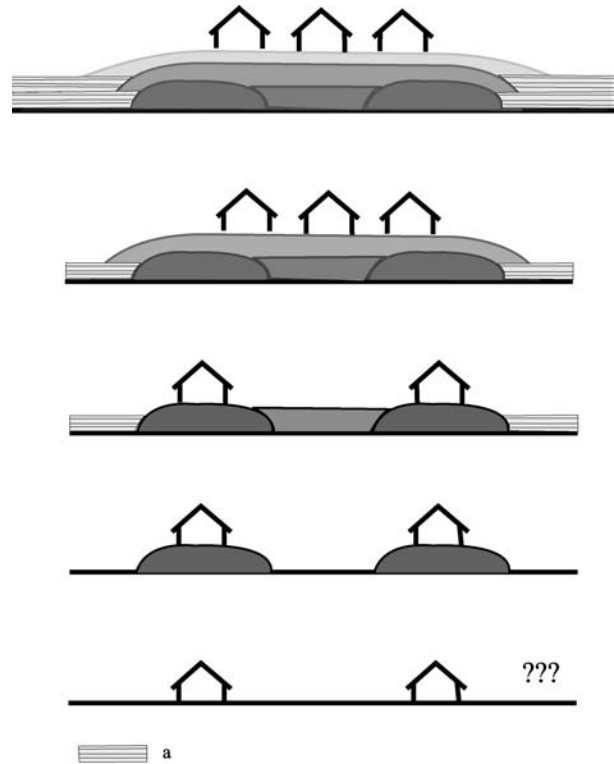


Fig. 3.4 The start and development of a terp, schematic view. The *Flachsiedlung* in the bottom row is questionable; it was certainly not the first phase of all terps. a: natural layers of sediment; flooding and sedimentation continued during habitation.

The use of dung in platforms and floors may seem strange, but was in effect a very practical choice. Dung has great insulating qualities and is thus very suitable for layers to live on, in houses as well as byres.⁵⁴ Used in surfaces, dung is far less slippery than clay, as many terp excavators can testify.⁵⁵ Substantial layers of dung in terps demonstrate that dung was not primarily used as fertilizer in the salt marsh area.

3.3.2 Agriculture, food and drink

The first necessity of life is drinking water. In the marine terp region, fresh water was not a matter of course; special adaptations were required. Surface water was saline or brackish. Sand layers in the subsoil carry fresh water from the interior, but in a large part of the salt marsh area, such layers are too deep to be useful. The locations of the first salt marsh settlements were perhaps chosen near fresh water courses coming from the inland. At a later stage, rainwater formed freshwater lenses under terps. Wells could successfully be dug into these lenses. Cattle can stand slightly brackish water. Watering places for livestock were dug on or near the terps. Occasional flooding of such ponds was not disastrous since fresh rainwater floats on salt water, but there are indications

46 Vos 1999; Vos & Gerrets 2005; Nieuwhof & Vos 2008.

47 E.g. Nieuwhof & Vos 2008.

48 For Ezinge, the assumed *Flachsiedlung*-phase was questioned by Boersma (1999).

49 E.g. Leeuwarden-Oldehoofsterkerkhof, Dijkstra & Nicolay 2008.

50 E.g. in early Roman Iron Age Peins, Bazelmans *et al.* 1999.

51 E.g. in Roman Iron Age Leeuwarden, Nicolay 2008a.

52 E.g. in middle pre-Roman Iron Age Englum, see chapter 10.

53 E.g. Englum; Roman Iron Age Heveskesklooster, Boersma 1988; early medieval Anjum, Nicolay 2010c.

54 Zimmermann 1999, 314.

55 Starting with Van Giffen 1924, 21-22.

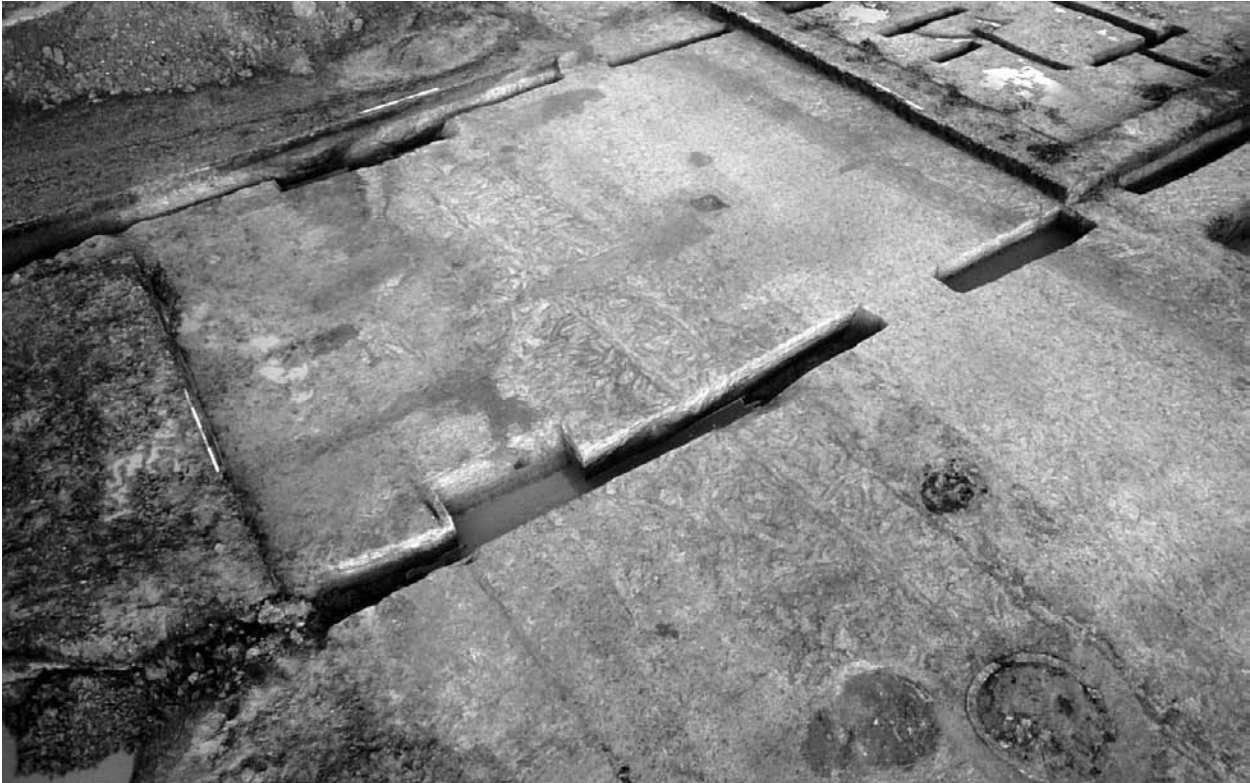


Fig. 3.5 Aerial view of the remains of a dike from the late pre-Roman Iron Age, found in Peins (Westergo). Linear patterns represent dike phases; the criss-cross stripes between the continuing lines are salt marsh sods; the dark circles are cross sections through wells from the early Middle Ages. Photo RUG/GIA.

that at least some of them were surrounded by small dikes.⁵⁶

One of the most debated subjects of terp archaeology is arable farming. Did the landscape allow for it? The brackish soil, the sea wind and the risk of flooding during germination and growing do not count as favourable conditions for growing crops. Experiments on the unprotected salt marsh have shown that it is possible to grow some crops on the sandy clays of the highest parts of the salt marsh, after the spring rains have washed away the salt. The yearly flooding of fields enriched the soil with all the necessary minerals, so that the use of dung as a fertilizer is unnecessary. Although species of wheat (*Triticum*) and millet (*Panicum*) were unsuccessful in these experiments, gold-of-pleasure (*Camelina sativa*), four-row barley (*Hordeum vulgare*), oats (*Avena sativa*), flax (*Linum usitatissimum*), Celtic bean (*Vicia faba* var. *minor*), and rapeseed (*Brassica rapa*) appeared suitable.⁵⁷

Circumstances on the unprotected salt marsh in the past were probably more favourable for arable farming than they are now, owing to the much larger capacity for

water storage of the salt marsh before diking. The salt marsh landscape was not only much larger but also more varied than it is nowadays. It is not unlikely that the occupants of the salt marshes could successfully grow their own vegetable products, including emmer wheat, the sub-fossil remains of which are regularly found in terp soil samples.⁵⁸ Moreover, there are indications that small dikes protected fields, in particular in northern Westergo (fig. 3.5); the remains of small dikes from the 1st century BC and the 2nd century AD have been found in Wijnaldum, Dongjum-Heringa and Peins-Oost.⁵⁹

Grinding stones and quernstones for grinding grain are common finds in terps.⁶⁰ Vegetable oil could be obtained from gold-of-pleasure, flax (linseed) or rapeseed. Apart from crops, there were wild plants to be collected from the salt marsh, for example beet (*Beta vulgaris*), sea aster (*Aster tripolium*), glasswort (*Salicornia* sp.), orache and goosefoot (*Atriplex* and *Chenopodium* sp.), stinging nettle (*Urtica dioica*) or wild carrot (*Daucus carota*). It is not certain that any of these plants was actually eaten. Some of them may have been grown intentionally. The remains of fruits and nuts (e.g. blackberry, apple, ha-

56 Elderly members of the historic society 'Ouwe Pölle' of the Wadden Sea island of Ameland (19th November 2009) could still recall the use of unprotected watering places on the salt marsh. A watering place surrounded by a small dike was found in 2012 during the excavation at Dronrijp-Zuid (pers. comm. J.A.W. Nicolay, University of Groningen).
57 Körber-Grohne 1967; Van Zeist *et al.* 1976; Bottema *et al.* 1980.

58 Pers. comm. M. Schepers (University of Groningen), and Schepers *et al.* 2013.

59 Bazelmans *et al.* 1999; Bazelmans 2005; Nieuwhof 2006a; 2012a.

60 Harsema 1967; Miedema 1983.

zelnuts, acorns), which would have to be collected in the interior, are rare, although twigs of hazel are often found.⁶¹ Elder (*Sambucus nigra*), which is more resistant to saline conditions than other fruits, regularly occurs in botanical samples; this shrub may have grown on the terps. Remains of plants that could have been used as kitchen herbs, for instance fennel (*Foeniculum vulgare*), are extremely rare, but they are occasionally found. These herbs were only introduced into the Netherlands in the Roman Iron Age; the earliest finds in the terp area also date from this period.

Domestic animals played a key role in the subsistence economy of the terp area. The combination of animal husbandry and arable farming must have provided the inhabitants with a fairly reliable food supply. Meat consumption is reflected in the many well-preserved animal bones found in terps. Cattle bones are most numerous by far in terps, followed by sheep.⁶² This applies to the entire coastal area during all habitation periods, but there are regional differences, probably related to the occurrence of fluke (*Fasciola hepatica*), which in particular affects sheep; fluke does not thrive in a saline environment.⁶³ Pig and horse bones are relatively rare, although the bones that were found indicate that some pigs and horses must have been part of the livestock in the settlements during all periods.⁶⁴ Chickens were introduced in the Roman Iron Age. There are indications that not only cattle, sheep and pigs, but also horses and dogs were sometimes eaten.⁶⁵ As a food source, cattle were probably primarily kept for milk and its products, rather than for meat. Meat may have been eaten on special occasions, such as seasonal feasts or ceremonial events.⁶⁶

Hunting, fishing and collecting shellfish or eggs of wild birds were only minor occupations of the inhabitants of the prehistoric salt marsh, if we follow the evidence from the bone spectrum. Among the abundant animal bones in terps, those of wild animals (including birds, fish, and shellfish) are relatively rare, even if wet screening is systematically applied. Hunting may only have been practiced on special (social, political or religious) occasions or in times of scarcity. Bones of wild animals such as aurochs, deer, or wild boar are sometimes found. Some of these animals may have been caught in-

land; antlers could have been imported as raw material.⁶⁷ The occasional bones of large marine mammals probably come from animals that were washed ashore; a limited number of bones of seals indicate small-scale seal hunting.⁶⁸ Shells are usually found in terps, but they are not necessarily the remains of eaten shellfish. It is quite certain that, for instance, layer of shells of mussels and periwinkles found in Englum served to consolidate a dung layer (see chapter 10).

Apart from water, the terp dwellers probably had alcoholic beverages to drink. Beer (based on grain with barley as the most likely candidate) probably was the most common alcoholic drink in this area. We know from Tacitus that the Germanic people drank beer, and that, at least according to Tacitus, they did not observe moderation when drinking.⁶⁹ Beer-making requires implements (very large pots) and techniques (heating with possible burning), which may leave traces in the archaeological record. Wine would have to be imported but there is hardly any evidence of wine import in the terp area. Mead implies beekeeping; it is, however, not very likely that year-round beekeeping was possible everywhere on the salt marshes. Only close to the inland, where a wider range of plants was available, beekeeping could be practiced.⁷⁰

3.3.3 Byres, houses and raw materials

The many bones of domestic animals found in terps are not the only indication that the inhabitants of the salt marsh area owned quite large herds. These are also indicated by the large byres, which are, for instance, found in Ezinge⁷¹, and the massive layers of dung in many terps. People and animals lived under the same roof. Keeping animals in byres (rather than outside) may seem to be self-evident in the salt marsh area where flooding regularly occurred. Animals were, however, kept in built-in byres in a large part of northwestern Europe⁷², so the risk of flooding cannot have been the only reason. Cattle, sheep, horses and pigs are descendants of wild animals and may well be kept outside all the year round; this is often even better for the animals' health. Keeping them inside has some practical advantages (collecting dung, safety) but also some major disadvantages (a health risk and the necessity to collect fodder for the winter), so the

61 E.g. in Englum, Bottema-McGillavry 2008.

62 Sheep are usually called sheep/goat in archaeozoology because of their similar bones. Goats are probably missing from the pre-Roman and Roman Iron Age bone spectrum in the terp region (pers. comm. W. Prummel, University of Groningen).

63 Prummel 2006, 42-44.

64 Cappers & Prummel 2005, 148.

65 Horses were eaten in Paddepoel (Knol 1983) and Englum (Prummel 2008). Dog bones with cut marks indicative of butchering were found in Wierum (Prummel 2006).

66 Roymans 1999, 292.

67 Recent stable isotope research indicates that aurochs bones found in terps come from a population of aurochs living on the salt marsh itself (pers. comm. W. Prummel, University of Groningen).

68 Prummel & Heinrich 2005, 65; Prummel *et al.* 2012.

69 Tacitus, *Germania* 23.

70 Nectar production by salt marsh plants is abundant in summer (if flooding does not occur), but not in spring (personal experience on the island of Terschelling). A beehive was found on the Feddersen Wierde (Ruttner 1981). This terp was less than 3 km from the Pleistocene inland, within the maximum flying radius of bees.

71 Waterbolck 1991.

72 Zimmermann 1999.



Fig. 3.6 Wooden object, probably representing a cattle head, found in the terp of Ferwerd-Burmania II (Friesland). Width 39.3 cm. It was possibly mounted on a wagon. From Boeles 1951, fig. 41.

reason for it may not only be practical, but social or ideological as well.⁷³ An ideological or symbolical meaning of cattle is suggested by various finds. Cattle horns, interpreted as ritual deposits, have been found in bogs in the Pleistocene inland; woodcarvings depicting horns have been found in the inland as well as in the coastal area, in the terp Ferwerd-Burmania II (fig. 3.6).⁷⁴ Written sources confirm that cattle had more than just economic value. According to Tacitus, cattle were the main property of the Germanic peoples, though he wrote somewhat condescending about their small size.⁷⁵ Domestic animals (cattle and sheep) were not only important in economy but also in social life, for instance in the exchange of marriage partners and for the payment of compensating fines (*weregild* in early-medieval terminology).⁷⁶

The small size of cattle of the pre-Roman and Roman Iron Age compared to modern as well as contemporary Roman cattle has been confirmed by modern archaeozoological research. The shoulder height of cattle was on average 107 cm, while modern Dutch cattle is 130-140 cm high.⁷⁷ The small size is reflected in the size of contemporary stall boxes.⁷⁸ Stall boxes were divided by wickerwork fences and cattle were tied up with their heads to the wall. The animals were probably herded outside summer and winter during the day (except during floods), and taken inside at night.⁷⁹ That way, the advantages and disadvantages of stalling were balanced: it was not necessary to collect fodder for the entire winter and it was healthier for the animals; at the same time dung could be collected, and the cattle's safety was guarded.

The number of cattle cannot directly be deduced from the number of stall boxes in a byre (ranging from 6 to 20 double stall boxes or even more). Apart from cattle, there

were other animals that needed shelter: sheep, horses and pigs. Besides female animals, there must have been male animals (at least in each settlement or in a small region) and oxen. An impression of the use of a byre can be obtained from the remains of a longhouse from the pre-Roman Iron Age in Nørre Tranders in Denmark, which burnt down with everything in it.⁸⁰ The byre, in which twelve single stall boxes were recognized, housed at least five sheep and two lambs (or five sheep, carrying lambs) and a subadult pig. These animals were all found together, not in a stall box but within a wickerwork fence. There were seven cattle, two horses and a young dog. One of the stall boxes was empty, while another had been used to store an amount of clay. The remains of five people were found there as well; one, found near the entrance, was interpreted as being caught by the fire while trying to save the animals. The others, three of which were 12-18 years old, must have been taken by surprise while sleeping there, at the far side of the house.

As was mentioned above, horses and dogs may occasionally have been eaten, but it is not likely that was their main function. Dog bones are common finds in terps. Dogs probably helped at herding, hunting and the defence against wild animals or human enemies. Every settlement had several horses. A harness that allowed horses to pull heavy loads was only invented in the Middle Ages. Before that, horses were mainly used for riding or possibly for pulling light carts. A yoke, which, considering its shape and size, is thought to be a dorsal yoke for two horses, was found in Ezinge (fig. 11.36).⁸¹ Disc wheels as well as spoked wheels from the research period were found in Ezinge and in Paddepoel (see chapter 13).⁸² The carts they were part of will usually have been pulled by oxen. Oxen were probably used for ploughing as well.

The rectangular, 3-aisled longhouses of the period⁸³ were supported by wooden posts and had wattle-and-daub walls. The length of the houses ranged from 10 to

73 Zimmermann 1999.

74 Van der Sanden 2001. The artefact is radiocarbon dated 1790 ± 50 BP (GrA-6842), cal. 120-390 (2 σ).

75 Tacitus, *Germania* 5.

76 Tacitus, *Germania* 12, 18, 21.

77 Pers. comm. W. Prummel (University of Groningen). See also Clason 1967, 102-104; Knol 1983; Van Gelder-Ottway 1988; Prummel 2008.

78 Waterbolk 1975.

79 Nieuwhof & Woldring 2008.

80 Nielsen 2002.

81 Hayen 1973, 168.

82 Van der Waals 1964; Van Es 1970.

83 Waterbolk 2009, types Hatzum, Hijken, Fochteloo, Midlaren and Noordbarge.



Fig. 3.7 Mineralized, dried dung cakes found in Englum; such dung cakes were probably used as fuel.

40 m, their width from 4 to 6.5 m. They were usually bipartite, with living quarters at one side and a byre with stall boxes for the animals at the other side. A dividing wall between the human and animal quarters may not always have been part of the house structure.

We are not well informed about the layout and use of the living quarters for human inhabitants since these are usually not as well preserved as the byres; only hearths can sometimes be recognized, indicating that cooking was done there. The byre part is often better preserved, probably because of the dung layers that protected wooden remains. The example of Nørre Tranders shows that the byre could be used for sleeping as well.

Trees did not grow in the saline environment of the salt marsh.⁸⁴ Once the terps had grown larger than the size of one or a few houses, some species of trees (elder, alder, birch, apple, willow) could grow there, but these trees cannot have made a major contribution to the wood supply needed for houses and utensils. Wood was probably not commonly used as fuel. In Englum, mineralized dung cakes were found, which had been dried on racks of twigs (fig. 3.7).⁸⁵ Dung may well have been a major source of fuel. Close to the peat area, peat was possibly used as well. Wood had to be imported from the inland area, either by exchanging it or by going on tree-felling expeditions inland. There are indications that twigs for wickerwork were taken from trees that were frequently used for the same purpose, so people may have returned to the same wooded areas repeatedly.⁸⁶ Driftwood may have served as an additional source of usable wood.

The landscape limited the availability of raw materials, not only of wood but also of stone. Stone had to

be imported from the inland areas with boulder clay. Stones were used for cooking, as a temper for pottery in some periods, and for grinding, hammering and whetting. From the late pre-Roman Iron Age onwards, rotary quernstones of basaltic lava were imported from the Eifel region.

3.4 Conclusion

Despite the seemingly unfriendly natural environment, it was quite possible to make a living in the salt marsh area of the northern Netherlands. The early colonists of this area learned to make the most of their environment. They made artificial mounds, terps, to live on out of the reach of floods, they grazed their cattle on the extensive salt marsh, and they practiced arable farming in areas that were expected not to be flooded during the growing season. Their descendants lived there successfully for a period of 800 or 900 years, until they finally had to leave around AD 300. A breakdown of the social environment, partly caused by a deterioration of the natural environment in the middle Roman Iron Age, is probably behind the abandonment of the area.

The salt marsh area was a natural environment that, for a major part of the research period, allowed of a prosperous life. That implies that people were not constantly engaged in safeguarding their livelihood and had ample time for social, cultural and spiritual activities. The next chapter will concentrate on the social environment of the inhabitants of the salt marsh area, and on the evidence that we have of their spiritual life.

⁸⁴ Schepers *et al.* 2013.

⁸⁵ Nieuwhof & Woldring 2008, 173-174.

⁸⁶ Bottema-McGillavry 2008.

4

Social and spiritual life of the inhabitants of the terp region

4.1 Introduction

The study of social and of spiritual life requires a different approach than the study of the ecological environment or the way people made a living. Evidence is often circumstantial and written sources are frequently used to complement and interpret it.

For the study of ritual, an understanding of the society in which it occurs is of crucial importance. The study of social organization in the archaeology of northwestern Europe usually concentrates on social stratigraphy and elite. It is also one of the main subjects of modern archaeology in the terp region.¹ This line of research heavily relies on a model of organization, the *Gefolgschaft*-system, which may not be as universally valid as is often assumed. In section 4.3 below, existing theories on social organization in the terp region will be discussed. This discussion will result in a model of socio-political organization in the terp region that I think is applicable to the research area of this study and that will be useful as a background against which ritual practice in the terp region can be interpreted.

The common emphasis on elites in the study of social organization implicitly suggests that everything else (marriage, the role and composition of family, the role of gender) is either well known or of minor importance. Ideas about these subjects are often quite traditional and just taken for granted. The subject is worth examining, because a real understanding of family life helps to better understand the finds and features in the archaeological record, including finds that can be related to ritual practice. Home-made objects such as pottery are not only interesting for dating purposes or to understand technological processes and stylistic development, but also because they may reveal something of family life, as will be shown in chapter 13. Therefore, some general aspects of family life will be discussed in 4.2.

Burial customs and ritual deposits are typical archaeological subjects, but only little is known about burial customs in the terp region. The subject of ritual in general is virtually *terra incognita* in the archaeology of the terp region. Only a small number of conspicuous deposits have been associated with ritual practice in the past. Finds such as Roman bronze statuettes or worked human skull parts have been linked to religious beliefs, but there is hardly any archaeological evidence on the religion of

the area in prehistory and protohistory. What we know is primarily based on contemporary and younger historical sources. These sources have served as a framework for the interpretation of archaeological finds, but this framework necessarily only provides a Romano-centric viewpoint when classical authors are consulted, or it relies too heavily on later Scandinavian sources. In section 4.4, the state of research on these elusive aspects of life in the study area: burial customs, religion and ritual, will be discussed, in preparation of the chapters of Part 3 of this study.

4.2 The family

In Dutch archaeology, which is often primarily concerned with settlement patterns and with the use of the landscape, a very simple model of social life is often taken for granted. It is usually implicitly or explicitly assumed that the nuclear family (father, mother and their children) forms the basis of society; this basic family may be extended to include needy grandparents and perhaps some servants. The alternation of generations is often implicitly considered to constitute a natural life cycle that can remain unchanged over centuries. Such a life cycle is, for example, at the basis of the study of Fokke Gerritsen on local identities and the cultural biography of houses in the southern Netherlands.² Danny Gerrets, though explicitly stating that families during this period may include other relatives or slaves, nevertheless assumes, perhaps unwittingly, that the new salt marsh land was colonized by young (nuclear) families.³

Although it is quite possible that the nuclear family played a role in these societies, it is remarkable that this model is so little questioned. The model is so familiar and like our own family life that it may be suspected to be based on anthropocentric thinking, or at least on analogy with early-modern family life in northwestern Europe. In its basic form, the traditional model includes the following elements:

- There is a monogamous marriage system. Husbands and wives meet because they live close to each other in the same or a neighbouring community; they start their life together in a house that is built for them, or they move in with the husband's parents.

1 Most recently Nicolay 2014b.

2 Gerritsen 2003, fig. 3.1.

3 Gerrets 2010, 73-74.

- Other relatives lead their own family lives.
- The older generation moves in with the nuclear family when they start needing care, at about the same time that the children are old enough to start their own family and leave the house.
- Servants are usually not mentioned, while slaves seem to be something for Celts or Romans, but certainly not for the free farmers of our region, at least not before the early Middle Ages. The free farmers and their sons did all the work themselves.

However, there are many uncertainties in this model. Several questions may be asked to shake it up a little:

- How were boys and girls raised and educated, and at what age were they considered adults and marriageable? The age of marriage, at least of a woman, influences the number of children she may have.
- Was the exchange of children as hostages in a peace-keeping system already common practice, or was it introduced by the Romans? If it was common practice, a household might include children who belonged to different families.
- Was marriage monogamous and was divorce possible? In *Germania*, it is stated that the Germans were strictly monogamous, except when politics forced a leader to accept more than one wife.⁴ We have no way of establishing how many spouses one could have, simultaneously or consecutively. The living quarters of the farmhouses were simple rooms without partitions, which do not help us in establishing how a household was composed.
- Were other relatives, apart from parents, grandparents and children, included in a household? In many societies we know from ethnographic accounts, uncles and aunts, cousins, nephews and nieces play a role, for example in raising children or when inheritance is concerned.
- Are there any indications that there were slaves, serfs or free servants, where did they come from and how did their lives elapse? Tacitus mentions slaves, having their own households, in *Germania* 25, and people losing their freedom because of gambling, in *Germania* 24. The *servi* of historical sources were possibly servants and unfree craftsmen, which may have had their own households.⁵

The answers to these questions, if we ever find them, may not be far from the traditional model, but even a slight change may provide an entirely different perspective on society and people's lives within it. A system of matrilineal descent combined with virilocality (the woman moves in with her husband or his family), for instance, may result in a high percentage of divorces, because mothers

tend to follow their children when these move in with her kin.⁶ Two more questions are relevant in this context; unlike the previous questions, these can be answered with some confidence:

1. What was the average life expectancy and how many people were so old that they needed care?
2. How did husbands and wives actually meet and where did they start their life together?

The age at death can be inferred from the ages of people buried in cemeteries. Infants and young children are not always buried there so that child mortality cannot be assessed that way, but cemeteries will give an impression of the life expectancy of people who survived early childhood. Since cemeteries from the research period have not been found in the salt marsh area, we may use the available, anthropological data of contemporary cemeteries elsewhere in northwestern Europe as a starting point.

- In the early pre-Roman Iron Age urnfield of Olthof-Noord near Deventer (province of Overijssel), the age of 25 out of 27 individuals could be determined. Eleven of them were children. Three individuals were older than 17; one was older than 20; one was 20-24, one was older than 24 and three were 20-40 years old; of the remaining individuals, two were "juvenile/adult" and three were "adult".⁷
- In the pre-Roman Iron Age cemetery of Mill Hill in Kent (Great-Britain), 20 out of 25 adult skeletons were between 20 and 45, while among the remaining five, four were between 40 and 50, and only one between 50 and 60.⁸
- In four native Roman cemeteries in the southern Netherlands, most adults by far had died at an age between 20 and 40.⁹
- Of the 1200 burials in the large Roman Iron Age cemetery of Slusgård on the island of Bornholm (Denmark), 467 were inhumations, with 125 preserved skeletons of which 78 were adult. The average age at death for those who survived childhood increased, from 31.2-34.9 in the early Roman Iron Age to 36.4-39.3 in the late Roman Iron Age.¹⁰

These sparse data indicate that the average age at death for people who survived childhood during the pre-Roman Iron Age as well as during the Roman Iron Age was low, between 20 and 40. Most people apparently did not grow old. Death at childbirth and infectious diseases may well be responsible for this. The farmhouses that were shared by people and animals must have increased the risk of infections. In the coastal area, malaria may have

⁴ Tacitus, *Germania*, 18 and 19.

⁵ Gerrets 2010, 136.

⁶ Turner 1969, 12-13.

⁷ Van der Wal 2012, Afb. 5.10.

⁸ Anderson 1995.

⁹ Smits 2006, 141.

¹⁰ Sellevold 1996.

posed an additional health risk. The mosquito *Anopheles atroparvus*, vector of the disease, especially thrives in a brackish environment. The watering places for cattle on terps, for example, provided favourable conditions for mosquitoes. In historical times, every fourth or fifth death in this region was probably related to malaria.¹¹ It is certain that malaria occurred in the coastal zones since the 7th century, as it did in low lying regions of Anglo-Saxon England.¹² It is not unlikely that malaria strongly affected the average age at death in the coastal zone already in prehistory.¹³ The low life expectancy, which is demonstrated by the ages of people buried in cemeteries, implies that in prehistoric and protohistoric times, there may not have been an 'older generation' in need of help. Since most people died before the age of 40, elderly people must have been rare. That must have had implications for individual and social life in many ways.

The second question concerns the origin of marriage partners. Part of the answer to that question comes from recent pottery research. An excavation near the village of Midlaren in northern Drenthe, just to the south of the salt marsh area, yielded a large amount of hand-built pottery, mainly from the Roman Iron Age and the early Middle Ages.¹⁴ Research on the Roman Iron Age material established that it did not only contain pottery that was to be expected in the northern part of Drenthe, but also pottery from the Groningen salt marsh area (terp pottery with an organic, vegetal temper), and pottery from the south, so-called *Rhein-Weser-Germanische Keramik*.¹⁵ Several pits appeared to contain concentrations of only Drenthe, Groningen or RWG-pottery, made by one individual potter. This indicates that potters were not always locals, and that some of them came from elsewhere, perhaps as spouses. It might be argued that only the pots were imported, not the potters, but it does not seem to make sense to transport ordinary cooking pots that could easily be made anywhere over large distances. If we follow the common assumption that making pottery is usually women's work in societies with a subsistence economy (the lack of standardization is not suggestive workshop production)¹⁶, it may be concluded that these finds confirm the traditional model that women moved in with their husbands, rather than the other way around (unless it can be proven that the potters were men). Moreover, the finds show that spouses did not necessarily come from neighbouring villages. This in-

sight provokes several other questions, which are hard to answer: What was the nature of the contacts that existed between these areas? Were faraway relatives ever visited? Did ritual practice play a role in these contacts (a question we will return to in chapter 11)? How did marriage partners meet, or were marriages pre-arranged, perhaps for political reasons? This latter question brings us to the realm of political organization.

4.3 Political organization and martial values

4.3.1 The *Gefolgschaft*-system

Many authors have generalized the socio-political organization of the Germanic tribes, echoing the work of Tacitus.¹⁷ Tacitus' description of the *comitatus* (the German word *Gefolgschaft* is commonly used) as a major factor in Germanic social and political organization is widely accepted, also in Dutch archaeology.¹⁸ However, regional variation in the immense area that was inhabited by the so-called Germanic tribes was certainly too large, and the historical reliability of Tacitus' work is too uncertain to allow of such generalizations.¹⁹

Since the *Gefolgschaft*-system is usually presented as the basic organizing principle of Celtic-Germanic society, including our research area, it is worth examining at some length and to assess its validity. The *Gefolgschaft*-system model is based on historical sources (in particular Tacitus' *Germania*, his historical works, and the early medieval epic poem *Beowulf*) and on weapons from graves or other contexts.

According to Tacitus, each man of some importance had a retinue, "a distinction in peace and protection in war".²⁰ The followers are depicted as *clientes* in a patronage system, similar to the system that lay at the basis of Roman society. A man's social status depended on the number of his followers and their valour, or on his place in the retinue of a specific leader.²¹ In return, followers expected to receive from the leader their battle horse and weaponry; they would also take part in banquets and expect lavish, though of course (being Germanic) unpolished, pomp. Tacitus suggests that leaders could only afford a large retinue by continuous robbery and war. Thus, the pursuit of social status by keeping a large retinue explains Germanic martial mentality.²²

Tacitus' account of the *comitatus* and its role has been combined by modern researchers with insights inferred from the early medieval epic poem *Beowulf*, resulting in the model of the *Gefolgschaft*-system. According to the

11 Knottnerus 1999; 2002.

12 Gowland & Western 2012.

13 A skull from Englum (see Ch. 10, skull no. 3) and a skull part from Achlum (App. C, 3e) possibly represent people who died of malaria.

14 Nieuwhof 2008e.

15 Von Uslar 1938.

16 Ethnographic studies show that making pottery for private use in a subsistence economy is usually women's work, while commercial pottery production in workshops is usually men's work (Abbink 1999, 39; Sinopoli 1991, 100; Rice 1987, 184). That might also apply to the past.

17 In recent years e.g. Gerrets 2010, 134ff.

18 Roymans 1990; Bazelmans 1991; 1999; Hiddink 1999; Nicolay 2007.

19 Timpe 1988; see also chapter 2.3.1.

20 Tacitus, *Germania* 13-14; transl. Rives 1999.

21 Tacitus, *Germania* 13.

22 Tacitus, *Germania* 14.

model in its basic form (various authors emphasize different aspects), the leader of a Germanic tribal group had a retinue, consisting of young warriors. Status and political power of a leader were directly linked to the size and fame of his retinue. The relationship between the leader and his retinue was basically an asymmetrical patron-client relationship. In return for their loyalty and military support, the leader was expected to present his followers with gifts, especially weapons and luxury objects. Young warriors were given a chance to win glory by showing courage in battle. Warriors who had thus acquired wealth and prestige were in a position to assemble their own retinue in due time. The system could only be maintained by frequent raiding and warfare so that warriors had the opportunity to prove their valour and could be rewarded with the spoils of war. Martial values were at the basis of the system, while warriorship constituted an important part of the identity and life cycle of men.²³

Some objections can, however, be made against this model. Although there are strong indications that this system functioned in northern Gallic societies as from the late pre-Roman Iron Age²⁴ and also in early medieval societies in northwestern Europe²⁵, it might be questioned as the basis of the organization of societies in our research area, the northern Netherlands, in the pre-Roman and Roman Iron Age. Arguments against the applicability of the *Gefolgschaft*-system model for all of northwestern Europe are aimed at Tacitus' original account and at the derived model.

Firstly, Tacitus' account is undoubtedly coloured by the social patronage system which he, as a Roman, was accustomed to, and by his preconceptions on the martial character of Germanic society. Reading between the lines of *Germania*, we get the impression that social differences between leaders and their retinue were actually not so large in Germanic society. The leaders Tacitus mentions (*reges, principes* and *duces*), seem to have been recruited from a large group of equal standing and did not have absolute authority.²⁶ Decisions were made during meetings. Tacitus describes feasts, which were not organized to reward a retinue for their loyalty, but rather to discuss important matters, such as matters of peace and war, feuds and probably the payment of compensating fines in the form of livestock (see 3.3.3), the forging of marriage bonds, and the adoption of leaders. Heavy drinking was part of such feasts, but decisions would be made afterwards, when everyone was sober again according to

Tacitus.²⁷ The impression is conveyed that all members of the group had a say in matters of importance, not only their leader. Contrary to the Roman and Gallic systems, followers were not subordinate to their leaders; since leaders and followers were equals, Jos Bazelmans suggests the relation is better called *coordinate*.²⁸ Moreover, battle was actually a family affair rather than the sole business of leaders and their retinue. Women were present in the background of battle, encouraging their husbands and sons and providing them with food.²⁹ Germanic social organization therefore does not seem so similar to Roman or even northern Gallic patronage relations as has been suggested. Secondly, the importance of martial values among the intensively studied Batavians³⁰ cannot be considered representative for societies that were not as involved in Roman affairs as the Batavians. The *Gefolgschaften* of the Batavians are probably not so traditional. They were a multi-ethnic group consisting of indigenous people and descendants of various tribal origins who had migrated to the area in the late 1st century BC. A new collective identity formed under the leadership of an aristocratic leader who was recognized and supported by the Romans.³¹ Martial values and membership of a retinue undoubtedly gained importance in this process. In general, the importance of *Gefolgschaften* probably increased as a reaction to Roman expansion.³² Although it has been argued that major changes did not occur in the socio-political system of the societies between Rhine and Weser during the pre-Roman and Roman Iron Age³³, it is actually more than likely that the Roman conquest and contacts with the Romans had a profound impact on indigenous socio-political organization.

Thirdly, Tacitus notes that gift-exchange was practiced with generosity on many occasions, and that hospitality towards any visitor was an important virtue.³⁴ The friendly social relations that were maintained by such practices do not appear to be consistent with the warlike attitude that Tacitus explicitly ascribes to the Germanic peoples, with martiality as a necessary ideal that keeps the *Gefolgschaft*-system going. Warfare may have been less common than he suggested, and also less common than is suggested by the model of the *Gefolgschaft*-system. Hiddink has argued that warfare in Germanic tribal so-

23 Nicolay 2007, 237ff.

24 Roymans 1990; Nicolay 2007.

25 Bazelmans 1999.

26 Gerrets (2010, 133ff), though accepting kings of noble birth, suggests that social differences in the rural settlements of the terp region were relatively small.

27 "They debate when ignorant of guile, but decide when incapable of error", *Germania* 22, transl. Rives 1999.

28 Bazelmans 1991, 104.

29 *Germania* 7-8. There are indications that women did sometimes fight in battle; armed women seem to have been found among the dead Germanic warriors on a battlefield during the Markoman wars (De Libero 2009, 284).

30 Nicolay 2007.

31 Roymans 2004, 65.

32 Steuer 2006; 2009, 317.

33 Hiddink 1999, 231-233; Hiddink's critique was in particular aimed at still prevailing evolutionary views on the development of tribal societies.

34 Tacitus, *Germania* 15 and 21; also Julius Caesar, Gallic War VI, 23.

cieties was not what the Romans meant by that word.³⁵ Violent conflict did not occur between foreign groups, but only between groups that were somehow connected, as a special form of interaction. Warfare was ritualized and regulated, in feuds and raids. Violent conflicts could arise in response to certain actions of others and were of a retaliative rather than acquisitive nature, though winning booty may well have been part of it. They were first meant to settle accounts if other strategies to keep the peace, such as imposing fines, had failed, and not primarily an occasion to win military prestige and personal glory.

Lastly, the model is usually applied to societies and areas where weapons played an important and demonstrable role. In the northern-Gallic area and in parts of Germany, the importance of martial values well before the Roman conquest can be derived from finds of weapons and related finds such as horse-gear. Horse gear and weapons play an important part in the recognition of changing martial values in the Batavian area.³⁶ In the Elbe-region in Germany, east of the river Weser, weapon graves occur from the late pre-Roman Iron Age onwards.³⁷ However, weapon finds are extremely rare in the area between the rivers Rhine and Weser, including the terp region. In the terp region, graves from before the early Middle Ages are scarce and usually do not contain grave-goods, as will be discussed in section 4.4.1 and in chapter 12. Neither have weapons so far been found in rivers or in other ritual contexts.³⁸

The absence of weapons in the archaeological record is not to be taken as an indication that weapons were not in use in this area. Frisian foot soldiers already took part in the first campaign to the north by Drusus in 12 BC. It may be assumed that they were enlisted because they knew how to fight and had proper weapons at their disposal. However, there may be other reasons for the lack of weapons in the archaeological record of this area.

Weapon finds in the terp region usually date from the early Middle Ages.³⁹ Iron from that period is usually heavily corroded, which suggests that most iron from earlier periods may have disappeared altogether. Iron objects of any kind are rare in the terp region. Pre-Roman Iron Age swords may only be recognized from the bronze rings of the hilts⁴⁰; these have not been found so far.⁴¹ The only weapons or weapon related objects from before the Roman Iron Age in the terp region are ceramic

sling stones⁴² and a small number of studs of belt hooks.⁴³ While weapons from the pre-Roman Iron Age are unknown in the terp region, weapons from the Roman Iron Age do occur, although they are rare. A small number of offensive weapons from the early and middle Roman Iron Age have been found in the province of Friesland.⁴⁴ Several finds of horse gear, probably associated with Roman cavalry, are also known.⁴⁵ These objects may have been taken home by returning veterans from the Roman army.⁴⁶

The absence of weapons in the archaeological record cannot be used as an argument for the absence of leadership or social stratification.⁴⁷ As was argued by Theuws and Alkemade, swords and other weaponry are specifically found in areas where power is contested, but is not to be expected in areas with a stable political organization.⁴⁸ Moreover, social differences may have been expressed in ways that did not leave recognizable traces. Livestock was probably important in the prestige sphere in the Rhine-Weser area, rather than metal objects. Competitive rituals, such as weddings or rituals in which goods were destroyed may also have functioned in establishing social status.⁴⁹ A competitive element was probably part of 1st century AD depositional practice in Englum and Ezinge, as will be argued in chapter 11.

Summarizing, society in our research area and period was probably not egalitarian, although differences may have been less outspoken than in other areas, and social status was certainly expressed differently. Contra the prevailing opinion in the current scientific debate, there are no indications of a developed *Gefolgschaft*-system with accompanying martial values and raiding. Small-scale warfare to settle accounts may not have been uncommon, but the payment of compensating fines may have been an effective way to prevent long-lasting feuds. This seemingly stable socio-political structure probably did change over time, if not by internal causes then by influences from outside. The next section will go into the most obvious of these influences: contacts with the Roman Empire.

4.3.2 Contacts with the Romans

The Roman conquest and later contacts with the Romans must have had a profound influence on the socio-politi-

35 Hiddink 1999, 76-77.

36 Nicolay 2007.

37 Kleemann 2009.

38 Only a sword of type Gündlingen, dated early pre-Roman Iron Age, has been found in the valley of the river Tjonger in the Pleistocene part of Friesland, south of the terp area (Boeles 1951, 54).

39 Knol a.o. 1993; 2007; Knol & Bardet 1999; Miedema 1983.

40 Roymans 2004, 108-109.

41 An inventory of finds made by metal detectorists is not available yet.

42 Ceramic sling stones are regular finds in the terp region (Miedema 1983, type XXIV; Taayke 2005, 161). Slings are not commonly associated with martial values, but Germanic soldiers in the Roman army probably used sling stones in battle (Speidel 2009, 246).

43 Nicolay 2006b.

44 Nicolay 2007, fig. 3.12; 2009, 267.

45 Nicolay 2007, 246 and fig. 3.13.

46 Nicolay 2009, 267.

47 Hiddink 1999.

48 Theuws & Alkemade 2000.

49 Bazelmans *et al.* 2002, who mention the potlatches of the Kwakiutl and Tlingit Indians of the northwest-American coast as an example.

cal organization of societies outside the Roman Empire. It seems unlikely that the socio-political situation of the area between Rhine and Weser remained unchanged, as Hiddink claimed⁵⁰, while in the same period major political changes did occur on a European scale. Moreover, the Dutch coastal area was close to the Roman Empire and contacts must have been numerous and influential. What was the nature of these contacts?

Although historical sources suggest otherwise (see 2.3), contacts were not all of a military character. The large amount of Roman import finds in the Dutch and German coastal area may be taken to indicate that contacts were often rather friendly.⁵¹ These finds include Roman pottery, especially *terra sigillata*, bronze figurines, coins, quernstones of basaltic lava (these had been imported already before the Roman conquest), and rare artefacts such as an engraved crystal finger ring with the representation of Bacchus found in the terp of Westerwijtwerd or a carved ivory knife handle found in the terp of Eenum.⁵² Such objects landed in the terp region in several ways.

In the first place, it is certain that many men (*Frisii* as well as *Chauci*) enlisted in the Roman army.⁵³ A Frisian unit was, for instance, stationed at Hadrian's Wall, at least in the 3rd century.⁵⁴ Veterans returning home probably brought Roman products and money with them. It might be expected that they had become accustomed to a Roman lifestyle and kept purchasing Roman objects after their return. Nevertheless, the striking find of locally made pottery near Hadrian's Wall in the style of the pottery of the homeland of the Frisian soldiers⁵⁵, shows that these soldiers did not adopt the Roman lifestyle indiscriminately.⁵⁶

Secondly, the Romans preferred diplomacy rather than military intervention to keep the peace in a wide area outside the borders of the empire. A stable political situation in neighbouring areas was in their best interest. Leaders of friendly groups outside the empire were presented with gifts on the occasion of diplomatic meetings.⁵⁷ In return, they were expected not to harm Roman interests. Taking hostages (in particular children of lead-

ers), for example when Corbulo pacified the *Frisii* in AD 47⁵⁸, served the same purpose. They were treated well as long as alliances were not broken.

The practice of gift exchange had been customary between communities and between leaders long before the Roman Iron Age. The Romans added a new gift category to the repertoire, as may be inferred from Tacitus' remark: "They take particular pleasure in the gifts of neighbouring tribes, sent not only by individuals but also by whole communities: choice horses, splendid weapons, ornamental discs and torques; *we have now taught them to take money also*."⁵⁹ This remark indicates that Roman coins found in the coastal area were not only taken there by veterans, but also by Roman diplomats. Other gifts may have been especially adapted to local taste. Michael Erdrich has argued that Roman objects entered the Germanic world in waves.⁶⁰ Despite the fact that the number of waves may be somewhat smaller than Erdrich suggested⁶¹, it is clear that Roman objects from the period between AD 16-50 and 100-150 are extremely rare. The Romans and people outside the Empire were clearly not constantly engaged in diplomatic or other contacts. From the second half of the 2nd century onwards, however, there was a rather continuous influx of Roman objects; although peaks in the dates of coins can be distinguished.⁶²

Thirdly, apart from political and diplomatic contact, there must have been some form of trade between the Roman Empire and the Germanic area. The many quernstones of basaltic lava from the Eifel that are found in the terp region as from the late pre-Roman Iron Age suggest a form of commercial trade independent of the Romans, rather than diplomatic gift giving. Money, acquired from the Romans, may have been used in trade, but barter trade and other kinds of exchange probably played a role as well. Small currencies are relatively rare in the terp region, which shows that money did not play a role as an exchange medium in the region itself. Meat, hides, soap and blond hair for wigs, dairy products, amber, wool, salt and slaves have been mentioned as possible commercial products from the coastal area.⁶³ The famous Roman tablet that was found in the terp of Tolsum and that used to be read as a selling contract for a cow⁶⁴ cannot be used as evidence for trade any longer. It was reinterpreted as a debt agreement written in AD 29, with a Batavian soldier and a tribune from the fifth legion among the signers.⁶⁵

50 Hiddink 1999, 231-233.

51 Erdrich 2001b.

52 Van Es 2005.

53 Galestin 2008a.

54 From an inscription, it is certain that they were there AD 222-235 (Jobey 1979, 140).

55 Housesteads ware; Jobey 1979. This pottery is in the same style as the middle Roman Iron Age pottery of different regions of the coastal area: present Noord-Holland, Friesland and Groningen (Taayke 1990, 179). Although it is usually assumed that the pottery is from the 3rd century AD (e.g. Galestin 2010), 2nd century types are among the pottery depicted by Jobey, which indicates that a Frisian army unit was there already in the 2nd century AD.

56 The pottery is quite sophisticated and must have been made by experienced potters. It is possible that pottery-making wives or female servants accompanied the soldiers (Van Driel-Murray 1994).

57 Erdrich 2001b, 34.

58 Tacitus, *Annales* XI, 19.

59 Tacitus, *Germania* 15; translated by Rives 1999. Italics are mine.

60 Erdrich 2001b.

61 Galestin 2010.

62 Bazelmans 2003.

63 Cf. Erdrich 2001a, 306; Van Es 1981, 266; Gerrets 2010, 139ff.

64 Boeles 1951, Pl. XVI.

65 Bowman & Tomlin 2009.

Lastly, it has been argued that Roman objects (in particular from the first half of the 1st century) were collected by natives in abandoned Roman *castella*, notably the naval base of Velsen in Noord-Holland.⁶⁶ Some *terra sigillata* sherds in settlements near Velsen were proved to belong to the same vessels as sherds within the base.⁶⁷ A similar argument has been used to explain Roman finds in early-medieval contexts, especially after the excavation of the terp Wijnaldum-Tjitsma. During this excavation, many Roman objects were found in younger, early medieval layers. These finds may have been imported from locations near the limes only in the early Middle Ages.⁶⁸ Nevertheless, although import of Roman objects after the Roman period may have played a role, it is rather certain that the great majority of finds from the Roman Iron Age in the terp region came to the area not long after they were produced.⁶⁹ There they were adapted to the local taste and needs, as the evidence from many terps, including Englum and Ezinge, shows (see chapters 10 and 11).

Contacts with Romans and the Roman Empire must have influenced life in the coastal area in many ways. Young men were probably attracted by the possibilities for adventure, bravery and fame that were offered by the Roman army. Homecoming veterans must have disturbed the existing social order since they not only took Roman money and objects home, but also new ideas and a taste for a martial lifestyle. It is not unlikely that the Roman policy aimed at befriending the elite resulted in increasing social differences. The introduction of money, increasing trade and new possibilities of achieving status undoubtedly had their effects on social life. At the same time, the effects on the material culture was marginal. Although imported Roman objects are known from most terps, these were no more than a minor addition to the household, which did not really affect ordinary life. The example of Housesteads shows that homemade pottery was preferred to imported ware, even by soldiers in the Roman army. Potters in the northern Netherlands did not adopt wheel throwing to make pottery, although they certainly could have done so if they had wanted to.⁷⁰ There seems to be a tendency to demonstrate that a Roman novelty such as a potter's wheel was not necessary to make nice pots. Many of the hand-built beakers are so thin and well finished that it is often difficult to distinguish hand-built from wheel-thrown, imported pots.⁷¹ These pots indicate that the merits of Roman life were under discussion within these societies. The potters may be representative of many others that were reluctant to accept the Roman way of life.

4.3.3 Socio-political organization in the coastal area

It is possible to sketch an image of the socio-political organization of the societies that inhabited the coastal area of the northern Netherlands, which takes the above considerations into account. This model will serve as a background for the chapters of Part 3.

Social organization undoubtedly was an important factor in the colonization of the coastal landscape from the beginning. Terps and dikes were labour intensive projects that needed constant attention. The development and growth of the salt marshes added new, habitable areas to the areas that were already colonized. It had to be decided who was to settle on new salt marsh ridges and where new settlements were to be situated. While there are regional differences in the way terps of different sizes were clustered, terps were usually within sight of each other (0.5-2 km apart). The available land for grazing and arable farming had to be shared or to be divided between the territories of terps or terp clusters. The use of distant fields, for instance in northern Westergo where small dikes probably protected fields on new salt marsh ridges, needed a stable social environment without threat of destruction or robbing by others.

Some form of leadership was probably required to organize and sustain this way of life. Territorial units must have sought to maintain friendly relations with each other; hospitality must have been an important virtue and marriage partners and gifts were exchanged. The leaders of local territories may have been answerable to a regional leader, which might be called a *king* if we follow Tacitus. The Dutch and German coastal areas may have encompassed a large number of different regional territories, each with its own leader, although special halls that could reliably be interpreted as residences of leaders, have not been found in the Dutch part of the coastal area so far. However, the number of excavated house remains is small enough to suggest an evidence gap. Special buildings of unknown function from the middle pre-Roman Iron Age were found in Middelstum-Boerdamsterweg in Groningen and, close to the Dutch terp region, in Jemgum and Hatzum on the Ems.⁷² A large number of Roman roofing tiles, found during levelling of the terp of Hatzum I near Dronrijp, suggest that one of the houses on this terp may have had (or was meant to have) a tile roof.⁷³ This possibly was the residence of a local or regional leader who maintained relations with representatives of Rome; it may also, or at the same time, have been

66 Cf. Erdrich 2001a; Van Es 2005, 177.

67 Vons & Bosman 1988.

68 Volkers 1999; Van der Vin 1999; Galestin 1999.

69 Galestin 2010.

70 Van der Waals 1965.

71 Nieuwhof 2008e.

72 Waterbolk 2009, 156. Outside the Dutch terp region, hall-like structures from the Roman Iron Age that possibly functioned as formal meeting places were found on the Feddersen Wierde in Germany (Haarnagel 1979; cf. Hiddink 1999, 115-122), in Midlaren in northern Drenthe (Nicolay 2010a) and in Wijster in the southern part of Drenthe (Waterbolk 2009, 159).

73 Boeles 1922.

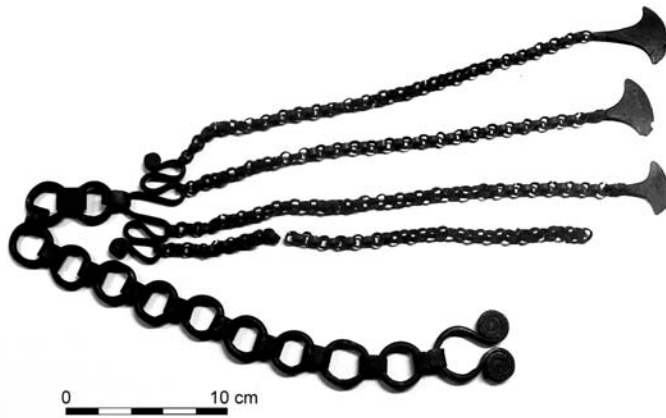


Fig. 4.1 Bronze chatelaine, probably from central Europe, dated to the pre-Roman Iron Age, found in the terp Swichum (province of Friesland). (Frisian Museum, photo author)

the house of a successful veteran with a taste for the Roman lifestyle.

Communities had contacts with the wider world, via alliances that were probably maintained by gift exchange and marriages. That way, objects from faraway places sometimes ended up in the terp region. Possible examples are a central-European bronze chatelaine dated to the pre-Roman Iron Age, found in the terp of Swichum (fig. 4.1)⁷⁴, or the late pre-Roman Iron Age glass bracelets from the central River area that are occasionally found in the terp region, which are thought to be indicative of marriage relationships.⁷⁵

The absence of weapon finds does not imply that martial values were of no significance in the terp area and that metal weapons were unknown there. Nevertheless, the absence of weapons from the pre-Roman Iron Age in the archaeological record of this area may be taken as an indication that this was a stable society in which power was not contested. Chosen leadership based on merit on all levels was beneficial for stability. Weapons from the Roman Iron Age are still rare, but the rare finds may reflect a significant change. Contacts with the Roman Empire, as well as taking service in the Roman army by some, must have destabilized the social order to some degree. New elites may have come forward, using weaponry as a status symbol, and martial values became increasingly important. This gradual change perhaps came with a tendency to make leadership hereditary, rather than chosen. Some form of aristocracy may have arisen, but it is not visible in a display of wealth, for instance in graves.⁷⁶

The nature of the relations between leaders and their people also changed during the Roman Iron Age. As long as leaders were chosen from among their equals, support was self-evident if the leader functioned well. During

the Roman Iron Age, leaders may have started to reward support with gifts just like Roman patrons did, using the objects they had acquired in their dealings with the Romans. Thus, dependency relations may gradually have been created and the original equality thereby turned into a relationship that was more like the Roman patronage system, with leaders as patrons and their subjects as clients.

During the pre-Roman Iron Age, warfare was limited to occasional feuds, which perhaps sometimes included raiding. In this economically stable and densely populated area, frequent raiding, as a means to win booty, cannot have been common practice. Meetings of men of equal social position, as described by Tacitus, must have functioned in stabilizing feuds that got out of hand. Leaders could raise a group of warriors for defensive or offensive tasks if necessary. We may call such groups a retinue, but they only had an *ad hoc*-character. During the Roman Iron Age, the formal character of such retinues may have increased because of increasing dependency relations and the creation of an aristocracy. Veteran mercenaries possibly played a major role in the new aristocracy, as well as in the retinues of the leaders.⁷⁷

The influence of contacts with the Roman Empire not only affected relations within societies outside the empire. Relations with the Roman Empire and relations between tribal societies must have been affected as well. The raids of the Chauks on the coast of Gallia and the raids of Germanic groups into Roman territory from the middle Roman Iron Age onwards may not have been inspired by native Germanic tradition in which martial values were of foremost importance, as is usually assumed. As Steuer has argued⁷⁸, they should rather be seen against the background of social changes that occurred in societies outside the Roman Empire, as a result of and a reaction to Roman aggression and Roman foreign policy.

74 Boeles 1951, 105.

75 Roymans 2004, 18.

76 Van Es (1981, 267) also suggested that the social organization of indigenous societies north of the Limes must have changed under the influence of contacts with the Roman Empire. He argued that these contacts instigated a process of state formation, which later turned against the Romans.

77 According to Steuer (2006, 233), the formation of warrior bands (another word for *Gefolgschaften*, not stressing their organization but their main activities) in tribal societies in general starts with veteran mercenaries who cannot renounce their way of life.

78 Steuer 2006.

4.4 Ritual, religion and dealing with the dead

4.4.1 Dealing with the dead

One of the reasons for this study is that we know hardly anything about burial customs in the coastal area of the pre-Roman and Roman Iron Age. At the time of colonization, ca. 600 BC, cremation burial in urnfields was the common burial custom in the Pleistocene interior. However, although urnfields continued to be used until ca. 400 BC in the interior (see 5.4.2), similar cemeteries have not been found in the coastal area of the northern Netherlands. It has been suggested that sedimentation in some areas or erosion in others are responsible for the absence of urnfields in the coastal area.⁷⁹ The catalogue of human remains from the coastal area (Appendix C) does list some possible cremations in urns from the urnfield period, which were found in Oostergo, the eastern part of Friesland (near Hallum and in Bornwird), an area where the old Pleistocene surface is less deep than elsewhere in the salt marsh area. However, if these urns are indeed reliable and dated correctly, they do not belong to early salt marsh occupation, but to older Bronze Age occupation on relatively high Pleistocene parts of Oostergo, before the area was silted over.⁸⁰

Single inhumations are regular finds in the terp region, but there are no indications of cemeteries from the pre-Roman and Roman Iron Age in the salt marsh area. If cemeteries occurred, it is rather certain that they did not include inhumations, as it is hardly conceivable that such cemeteries would all have escaped discovery in the course of agricultural or other activities.⁸¹ Only in the Migration Period, cemeteries appear, with cremation as well as inhumation graves. Besides the single inhumation graves, single human bones are dated to the research period, and a very small number of cremation burials.⁸² These finds will be further discussed in chapter 12.

Because of the small number of graves in terps, some of the early researchers thought that the rare human remains were not intentionally buried at all. In a letter from 1907, the curator of the National Museum of Antiquities in Leiden, J.H. Holwerda, wrote that the terp dwellers must have been nomads from the inland sandy soils; people who had accidentally died on the way were left on the terps.⁸³ Nyëssen, in his study *The passing of the Frisians; Anthropography of Terpia*, thought that the dead found in terps had died by accident when sliding on slippery slopes or by stumbling into pits and ponds, or that

they had fallen victim to raiding Chauks or Vikings.⁸⁴ More recently, Halbertsma used the single inhumations that were found as evidence for inhumation as common practice.⁸⁵ Most modern authors, however, assume that cremation must have been the common mortuary ritual during the research period. Although this may seem a far-fetched conclusion as it is based on hardly any finds, it is actually not so unlikely. Cremation was practiced inland in this period; after the urnfield period ended, cremations without urns became common. The chance of finding cremation remains is extremely small if they were buried without a container in the salt marsh and were covered by sediment later. Some authors have argued that other explanations (such as excarnation) are to be considered as well.⁸⁶ It seems likely that there was more than one way of dealing with the dead.

The formal cemeteries that were introduced after the 4th-century break in habitation are interesting for comparison. From the 5th to the 8th century, cremation as well as inhumation were practiced within the same cemeteries.⁸⁷ The carefully excavated cemetery of Oosterbeintum is a good example of such a mixed cemetery.⁸⁸ Bodies in inhumation graves were placed in various postures, for instance crouched or supine, in wooden coffins, sometimes tree-trunk coffins, or without recognizable container; cremations were urned or unurned. Grave goods are quite common. Women may be buried with beads, brooches, and a knife; men with weapons. In general, there is a broad spectrum of grave goods, including amulets and conspicuous animal remains such as bird bones. Burials of dogs and horses regularly occur in such cemeteries.⁸⁹ Early medieval graves clearly represent an entirely different way of dealing with the dead than the sober, single inhumation graves from earlier periods.

4.4.2 Religion

The religion of the inhabitants of the terp region before Christianization in the 8th century has never received systematic attention, but Germanic religion in general has. Norse mythology, in particular the medieval Icelandic epic poem *Edda*, and epigraphic and other historical sources from the Roman Iron Age have been used as the main source of the names and functions of the gods of the Germanic peoples, with linguistics as a tool to connect and explain their names and functions.⁹⁰ However, this use is precarious. Evidence from Roman written sources is scarce and cannot provide more than a

79 Waterbolck & Boersma 1976, 44; Hessing & Kooi 2005.

80 There are some indications that this area was not entirely devoid of people in the late Bronze Age; e.g. Arnoldussen & Visser 2014.

81 Knol 1983, 174.

82 An unpublished (now incomplete) inventory of these finds was made by Knol (1986b), which was partly published by Hessing (1993). For a new inventory, see Appendix C.

83 No. 18 in E.H. Waterbolck 1969.

84 Nyëssen 1927, 40.

85 Halbertsma 1954, 45.

86 Hessing 1993, 30; Bos 1995a, 88; Ter Schegget 1999, 200; Hessing & Kooi 2005, 634.

87 A.o. Knol 1993; 2009; 2011.

88 Knol *et al.* 1996.

89 Prummel 1992; 1993; 1999.

90 Grönbech 1987 (1909-1912); De Vries 1956; Simek 2003.

very short list of names of gods. Moreover, information from these sources is coloured by the classical authors' own preconceptions on religion. As for Norse mythology, there is often a large distance in time and space between these younger sources and the societies that are studied, for instance from the pre-Roman Iron Age. Cultural continuity cannot be taken for granted.⁹¹ Moreover, continuity of religious ideas can certainly not be presupposed for the coastal region, which was largely abandoned at the end of the Roman Iron Age. That makes the use of, for example, the *Edda* as a sourcebook of regional mythology in earlier periods highly questionable.

Considering these objections, the historical information on religious concepts of the inhabitants of the terps in the coastal area of the northern Netherlands in the pre-Roman and Roman Iron Age can only be used with caution. Nevertheless, although it is one of the points of departure of this study that it is possible to study ritual without studying religion (see also chapter 6), it would not be wise to ignore the scarce evidence that we have of regional mythology and religion, if we want to recognize and understand religious ritual. In this section, this evidence will be assembled and discussed.

For Romans, Gauls and Germans, it was easy to detect traits of familiar gods in each other's deities. After the Roman conquest, the names of local gods were often combined with that of a Roman god, based on shared characteristics. Well-known is Hercules Magusanus in the Batavian *civitas*.⁹² Although there was an imbalance of power, this Roman interpretation of local gods⁹³ (or indigenous interpretation of Roman gods) was not forced upon the conquered peoples against their will.⁹⁴ Rome usually did not interfere with the religious life of conquered peoples, as long as it did not threaten their interests. Some new cults were introduced (e.g. the imperial cult), but they usually accepted the gods of conquered peoples and even worshipped them if they thought this would help them. The Hellenistic Isis, the Great Mother of Syria and Yahweh of the Jews (under the name of Iao) were granted a more or less prominent place in the pantheon and were worshipped, just to be sure.⁹⁵ In the southwestern Netherlands, traders and seamen from other parts of the Roman Empire made offerings to the local goddess of seafaring, Nehallennia, in the sanctuaries of Colijnsplaat and Domburg.⁹⁶

While the Romans were accustomed to build sanctuaries, the Germans "judge it not in accord with the

greatness of the gods to confine them with walls or to liken them in appearance to any human countenance", according to Tacitus.⁹⁷ Indoor cult places are not known from northwestern Europe outside the Roman Empire, but there are many indications of open air cult places, especially bogs and lakes.⁹⁸ Such cult places have not been found in the terp region, perhaps because research is usually confined to the terps themselves and do not extend to their surroundings. The wooden images with only the most basic of human features, which have been found in bogs in Germany and Denmark, may be identified as representations of supernatural beings if we follow Tacitus. Most of these images are from the pre-Roman Iron Age.⁹⁹ It is, however, not certain that the images represent gods, although that is a common interpretation.¹⁰⁰ Instead, they may have been representations of ancestors or substitutes for human sacrifice.¹⁰¹

Julius Caesar already gave some information on the religion of the Germanic peoples, by comparing it to the Gallic religion. He claimed they had no druids, rarely sacrificed and only knew gods that could be perceived and experienced directly: Sun, Vulcanus and Moon.¹⁰² The short description seems to be aimed at making a clear difference between Germanic and Gallic peoples and denies Germanic religion any sophistication, at least to Roman eyes. Tacitus seems to be slightly better informed and gives us some hints of Germanic mythology, in particular a myth of origin and the names of some gods. The myth of origin implies a god, Tuisto, who is brought forth from the earth. His son Mannus, the founder of the Germanic peoples, is the father of three sons. These sons gave their names to three large Germanic groups: the Ingvaeones (those nearest the ocean), the Herminones (in the middle) and the Istvaeones ('the rest').¹⁰³ This story seems to be a typical myth of origin. Although it might be based on older myths, it may have taken this form only when contacts with the Romans made it necessary to establish Germanic identity in addition to existing identities.¹⁰⁴ It cannot be used as evidence for genetic relations, as Tacitus does. What may be original are the names of Tuisto and Mannus, but we do not know to which tribal groups they belonged.

91 Von See (1972, 41ff), who denied continuity of Germanic culture in general on theoretical grounds, laid bare the role the concept of Germanic continuity played in national socialist ideology.

92 Double names are only applied to male gods, not to goddesses (Derks 1998, 92-93).

93 *Interpretatio Romana* after Tacitus, *Germania* 43,3.

94 Derks 1998, 100.

95 Kirsch 2004, 62.

96 Stuart & Bogaers 2001, 44.

97 *Germania* 9, transl. Rives 1999.

98 For Germany and Denmark: Jankuhn 1967, 177ff. In Drenthe, several small bogs were regularly used to deposit a large variety of offerings. Examples are the Bolleveen near Zeijen and the Bolveen near Taarlo (Van der Sanden 2001).

99 Van der Sanden & Capelle 2002.

100 E.g. Simek 2003, 103ff.

101 Van der Sanden & Capelle 2002, 112-113.

102 Julius Caesar, Gallic War VI, 21.

103 Tacitus, *Germania* 2.

104 Timpe (1991, 99; 106/7) argues this myth functioned in a process of 'fortschreitender ethnischer Bewusstseinsbildung und Selbstidentifikation', which was influenced by the Roman conquest.

In Germania 9, Tacitus mentions the names of some other Germanic gods, albeit in Roman interpretation: “As for the gods, Mercury is the one they worship most, and on certain days they think it right to propitiate him even with human victims. Hercules and Mars they appease with lawful animals. Part of the Suebi sacrifice also to Isis.”¹⁰⁵ It was argued by Dieter Timpe that Tacitus generalized the situation in the Roman-Germanic contact zone near the Rhine for his description of the gods of the Germanic tribes, with the addition of some specific stories from the Baltic area and the amber route, and that his seemingly accurate descriptions should not be taken at face value, not even for these areas.¹⁰⁶ That implies that the names of gods mentioned by Tacitus in Roman interpretation cannot be considered a reliable representation of the religious concepts of the people living in the coastal area of the northern Netherlands and northwestern Germany.

Native names of gods appear on a number of inscriptions found in Housesteads near Hadrian’s Wall:

“To the god Mars Thincsus and the two Alaisiagae, Beda and Fimmilena, and the divine power of the emperor, German tribesmen from Tuihantis willingly and deservedly fulfilled their vow.” (RIB I 1593)¹⁰⁷

“To the goddesses the Alaisiagae, Baudihillia and Friagabis, and to the divine power of the emperor, the unit (*numerus*) of Hnaudifridus willingly and deservedly fulfilled its vow.” (RIB I 1576)¹⁰⁸

“To the god Mars and the two Alaisiagae, and to the divine power of the emperor, the German tribesmen of Tuihantis of the formation (*cuneus*) of Frisians of Vercovicium, Severus Alexander’s own, willingly and deservedly fulfilled their vow.” (RIB I 1594)¹⁰⁹

The inscriptions are connected by the dedication to the Alaisiagae and relate to two units in the Roman army, the explicitly Frisian *cuneus Frisiorum* and the Germanic *numerus Hnaudifridus*. The inscriptions show that their god Thincsus was called Mars in Roman interpretation. While the third dedication shows that the dedicants were members of the Frisian *cuneus*, they are explicitly called tribesmen from Tuihantis. These Tuihantes, though members of the Frisian unit, did probably not come from the coastal area, but from present day Twente in the eastern part of the Netherlands, so Thincsus may not have been a god of the Frisians. Although the dedicants were soldiers, the link between Mars and Thincsus is not necessarily related to warfare. As Ton Derks has argued,

Mars was foremost a protective god. As such, he could protect soldiers in battle, but also the sick or crops in the field.¹¹⁰ It may have been the general, protective force rather than the association with battle that linked Mars to Thincsus. Mars often seems to have been associated with chief tribal gods in Roman interpretation, so Thincsus may have been the chief tribal god of the Tuihantes.¹¹¹

The texts also give us the names of female supernatural beings, the Alaisiagae, in two different pairs. Although they are called goddesses, their names resemble those of the *matronae* of the Lower Rhine region, ancestral mothers that are always represented as three women.¹¹² The Alaisiagae are perhaps ancestral mothers too, worshipped as a pair; in that case their different names belong to different communities. The dedication indicates that a cult involving ancestral mothers also occurred north of the Lower Rhine region, outside the Roman Empire.

The goddess Hludana is connected to the Frisian area because her name was written on the only altar stone that was found in the Frisian area, in the terp of Beetgum. It is not certain when the stone, which bears a votive inscription mentioning a lease on fisheries by contractors working under a Q. Valerius Secundus, came here. Wim van Es has argued that it is not unlikely that the altar stone was only brought to the area after the inscription was made.¹¹³ In that case, the fishery lease does not apply to the Wadden Sea area but to the area of origin of the stone, probably the Lower Rhine region. Inscriptions mentioning Hludana were also found in the Eifel.¹¹⁴ Another altar stone for Hludana was found in Nijmegen; it was dedicated by a soldier of the 30th legion from Xanten.¹¹⁵ That indicates that the goddess Hludana was probably not native to the coastal area. Another goddess connected to the northern Netherlands is Baduhenna. A forest dedicated to her was the location where 900 Roman soldiers were killed by rebellious Frisians in AD 28.¹¹⁶ It may have been situated in the present province of Noord-Holland. The name Baduhenna is thought to be related to battle.¹¹⁷

A striking find category in the coastal area, as well as in the eastern Netherlands and in Lower-Saxony in Germany are the bronze statuettes from the Roman period. Over 40 of them were found in the northern Netherlands. The statuettes mostly represent gods (seven of Mars and 14 of Mercury) and goddesses, but representations of people and animals also occur.¹¹⁸ Most of these finds do not have a reliable find context. A feature in which a statuette of Mercurius was found during an

105 Transl. Rives 1999.

106 Timpe 1992, 458-459; 483-484.

107 Ireland 1996, 191.

108 Ireland 1996, 192.

109 Ireland 1996, 119.

110 Derks 1998, 102.

111 Von See 1972, 16.

112 Derks 1998, 199ff.

113 Van Es 2005.

114 Simek 2003, 116.

115 Van Es 2005.

116 Tacitus, *Annales* IV, 73.

117 Simek 2003, 116.

118 Zadoks-Josephus Jitta *et al.* 1967.



Fig. 4.2 Large parts of a horse, a cattle and a sheep, found at the foot of the north wall of the oldest excavated house in Ezinge (middle pre-Roman Iron Age). Photo RUG/GIA.

excavation in Tzum-Greate Vlearen was dated AD 175-225.¹¹⁹ Outside the terp region, a statuette representing Victoria was found in the posthole of a farmhouse from the 3rd century AD, in Colmschate near Deventer in the province of Overijssel; two statuettes were deposited in a pool in the 3rd century AD in the settlement of Ede-Veldhuizen in the province of Gelderland.¹²⁰ These locations suggest ritual deposition.

It must be noted that the naturalistic bronze statuettes are very far from the coarse wooden images that are usually associated with Germanic religion, and that may originate in an anti-naturalistic attitude when it comes to representation of the gods. This may have changed during the Roman Iron Age, when naturalistic images became available. Whether and how the bronze statuettes functioned in local religion, or represent changes in religious practices that occurred during the Roman Iron Age, can only be guessed at. The number of 40 statuettes, though large compared to other areas, is small if it is to represent religious practice in the entire terp region.

They may have had a religious meaning, but their meaning and use in local religion probably differed from their original meaning and use in Roman society.

Tacitus' *Germania* gives some additional information on religion and ritual that may apply to the coastal region as well. In the first place, although Julius Caesar wrote that the Germanic peoples had no druids, Tacitus mentions priests in the context of corporal punishment, including death; priests, not kings or commanders had a right to perform such punishment.¹²¹ In the second place, Tacitus notes that the Germans believe that there is a holy and prophetic force in women, and that women with visionary powers in particular are held in high esteem, almost as a supernatural power.¹²² The Germans also "attend to auspices and lots like no one else".¹²³ This brings us to the realm of ritual practice.

4.4.3 Ritual

This study would be superfluous if ritual already was a well-studied subject within terp research. That is not the

119 Van Es 1991, 99; see also Appendix C, 88d.

120 Colmschate: Hermsen 2003; Ede-Veldhuizen: Taayke *et al.* 2012, 128.

121 Tacitus, *Germania* 7.

122 Tacitus, *Germania* 8.

123 Tacitus, *Germania* 10.

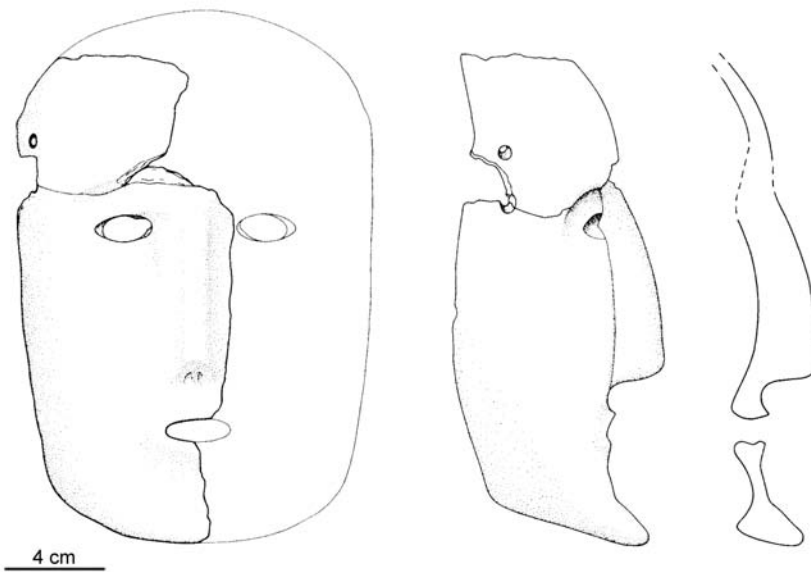


Fig. 4.3 Clay mask found in Middelstum-Boerdamsterweg (prov. of Groningen), from the middle pre-Roman Iron Age. From Taayke 1996, III, 45.

case. Still, over the years some archaeological phenomena have occasionally been related to ritual practice. This section will give an overview of the little that has been said about ritual practice in our research area and period.

One of the best known ritual deposits in the terp area is the foundation sacrifice excavated in the terp of Ezinge by Van Giffen in the 1930s. It consists of skeletal parts of a horse, a cow and (probably) a sheep.¹²⁴ These animal parts had been buried at the foot of a house wall from the middle pre-Roman Iron Age (fig. 4.2). In 1963, Van Giffen wrote an article with the promising title “*Het bouwoffer uit de oudste hoeve te Ezinge*” (The foundation sacrifice from the oldest farmhouse of Ezinge). Although the title suggests otherwise, the article is actually not about the finds assemblage but about the construction of the house. The photo shows that the animals were not buried complete but only partial. Unfortunately, the bones were not collected. While this deposit was found *in situ* and the context could be described (in effect, only the context was described), other early terp finds were usually made during levelling activities, so their context is unknown. We may suspect that many of the complete pots, brooches and other objects found in terps (as well as many broken or fragmented objects) landed in the soil during rituals; without context, however, it is not possible to investigate their ritual character.

Worked human skull bones were found in several terps in Groningen as well as Friesland, and attracted some attention.¹²⁵ Similar objects were also found at low tide on the coast of Noord-Holland near IJmuiden (an

eroded area).¹²⁶ Most of the worked skull parts are shaped as small, shallow bowls; some have a small hole at the rim. A second category consists of roundels with a central hole, possibly used as amulets. It is hard to imagine that worked human skull parts served as ordinary household ware, so a ritual use is to be expected. They will indeed occupy a prominent place in chapter 14, which deals with human remains in the terp region. Brongers already concluded that “... this area was inhabited by a group of people who, for some reason or another, were particularly interested in the human skull and its fragments - and of course ritual practices spring to mind.”¹²⁷

One of the most striking finds from the coastal area is a unique ceramic mask from Middelstum-Boerdamsterweg, the earliest (known) settlement in the Groningen area (fig. 4.3).¹²⁸ Only half of the mask was found, in a building with unknown function.¹²⁹ A small additional part was discovered later among the potsherds from the excavation.¹³⁰ Small holes near the rim probably served to attach it to someone’s head. The fabric of the mask is identical to the fabric of contemporary local pottery; it was certainly made locally and is dated to the 6th century BC. Its function is open to speculation. The settlement, one of the earliest in the coastal area, has uncommon features, such as an unusually large number of granaries and the building with unknown function, in which the mask was found. The find of the mask in this building inspired Tjalling Waterbolk to the suggestion that religious ceremonies were performed there. This

124 Van Giffen later described this animal as a dog (Van Giffen 1963), but according to the finds book, it was a sheep. De Langen and Waterbolk (1989), referring to Van Giffen’s article, mistakenly mention a cow, a dog and a pig. See also Appendix B, UV-1555.

125 Brongers 1967; 1968; Knol 1983.

126 Pers. comm. L. Amkreutz, Dutch National Museum of Antiquities, Leiden.

127 Brongers 1967, 31.

128 This mask adorns the cover of the journal *Archaeological Dialogues*.

129 Boersma 2005.

130 Taayke 1996b, 44-45.

also endorsed his interpretation of this settlement as a regional centre.¹³¹ If this interpretation is right, this would be the only known cult building in the entire coastal area before Christianization.

In 1994, an excavation was carried out in the terp of Wommels-Stapert. This terp is one of the earliest salt marsh settlements in the present province of Friesland. About thirty small pits from the pre-Roman Iron Age were found there, containing either a complete pot or a very large part of a pot, dating from the middle pre-Roman Iron Age. A pot often was the only find in a pit, but sometimes some sherds and other 'rubbish' were found besides a pot.¹³² The pots were standing upright. They were interpreted as intentional deposits by the authors of the excavation publication.¹³³ They suggest that during this period, a religious ritual was practiced in which the offering of pots (or their contents) played a role. To support this suggestion, they provide a number of examples of finds of broken or unbroken pottery in small or large pits in the northern Netherlands. This interpretation of the traditionally labelled 'rubbish pits' paves the way for a different approach of ritual deposits, which will be further developed in this study.

4.5 Conclusion

In this chapter, aspects of social and spiritual life in the coastal area were discussed, starting with the family. Family life in the past is usually (unconsciously) thought to resemble family life in early modern or modern Europe, but during the pre-Roman and Roman Iron Age, most people probably died before they were 40. This must have influenced all aspects of social life. There were, for instance, hardly any elderly people. Pottery research indicates that women moved in with their husbands or their husband's family. They sometimes came from afar, possibly as part of socio-political alliances and exchange relations.

Socio-political organization must have enabled and supported the way of life of the inhabitants of the terp region. The prevailing model of socio-political organization is the *Gefolgschaft*-system, which is mainly based on historical sources (Roman as well as early medieval) and on the archaeology of tribes in northern Gaul and the Lower Rhine region. It does, however, not account for the archaeological reality of the research area in all respects. In the terp region, some form of leadership was necessary, but that may initially have been a chosen leadership rather than a hereditary one. In times of need, armed men may have assembled, but such gatherings cannot be compared to the *Gefolgschaften* described in historical

sources. During the Roman Iron Age, dependency relations (patronage) may have been created between leaders and community members, gatherings of armed men possibly changed into retinues, the standard companions of leaders, and hereditary leadership and an aristocracy may have come into being. These changes in the social organization should not be considered a natural evolution towards greater complexity; they rather occurred as a result of and in response to contacts with the Romans and their foreign policy.

Burial customs in the coastal region of the northern Netherlands during the research period are not well known. While most authors assume that there is an evidence gap and that cremation was the common mortuary ritual, single inhumations demonstrate that there was more than one way to deal with the dead. Cemeteries were only introduced in the early Middle Ages. Graves from this period can be distinguished from earlier graves by features such as tree-trunk coffins or the presence of grave goods. Earlier graves, as far as they are known, are very sober. They miss containers as well as grave goods. For the present study, it is important to note that, although a certain evidence gap cannot be denied, the evidence is actually more extensive than most authors assume, as the inventory of human remains in the terp region made for this study (Appendix C) demonstrates. It enables new insights in burial customs of the terp region, as will be demonstrated in chapter 12.

The remains of rituals from the terp region have hardly attracted attention in earlier terp research and this area of research is still in its infancy. The scanty evidence that has been recognized as belonging to rituals indicates that animals as well as pottery and human bones played a role in ritual practice. As far as they were identified, such finds have usually been interpreted as offerings or as part of other religious rituals. An integrated, comprehensive view on ritual practice is still missing.

Historical evidence indicates that gods and goddesses as well as tribal and regional ancestral mothers played a role in the mythology and cults in northwestern Europe outside the coastal region of the northern Netherlands. Gods and goddesses, as well as ancestral mothers and possibly fathers may have been part of the mythology of the inhabitants of the research area as well, although direct evidence is lacking. We do not know of any cult places here, but wet contexts such as bogs were used as such inland. In the next chapter, the finds from bogs, and other evidence of ritual practice in areas surrounding the terp region will be examined, to widen the context of the finds that will be described in the chapters of Part 3.

131 Waterbolk 1988, 17; 2009, 156 and 193.

132 The 'rubbish' included a number of human bones, see Appendix C, 100.

133 Bos *et al.* 2002.

5

Remains of rituals in surrounding areas

5.1 Introduction

The terp region of the northern Netherlands is not an isolated region; surrounding areas were also populated during the research period. Although the landscapes differed, the people who lived there participated in the same socio-cultural networks. It can be expected that their social organization and their customs and traditions, including ritual practices and burial customs, show great similarities. To provide a regional context, this chapter aims to give an impression of ritual finds assemblages and their interpretations that have been identified in other regions in the Netherlands, especially the present provinces of Noord-Holland and Drenthe, and in north-western Lower Saxony. This broad outline is largely based on published finds and is not meant to give a complete overview of ritual practice in surrounding areas.

Since each region has its own research history and characteristics, the finds from these different areas are not directly comparable. The natural circumstances and differences in the frequency and type of human activities in these areas are highly influential when it comes to the character of the finds.¹ In the first place, there are large differences in modern land use, in population density, in the size of building activities, and in the activities of the institutes that have been involved in archaeological research in the areas surrounding the terp region. These differences are mirrored in the numbers of excavations and finds from different areas.

In the second place, there are considerable differences in site formation and preservation conditions between Pleistocene and Holocene landscapes, which influence the quantity as well as the quality of the finds. In the Holocene area along the coast, the relative sea level rise was more or less compensated by continuous sedimentation until dikes interrupted this process in the late Middle Ages. Marine sediments cover older landscapes. The coastal areas are usually wetlands, with high water tables and excellent preservation of organic materials. In the Pleistocene inland, prehistoric traces are still found at the surface, with the exception of areas that were covered by medieval *plaggen* soils. A special environment is provided by peat formations; before peat reclamation and cutting, peat covered a large part of the interior (figs. 3.1-3). Peat was not confined to the inland, but bordered on the salt marsh area and locally grew over salt marsh

deposits, often to be covered by clay again at a later stage. Holocene salt marshes and peat are also found in the western provinces of the Netherlands, but here, a dynamic dune landscape forms a barrier between these inland deposits and the North Sea.² While information on prehistoric and protohistoric occupation of the Wadden Sea islands north of the terp region is extremely sparse³, the coastal barrier of Noord- and Zuid-Holland is known to have been occupied.⁴

The considerable variation in preservation conditions makes it difficult to compare finds from these different areas. In the marine, calciferous clay of the Holocene wetlands along the coast, the preservation of bone and other organic materials is usually excellent. In the Pleistocene inland, conditions for the preservation of bone and other organic remains are usually unfavourable because of the acidity of the soil and low water tables. Inhumation graves are sometimes recognized by the presence of corpse silhouettes. In peat, acid conditions will normally destroy bone, but wood and body tissues such as skin, hair and horn may be well preserved.

The comparability of archaeological finds from different areas is thus hindered and biased in several ways. In the interior, prehistoric features are found on the present surface, but preservation conditions are not favourable for organic remains. In the coastal areas, where preservation is excellent, features are often hidden under sediment layers. Moreover, excavations in these areas are of an entirely different character, due to different soils, water tables and different types of settlements. The complicated stratigraphy of terps in a clay matrix requires a different approach than the settlements of the sandy soils with traces of all phases of habitation in one level. Moors and bogs pose an altogether different environment with different preservation conditions and different types of settlement and off-site features.⁵ These differences, as well as the difference in human activities in different areas, will have to be accounted for when comparing and interpreting the remains of rituals.

Ritual find assemblages can be organized in different ways, for instance chronological or per region. In the

1 The c- and n-transforms defined by Schiffer (1976, 14-17).

2 Vos *et al.* 2011.

3 With the exception of the partly Pleistocene island of Texel; Bazelmans *et al.* 2009, 26.

4 Vos *et al.* 2011, 61; Bazelmans *et al.* 2004.

5 E.g. De Langen 2011.

following, burial customs, which form a relatively well recognized part of ritual practice in archaeology, are separated from other types of ritual practice. For the purpose of this overview, the remains of these other types of ritual are classified according to their location, since the location of deposits also plays an important role in the case studies of Part 3. Finds from settlement contexts are distinguished from assemblages that were found outside settlements and examples of these two categories will be discussed. The second part of this overview is devoted to burial customs in areas surrounding the terp region.

5.2 The remains of rituals in settlements

The remains of rituals within settlements are varied. They can occur inside houses, associated with walls, floors, posts, entrances or hearths, and outside houses, in wells, pits or ditches.

5.2.1 Rituals associated with houses

Ritual deposits associated with houses are known from all areas adjacent to the coastal area of the northern Netherlands. In pre-Roman Iron Age Noord-Holland, house offerings have, for instance, been identified in the Assendelver Polder and in Schagen-Muggenburg. The finds included pots without recognizable contents; pots containing barley or cattle skull bones; a wooden bowl; and a large black pot with worked wood, possibly from a loom, under a floor.⁶ In The Hague in Zuid-Holland, miniature hand-built pots served as foundation deposits.⁷ In Drenthe, in the settlement of Wijster, a *terra sigillata* bowl without foot was placed on top of a 4th century, hand-built beaker, in a posthole next to the southwestern entrance of one of the longhouses. It was first interpreted as a foundation offering⁸, later as an offering associated with abandonment.⁹ In Midlaren-De Bloemert, a small pot that had been placed in the posthole of a 2nd century AD house after the post had been taken out, was also interpreted as an abandonment offering.¹⁰ In Heeten in Overijssel, a beautifully polished and decorated beaker was found in a posthole of the entrance of one of the houses.¹¹

In the south of the Netherlands, foundation deposits are rare in the pre-Roman Iron Age, but more common in the Roman Iron Age. They include pots, presumably containers of food or liquids, an iron knife with a possible whetstone, a complete rotary quern, a beaker placed over a Roman coin, and a Neolithic axe at the bottom of postholes.¹² Single pots buried inside houses are regular

finds in this area.¹³ A pit in a pre-Roman Iron Age house in Haps contained five, secondarily burnt pots and 70 sling stones.¹⁴ In an annex of a late pre-Roman Iron Age house in Beegden, three iron tools were found in a small pit.¹⁵ Large pits containing large quantities of potsherds, often burnt, more or less complete pots, burnt loam, cooking stones or hearth stones, fragments of grinding stones, spindle whorls, loom weights, and sometimes wooden objects, were found in or near several houses in the Meuse-Demer-Scheldt region. These pits must have been dug shortly after the house was abandoned and were all filled within a very short time, probably a single event. Gerritsen argues that these pits functioned in ritual abandonment practices that involved the destruction of household goods.¹⁶ These pits were all dated to the early and middle pre-Roman Iron Age. Similar deposits near houses from this period have been identified in Hijken in Drenthe.¹⁷ It will be demonstrated in chapter 13, that they were also common in Ezinge.

In northern Germany and Denmark, for which Ines Beilke-Voigt made an inventory of ritual deposits in settlements, most ritual deposits in houses consist of pottery, especially miniature pots, and other manmade objects.¹⁸ During the pre-Roman Iron Age, animal parts apparently were not part of depositional practice associated with houses in this area. In this context, Beilke-Voigt mentions the building sacrifice of Ezinge, consisting of the remains of three animals (see chapter 4.4.3), as an example of different practices elsewhere.¹⁹ During the Roman Iron Age, dogs were deposited under or near thresholds, more than other animals or objects.²⁰ The number of deposits inside houses increases in the beginning of the Roman Iron Age, especially deposits associated with hearths.²¹

Various ritual deposits from the Roman Iron Age were found in and near the so-called *Herrenhof* on the Feddersen Wierde, the alleged local socio-political centre of the settlement, which consisted of a *Herrenhaus* (the leader's residence) and a meeting hall.²² Several burials of humans (see below) and animals were associated with these buildings. A horse was buried near the entrance of the meeting hall; a dog skeleton in a pit under the threshold of the eastern entrance of the meeting hall; and a cattle skull under the northern post of the same entrance. A pig was found under the hearth of the meeting hall, under a loam plaster that was (unlike other hearths in houses on the Feddersen Wierde) decorated with a dou-

6 Therkorn 1987.

7 Van Zoolingen 2011, 21.

8 Van Es 1967, 177 and Pl. 23.

9 Van Es 2012, 22; 51.

10 Nicolay & Waterbolk 2008, 97.

11 Lauwerier *et al.* 1999, 186-187.

12 Gerritsen 2003, 64-66.

13 Gerritsen 2003, 85.

14 Gerritsen 2003, 85.

15 Gerritsen 2003, 93-94.

16 Gerritsen 2003, 96-102.

17 Arnoldussen & De Vries 2014.

18 Beilke-Voigt 2007.

19 Beilke-Voigt 2007, 95.

20 Beilke-Voigt 2007, 118.

21 Beilke-Voigt 2007, 91ff.

22 Haarnagel 1979.

ble oval groove.²³ The concentration of special deposits in and near these buildings may be related to their public function, or to the high social status of the inhabitants of the *Herrenhof*.

Ritual deposits associated with houses are so common that it may safely be assumed that they reflect a common ritual practice in northwestern Europe. They seem to be related to the building, occupation and abandonment of houses. Yet, although ritual deposits are quite common in the houses of the pre-Roman and Roman Iron Age, they do not occur in every house, perhaps because of different family traditions or because perishable materials such as liquids or plant material were used.²⁴ That applies to outside deposits as well.

5.2.2 Rituals in settlements outside houses

Apart from rituals directly associated with the building, occupation and abandonment of houses, remains of rituals have been identified in pits, wells and ditches and near fences outside houses. Many examples show that deposits in such features are variable. Animal bones are often part of them, sometimes bones that articulate with bones of different species.²⁵ In Katwijk in the present province of Zuid-Holland, for instance, a well contained four cattle skulls and a large fragment of a grinding stone. Complete as well as partial skeletons of horses, sheep, dogs and oxen were uncovered in the settlement The Hague-Hogeveld²⁶, and 79 loom-weights of different types were found with a dog skeleton and many smaller artefacts and potsherds in a pit in a settlement in the Harnaschpolder.²⁷

In Noord-Holland, a variety of manmade and natural objects were found in pits in settlements: complete or partial animals (some without foot bones, and some with twisted heads or strongly bent legs) and single animal bones, pottery, stones, worked and non-worked wood, metal objects, Roman imports and human skeletons or human single bones.²⁸ Such features were interpreted by Linda Therkorn as belonging to seasonal rituals that included offerings made in pits, which were clustered in sets of three.²⁹ According to Therkorn the division of the year in three seasons, as inferred from the clusters of three pits, “seems general to Indo-European time/cosmology and is part of tripartite structuring”, that is, as she claims, also evident from the structure of houses.³⁰ Therkorn also recognized constellation patterns when visually combining groups of pits and large features with special contents on the excavation plans of settlements.

However, in my view, the tripartite ordering of time and space, the constellations recognized by Therkorn and the meanings ascribed to them are insufficiently corroborated by the available evidence as presented in her thesis. Moreover, her use of the mythology of the Edda is questionable, as was discussed in 4.4.2.

Excavations in settlements in the Pleistocene area to the south of the northern Netherlands coastal area have not yielded a large number of ritual deposits, partly due to the poor preservation of organic remains. In the settlement of Wijster in the south of Drenthe, which is dated to the Roman Iron Age and the Migration Period, sixteen to twenty rectangular pits with the silhouettes of animal skeletons were found within the settlement. Most of the animals were horses. Two burials contained a horse and a cow. A large rectangular pit contained the skeletal remains of perhaps six animals, probably mostly cattle, with a few horse fragments.³¹

In the settlement of Midlaren-De Bloemert in northern Drenthe, several pits from the Roman Iron Age were found, containing a large number of complete or almost complete pots, apparently made by one potter³²; the pits were tentatively interpreted as the result of a rite of passage, possibly a funeral, of a (female) potter, or as the remains of a ritual meal organized by one household.³³ Depositions of animal skulls, made during the Roman Iron Age and the Migration Period, were inferred from the finds of complete, closed sets of animal teeth from lower and upper jaw (especially cattle, but also sheep) in pits and wells in this settlement. The skulls had been deposited individually, or with two or five together. It could not be established whether only skulls were deposited, or larger parts of animals.³⁴

Just south of Drenthe, in Heeten in the province of Overijssel, a large settlement from the late Roman Iron Age was excavated in 1994. Ritual deposits include two small pots, which were found standing in a rectangular pit in the southwest corner of the enclosure, interpreted as “possibly a site sacrifice”.³⁵ A number of animal heads, some of them associated with lower limbs and large fragments of pottery, were identified as possibly ritual.³⁶ Three 4th century AD features, two wells and a pit, contained large bone dumps, mainly of cattle bones, with small percentages of horse and pig. The bones were not as fragmented as normal offal and it was established that all bones were deposited during a single event; at the time of deposition, some meat may still have been adhering to the bones. The dumps are interpreted as the

23 Haarnagel 1979, 226; Beilke-Voigt 2007, 129.

24 Beilke-Voigt 2007, 127-130.

25 Groot 2008; 2009.

26 Van Zoolingen 2011, 21-22.

27 Bakx 2013, 108-9.

28 Therkorn *et al.* 2009.

29 Therkorn 2004.

30 Therkorn 2004, 30.

31 Van Es 1967, 114-117.

32 Individual potters can sometimes be identified on the basis of similarities in fabric, finishing, decoration or shape.

33 Nieuwhof 2008e, 298.

34 Prummel *et al.* 2008.

35 Lauwerier *et al.* 1999, 186-187.

36 Lauwerier *et al.* 1999, 187-188.

remains of feasts, associated with supra-local activities. The amount of meat that was available per deposit (e.g. 1500 kg, conservatively estimated) suggests that a large number of people must have been there at the time, a much larger number than the population of the settlement itself. The earliest dump seems to coincide with the beginning of large-scale iron production in Heeten, the youngest dump with its end.³⁷

Eleven animal burials were found in Heeten, all from the late 3rd and 4th century AD, although preservation was poor. One of the animals was a red deer, the others were horses and cattle. Lauwerier *et al.* argue that the burial of the red deer is almost certainly a ritual deposition, since it is unlikely that a deer would have been killed and buried complete for another reason.³⁸ Although it is conceivable that the domestic animals in Heeten, and complete animals in general, are dumped carcasses that had died of diseases which made them useless for consumption, the authors take the similarities with the red deer burial as an indication that at least a number of them were ritually deposited. Moreover, the burial pits all had more or less the same shape and the animals were placed with care. The heads of two of the cattle were twisted back; the legs of the deer and one of the horses were folded against their bodies.³⁹ Many of the animals were found near the entrance and the enclosure, which is taken to indicate that they “demarcate the site and mark the entrance”.⁴⁰ The authors observed that the domestic animals were found near the boundaries of the settlement, while the red deer was buried at some distance from the enclosed area. They give a structuralist interpretation, associating ‘inside’ with the domestic sphere and domestic animals, as opposed to ‘outside’ which is associated with wild animals, the forest and the natural world.

The terp Feddersen Wierde on the coast of Lower Saxony in Germany was occupied between the 1st century BC and the 5th century AD. In this terp, 24 animal skeletons were found, including horses, cattle and dogs.⁴¹ Some of the cattle skeletons were disarticulated; their meat had probably been eaten before the remaining bones were buried in pits. Animal burials were found alongside roads, near houses and in artisan areas. Dogs were buried under thresholds of houses (see previous section) and under a path between two houses; Haarnagel ascribed them a protective function.⁴² Two horse skulls were found standing upright in round pits. The legs of complete horses and dogs were often folded against their

bodies. One of the horses with strongly contracted legs, a 4-5 year old mare, was found buried in a structure that was identified as a mortuary house (2 x 3 m), located on a small, flat hill.⁴³ The structure was built along the main road near the socio-political centre of the settlement, the *Herrenhof*.

5.3 The remains of rituals outside settlements

5.3.1 Depositional practice and the landscape

The landscape, either natural or cultivated, will play a role in rituals outside settlements. Locations will not be arbitrarily chosen. Rituals are located in parts of the landscape with a special meaning, for instance near funerary monuments or on mountaintops, in moors or in rivers. In the Low Countries, places used for depositional practices are usually wet contexts, such as moors, or rivers or lakes that were later filled with peat. Drier areas cannot be excluded as locations used for depositional practice, but poor preservation makes them difficult to recognize.

Some locations were used only once; other locations were used for making deposits repeatedly over a long period. However, there is a gliding scale between one-time and repeated use of such locations. Features may have been used once or repeatedly for a short period or over a long period, or features such as rivers or moors may have been used over and over again for a long time, but not on exactly the same spot. For example, single brooches (in one case with a ball of yarn) from the pre-Roman and Roman Iron Age are regular finds in watercourses in Drenthe.⁴⁴ The river Tjonger in the Pleistocene area in the south of the province of Friesland is the location of depositional practice from the late Bronze Age onwards, including a Gündlingen sword from the early Iron Age and denarii from the early Roman Iron Age.⁴⁵ In some rivers, human bones are regular finds, but not necessarily confined to one location.⁴⁶

Special locations that are used over and over again during a limited period are often called offering sites or cult places. This identification goes from the assumption that such depositional practices are of a religious nature, although, as will be argued in the following chapters, that does not need to be the case.

In Noord-Holland, 22 so-called offering sites were identified in the wet, low-lying areas in the estuarine Oer-IJ region, dated to a long period from 2500 BC to AD 450.⁴⁷ Especially creeks and marshy areas outside cultivated areas were used as such. Each of these sites had been used for decades or more. Structures were sometimes part of these open-air sites. The most remarkable

37 Lauwerier *et al.* 1999, 178.

38 Lauwerier *et al.* 1999, 185-186.

39 Similar manipulation of animal bodies was also recorded for Noord-Holland by Therkorn (2004) and for the central river area by Groot (2009).

40 Lauwerier *et al.* 1999, 186.

41 Haarnagel 1979, 224ff.

42 Haarnagel 1979, 228.

43 Haarnagel 1979, 224; Tafel 169,1.

44 Van der Sanden 2005.

45 Boeles 1951, 54; 143; 482; Pl. VI.

46 Ter Schegget 1999, 201-202.

47 Kok 2008.

structure is a long mound with a length of over 100 m from the late pre-Roman Iron Age.⁴⁸ A variety of objects have been found in these offering sites: head and leg parts of animals (especially horses, dogs and cattle), human body parts, wood of different, sometimes non-local species, and all kinds of man-made objects. The location of offering sites in the Oer-IJ region changed over time. Changes appear to be related to changes in the landscape. Salt water or areas influenced by the tides were avoided; in areas that were no longer salt, new offering sites appeared.⁴⁹

An exceptional site is the confluence of the rivers Meuse and Waal near Kessel-Lith, in the central river area of the Netherlands, where deposits were being made over a long period. At the time, a settlement and a sanctuary were situated nearby. Dredge finds revealed that the river was used to deposit large amounts of metal objects (weapons, coins, cauldrons, and brooches), pottery, animal bones and human bones, among them remains of children, women and men and bones with traces of injuries. Some swords had been intentionally destroyed.⁵⁰ The finds were deposited over a period of several centuries, from the late pre-Roman Iron Age into the Roman period. Roymans identified Kessel-Lith as a pre-Roman central place, comparable to the central-European *oppida*; as a cult place, it probably played an important role in shaping the collective identity of the Batavians.⁵¹ Similar sites are not known from more northern parts of the Netherlands.

5.3.2 Peat bogs

Peat bogs were used for recurring depositional practice, either in the form of series of one-time deposits on several locations in the same type of landscape, or tied to specific locations. In the Netherlands, finds from peat bogs have in particular been found in Drenthe, an area directly adjacent to the coastal salt marshes. Since similarities in material culture, which can be established between those areas, may go hand in hand with similar ritual practices, it is worth examining the finds from the peat bogs and their interpretations in some detail.

The Drenthe bog finds are not an isolated phenomenon; similar finds have been made in a large part of northern and western Europe, from Ireland to Poland and Scandinavia. Most finds were made during peat cutting, which implies that details of the finds and their locations are often obscure. Since Wijnand van der Sanden started to study the Drenthe bog finds and their recent history in the early 1990s, the Drenthe finds have become better known and can be compared to the finds from peat bogs elsewhere. Despite similarities, there appear to be

differences too. Especially weapon deposits, such as the large deposits made in Schleswig-Holstein or southern Scandinavia, have not been found in Drenthe, nor in other Dutch bogs or former lakes.

Depositions were made in high moors as well as in wet places that were later filled and overgrown with peat. The practice of depositing objects in bogs in Drenthe already started in the early Neolithic (ca. 4900-3400 BC) and continued until after the Middle Ages.⁵² A wide range of objects have been found in bogs and moors. Finds dated to the pre-Roman and Roman Iron Age include human bodies⁵³, cattle horns⁵⁴, pottery⁵⁵, human hair⁵⁶, quernstones and balls of wool⁵⁷, and wooden objects such as parts of wheels and wagons.⁵⁸ There is only one account of an animal bog body, reportedly a pig, but this find did not survive the curiosity of the peat diggers who found it.⁵⁹ Metal objects such as brooches and coins have been found in stream valleys more than in bogs and moors, but the number finds is small; objects such as brooches were easily overlooked during peat cutting.⁶⁰

Objects from moors and bogs have been found alone or in concentrations, often combined with built or dug structures.⁶¹ Rows of stakes and posts were discovered more than once, as well as wooden trackways. One of the functions of the latter apparently was to enable making depositions deep into the moor. A number of complete and incomplete rotary querns, seven wagons and large parts of wagons and four human bog bodies were, for instance, found near the so-called *Valtherbrug*, dated to the late pre-Roman and Roman Iron Age.⁶² In the eastern border zone of the Looveen, a small bog not far from the settlement of Wijster, two large pits were found, containing pottery from the Roman Iron Age and objects such as finished and semi-finished wooden bowls, and many semi-finished parts of wooden wheels.⁶³ Van der Sanden has argued against the functional explanation that semi-finished objects were placed in wet contexts to saturate the wood with water as part of the production process.⁶⁴ That does not seem to be a sufficient explanation for the finds assemblages concerned.

Pits were also found in two bogs, the Bolveen near Taarlo (with 1st-6th century AD pottery; shoes, hair, cattle horns, a finished and a semi-finished wooden bowl,

48 Kok 2008, 132.

49 Kok 2008, 200.

50 Ter Schegget 1999.

51 Roymans 2004, 146ff.

52 Van der Sanden 2001.

53 Van der Sanden 1990; 1996.

54 Prummel & Van der Sanden 1995.

55 Van der Sanden & Taayke 1995.

56 Van der Sanden 1995.

57 Van der Sanden 1998.

58 Van der Sanden 1997a.

59 Van der Sanden 1999, 219.

60 Van der Sanden 2005.

61 Van der Sanden 2001.

62 Van der Sanden 1997a and 2001, 143-144.

63 Van Es 1967, 126-137; Van der Sanden 2001.

64 Van der Sanden 1997a.

a wooden wheel and parts of wheels) and the Bolleveen near Zeijen. In or near this latter bog, a number of beehive-shaped structures made of fieldstones were uncovered (unfortunately not documented well at the time), as well as a number of deep pits. Finds from this bog probably include two (human) bog bodies, the stomach of a horse or a cow, a copper dish, wooden objects, many sherds and some complete pots dated to the 1st to 6th century AD, animal bone (especially of horned cattle, but also of pigs, sheep, a horse and a dog), and wood, including twigs and posts with sharpened ends.⁶⁵ A special find is a carved wooden object resembling two horns on a head. This piece, possibly intended to be mounted on a wagon, has a clear parallel from the Roman Iron Age in the Frisian terp of Ferwerd-Burmania II (fig. 3.6).⁶⁶

The majority of finds recovered from wet contexts are interpreted as offerings, “deposited by the local population to beg supernatural powers for assistance, or thank them for favours already granted.”⁶⁷ The agricultural implements, cow horns and household utensils among the finds have earlier been taken to indicate that the offerings were meant to ask for successful food production and for reproduction of the community.⁶⁸ In the same line of thinking, human sacrifices (the bog bodies) were meant to ask for fertility in special circumstances.⁶⁹

Hiddink has also suggested that the relatively sober character of most of these finds suggest that local farming communities made these depositions⁷⁰, thereby inducing the elite to offer more valuable and prestigious objects such as coins and brooches in stream valleys. Thereby Hiddink not only positions the elite outside the local communities, which, as was argued in section 4.3, seems unlikely, but also implicitly reduces the meaning of rituals that involve metal objects to a display of status. There must have been better ways for members of local elites to distinguish themselves than by the occasional deposition of a brooch. Van der Sanden interprets such finds as votive gifts deposited by individuals, which seems more likely.⁷¹

In his comprehensive study on the bog bodies of northwestern Europe, Van der Sanden recorded a number of 46 bog bodies of pre-medieval date from 36 sites in the Netherlands.⁷² Several bog bodies have later been added to this number.⁷³ However, it has been discovered since that a number of reported bog bodies were only concocted by the German, former authority on bog bod-

ies, Alfred Dieck.⁷⁴ This has consequences for some of the Dutch finds (one of them in Opwierde in the terp region, see Appendix C.124a), leaving a number of 50 reliable bog bodies. In Lower-Saxony, an equal number of 50 reliable, pre-medieval bog bodies has been recorded; comparable numbers are known from Ireland and Great-Britain. In Denmark, many more bog bodies are known, but numbers have not yet been scrutinized as they were in the Netherlands and Lower-Saxony.⁷⁵ In all peat areas, the original number must be larger, since many finds will have been dug away unnoticed or were sold for commercial purposes during peat cutting.⁷⁶

The meaning of human bog bodies is not clear. In the acid conditions of bogs and moors, bodies are mummified. However, although they look very different compared to the human skeletons found in more alkaline conditions, their meaning may not differ. How are these deaths to be interpreted? Were they accidental deaths, murder victims, natural deaths buried in special locations, executed people, or human sacrifices?

Most of the Dutch bog bodies date from the period 500 BC – AD 200. The majority of the bodies are adults (twice as many males as females). The youngest is the 16 years old Yde Girl. Several children have been found outside the Netherlands but the percentage of children is very small everywhere. Bodies are found isolated or with two or three together (e.g. in Westergeest, see Appendix C.92a-c). They were sometimes buried in pits in the peat, or covered or pegged down by branches or sticks. Many bog bodies show deformities. The Yde Girl had a considerable scoliosis; Aschbroeken man had a broken humerus, which had healed in an unnatural position. Similar imperfections have been attested for bog bodies abroad. It is possible that people with such disorders run a higher risk of ending up in a bog than people without defects. Perhaps they were especially singled out because of their deformity, as ‘touched by the gods’ destined to be sacrificed at some point in their lives.⁷⁷ It is, however, not known whether the percentage of deformities in bog bodies is representative for the population as a whole, or considerably higher. Only in the latter case, a bodily imperfection probably played a role.

Six or seven of the thirteen Dutch bog bodies that have come down to us (the other bog bodies were not saved) show signs of violence. They have been strangled, had their head bashed in, or were stabbed. Bog bodies from other countries show an even wider range of violent deaths (including hanging, decapitation, breaking bones, cutting off limbs, possibly poisoning by ergot). Some were blindfolded or bound up; their hair was sometimes

65 Van Giffen 1950.

66 Van der Sanden 2001, 138.

67 Van der Sanden 2001, 132.

68 E.g. Prummel & Van der Sanden 1995, 116.

69 Hiddink 1999, 53.

70 Hiddink 1999, 53.

71 Van der Sanden 2005.

72 Van der Sanden 1996, 75.

73 Van der Sanden 2002.

74 Van der Sanden & Eisenbeiss 2006.

75 Van der Sanden 1996, 71-84.

76 A medicine, *Mumia*, was made of bog bodies (Van der Sanden 1996, 43).

77 Parker Pearson 2003, 71.

partly cut.⁷⁸ Many bodies were hurt in more than one way, so one might speak of overkill. Although a violent death cannot be demonstrated in all bog bodies, it seems likely that most of them were killed.

Different theories have been forwarded to answer the question why these people were killed and submerged in bogs and moors.⁷⁹ Very influential was and still is a section from *Germania* by Tacitus, in which he describes punishments for various offences.⁸⁰ According to this text, traitors and defectors are hanged on trees, while cowardly, unwarlike and infamous people are submerged in bogs and swamps, covered by branches or hurdles.⁸¹ This passage suggests that the people whose remains were found in bogs had committed an offence and were killed for it. However, it seems unlikely that children could have been killed for such crimes. In the 1950s, E. Thorvildsen was the first to argue that the bog bodies were actually human sacrifices, on the basis of some shared characteristics: they were often found naked with the remains of clothing nearby (this may not be true since linen is not preserved in bogs); the way they had been killed suggests ritual killing; and stones and branches were often found with the bodies.⁸² Still other interpretations have been forwarded. K.W. Struve in 1967 thought that bog bodies had been people (criminals, suicides, victims of violence or accidents) who were expected to haunt the living after death and were made harmless by maltreating their bodies after death and depositing them into a bog, the so-called *Wiedergänger*-hypothesis.⁸³

Van der Sanden is among the authors who think that most bog bodies (except for a small number who may have met their death by accident in a moor or bog) were human sacrifices. The main reason for this interpretation is the similarity with other bog finds, which were almost certainly offerings. Sticks, which often cover the bodies, have also been found covering other objects. Bog bodies were often found associated with other objects, or were found in comparable places, such as pits in bogs. Van der Sanden therefore concludes that “the bogs and other watery environments were evidently places where people sought contact with the supernatural world and where they deposited simple or valuable objects to put a seal on those contacts.”⁸⁴ That raises some new questions: Why

have these specific people been chosen as victims of sacrifice? Why were human sacrifices performed?

If we accept that the violation of specific rules within a community was considered insulting to the supernatural world and would thereby endanger the wellbeing of a group, it is quite possible that offenders of such rules were sacrificed, in order to appease the supernatural world. Punishment and sacrifice may thus go hand in hand. That is not to say that all sacrificed people had been offending rules. There may still have been other reasons for a human sacrifice, unrelated to something the victims had done. We do not know on what grounds specific people were victimized. They might have been outsiders who happened to be in the wrong place at the wrong time, or people from the community itself. They may have been chosen by lot, or were selected for some physical defect; however, as was noted above, we do not know whether bog bodies have more bodily deformities on average than other members of such communities.

What we do know is that bog bodies that have been found and documented *in situ*, appear to have been deposited with some care. They were not killed and thrown in the swamp, but were carefully placed in the bog, sometimes in a pit, with branches placed over them; they may not have been naked but were possibly dressed in linen, and are often found with woollen, leather or fur clothing and accessories. This suggests that the dead were no strangers, but people selected from their community. The manicured nails and the lack of callosity on the hands of some are taken to indicate that these people were members of the elite⁸⁵; this implies that all members of a community, not only outcasts, could be selected.

If human sacrifice was indeed practiced, it must have been rare. This can be inferred from the relatively low number of finds. Even if we allow for many bog bodies that disappeared unnoticed during peat cutting, there may not have been more than a hundred in the bogs and moors of the Drenthe Plateau. This implies that human sacrifice was not a common ritual, for example a seasonal ritual to promote the fertility of fields, animals and people. That would have cost many more than a hundred lives over a period of about 700 years, from ca. 500 BC-AD 200, in the entire area.⁸⁶ Nevertheless, although a cyclical fertility ritual involving human sacrifice can be excluded, it is quite possible that famine or long droughts were among the reasons to perform a ritual that included the sacrifice of a human being.

It may be concluded that the majority of bog bodies are the mummified remains of people who were

78 The “girl of Windeby” not only was probably a boy, but also lost her hair only when she was discovered in the moor (Burmeister 2007). That may also be the case for other bog bodies.

79 Cf. Van der Sanden 1996, 166-181.

80 Tacitus, *Germania* 12.

81 Tacitus, *Germania* 12: *Distinctio poenarum ex delicto: proditores et transfugas arboribus suspendunt; ignavos et imbelles et corpore infames caeno ac palude, iniecta insuper crate, mergunt.* The translation of *corpore infames* as homosexuals was used on different sides as evidence that the persecution of homosexuals has a very long history.

82 Van der Sanden 1996, 168.

83 Cf. Van der Sanden 1996, 168.

84 Van der Sanden 1996, 175.

85 Van der Sanden 1996, 177.

86 Estimates of the number of settlements on the Drenthe Plateau in this period vary considerably. Middle pre-Roman Iron Age: ca. 95; late pre-Roman Iron Age: at least 20, possibly many more; early Roman Iron Age: ca. 40; middle and late Roman Iron Age: ca. 60 (Spek 2004, 140-141).

sacrificed and deposited in a specific type of landscape. Considering the clear traces of killing on many bodies, it is not likely that bog bodies represent people who died of natural causes and were buried in a special way for some reason. The victims possibly had violated specific rules, or were selected from their community in times of serious misfortune. In both cases, harmony with the supernatural world must have been thought to be disturbed, thus threatening the wellbeing of the community. Sacrifice often involved brutal killing. Apart from the killing itself, the victims appear to have been treated well. Their bodies were often handled with respect after death, and were placed with care. Such a treatment can be expected if they sacrificed their lives for the wellbeing of their community.

5.4 Burial customs

In section 4.4.1, the scanty evidence on burial custom in the coastal area of the northern Netherlands during the pre-Roman and Roman Iron Age was discussed. The situation in surrounding areas is not very different. Cremation is usually taken to be the common burial rite in a large part of northwestern Europe, although evidence from this period is scarce anywhere. Remains of different ways of dealing with the dead are found as often as cremation burials. Grave goods hardly occur.

5.4.1 Western Netherlands

An inventory of non-cremated human remains from Holocene parts of the Netherlands from the pre-Roman and Roman Iron Age was published by Wilfried Hessing in 1993. His inventory includes only a small number of human remains from Noord-Holland and Zuid-Holland. Most of his records concern inhumation graves, which were situated near houses, ditches or creeks. Bodies are often lying on their sides in crouched position. Orientation of the graves is irregular; grave goods are very rare. Single human bones (especially skull fragments) are rather common, not only in the inventory made by Hessing, but also in excavations published afterwards.⁸⁷

A number of cemeteries from the Roman Iron Age are known from Zuid-Holland.⁸⁸ Most of Zuid-Holland belonged to the Roman Empire at the time. This influenced burial ritual to a large extent and explains the differences in burial customs between Zuid-Holland and Noord-Holland in this period. A large cemetery was excavated near the *castellum* of Valkenburg, dated ca. AD 50-250. Here, inhumation graves of 60 infants and 51 older children and adults were found among 598 cremation burials. Inhumation apparently was the common

rite for infants, while older children and adults were usually (but not always) cremated.⁸⁹

In Noord-Holland, regular burial customs before the 3rd century AD cannot be established. The finds are variable, and not unlike the finds from the terp region that will be discussed in the chapters 10, 11 and 12. Cremated remains from the middle pre-Roman Iron Age have been found a pit in Heemskerk-Broekpolder and near one of the houses in the Assendelver Polders.⁹⁰ Cremated bones from the Roman Iron Age were found in a pit in Schagen-Muggenburg, where they were covered by a number of inverted pots⁹¹, and in several contexts in Heemskerk-Broekpolder.⁹² A unique cremation grave with many luxury grave goods from the end of the 1st century AD was found at the Sommeltjesberg on the island of Texel. It was interpreted by Erdrich as the grave of a tribal leader with good relations with the Roman world.⁹³

Four cremation burials as well as a few inhumation burials and single human bones were found in Castricum-Oosterbuurt, spread over the settlement. One of the inhumations concerned two infants who had died shortly after birth; the grave contained bones from the left side of one individual and from the right side of the second individual. Some of the single bones in this settlement had been chewed by dogs.⁹⁴ Six younger inhumation graves were found together, forming a small cemetery dated AD 230-330; some contemporary inhumation and cremation graves were also found outside this cemetery. The graves might be clustered in rows.⁹⁵ A similar small cemetery from ca. AD 300 was found in Schagen-Muggenburg.⁹⁶ These small cemeteries represent a change in burial customs during the 3rd century AD.⁹⁷

In Uitgeest-Dorreveest, two concentrations of human and animal inhumations were found alongside and on the edge of a gully, besides a number of single human bones that were found in several disturbed contexts in the settlement. Several of these burials seem partial or mutilated, possibly because of later digging in the intensively used area. The human bodies found on the slope of the gully were not found in clear burial pits. A direct relation between burials of animals and humans cannot be established since the dates of the burials vary considerably, from the pre-Roman Iron Age until well into the early Middle Ages.⁹⁸ The gully is one of the offering-sites from the study of Marjolijn Kok mentioned earlier. In the gully, fragments of human skulls were found, besides a

⁸⁷ E.g. Therkorn *et al.* 2009.

⁸⁸ Hessing 1993, 18.

⁸⁹ Smits 1993.

⁹⁰ Kok 2008, 111; Therkorn 1987, 105.

⁹¹ Therkorn 2004, 23.

⁹² Therkorn *et al.* 2009, 60.

⁹³ Erdrich 2001a, 320.

⁹⁴ Cuijpers & Robb 1999, 158.

⁹⁵ Hagers & Sier 1999, 85 and 187-197.

⁹⁶ Hagers & Sier 1999, 86.

⁹⁷ Hagers & Sier 1999, 88; Bazelmans *et al.* 2004, 27.

⁹⁸ De Koning 2000, 57-63; 2003.

large amount of sherds and metal objects, among them 1302 Roman *denarii* from the 2nd century AD, a bronze flask containing herbs, and military equipment.⁹⁹ Jan de Koning suspects that the human and animal burials alongside the gully represent a ritual that had to do with the wet environment of the gully or with the boundaries of the settlement.¹⁰⁰

5.4.2 The Pleistocene inland

Prior to the colonization of the young salt marshes of the coastal area in the early Iron Age, cremation was the common burial rite on the Drenthe Plateau and adjacent northwestern Germany, the possible areas of origin of the settlers. Cremation remains were collected in an urn, buried in a pit, often accompanied by grave gifts, and covered by a small barrow. Such burials are usually found together, forming urnfields.¹⁰¹ These were often located near older Bronze Age barrows. A remarkable feature of the urnfields, at least from the perspective of a student of later burial rites, is that all community members seem to have been buried there. That makes it possible to calculate population density from the number of graves in urnfields.¹⁰² About 500 urnfields have been identified in Pleistocene parts of the Netherlands. They were in use until ca. 400 BC.

The number of burials diminishes in the middle pre-Roman Iron Age. Middle pre-Roman Iron Age barrows do not seem to be the last resting place of entire populations anymore, as urnfields had been. This might be caused by a change in the cremation ritual and thereby in its recognizability. As from the late urnfield period¹⁰³, there was a tendency to bury cremation remains without a preservable container in shallow pits or even on the surface¹⁰⁴, and to collect an ever smaller number of cremation remains from the funeral pyre.¹⁰⁵ Some apparent graves do not contain cremation remains at all, only some charcoal. What was done with the actual cremated bones is unknown. Most barrows do not have a surrounding ditch, as was customary in earlier periods. These changes make it difficult to recognize cremation burials, even more so after the middle pre-Roman Iron Age, when barrows are no longer customary. This type of cremation burial remains in use throughout the late pre-Roman Iron Age and well into the Roman Iron Age, but the number of finds is small.¹⁰⁶ During the late urnfield period, still another change occurred. Older burial mounds started to get used for secondary burials. This

remained regular practice during the pre-Roman Iron Age.¹⁰⁷ In the Roman Iron Age, cremation (usually *Brandgrubengräber*, pits containing the remains of the pyre without an urn) was still practiced in the Pleistocene parts of the Netherlands. The rare grave gifts were usually burnt with the body on the pyre.¹⁰⁸

The considerably smaller number of cemeteries that is known from the middle and late pre-Roman Iron Age (no more than 10% of the number of urnfields) may not only be caused by their poor visibility because of a different cremation ritual and a different type of grave, by a smaller size of cemeteries¹⁰⁹, or by medieval *plaggen* soils that cover the cemeteries.¹¹⁰ Increasing variability in burial practices, no longer restricted to cremation, perhaps also contributed to the relative absence of graves.¹¹¹ Such variation may, for instance, be inferred from the finds of single human bones from the pre-Roman and Roman Iron Age in stream valleys in Drenthe and elsewhere. Van der Sanden suggested that these might be the remains of people whose bodies had been excarnated.¹¹² In the southern Netherlands, graves are more dispersed in this period, no longer confined to communal cemeteries but often found in or near farmyards.¹¹³

Although most urnfields seem to represent rather egalitarian communities, there are some exceptions. A small number of graves at the end of the late urnfield period, from about the late 6th century until the early 5th century BC, found in the east and south of the Netherlands, can be considered elite graves, containing grave goods such as weaponry, horse gear, bronze *situlae* and jewellery, which reveal contacts with central Europe.¹¹⁴ From a later date, ca. 350-100 BC, is a special secondary burial in an older barrow, found in Fluitenberg in the south of Drenthe.¹¹⁵ This burial consisted of cremated bones and the burnt remains of an iron coat of mail and possibly a shield. The rare graves from this period with coats of mail elsewhere in Europe are associated with social elite. This grave probably belonged to an elite warrior, who acquired his coat of mail via long-distance contacts, or who had been travelling far.

Elite burials from the Roman Iron Age are as rare as from the pre-Roman Iron Age. Two secondary burials associated with Roman bronze vessels were found in older barrows in Anloo and in the Schoeberg near Diever, dated to the 3rd century AD.¹¹⁶ A burial from the

99 Kok 2008, 141.

100 De Koning 2000, 62.

101 Kooi 1979; Hessing & Kooi 2005.

102 Kooi 1979.

103 Lanting & Van der Plicht 2006, 296; 305.

104 A cinerary barrow; Kooi 1979, 133.

105 Hessing & Kooi 2005, 650; Gerritsen 2003, 128-129; Van Beek 2006.

106 Lanting & Van der Plicht 2006, 313.

107 Hessing & Kooi 2005, 637.

108 E.g. the cemetery of Colmschate in Overijssel, Hiddink 1999, 49.

109 Van Beek 2006.

110 Hiddink 1999, 51.

111 Gerritsen 2003, 140.

112 Van der Sanden 1997b.

113 Gerritsen 2003, 88-89.

114 For Drenthe: De Wit 1998; for the southern Netherlands: Gerritsen 2003, 129-131.

115 Van der Sanden 2004a.

116 Ter Wal 1998.

first part of the 1st century AD was found in the area of Bargerosterveld near Emmen.¹¹⁷ The, probably incomplete, grave goods include fragments of a *terra sigillata* plate, three brooches, and bronze objects belonging to a soldier's military equipment. Some glass beads and fragments of a bronze rectangular mirror are taken to indicate that a woman's grave from the same period was disturbed here as well. These graves from the period of first contact with the Romans might belong to a veteran from the Roman army and a female relative. The very small number of elite graves makes it clear that most members of the elite were buried in a way that cannot be distinguished from non-elite burials.

Illustrative of burial ritual in the late Roman Iron Age is the cemetery of Wijster.¹¹⁸ The cemetery included 25 cremation burials (mostly *Brandgrubengräber* and one or two urned cremations) and eight inhumations, among them small burial pits that probably were children's graves. Besides, 22 four-post square to rectangular configurations were found among the graves. Similar post settings have been found in several cemeteries in adjacent Germany; they might belong to pyres.¹¹⁹ The earliest graves (inhumations as well as cremations) are from the 3rd century AD, though most burials were dated to the 4th and 5th century. Grave goods are not common; the rare finds had been burnt with the body on the pyre. A special inhumation grave was found 100 m from the cemetery as a secondary burial in the centre of one of a group of four barrows from (probably) the middle pre-Roman Iron Age.¹²⁰ This was a warrior grave, with grave goods consisting mainly of weaponry and belt fittings; a 2nd century Roman denarius (of Antoninus Pius) was found in the dead man's mouth.¹²¹ The grave itself was dated to the 4th or 5th century AD.

Also illustrative for the Roman Iron Age are the finds made during the excavation in Midlaren-De Bloemert in the north of Drenthe. This settlement was a small village with two or three farmsteads during the Roman Iron Age and the early Middle Ages. The earliest burial here was a cremation burial dated to the end of the middle Roman Iron Age, consisting of an urn containing the cremated bones of two individuals: an adult and a child under seven. This burial was found in the periphery of the settlement.¹²² Not far from a house from the 4th century AD, five inhumation burials in line were identified, also dated to the 4th century. The identification as graves is based upon their rectangular shape and the size of the pits; bones were not preserved. A large set of grave goods was found in one of the pits (probably the oldest since it

was cut over by a younger burial pit): a copper bracelet; a leather case with bronze lining containing an object that was partly made of an elder branch; two small bronze rings; a bronze brooch; a ring of organic material; a fur amulet; and 200 beads made of glass and amber. All objects had probably been packed in a piece of cloth and placed in a corner of the burial pit. The exceptional preservation was caused by the copper from the bracelet.¹²³

At least one communal cemetery belonged to the settlement of Midlaren-De Bloemert. It was partly excavated while digging trial trenches at the west side of the excavated settlement. Six inhumation graves with various orientations and sizes were uncovered, as well as ten cremation burials (urned cremations and *Brandgrubengräber*), and five four-post configurations. The cemetery seems to have been in use for several centuries, from the end of the 3rd century until the 5th century AD.¹²⁴

Although preservation conditions in the Pleistocene inland make a comparison with the coastal regions of the Netherlands and Noord-Holland difficult, it may be clear that there were various ways of dealing with the dead in all of these regions. Only at the end of the middle Roman Iron Age, burial custom takes on a recognizable form.

5.4.3 Germany

Burial customs in the neighbouring part of northwestern Germany during the research period is slightly better known than it is in Holocene and Pleistocene parts of the Netherlands. Common burial ritual inland was cremation.¹²⁵ As in the Netherlands, the urnfields of the early pre-Roman Iron Age are followed by less conspicuous, unurned cremation graves; secondary burials in older barrows are not unusual. Personal objects are sometimes found, burnt with the skeleton on the pyre.¹²⁶

In the German salt marsh area, cemeteries from the pre-Roman and Roman Iron Age are virtually unknown, just like in the Netherlands. A small number of cemeteries are known from the end of this period. Graves from earlier periods are always single. The terp Feddersen Wierde can be considered exemplary for the German salt marsh area.¹²⁷ The Feddersen Wierde, which was inhabited between the 1st century BC and the 5th century AD, was a relatively large settlement with as many as 26 houses at its height in the 3rd century AD. Despite this considerable population size and careful searches, a cemetery has not been found in the vicinity of this terp. Only single graves were found on the Feddersen Wierde: one cremation grave, twelve adult inhumations and four inhumations of children.¹²⁸ Although 17 burials are not a

117 Van der Sanden 2004b.

118 Van Es 1967, 409-521.

119 Van Vilsteren 1989.

120 Van Es 1967, 498.

121 Van Es 1967, 448.

122 Nicolay 2008b, 193-195.

123 Nicolay 2008b, 195-202.

124 Tuin 2008a, 531-539.

125 Nortmann 1983; Beilke-Voigt 2007.

126 Nortmann 1983, 108.

127 Haarnagel 1979.

128 Haarnagel 1979, 230ff.

small number, they cannot represent more than a small part of the population of the Feddersen Wierde.

Some general observations can be made concerning these graves. Adult inhumations from the first habitation phases were found in or right outside the settlement, in the salt marsh alongside creeks or in the fills of creeks.¹²⁹ Later, 3rd-4th century inhumations were associated with houses or roads on the terp. According to Haarnagel, the graves were often oriented more or less north-south¹³⁰, but north-south should not be taken too literally. Only three inhumations were actually oriented to the north; four were oriented to the northwest, three (one adult and two children) to the west, and two to the south and to the southeast. Orientation does not seem to have been meaningful in itself, but may have been determined by the orientation of nearby features (creeks, roads, houses).

Body posture also differs. One of the bodies, found in a rectangular pit near the west wall of a house, was strongly flexed. Another, in supine position, was conspicuous for the position of the legs; the lower legs were bent upwards so that the feet were found near the pelvis, indicating that the tendons in the knees had been cut.¹³¹ Most graves were found without grave goods, but in one of the early graves in the salt marsh, the body had been placed on a layer of plant material, possibly hay. A wooden, crescent shaped, perforated wooden plank was found near its right hand.¹³² A woman was buried on a bier near the meeting hall. The body was lying on and was covered by plant material. Four brooches, which probably had been attached to linen clothing, were associated with the body. Close to this grave, a (possibly partial) horse was buried in a pit.¹³³

The burials of children were all associated with houses. An infant was found near a south wall, a 4-5 year old near a west wall, and a 3-4 year old near the *Herrenhaus*. A child of less than a year was found in sitting position under the hearth of a house. The pit was covered by the sherds and loam that formed the basis of the hearth.¹³⁴ The child had probably died of a disease.¹³⁵ A natural cause of death could also be established for the 4-5 year old; it probably died of protracted brain haemorrhage.¹³⁶ Noticeable are the missing hands and feet of all children, despite careful excavating. One of the children had been wrapped or clothed in fur.¹³⁷

Haarnagel considered especially the child buried under the hearth of one of the houses to be a likely sacrifice, similar to the child that had been found in the terp of

Hessens under a hearth.¹³⁸ This child had earlier been reported to have been killed by stabbing (this has been falsified since¹³⁹). He thought it unlikely that children that had died of natural causes were buried in or right near houses. Beilke-Voigt, however, noted that infant burials are often found within houses of the pre-Roman and Roman Iron Age, for instance on the terp of Tofting in Schleswig-Holstein.¹⁴⁰ A child had been buried under the centre aisle of the byre of a farmhouse there, right before or during house building. The child had been placed in hay on a wooden trough, which had probably served as a cradle. A cup was placed near its head. There are no indications of an unnatural death, as had been suggested earlier.¹⁴¹ A second infant was found in the dung fill of a water pit that was situated under the hearth of a house in Tofting. Beilke-Voigt has argued that these infant burials are not to be considered '*Sonderbestattungen*', anomalous graves, or child sacrifices. Burials of infants of young children in or near houses rather represent common burial practice for this age group.¹⁴²

Like their Dutch colleagues (see section 4.4.1), most archaeologists working in the German coastal area implicitly or explicitly assume that there must be cemeteries near the settlements in the coastal area but that these are difficult to recognize because cremation burials contain only a small portion of the remains of the cremation pyre¹⁴³, or because they have been destroyed by post-depositional processes, such as erosion, later sedimentation, or agricultural practices.¹⁴⁴ It is generally expected that cemeteries from before the late Roman Iron Age will someday be found in the German terp region. However, cemeteries that can be reliably dated before the end of the Roman Iron Age are as yet unknown.¹⁴⁵ The earliest, with inhumations as well as *Brandgrubengräber* and urned cremations, were found between the terps of Dingen and Barward, south of the Feddersen Wierde, only 0.5 km apart. Only a small part of both cemeteries was excavated.¹⁴⁶ Most graves from Dingen are from the 4th and 5th century, but some were dated to the 3rd century AD.¹⁴⁷ The earliest finds from the cemetery of Barward are reported to date from the 2nd century AD.¹⁴⁸ Somewhat later, dated to the 4th and 5th century AD, is the cemetery of the nearby terp of Fallward in the same terp series, also with cremations and inhumations. It stands out for its boat burials and for the well-preserved, beautifully

129 Haarnagel 1979, 230ff.

130 Haarnagel 1979, 238.

131 Haarnagel 1979, 235; Taf. 172,1.

132 Haarnagel 1979, 234; Taf. 16.

133 Haarnagel 1979, 226, 236; Taf. 172,2 and 3.

134 Haarnagel 1979, 231; Taf. 170, 3-5.

135 Beilke-Voigt 2007, 158.

136 Cf. Beilke-Voigt 2007, 159.

137 Haarnagel 1979, 230-231; Taf. 170,1.

138 Haarnagel 1979, 231.

139 Cf. Beilke-Voigt 2001, 180; Siegmüller 2009.

140 Beilke-Voigt 2007, 180ff; Bantelmann 1955, 34; 46-48.

141 Cf. Beilke-Voigt 2001, 181.

142 Beilke-Voigt 2001.

143 E.g. Martens 2009, 334.

144 E.g. Haarnagel 1979, 232; Schön 1999, 42.

145 Schön 2003.

146 Haarnagel 1979, 16-17.

147 Plettke 1940.

148 Genrich 1941.

carved wooden objects that were found in some of the graves.¹⁴⁹ In the nearby Pleistocene area, thousands of graves have been uncovered in cemeteries, but these do not seem to be older than the earliest salt marsh cemeteries.¹⁵⁰

Schön discussed the origin of the inhumations in the mixed cemeteries that occur from the late Roman Iron Age onwards.¹⁵¹ He argued against the general assumption that the custom of inhumation was introduced to the area by people with contacts in the Roman Empire. The inhumation burials in the cemeteries of the end of the Roman Iron Age should rather be seen as a continuation of older practices, of which the single inhumations of the Feddersen Wierde are an example. Schön thus considers these older, single graves ordinary burials. Graves with rich grave goods are virtually unknown in a large part of northwestern Germany. Only east of the Weser and more to the south, close to the Roman *limes*, cremation cemeteries from the first half of the Roman Iron Age have been found, with graves containing bronze grave goods.¹⁵²

Exceptional is an isolated cremation deposit near the settlement of Bentumersiel on the Ems. It contained only a few small fragments of burnt bone but a large amount of burnt grave gifts, dated to the middle Roman Iron Age. The burnt material includes native as well as imported objects, such as a large amount of bronze fragments and melted glass, both from vessels, and a native bone comb. From the presence of beads, it was concluded that a woman was buried here; the find is dated to the early 4th century AD.¹⁵³ Close to Bentumersiel, near the terp Jemgumkloster, an early 3rd century AD cremation grave containing a silver belt fitting was found close to the skeleton of a very large dog. The two burials probably belong together; the skull of the dog had been bashed in.¹⁵⁴ These rich graves, especially the one from Bentumersiel, are not unlike the rich cremation burials that were discussed in the above, such as Texel-Sommeltjesberg (Noord-Holland), Diever-Schoeberg, or Anloo (Drenthe). Such graves probably represent members of the elite with whom the Romans maintained diplomatic contacts.

5.5 Conclusions

This chapter is meant to merely give an impression of ritual practices in areas surrounding the terp region. Although it is far from complete, it allows some conclusions concerning the nature of the remains of rituals that have been identified in these areas. Firstly, there may also be regional differences in ritual practice; for instance, large weapon deposits of the type that occur in north-

ern Germany and Denmark, are unknown from the Netherlands. Secondly, the variation in ritual practice seems to be enormous, especially in the composition of the deposits themselves. In all areas, human bones, animals and animal parts, and all kinds of man-made objects are combined in a seemingly endless variety of deposits. Depositional practice was certainly not strictly regulated. Still, some underlying constants are shining through.

In the first place, depositional practice seems to concentrate on specific types of locations, within as well as outside settlements. Inside settlements, many ritual deposits have been found associated with houses (hearths, postholes, walls, thresholds and floors). It would not be correct to call the finds from houses building or abandonment sacrifices or offerings, since we do not know whether these were all religious rituals. They should rather be called foundation, building or abandonment *deposits*. Many deposits in settlements outside houses were found in structures such as wells, in pits, or near fences.

Locations outside settlements include single deposits, but also open-air locations that were in use for depositional practice over a long period. Locations used for ritual practice must have been meaningful places in the landscape, either for individuals who made one-time depositions on specific occasions, or for communities that frequently used specific places or landscape types for ritual activities. Peat bogs and rivers were clearly used for that purpose, but it should be noted that preservation condition make them easily recognizable. There may still have been other natural features that attracted ritual practice.

In the second place, deposited materials are usually not prestigious objects, but normal utensils and tools, and animal and human remains. Ordinary pots, sometimes placed upside-down, potsherds, miniature pots, ceramic artefacts, and implements made of wood, stone or bone commonly occur in deposits. Among the animal remains, domestic animals are common, but pigs are rare. Wild animal species hardly play any role in ritual practice. In the northern Netherlands, weaponry was only deposited on a small scale in so-called offering sites from the Roman Iron Age in Noord-Holland, and in a very small number of elite graves. Other metal finds such as brooches are rare, but they may well have been part of normal depositional practice and should not be considered prestigious deposits. The low number of metal finds may be caused by the relatively low chance of finding them without a metal detector. An inventory of finds by metal detectorists will, in the future, hopefully give a better idea of the role and significance of metal objects in the past, in daily life as well as in ritual practice.

A special find is a carved piece of wood, representing a horned head, supposedly of cattle, in a bog in Drenthe. This piece has a nearly exact parallel in the terps of the coastal region (see fig. 3.6). It is one of the rare material

149 Schön 1999.

150 Schön 1999, 40ff; 2003.

151 Schön 2003.

152 Strahl 2009, 66.

153 Strahl 2009; Mückenberger & Strahl 2009.

154 Jöns *et al.* 2013, 230.

indications of symbolic meaning. The occasional deposits of cattle horns in bogs underline the symbolic meaning of cattle, or at least of cattle horns. In this respect, it should be noted that hornless cattle did occur in the Netherlands during the Roman Iron Age. This relatively short period indicates that farmers probably favoured horned cattle, and tried to erase this mutation from their livestock by targeted breeding.¹⁵⁵

Human remains are either found as separate bones, or as partial or complete skeletons. Separate bones are often skulls or skull parts, but not exclusively so. Some single bones were reported to be chewed by dogs (Castricum-Oosterbuurt in Noord-Holland). A peculiar characteristic of human as well as animal skeletons are the frequently missing foot bones, despite careful excavating (e.g. the children of the Feddersen Wierde and animals and humans in Noord-Holland sites). Cemeteries from before the end of the middle Roman Iron Age only occur in regions that were part of the Roman Empire. Single inhumations are found occasionally in Holocene areas outside the Roman Empire, already in the pre-Roman Iron Age, but their small number indicates that they probably do not represent common burial customs.

In Pleistocene regions, single inhumations are only seldom found, probably due to the poor preservation of bone there. Some of the dead were possibly victims of human sacrifice. That is the most likely interpretation of the mummified human bodies found in bogs. Rather than outsiders, they may have been members of communities who were selected to be sacrificed, possibly because they broke some rule or for another reason. They were brutally killed, but often carefully placed in a bog.

Cremation is usually taken to be the common burial custom of Pleistocene areas in the Netherlands and Germany during the pre-Roman and Roman Iron Age, but it is not certain that this was the burial rite for all members of a community. In Holocene parts, cremation remains are extremely rare; this has been explained as a research gap caused by the special landscape conditions. Grave goods are rare in all areas, but not entirely absent. A small number of elite graves have been identified on the basis of unusually exuberant grave goods.

At the end of the Roman Iron Age, small cemeteries start to appear. It has earlier been suggested that communal, mixed cemeteries, with cremations as well as inhumations, originate in the regions east of the Netherlands and are introduced in the northern Netherlands during the Migration period by Anglo-Saxon immigrants (see chapter 4.4.1). However, this date may have to be adjusted when we compare the evidence from Lower-Saxony, Drenthe and Noord-Holland. Cemeteries such as Barward and Dingen in Lower-Saxony, Midlaren-De Bloemert and Wijster in Drenthe, and Schagen-Muggenburg and Castricum-Oosterbuurt in Noord-Holland, combine inhumations and cremations already in the 3rd century AD, although it is not always clear whether such cemeteries belong to a specific household, or can be considered communal cemeteries. Anyhow, burial in cemeteries apparently already started before the arrival of Anglo-Saxon immigrants in the 5th century. Schön has argued that the introduction of inhumation in cremation cemeteries was not a Roman influence, as has earlier been suggested, but a continuation of an indigenous inhumation practice, indicated by, for example, the single inhumations on the Feddersen Wierde.¹⁵⁶ The novelty in burial customs of this period in the northern Netherlands and Lower Saxony apparently was the introduction of clustered graves, of cemeteries, rather than the introduction of either inhumation or cremation.

The rituals that were identified in areas surrounding the coastal area of the northern Netherlands form a necessary background if we want to understand ritual practice in this area. However, comparison with surrounding regions is not enough if we want to understand ritual practice in any region. What actually is ritual or ritual practice? What is the relation between ritual and religion? How is the wide variation in ritual practice to be explained? How can we identify the remains of ritual practice? And can we go beyond the standard explanation of such remains as offerings to the gods? In the following part, it will be attempted to create a theoretical framework which will help to understand ritual itself, and with that the identification and interpretation of the remains of rituals in the archaeological record.

155 Hulleger 2012, 126.

156 Schön 2003.

Part 2

Theory of ritual

The four chapters of Part 2 are devoted to the theory of ritual and its applications in archaeology. It starts with a general account of the origin of ritual and religion in the human mind, in chapter 6. This account forms the point of departure if we want to understand rituals and ritual behaviour, and their remains in the archaeological record. Chapter 7 is aimed at showing the diversity and dynamics of ritual, in view of the variable finds in the archaeological record. Various aspects of the meaning and interpretation of ritual practice that are relevant to the interpretation of the remains of rituals that we are dealing with as archaeologists will be discussed in chapter 8. The final chapter of this part, chapter 9, has a more practical point of view. It concentrates on the identification of the remains of rituals in the archaeological record, and on the kind of information that we need if we want to understand these rituals.

6

Ritual, religion and the mind

6.1 Introduction

A study of ritual in any area of research, including archaeology, is necessarily based on a theoretical account of ritual. The field of ritual studies is so wide, and so many different views exist on the subject, that it is necessary to elucidate the position of the researcher in the ongoing debate on ritual in general and on ritual in the researcher's own specialized field in particular. In archaeology, the study of ritual has its own, rather short, history, and its own, growing corpus of theoretical literature. That corpus is, however, not always sufficient as a background for new research on ritual phenomena in archaeology. This chapter is meant to give a theoretical foundation to the chapters on the interpretation of archaeological phenomena in Part 3.

The disciplines that traditionally study religion and ritual are social and cultural anthropology and religious studies. These are extensive fields of knowledge, which are based on centuries of research and philosophical thinking.¹ This invites a relative outsider to be eclectic and pick some philosophical ideas from the 'hermeneutic vortex'², the ever-growing corpus of interpretational *-isms* dealing with the study of religion and ritual within social anthropology. However, the most recent or most cited ideas from this corpus are not necessarily truer than the older ideas to which they respond. Moreover, although this 'hermeneutic vortex' does contain many ideas that are worth considering, these often do not really explain much. I tried to avoid this vortex by going to the origins of human thought and behaviour. Cognitive and evolutionary psychology are my starting point, as I think that is where it all starts: in the minds of individual people who are constantly reacting and adapting to their natural and social environments.

The reader will notice that the resulting theory is largely based on rational reasoning from intuition, rather than on the systematic evaluation of the corpus of literature on ritual and religion. I ignored many theories that I did not find useful, or that go far beyond what is needed here. For all those who think they are themselves not familiar with rituals and religion (and I found many of them within archaeology), I have chosen to use examples from our own time and society and from our still prevail-

ing religion, Christianity, rather than the exotic rituals and religious beliefs we can read about in ethnographic literature. This may lead to some misunderstanding since I might be accused of projecting modern, western preconceptions onto people in prehistoric or non-western societies. Rather than stressing that they are really just like us (that is, the *us* we believe to be), however, I would like to stress that we are actually just like them. Since we all belong to the same species, our minds basically work in the same way. Therefore, I believe that the theoretical insights described in this chapter can be applied to all human societies, be they modern or ancient, familiar or exotic.

Within archaeology, the use of cognitive psychology and evolutionary biology to explain cultural phenomena such as ritual or religion has been encouraged by Colin Renfrew and explored by Steven Mithen.³ As a field of study, it is relatively recent, starting in the early 1990's, with Lawson and McCauley's *Rethinking religion: connecting cognition and culture* of 1990 as an incentive. Within these last decades, researchers from various disciplines joined their forces, resulting in a substantial corpus of literature on the subject. A certain consensus has emerged, although, as a theory, it is still under construction and different schools have already developed, as will be discussed in section 6.3 below.⁴

One of the most influential researchers in this new research area is the anthropologist Pascal Boyer. His study from 2001, *Religion explained. The evolutionary origins of religious thought*, is a comprehensive work that forms a good starting point for an exploration of the field. Boyer makes use of the insights of cognitive psychology, social anthropology and evolutionary biology, to give an explanation of religion and related phenomena such as ritual. The basis of Boyer's explanation is a description of how people think, how this functioned in human evolution, and how religion, ritual and other 'cognitive gadgets'⁵ such as jokes, music and art came into being as side effects of the process. As Boyer's theory enhances the understanding of the role of ritual and religion in human existence, it will be the starting point in this general description of religion and ritual.

1 Useful overviews are written by, e.g., Evans-Pritchard 1965; Bell 1997.

2 Term used by Lawson and McCauley, cf. Whitehouse 2004a, 75ff.

3 A.o. Renfrew 1994; Mithen 1996; 1998.

4 Boyer 2004, 431; Whitehouse 2004b, 171-174.

5 Boyer 2001, 235.

6.2 The mind

Human cognition is studied in different disciplines, either by experimental studies of normal adults, by studying the learning capacities of young children, by imagery techniques that make brain activity visible during different kinds of tasks, or by studying cognitive pathologies.⁶ These different types of research show that the human mind consists of many specialized cognitive systems, which produce inferences about different aspects of the world around us.⁷ Since these systems involve computations that are far more complicated than our conscious mind can handle, they work largely on an unconscious level ('in the basement' as Boyer calls it, using the analogy of a Victorian elite household). They process what we experience and learn, providing our conscious mind with *intuitions*, which form the basis of our decisions and actions.⁸ These systems have evolved through natural selection; we share part of them with animal species.⁹

Many of these inference systems and other cognitive capacities play a part in the context of religion and ritual; a number of them is listed below. It must be noted that this list of capacities is tentative; research in this field is continuing and new or even more refined mechanisms and connections between them are discovered all the time.¹⁰ Nevertheless, it is quite certain that these systems somehow play a role:

1. We are able to think about what is not here and now, a capacity that is called *decoupling*.¹¹
2. We are able to distinguish *ontological categories*.¹² This inference system provides us with a kind of templates (for persons, animals, plants, inanimate things, manmade things), which make it possible to classify the objects around us.
3. We are aware of a *distinction between physicality and interiority*¹³, of a difference between physical appearance and inner life, in ourselves and in other living beings and objects.
4. We have a *hazard-precaution system*.¹⁴ This is a cognitive system or set of capacities for the detection of and reaction to potential danger. It comes with a specific repertoire of precautions. A contagion system to help us avoid invisible danger in food or other substances is part of this system.¹⁵

5. We have an *action-representation system*.¹⁶ Hereby we know that, for instance, any action consists of three elements: someone who is doing the action, the actor; something or someone that is acted upon, the object; and the action itself. This system is closely related to the *agency-detection system*¹⁷, which enables us to detect an agent (a predator or a prey) from clues in the environment.
6. We have a *moral system*, a *theory of mind* (we are able to make an educated guess at what other people think and feel in any situation) and many other mental adaptations for social life that are characteristic of the human species, though they are not uniquely human.¹⁸ Our social mind makes it possible for us to live in groups. It enables us, for instance, to assemble and infer information about our own and other people's reputation and character, to interpret commitment signals, to form coalitions with non-relatives, to be altruistic within our group, and to behave non-opportunistically if necessary.¹⁹ A natural inclination towards empathy is at the basis of such capacities.²⁰

It is important to note that these inference systems enable us to select and process information from our environment, but do not have content. Content (ideas about the natural and social environment and directions for behaviour) is provided by culture. Infants, for instance, do not know by themselves any animal species, but they are able to classify animals in accordance with their specific characteristics. Another example: the distinction between interiority and physicality recognized by Philippe Descola can take different, culturally determined forms.²¹ The position taken determines how we perceive and interpret the world, and how we deal with other beings, sometimes with far-reaching consequences. Within the human world, for instance, the distinction made between interiority and physicality easily leads to the exclusion of people to whom inferior interiority is ascribed. To deny other people the same kind of interiority is usually taken as a license for oppression, as women, people with different skin colours, people who are thought to be more primitive (e.g., the Gallic and Germanic tribes in the eyes of the Romans), or people of other religions have experienced in the past, and still experience today, all over the world.

Many cultural phenomena do not seem necessary for the survival of our species. Nevertheless, we, that is all hu-

6 Boyer 2001, 100.

7 Boyer 2001, 106.

8 Boyer 2001, 118 and 128.

9 De Waal 2005, 188-195.

10 The term 'system' is adopted here following Boyer; other authors use 'mechanism' (Plotkin 2002) or 'faculty' or 'capacity'.

11 Boyer 2001, 135.

12 Boyer 2001, 60ff.

13 Descola 2006, 139-140

14 Boyer & Liénard 2006.

15 Boyer 2001, 119.

16 Lawson & McCauley 1990, 87ff.

17 Boyer 2001, 145.

18 Boyer 2001, 120ff.; De Waal, a.o. 1996; 2005; 2009.

19 Boyer 2006, 466.

20 De Waal 2009.

21 Descola 2006, 141ff.

man groups, have them. This applies for example to art, decoration, music, humour, religion and ritual (this is not to deny that some animals also seem to have a sense of humour, or decorate their nests or seem to sing for the fun of it). When these traits do not give our species a specific evolutionary advantage, they did not disappear by natural selection either. Why do we actually have them? Do we just hold on to them to make life more interesting?

Evolutionary and cognitive psychology show that for an answer to these questions we should not look so much at the survival of our species, but rather at the origin and survival of these cultural traits themselves, on the level of the individual person. Culture can be regarded as an integrated collection of cultural concepts or memes.²² Some concepts remain the same over long periods, while others change or disappear. The transmission of memes or cultural concepts, among them ideas about the supernatural and rules on the performance of rituals, is a dynamic process in which people experience and learn and think about these cultural notions, discuss them and tell their children about them. In and by this process culture can change. In order to be transmitted or spread within culture, cultural concepts must have specific advantages, not necessarily in real life, but to people's minds. That also is the case for "by-products of ordinary cognitive function"²³ such as religion and ritual. Successful concepts are typically those that make use of several inference systems, so that people intuitively feel that they must be right.²⁴ Religion and ritual and their manifestations come natural to humans, because they activate inference systems and associated emotions of vital importance, such as systems that deal with danger and systems for interaction with other people, for moral feelings, and for the organization of social groups.²⁵ That does not mean, however, that cultural traits such as religion or ritual and their manifestations provide an evolutionary advantage by themselves, as will be argued in the next section.

6.3 Origin and function of ritual and religion

The question of why religion and ritual and other cultural phenomena exist can be addressed in two ways. The first is by examining what they are for, their function; the second is by looking at the way they came into existence, their origin. In this study, religion and ritual are considered *by-products* of evolutionary advantageous

capacities, which answers the question of their *origin*. The *function* of religion and ritual can be and has been considered from an evolutionary perspective as well. In that case, attempts are made to identify the advantages of such traits for Darwinian fitness, that is for the survival and reproduction of individuals or human groups. In general, religion and ritual seem to function in establishing and maintaining group identities. That in itself might be considered advantageous for the survival of individuals: being a member of a well-defined group is beneficial, outsiders are usually worse off than insiders. However, does that mean that all separate religious and ritual features are in themselves advantageous? Can and should they be explained in terms of a better chance of survival and reproduction of the individual or the group?²⁶

The use of the term 'by-product' to describe such essential traits of human culture as religion, ritual, art or music needs to be explained since it may be confusing. After all, cultural phenomena cannot have their origins anywhere else than in human evolution, so at that level they may certainly be called 'product'. However, if we consider cultural phenomena as direct products of evolution, comparable to the spots of a leopard or a mammal's vascular system, a specific, adaptive function is implied. To this position, psychobiologist Henry Plotkin objected: "I will *not* adapt the view that human culture, and our capacity to enter into it, is a single attribute with an adaptive design that has evolved to carry out some specific function. Culture is not like our vascular or visual systems."²⁷ This statement suggests the existence of a paradigmatic divide between two sides in the discussion on the role of culture in human evolution. Apparently, there is a school in which it is believed that cultural traits do have specific adaptive functions, just like our vascular or visual systems, and another school that does not believe so.

These schools represent opposite interpretational paradigm's, which offer different explanations of the same phenomena. On the one side, to which I do not adhere, cultural concepts such as religious or ritual features are considered to be products of natural selection, which are themselves advantageous adaptations. This might be called the '*functional-sociological side*'. Explanations of cultural concepts on the functional-sociological side concentrate on their function in the survival of social groups; they are, for example, thought to motivate advantageous behaviour. The main function of ritual and religion, in this perspective, is that it is of crucial importance for the organization and cohesion of social groups.²⁸ The study of Jesse Bering on beliefs in the immortality of the

22 The term *meme* was coined by Richard Dawkins in "The Selfish Gene" (1976), and has since become popular (cf. Burman 2012). The term as used here is only meant to indicate "an element of a culture or system of behaviour passed from one individual to another by imitation or other non-genetic means" (Oxford English Dictionary). The term *selfish memes* is used analogous to *selfish genes*.

23 Boyer 2003, 119.

24 Boyer 2001, 34-37; Pyysiäinen 2006, 483.

25 Boyer 2001, 22 and 135.

26 This is an essential question in the debate on the relation between culture and nature, see Corbey 2005, Ch. 5.

27 Plotkin 2002, 18.

28 Following Durkheim, cf. Boyer & Liénard 2006, 612; Bell 1997, 24-26.

soul and the afterlife may serve as an example.²⁹ The alleged function of these irrational beliefs is that they motivate people to be well-behaving members of their society, since only well-behaving people have the prospect of a pleasant afterlife.³⁰ These ideas fit into the widespread idea belonging to this side, that we need religion as a basis for moral behaviour. Other interpretations on the functional side do not concentrate on social groups, but on the reproduction of genes; in this view, religion or art are successful cultural traits because when they emerged, religious or artistic people were more attractive to the opposite sex and had a better chance of reproduction.³¹

Religion and ritual may well provide adaptive advantages for people and societies sometimes, but very often they are just neutral in this perspective, and they sometimes have clear negative effects. It is not so difficult to give counterexamples that are clearly not in line with the explanations provided by the functional-sociological side. Religious or ideological ideas often inspire people to make choices “which defy explanations purely in terms of biological fitness”³², because they are disadvantageous to the fitness of the group or the reproductive success of the individual. We only need to think of the collective suicide by religious groups or of the persecution of heretics by celibate clerics. Neither is it the primary function of a belief in an afterlife to promote social advantageous behaviour, although this can sometimes be a secondary effect. It rather seems to stress the urgency of religious beliefs. An example is the Christian Protestant belief that one may enter heaven only when one believes that Jesus Christ died to reconcile humanity’s sins, while repentant sinners will always be forgiven. This belief appears to be aimed at perpetuating the religious concept itself, rather than proper behaviour. Pious, catholic Mafioso who secure the afterlife by regular confessions form another example. Unless one resorts to hard-boiled social Darwinism (stating, for instance, that aggressive Mafioso are clearly the fittest in the struggle for survival), it is clear that religion legitimizes antisocial behaviour in such a case and cannot be considered advantageous.

Explanations on the functional-sociological side often seem rather cynical, but that is not the main objection to them. More important is that such explanations not only do not take the possible negative effects of cultural traits into account, they also are usually reduced to only one function and do not sufficiently explain the variability and complexity of cultural traits. Although some rituals may be argued to strengthen group cohesion or perform other social functions, that does not explain the specific elements of ritual behaviour.³³

On the opposite interpretational side, which might be called the ‘*cognitive-origin side*’, it is believed that cultural concepts, such as the many expressions of ritual and religion, are much better explained when they are not regarded as advantageous products of natural selection themselves, but as *by-products* or *side effects* of advantageous cognitive products, such as the inference systems that were listed in the previous section.³⁴ Boyer called these side effects parasitic, to stress that they profit from systems that do have adaptive functions.³⁵ Nevertheless, although cultural concepts such as religion and ritual are side effects of cognitive evolution, they are part and parcel of human existence and cannot be separated from it. Biology and culture are dialectically intertwined, in the words of Goodman and Leatherman, and it is the flexibility of humans that arises from this dynamic bond, which enables the human species to adapt easily to all kinds of environmental conditions.³⁶ Not the separate cultural memes, but this dynamic, dialectic process between biology and culture is a true adaptive mechanism. Culture thus is “a powerful force in human evolution”³⁷, equalling that of genetic inheritance.

It is the cognitive-origin side that I will choose as it has several advantages. In the first place, it is far more interesting to understand ritual and religious variability as rooted in cognitive capacities than to reduce it to a functional explanation that ignores diversity. In the second place, it can be acknowledged on this side that social life is possible without religious motivations or rituals. Human kind is a social species with social capacities and a moral faculty anyway, as has often been stressed by primatologist Frans de Waal: “...conscience is not some disembodied concept that can be understood only on the basis of culture and religion. Morality is as firmly grounded in neurobiology as anything else we do or are”³⁸ (It should be noted that morality in this context is about ‘Helping and (not) Hurting’, as De Waal puts it, and not about cultural rules such as sexual moral or good manners.³⁹ In the third place, the study of cultural concepts on this side does not lead to forced interpretations that stress their positive effect on the survival and reproduction of the individual or the group. It can be acknowledged that they may be neutral or even harmful. Cultural concepts or memes have their own history and “life”-cycle. Memes may seem *selfish*, especially when they are accompanied by a feeling of urgency coming from basic cognitive inference systems. The belief in the afterlife in Christian Protestant orthodoxy, as described above, is a

29 Bering 2006.

30 Bering 2006

31 Miller 2000.

32 Plotkin 2002, 158.

33 Liénard & Boyer 2006.

34 E.g. Boyer in his comment on Bering, Boyer 2006, 466; Whitehouse 2004c, 190; Boyer & Liénard 2006, 612.

35 Boyer 2001, 202.

36 Goodman & Leatherman 1998, 5ff.

37 Plotkin 2002, 246.

38 De Waal 1996, 217-218.

39 De Waal 2005, 201-202

clear example of such a selfish meme. The study of the origin of cultural concepts and of the biography of memes provides an entrance to the study of the dynamics of culture. The dynamic, dialectic process between biology and culture is a true adaptive mechanism that has played a major role in human evolution. However, culture, as an integrated set of cultural concepts or memes, is obviously not only about adaptation to different circumstances and biological fitness. It also is about the reproduction of culture itself, and about the ways memes influence people's lives. Memes often seem to go their own way, without necessarily being beneficial to human individuals or groups. Between memes and the individual minds that create and sustain them, a field of tension exists. The social group, human society, is the theatre in which these tensions are enacted. Individual people or subgroups sometimes have to give in to strong, prevailing memes that are highly valued by the dominant group, while in other cases memes may lose their ascribed value, and change or disappear. Religious and ritual studies should therefore not be aimed at discovering the positive adaptive function of ritual and religious phenomena from an evolutionary perspective. It is far more interesting to concentrate on the diversity and dynamics of religious and ritual phenomena, and on their diverse and dynamic roles in the cultural and social environments of which they are part.

6.4 Religion

A belief in supernatural beings or, in the terminology of Boyer, religious concepts, is the primary characteristic of religion. To understand religion and its success in the history of humankind, it should be established why religious concepts are so successful. From the assumption that the origin of religious concepts lies in the mind of individuals, experiments in several different cultures were carried out to establish which religious and other concepts are successfully remembered and transmitted.⁴⁰ Although religion and ritual do not necessarily always go hand in hand (see section 6.6 below), the results of these experiments may be important for the nature of many rituals too, so they will be described here in some detail.

Concepts of the supernatural were found always to consist of basically the same two elements.⁴¹ In the first place, a supernatural entity is always based on one of the ontological templates that belong to our basic cognitive capacities (a person, an animal, a plant, an inanimate object or a man-made object). In the second place, there is a specific feature of the supernatural entity that *contradicts* the information that belongs to the ontological template.⁴² Because of the first characteristic, people already

know many things about the supernatural object that do not need to be told. When the supernatural being is, for example, a ghost, we know that it is a kind of person. We therefore expect it to act and react as a person, and we already know that it can see, hear, and remember what it sees and hears. In addition, it has something special that normal persons do not have: it can go through walls. That makes it into a kind of person that is not easily forgotten. A god may be a person in all aspects except for this: it is invisible and can be everywhere at the same moment.

The possible combinations result in a concise "catalogue of supernatural templates"⁴³: persons, animals, plants or objects with a counterintuitive physical, biological or psychological property. These are the concepts that differ from the ontological template enough to grab the attention, but are still so familiar that they will be easily remembered; therefore, they have a fair chance of being successfully transmitted. This probably goes for all cultures (experiments were performed in Tibet, Gabon, France and the USA). It would not be quite correct to call these concepts *counter-intuitive representations*, as Ilkka Pyysiäinen suggests.⁴⁴ The aspect of ontological normality, by which we understand supernatural beings so easily, is missing in this designation.

Supernatural and religious concepts are often used as synonyms, but Boyer makes a clear distinction between them: "Religious concepts are those supernatural concepts that *matter*".⁴⁵ With 'matter' is meant that religious concepts or entities have free access to *strategic information*, defined as "the subset of all the information currently available (to a particular agent, about a particular situation) that activates the mental systems that regulate social interaction".⁴⁶ Although making a distinction between supernatural and religious concepts does not seem necessary in the context of this study, the concept of strategic information is relevant to understand religious and ritual practices. As will be argued in chapter 8 and in the case study of Ezinge, supernatural beings who supposedly can read people's minds may require other types of offerings than supernatural beings without access to strategic information.

Strategic information is the kind of information that matters to people in social life. It is information that we would not like everybody to know. We may want to keep secret that we drink too much, that we dislike our boss, that we have a lover while being married to someone else, or that we won the lottery. When this information would be brought into the open, it might have serious and undesired effects on our social life. People only have limited access to strategic information on other people. Although, as was argued in section 6.2, they have a the-

40 Boyer 2001, Ch. 2.

41 Boyer 2001, 64-84.

42 Boyer 2001, 64.

43 Boyer 2001, 78.

44 Pyysiäinen 2001, 235.

45 Boyer 2001, 137.

46 Boyer 2001, 152.

ory of mind as a basic capacity, they cannot read each other's minds. If there were supernatural entities (gods or spirits or ancestors) with access to strategic information, who would always know everything we did and thought, right or wrong, these would really matter to us. These would be entities to fear or to confide in and to ask for help in personal affairs (knowing that they would know everything about us already).

Although from the outside it may seem strange and irrational to accept such a belief, it does not really take an effort to believe that such supernatural entities do exist. Our cognitive action-representation system postulates an agent whenever we experience an event as an action, as we often do. From an evolutionary point of view, it has always been more advantageous to overdetect agency (for example a suspected predator) than to underdetect it.⁴⁷ A counterintuitive event (fortune or misfortune) is easily and intuitively taken for an action by an agent with counterintuitive qualities, as a reward or punishment for something we did, even though it is usually not made clear how these beings can cause anything.⁴⁸ Since we, by nature, are used to think in terms of social interaction, we would find it important to keep good relations with them.⁴⁹ This is a self-perpetuating process. On the one hand, we may think that the gods, who know everything about us, will award or punish us for good or bad behaviour. On the other hand, when we feel punished or rewarded by events that happen to us, it is only natural to recognize an action of an agent, which then must be supernatural.

It is important to stress once more that this does not imply that morality, the aspect of social life in which the notions of right and wrong behaviour are important, is only possible because people believe that they will be punished or rewarded for their actions by supernatural agents. What it means is that religious concepts are successful because people already have a social mind, including a moral system. Religious concepts are successfully transmitted thanks to the intuitive ontology and moral thinking of the social beings that humans are by nature.

There is still another reason for the successful transmission of religious concepts. They are often associated with a feeling of urgency; it does not feel safe to put religious concepts aside, they are selfish memes. This is why religious people often have feelings of anxiety when they are confronted with the rational considerations of non-believers and why some of them have a missionary zeal. This is also why, for example, within Christianity the apostle Paul's claim that there is no salvation unless one believes that Jesus Christ died for one's sins, came to

be the basis of Christian doctrine. It is clearly a religious concept that cannot be put aside without danger.

Summarizing, human beings have a natural inclination towards religious thinking, which is a side effect of a range of cognitive capacities with adaptive functions. However, their cultural environment and personal experiences determine whether they will be religious people and what they will believe. Within some groups, all members share the same beliefs. In others, several religious systems coexist, and in still others, scientific rationalism more or less abolishes religious beliefs. Children, when growing up, may learn about supernatural beings, for example by listening to stories. They will usually accept such beliefs; later, they may question some of these ideas under the influence of new circumstances, people or stories, and change their beliefs, add new ideas, or give them up. Children that are not taught religious concepts will still have religious inclinations. When growing up, they may easily accept the elementary belief that "there must be something", which seems to be the most common religion in the secularized Netherlands nowadays, or adopt other new or traditional beliefs.⁵⁰

In this study, the simple terms 'supernatural agents', 'supernatural beings' and 'supernatural concepts' will be used indiscriminately, without distinguishing between supernatural and religious concepts as Boyer does. The neutrally intended term 'CPS agents' (Culturally Postulated Superhuman agents), which is often encountered in modern literature on this subject, implicitly brings superhuman agents that are *not* culturally postulated into the discussion. That does not seem to be very relevant in this context.

6.5 Ritual, ritualization and ritualized behaviour

People may, at least in theory, live together and have children, sow and harvest, make war, get older, be a member of a students' union or prepare and have their meals without performing any ritual; life and death would continue anyhow. In ritual, however, some aspects of human existence are emphasized by means of something extra, an act or a series of acts that are not practically necessary. This extra usually forms an integral part of actions and events. A ritual will be considered as something functional and indispensable by those who perform it.

Every community has its own ways and moments of putting this extra emphasis. Some events, such as death and marriage, will be accompanied by some form of ritual in every community. Other events and acts are less

47 Boyer 2001, 145.

48 Boyer 2002, 87; Barrett & Malley 2007.

49 Boyer 2001, 202

50 An inquiry by the national Christian newspaper *Trouw* (published 21 October 2004) revealed that 40% of the Dutch adhered to *ietsisme* (something-ism), a term that was mockingly invented in the 1990s to describe the religious beliefs of those who no longer considered themselves Christians, but who were not atheists either.

frequently accompanied by rituals. For instance, rituals may accompany butchering animals, or butchering may be practiced in a specific, ritual way, for instance in Jewish and Islamic practice; in modern abattoirs, ritual will usually not be part of common practice. Midsummer is celebrated in Sweden, while in the Netherlands it usually passes unnoticed. Thus, it seems that, within a given community, some acts and events get this ritual extra, while others do not. In other words, some acts and events are *ritualized*.

This section will be mainly concerned with ritualization and ritualized behaviour.⁵¹ Ritualized behaviour is not identical with ritual. Ritualized behaviour is one of the elements of ritual, but it can also occur by itself, for instance in the case of children who only walk on specific paving stones, or of adults who order their desk always in the same way.

All rituals have some characteristics in common: rituals follow specific rules concerning, for example, the roles played by participants, the location, the manner in which the actions are performed, the special objects that are used, and the ordering of the acts.⁵² Just like religious concepts, rituals are usually accompanied by a sense of urgency; it is usually thought important to perform them, and in the right way. The elements of ritual are never automatically performed routines, like driving a car or building a wall.⁵³ They always demand the full attention of the participants. Ritual rules are similar to precautionary rules; performing the ritual the wrong way is thought to be ineffective or to involve danger.⁵⁴ For an example, we may think of the non-religious ritual of the birthday cake with candles that is known to many westerners. Although we claim we do not take the consequences very seriously, there is the feeling that the candles on the birthday cake should be blown out in one go, otherwise the accompanying wish will not be fulfilled.

Like religion, ritual can be considered as a side effect of cognitive development, associated with several cognitive mechanisms, such as our social and hazard-precaution inference systems. Our intuitional inclination to magical rather than rational thinking, as experiments indicate⁵⁵, must be one of the factors contributing to the success of ritual as a cultural concept. This intuition makes us avoid behaviour that may be interpreted as tempting fate. It also suggests events we *imagine* have a chance of becoming real. Tempting fate includes “leaving oneself exposed” without taking precautions, taking actions that may offend the gods or the universe or fate, or *hubris*, arrogance.⁵⁶ This intuitive magical thinking has a

function in avoiding danger and is linked to our hazard-precaution system. It comes natural to people, also when they consider themselves perfectly rational and non-religious beings.

That the hazard-precaution system is involved follows not only from our inclination to intuitional magical thinking, but also from the striking similarities between ritual behaviour and the behaviour of people with obsessive-compulsive disorder (OCD). In both, a concern with pollution and purity and with disorder and order often is very important.⁵⁷ Fiske and Haslam argue that rituals as well as the behaviour associated with OCD produce order, regularity, boundaries, and certainty in situations that are chaotic or threatening.⁵⁸ The similarity with OCD does not mean that rituals are the result of a kind of mental illness. Rituals are not based on the hazard-precaution system in the same way as OCD, but they are a side effect of this system.⁵⁹ This means that the hazard-precaution system, which is abnormally activated in OCD, is also activated by elements of ritual performances, for example by mentioning or experiencing potential danger and anxiety, and by presenting a solution in the form of precautionary measures.⁶⁰

These precautionary measures are intuitively chosen and come from our evolutionary *precaution repertoire*, a set of actions that help us focus attention and clear our environment, so that danger is more easily perceived and reacted upon. These are basically the same type of actions that are so characteristic of OCD. Performing these actions activates the hazard-precaution system even more. The anxiety involved may trigger doubts about the proper performance and about its effectiveness, and cause (rigid) reiteration. The attention to small details may result in a performance that surpasses any functional need. In ritualized action, that as a complete sequence of action units may have a specific goal, the action units themselves are detached from this goal; they only point to the next unit in the sequence of actions.⁶¹ To return to the birthday cake for an example: celebrating a birthday is a ritual extra in itself, as people will get older anyway. Within this ritual, the cake may seem to be proper celebration-food and eating it with friends and relatives has a clear social function. However, bringing it in from outside with burning candles, blowing out the candles in one go and making a wish, are action units (consisting of even smaller units) that have no clear function at all.

Ritualized behaviour thus has some clear features, which it shares with OCD. To sum up⁶²:

51 For the history of the term ‘ritualization’, cf. Bell 1992, 88-89.

52 Boyer 2001, 231-232.

53 Liénard & Boyer 2006.

54 Boyer 2001, 235-236.

55 Risen & Gilovich 2008.

56 Risen & Gilovich 2008, 294.

57 Boyer & Liénard 2006.

58 Fiske & Haslam 1997.

59 Boyer & Liénard 2006, 609.

60 Boyer 2001, 238-240; Liénard & Boyer 2006.

61 Boyer & Liénard 2006, 595.

62 Boyer & Liénard 2006, 598.

1. *A feeling of urgency.* It does not feel safe not to perform the ritualized action.
2. *Rigidity, adherence to script.* A feeling of anxiety is the result of improper performance of the action.
3. *Goal-demotion.* The action units are not aimed at an observable goal.
4. *Internal repetition and redundancy.* A given action or sequence of actions may be repeated an exact number of times.
5. *A restricted range of themes,* coming from our evolutionary precaution repertoire: pollution and purification; danger and protection; the possible danger of intrusion from outsiders; the construction of an ordered environment by means of symmetry, specific structures or forms, prescribed clothing, colours, numbers etc. Many of these themes are relevant to the archaeological record, for example structuring and ordering, or pollution and purification. Blood, semen, saliva and excrements are a major concern in many rituals, as are water and fire as purifying elements.⁶³

From these characteristics of ritualization, some differences with non-ritual practices become clear. In the first place, in ritual, the action units of which it consists are in themselves not aimed at the intended goal. If we compare the separate action units in the ritual with the birthday cake to the action units that together make up building a table, the difference immediately becomes clear. In building a table, each action unit is an indispensable part of the process. In a ritual, the action units lead to other action units, but they are not connected to a specific goal. In the second place, actions within a ritual may be repeated an exact number of times. In non-ritual, technological actions such as weaving or building a wall, actions are also repeated. However, each repetition adds up to something, while the exact number of repetitions has no meaning of its own. In weaving or building a wall, the number of repeated actions is directly related to the result, in this case the size of the cloth or the wall.

The terminology used when speaking of ritual, indicates that yet another aspect is important in ritualization: rituals are *performed*. Performance is one of the key concepts for understanding ritual for many authors.⁶⁴ Ritual is something people do; it is action that is deliberately performed, comparable to a theatrical performance. Theatrical performance can be used as an analogy for understanding ritual in several ways: for instance as the creation of a new kind of reality; to emphasize the roles of actors and audience; or as an action based on script (or as a free improvisation). By performing a ritual, people bring themselves into a special, emotional state

in which daily reality is somehow changed or extended: "I do things that move me".⁶⁵ This emotional state is not achieved by just thinking about something. Performing an action, doing something in a certain way, will cause changes in our experience of reality.

Rituals not only make use of our hazard-precaution system, but also of other inference systems, in particular our social mind. They will often function in strengthening group cohesion⁶⁶, they accompany important events in the social life of individual persons and groups (the rites of passage that will be discussed in section 7.3), and they usually include practices that also play a role in social life, for instance eating together and gift exchange (see chapter 8). We may think of ceremonial meals, but also of our birthday cake, which is not supposed to be eaten solely by the one whose birthday it is, but is to be shared with visiting friends and relatives. It is clear that many rituals have a direct, though often not explicit or completely conscious, connection with our mental capacities for social life.

That people perform rituals and continue to do so, clearly does not have one single cause. Rituals are successful concepts because they activate several cognitive systems "in the mental basement", that is unconsciously, producing highly emotional and salient effects.⁶⁷ By emphasizing certain aspects of personal, social, economic, religious or political aspects of human life, rituals give us some control over our lives. Rituals make life into a meaningful, structured whole, rather than a meaningless chain of events that happen to us.

6.6 The bond between ritual and religion

Ritual is important in all religions, but ritual does not need to be religious, as the birthday cake with candles shows. Ritual practices also occur outside religion, an aspect that is not always acknowledged by archaeologists.⁶⁸ There is no basic difference between religious and non-religious rituals. The question is: Why are religion and ritual so often combined, why is this connection felt as a natural bond, and how are the two connected?

Supernatural concepts, as we have seen, are based on normal cognitive ontological templates, but they have characteristics that contradict some aspect of the template: they combine intuitive and counterintuitive elements, they may be thought to have access to strategic information and they supposedly can act upon it. Once such concepts are established, they may give rise to, or be accompanied by, a variety of other phenomena, to-

⁶⁵ A recapitulation of a discussion on the meaning of ritual to good not to be cited, by Michael Houseman during a session of the conference *Ritual Dynamics and the Science of Ritual*, Heidelberg 29 September – 2 October 2008.

⁶⁶ Boyer 2001, 241-252.

⁶⁷ Boyer 2001, 263.

⁶⁸ E.g. Insoll 2004, 12.

⁶³ Liénard & Boyer 2006, 817.

⁶⁴ Cf. Bell 1998.

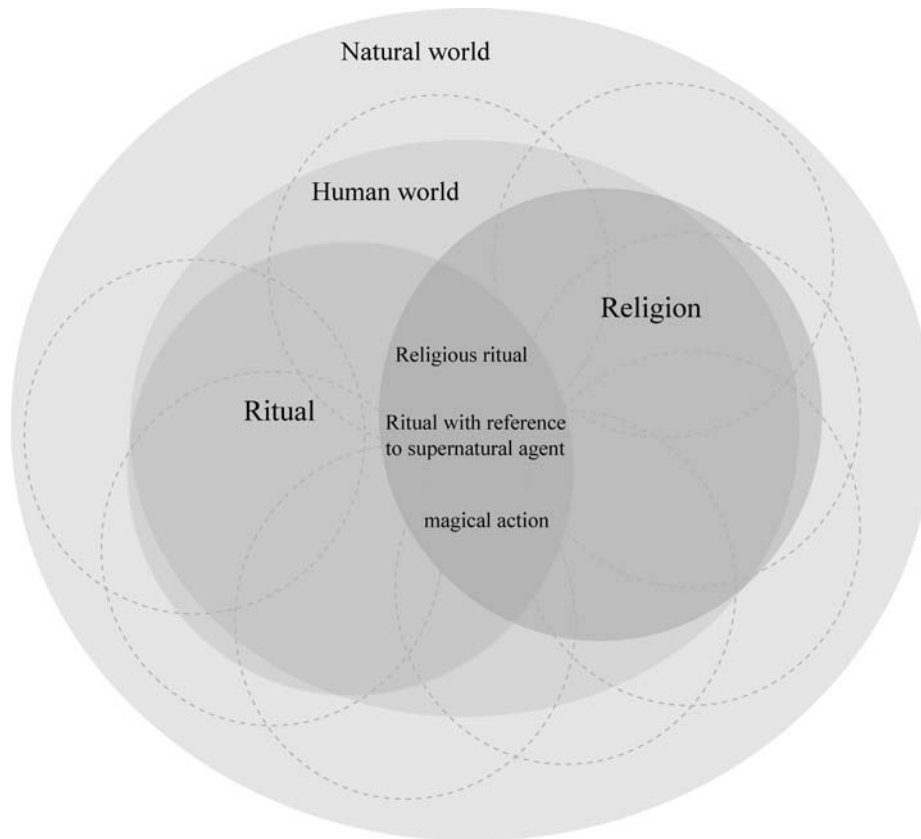


Fig. 6.1 Ritual, religion and the human and natural world, and the relations between them. Ritual and religion do not only overlap with each other, but also with many other human concerns, such as agriculture, reproduction, politics, education, house building or fresh water supply (represented by transparent circles). These are part of human culture but also are in many ways linked to the natural world.

gether forming 'religion'. These may include mythology, moral rules, doctrine, religious specialists, religious symbols, techniques for trance or meditation, education, institutions and rituals. All aspects of religion, including rituals, will usually be connected to other aspects of human life as well; we may only think of political power and economy.

The close connection between the spheres of religion, ritual and the human and natural world (fig. 6.1) implies that it is very often not possible to make a sharp division between them. A similar point was made before by others, among them Bradley, who stressed that ritual cannot be separated from the concerns of daily life.⁶⁹ That means that studying one sphere may reveal something of the other spheres too.

Ritual and religion have several points of correspondence, which make them quite natural partners. They both exist by the grace of cognition systems we have as a social species, for instance our system for social interaction. For people willing to have good relations with the supernatural, some sort of exchange of goods or prayers for protection or other help is a natural way to achieve this goal. As fortune and misfortune would be felt to depend on the

success of this exchange, a sense of urgency immediately arises, causing ideas about the proper way of praying or presenting gifts to the beings involved and with that, a ritual. Boyer notes a side effect of rituals that makes the connection even stronger: ritual prescriptions are often formulated as precautionary rules (you should do it like this, or else ...), which suggests that a supernatural agent must be involved.⁷⁰

It is this characteristic of ritual that makes it so easy to connect it with religion. When we return to the example of the birthday cake, it would not be difficult to make it into a religious ritual. Just think of the precautionary rule concerning the blowing out of the candles (in one go, or else...) and the reward of the wish fulfilled. It is only a small step to postulating some supernatural being that is unhappy when the rules are not obeyed, and that has it in its power to fulfil wishes. This is such a natural thought, that many people (if they were to think about it) may feel that this ritual must have originally been a religious ritual of which we now only have a relic. We may conclude that the feeling of urgency and the precautionary rules that come from our hazard-precaution system, and the capac-

69 Bradley 2005.

70 Boyer 2001, 236.

ity for social interaction coming from our social mind, connect ritual and religion, resulting in a strong bond.

6.7 Definitions of religion and ritual

6.7.1 Religion

'A religion' or 'religions' are rather misleading terms that only exist thanks to early comparative religious studies, a branch of western scholarship that has its roots in Judaism and Christianity. The use of these words suggests that religion has been a recognized institution always and everywhere. However, the term *religion* "is created for the scholar's analytical purposes by his imaginative acts of comparison and generalization".⁷¹ If it were possible to ask people without knowledge of modern scholarship, for example people in prehistory, what their religion was, they would not understand the question. They would not even have a word for our concept of religion at their disposal. In the Roman Period, words containing *religio* were cultic terms, used to describe "careful performance of ritual obligations".⁷² This remained so until during the Reformation period, the meaning of the word shifted from religious action, from ritual, towards 'belief'.⁷³

Religious beliefs and practices start with our natural inclination to detect agents in our environment, and to 'entertain thoughts about non-physically present agents'.⁷⁴ Such thoughts may develop into a belief in supernatural beings. If they are communicated, they may spread without ever becoming institutionalized. In some situations however, often in connection to a specific political system and in a literate society, a specific version may gain in importance and become standardized and institutionalized.⁷⁵ The latter domain is what is usually understood by the term 'religion': an ideological "package that would include ideas about supernatural agents, moral imperatives, rituals and other prescribed behaviours, taboos and the building of a community around a common cult"⁷⁶. That description clearly does not apply to all human groups, and it does not cover the full range of beliefs and practices associated with supernatural beings.

One of the aims of this study is to detect what religious concepts and related phenomena people in the past may have had, based on the remains of rituals in the archaeological record, and in societies that probably did not have the full package as described above. The term religion is difficult to avoid, but considering the objections to its use made above, this study opts for a practical and open definition, which results from the above:

Religion is that part of human thinking and acting that is concerned with supernatural beings and with relationships with them; it may involve rituals, mythological stories, doctrine, religious specialists, institutions, and other phenomena.

6.7.2 Ritual

It is not easy, perhaps even impossible, to give a definition of ritual that does justice to all aspects of ritual acting. Many definitions from social anthropology and religious studies do not agree with the characteristics and aspects of ritual that will be described in this study. For example, rituals have often been defined as repetitive actions with a specific order of elements, but, as will be argued in chapter 7, many rituals are more dynamic than is recognized in this description and such a definition would conceal that aspect. Moreover, repetitiveness is by no means unique for ritual practices; it is a characteristic of many everyday actions and technological processes. Neither will ritual be defined as a symbolic action, meant to convey symbolic or other meanings and messages.⁷⁷ Symbolic action and meaning (see chapter 8.2) will usually be part of ritual, but the communication of meaning does not seem to be 'distinctive or definitional of ritual', as Humphrey and Laidlaw put it.⁷⁸ And, of course, as may be clear by now, ritual will not be defined as something that exclusively belongs to the domain of religion. These examples show that definitions really matter and can be a source of inspiration but also of confusion. It is necessary to describe what we are actually talking about when discussing ritual.

The direct purpose of a ritual may be some personal, social, economic, religious or political good. That is, however, not the reason why rituals exist and why they are successful cultural concepts. The ultimate result of participating in ritual is a complex of emotions and intuitions that come with the various cognitive systems of which they make use. These emotions and intuitions create the feeling that one is a significant part of a meaningful, coherent whole, rather than a defenceless creature in a threatening world. This emotional state is not only the result of partaking in ritual, but also the cause of its success in cultural transmission. In a definition of ritual that is useful in archaeology, however, the emotions and intuitions that result from ritual practice cannot take a prominent place. Although we may hope to approach them on the basis of our data, the reality of the archaeological record requires a definition that is more down to earth.

In this study, I will start from the elementary definition formulated by archaeologist Richard Bradley:

71 Smith 1982, xi.

72 Smith 1998, 269.

73 Smith 1998, 270-271.

74 Boyer 2013, 170.

75 Boyer 2013, 170-171.

76 Boyer 2013, 169.

77 E.g., Leach 1968, 524.

78 Humphrey & Laidlaw 1994, 2.

ritual is “a specialized form of behaviour which emphasizes some of the concerns of daily life through a kind of performance.”⁷⁹ This definition summarizes the discussion of section 6.5. The aspects of behaviour and performance are important in this definition. It also implies that ritual does not exclusively belong to religion. However, we may expand this definition. Ritual can be associated with practically any event in human life. Moreover, ritual is actually an assemblage of features that together form this kind of performance. It may involve different kinds of actions (ritualized, symbolic, magical and technical) and other elements that played a role in the above, or that will be discussed in the following chapters.

The above considerations result in a descriptive definition, which is meant to encompass the variability of ritual practice. That is an important aspect in the identification and interpretation of the remains of ritual in the archaeological record, as will become clear in the next chapter. The definition does not mention the purpose or the effect of rituals, not because these aspects are not important or cannot be traced, but because the study of ritual in the archaeological record necessarily starts with the identification and reconstruction of rituals. Only when these are established, purpose and effect of a ritual can be investigated. The resulting definition is as follows:

Ritual is a kind of performance, which may emphasize personal, social, economic, religious or political aspects of human life, and which may consist of elements such as ritualized, symbolic, magical and technical actions, objects, language in various forms, music, meals, and natural and supernatural participants.

Ritual, described like this, is ceremony, although it is customary to use ‘ceremony’ for large-scale, public rituals. The difference between ceremony and ritual, however, is a matter of scale, not of content. This definition covers simple rituals such as a birthday cake or a prayer at the beginning of a meal. Within this definition also fall non-religious rites of passage such as the defence of the PhD-thesis at Dutch universities, and large-scale ceremonies, such as our national Dutch ritual involving the gilded coach and the King’s speech at the start of the parliamentary year and the presentation of the state budget on the third Tuesday of September. As will be demonstrated in the case studies of Englum and Ezinge, the rituals that can be recognized in the archaeological record also comply with this definition.

6.8 Conclusion

Ritual is not a relic from the past that would disappear if only we would be more rational, nor is religion. They are both cultural concepts that come from our minds

in a very natural and predictable way as by-products of evolutionary advantageous capacities. All kinds of experiences constantly give rise to new religious and ritual phenomena. Human life without ritual behaviour and rituals is inconceivable. All aspects of human existence can be emphasized by ritual, so that the study of ritual not only can be used to learn about ritual itself. It also gives us access to the understanding of those aspects of human life in which ritual plays a role, in a way that the study of, for example, material culture, settlement patterning, the landscape or ancient economy will not allow by itself. Not that archaeologists studying ritual can do without these fields; they are indispensable as a starting point when we want to make any sense of what we find.

The reader may have wondered whether all this theory is really necessary for the understanding of the remains of rituals from the archaeological record. The first reason to give a full exposé on ritual theory is that I have not been able to find an overview on ritual that I could fully agree to and that also would be useful when studying the remains of rituals from the past. This is not to deny that many useful studies have been written on aspects of ritual. The second reason for giving a theoretic account of ritual including its origin in the human mind, is that I needed a theoretical framework against which the many theories on the subject could be judged, and I wanted to be clear about my premises. The premises deriving from cognitive research that I thought were relevant and that I adopted as my own, made it possible to create, in the next chapters, an assemblage of compatible ideas from various sources, forming a personalized theory on ritual. This assembled theory will, I think, be useful when interpreting finds and contexts. By including the premises in this exposé, the reader can judge for him or herself.

The most important basic idea in all this is that humans are social animals that have to adapt to their natural and social environment constantly. To do this, they use all their cognitive abilities, which as a side effect create the enormous diversity of cultural concepts or memes, that together make up culture. One of these concepts is the supernatural world, which can be seen as an extension of the human world. The same mechanisms that work between people are thought to work between people and the supernatural beings they believe to exist. Another cultural concept is ritual performance that, in all its cultural variety, is used to emphasize some events and actions in human existence.

Although ritual is an important part of religion, ritual is not necessarily linked to it. Many rituals are not religious in any way. In the above, both ritual and religion were discussed against their cognitive background, since there are many points of contact between them, and they are often considered two sides of the same coin. This study concentrates on ritual, since as archaeologists dealing with periods of which no written records are avail-

⁷⁹ Bradley 2005, xiii.

able, it is through the remains of rituals that we may be able to say something about religious beliefs. Ritual does, however, not need to be religious to be an interesting feature of human existence.

The next chapters will concentrate on a number of themes that were already mentioned in the above, and that play, or should play, an important role in any discussion or interpretation of ritual. Several aspects of the meaning and interpretation of rituals, including symbolical and religious meaning and the role of gift exchange

in ritual practice, will be examined in chapter 8. But first we need to explore the diversity and dynamics of ritual practice, which is implied in the definition of ritual formulated in the above. An understanding of the diversity of ritual practice and of the way they may be related to social organization, will widen the range of possible interpretations considerably, and increase our understanding of the role of ritual practice in human experience and in society.

7

Diversity and dynamics of ritual practice

7.1 Introduction

The variation in ritual is enormous, ranging from terrifying initiation rituals to friendly birthday cakes, from extremely noisy and colourful events to tranquil, discreet performances and from group ecstasy to inward prayer. Rituals can change, although the frequent emphasis on identical performance suggests otherwise. New ideas, events and influences can make it necessary to reconsider the way rituals are performed, or to invent new rituals. Rituals are thus a dynamic part of human existence.

The recognition that ritual is a dynamic aspect of human life rather than a static and traditional thing of the past has given a new direction to the 'the science of ritual' in the last decades.¹ Definitions of ritual used by archaeologists, however, often stress that ritual is patterned or repetitive. Repetition can be a characteristic of rituals in two ways: repetition *within* ritual and repetition *of* ritual. Repetition of actions within ritual belongs to ritualized behaviour. Definitions of ritual that stress repetition and identical performance are concerned with repetition *of* ritual. The idea that identical repetition of rituals is a decisive feature is based on the assumption (a 'common caricature' according to Barrett and Lawson²) that rituals always follow certain rules.

The emphasis on repetition and patterning in archaeology is understandable when we realize how difficult it is to identify the remains of rituals in the archaeological record. Repetition and patterning does make it easier to identify them. Moreover, a limited range of options makes it easy to interpret them. The most common interpretational category in archaeology, apart from human burial, is religious offering; other options are often ignored. However, although the remains of offerings may well be the most common of ritual remains in the archaeological record, taking such a narrow view as a starting point does seriously limit our understanding of ritual practice, now and in the past. The conclusion that a specific assemblage has been deposited as an offering to the gods can only be sound if it is made from an awareness of the diversity of ritual. Offerings are not the only rituals that are identifiable in the archaeological record, as will become clear in the case studies of Part 3.

This chapter will expand on the diversity and dynamics of ritual practice, in four sections of different size. It will start with a short exposition on the variety that is caused by different human participants of rituals. The major part of this chapter is taken by a discussion of two major categories of ritual: rites of passage and religious rituals. They give an impression of the multiformity of ritual practice and of its elements. After emphasizing the variability of ritual practice, the focus will change to one of the underlying principles: the distinction that can be made between rituals in the doctrinal and in the imagistic mode. These modes are related to several other aspects of social life, even to the way society is organized, and therefore have implications that extend beyond ritual practice. The chapter will end with some notes on the causes and implications of the dynamics of ritual.

7.2 Participants

Characteristics of the participants of rituals, such as status, wealth, gender, age, profession or membership of a specific social group, highly contribute to ritual variety.

Rituals will usually, consciously or not, express the status of the participants in some way. Status and wealth may influence, for example, the type of rituals performed, the food eaten at a ritual meal, the quality of the tableware, the objects that are used as offerings, the quality and abundance of grave goods, or the presence or absence of a funerary monument. High-status people as well as religious and secular authorities may use rituals to bind people to them, thus maintaining the *status quo*, but rituals do not necessarily always serve the social order. Protest movements may use rituals against it.

Gender of the participants often plays an important role in rituals. Some rituals may only be performed by or on behalf of women, others only by or for men. Some rituals may be performed by women as well as men, but not together. Both sexes may receive specific grave goods, use specific attributes in rituals, go through different rites of passage, or use specific objects or animals as proper offerings.

Profession and group membership are other distinguishing characteristics that may influence ritual variety. Specific artisans may use specific rituals to accompany the technological process. Specific professions may have their own rituals and specific funerary rites (e.g. blacksmiths, kings or religious practitioners). Families, secret

1 'Ritual Dynamics and the Science of Ritual' was the title of a conference, organised 29 September – 2 October 2008 in Heidelberg.

2 Barrett & Lawson 2001, 198.

societies and other social groups often have their own ritual traditions.

Rituals can be linked to specific ages and age may influence the exuberance of rituals. In our society, funerals of old people usually differ from funerals of people who died at a younger age. In many places and periods, deviant funerary rites were practiced for children who died before they became full members of their society. That explains the burial of infants who died before they were baptized outside consecrated ground of Roman Catholic communities, as well as the regular find of the remains of infants in or near houses from before Christianization.³

7.3 Types of ritual

In ritual practice, a wide range of types of rituals can be distinguished. The following is dedicated to two major types of ritual: the rites of passage, including an important category in archaeology: burial ritual, and specifically religious rituals, among them offerings and magic. These types also play an identifiable role in ritual practice in the terp region, as will be established in the chapters of Part 3.

7.3.1 Rites of passage

More than a century ago, in 1909, the anthropologist Arnold van Gennep brought some order in common ritual experience by introducing the important category *rites de passage*, for the rituals that mark changes in the lives of people.⁴ This concept is still valid and widely used.

Rites of passage are nonreligious in principle, although ritual elements often play a role. Rites of passage have some specific characteristics that will sometimes make them recognizable in the archaeological record. That applies to burial rituals in particular. Since graves and the remains of human beings are among the main find categories in archaeology, burial rituals are discussed separately.

7.3.1.1 Separation, transition and incorporation

Nowadays, 'rites of passage' are usually meant to indicate the rites⁵ that accompany a few single events in human life: birth, initiation, marriage and death. Van Gennep himself, however, had a much more sophisticated conception of these rites, not limiting them to these major events. He based his ideas on the observation that individuals are part of various sections of a society, throughout their lives and also synchronically, as part of differ-

ent groups.⁶ Moreover, people may believe their lives to stretch beyond this world, including an existence before birth or after death. People change categories and groups on many occasions, not only when they are born or married or have died, but also, for instance, when they move to another place, go on a journey, get pregnant, adopt a child or are adopted, become ill and recover, acquire a certain professional status, are ordained, start a new job, or become a member of a club. Even simply getting older changes one's position in society. All these changes may be accompanied by rituals of a more or less intricate character. Sometimes they very simple and hardly noticed, for instance when a father takes his newborn child out of the delivery room to show it to the waiting relatives outside. Others, for instance marriage ceremonies, may be elaborate.

Van Gennep noticed that, notwithstanding the enormous variety in rituals accompanying such events, these ceremonies all follow the same pattern, consisting of three elements (fig. 7.1):

1. Rites of separation. These rites are directed at closing the past. They may take many forms, such as washing, symbolically dying, going to sleep, taking of clothes, destroying possessions, cutting hair, cutting off body parts, taking leave of people. These actions express that the old life has come to an end. It is important to note that the leftovers of the old life, the cut-off hair, old clothes etc. may be deposited somewhere; such deposits have been identified in Englum as well as in Ezinge.
2. Transition or liminal phase. The transition phase is a moment in time or a period of inertia between the past and the future, in which the 'passer' is not an active part of society. Crossing lines or thresholds, walking through corridors, being carried, sitting on platforms or spending time in seclusion may belong to this period.
3. Rites of incorporation. These rites are aimed at the future and at becoming part of a new group (adults, a family, a club, or the ancestors). They may involve being symbolically reborn, waking up, welcoming speeches, receiving gifts, drinks, meals, having tattoos or taking on new cloths or jewellery.

These different ritual elements are often intertwined or combined. The emphasis varies in different rituals; in marriage ceremonies, it may be on rites of incorporation, while in burials, separation may be stressed. Moreover, in many ceremonies other rites can also play some role, such as fertility rites in wedding ceremonies.⁷ The various elements may be spread over a long time. For instance, growing from infant to speaking and walking child may

³ Beilke-Voigt 2004. This explanation is at least as likely as the often heard alternative, that infants buried in houses were killed as building sacrifices (e.g. Merrifield 1987, 51). See also chapter 12.5.3.

⁴ Van Gennep 1977. The English translation '*Les rites de passage*' was only published in 1960, as 'The rites of passage'.

⁵ In the original French, '*rite*' is the word for ritual as well as for rite. The use of 'rite' here instead of 'ritual' does not imply a different meaning of the word.

⁶ Van Gennep 1977, 189.

⁷ Van Gennep 1977, 11.

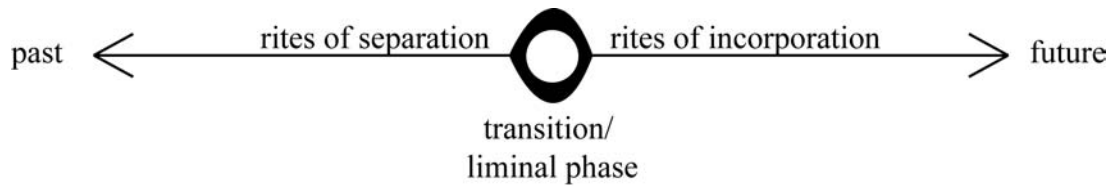


Fig. 7.1 Schematic representation of the rites of passage as an entangled cluster of rites directed at the past and the future, surrounding a timeless void, the transition phase.

involve small yearly rites of separation (e.g. cutting of hair), followed by a one-day celebration that includes transition and incorporation.

Van Gennep noted that the passage of one social category to another is quite similar to a territorial passage, as are the rites that accompany such occasions.⁸ Entering a house or the territory of a group, as well as social passages, are usually accompanied by rituals following the same pattern of separation, transition and incorporation. Entering a house may involve taking off one's shoes, leaving clothes in the hallway, washing hands (rites of separation), being greeted by the host in the hallway (transition), being invited in and being offered a seat, a drink or a meal (incorporation). The same rituals may be involved in changes of social category, not only when such a change includes an actual change of place (as many do). To stress the change of social category, many rites of passage involve similar actions, like walking under a portal or arch, crossing a threshold, or having to wait in a secluded place.

Equally powerful as an analogy for the rites of passage are the cycles of day and night, the phases of the moon, the seasons and the dying and regeneration of the vegetation. These may provide rites of passage with strong symbolism, joining the stages of human existence 'to the great rhythms of the universe'.⁹ The symbolism of regeneration may, for example, be important in death rituals.¹⁰

Rites of passage are important in social life since they emphasize an individual's social status. Although one will get older, may have children and will die without any rite involved, these rites make these events into social, rather than biological events. Rites of passage are indispensable in acquiring a new social status. In our society, it was, until recently, considered to be disgraceful to have children without being married; these parents (usually single mothers) and children were treated as social outcasts, the children were called 'bastards'. To become a doctor of philosophy in Dutch universities one is to defend the thesis in public, although it was approved of before and the unnerving ceremony is actually 'only' a formality. However, rites of passage are not necessarily imposed by society. They may also be used by individuals to mark certain

occasions in their lives, of minor or major importance. As a personal rite of separation after passing school exams, some students burn their notebooks. Large groups of high school students may join in the heavy drinking that sometimes follows school exams in northwestern-European countries, and that may be considered part rite of separation and part transition phase. These actions are not really approved of by society, but apparently for many young people are a necessary ritual when leaving school.

Van Gennep's scheme is a useful tool for analyzing the rituals that accompany changes in space, time and social position. It can also help archaeologists to identify the remains of such rituals, especially when they accept Van Gennep's broad view and do not confine themselves to some standard rites of passage, such as birth, marriage and death. Growing up, moving into a house, leaving a house, leaving one's home, colonizing new land, going into the army, becoming a warrior, and many other events in the life of individuals may equally involve rites of separation and rites of incorporation. Some objects may especially occur in such depositional practices because they are important and meaningful and at the same time ambiguous, a suggestion made by Fontijn, although he does not use the term rites of separation.¹¹ We may think of weaponry, special clothing or jewellery, 'paraphernalia of ... special personal identities'.¹²

Several stages of the lifecycle of houses can also be associated with rituals, as was argued for the Meuse-Demer-Scheldt region by Gerritsen (see chapter 5.2.1); this theme will recur in the case study of Ezinge.¹³ Such rituals are actually rites of passage, for two reasons. In the first place, such structures resemble persons in having social identities and lifecycles. Building and abandonment can be considered analogous to being born and dying. In the second place, the people that inhabit a house move on to another stage of their lives when they move into a new house. Rituals that accompany construction are aimed at the future and resemble rites of incorporation. Rituals of closing or abandonment refer to the past and resemble rites of separation. The transition stage may not be much more than the moment just before the new structure is taken into use.

8 Van Gennep 1977, 192.

9 Van Gennep 1977, 194.

10 Bloch & Parry 1982.

11 Fontijn 2002.

12 Fontijn 2002, 276.

13 Gerritsen 2003.

The transition or liminal phase of the rites of passage inspired Victor Turner to develop his concept of *liminality*.¹⁴ During the liminal phase, the participants of a rite of passage are between two worlds; they are 'betwixt and between'. Being in-between worlds makes the liminal phase into something ambiguous, paradoxical and anomalous, associated with uncleanness, pollution and anxiety. Being in a temporary no-man's-land may also make an individual more perceptive to the experience of the supernatural. Places can be liminal no less than periods or moments, which makes it into an attractive concept for archaeology. It has been applied to marginal places, either natural or man-made, such as borders, pits, wells, moors and bogs, rivers, confluences of rivers, springs, caves, roadsides and coastlines. Such locations may have been considered ambiguous and potentially dangerous places. Such liminal places are equally suitable as contact points between the human and supernatural worlds as transition periods are, and they also attract rituals and symbolic representations. Extremely impressive rituals may combine transition rituals with liminal areas. An example of such a ritual is the first vision-seeking of the Sioux medicine man Lame Deer at the age of 16, a rite of passage in the imagistic mode.¹⁵ After several separation rites (e.g. being purified in a sweat lodge), the young vision-seeker was left in a pit on the top of a hill (a liminal place) for four days and nights (a transition period), without food or water. During this period, he experienced a series of visions that guided him throughout his life and that he could still recall in detail at old age.

7.3.1.2 *Rituals surrounding death*

A specific category of the rites of passage consists of the rituals that accompany death. Since human remains are an important category of finds in archaeology in general, and in this study in particular, this section will go into some more detail on the rituals surrounding death. This section will focus on what was done with the body, though taking into account that ideas about other constituents of the body (e.g., the soul, social status) must have influenced the way the dead body was dealt with.

Death of a member of the social group or a loved one usually brings about shock and grief; it often is the beginning of a period in which life comes to a standstill for the next of kin. At the same time, practical decisions need to be made. An important part of dealing with death is the problem of the dead body. It is clear that something needs to be done with it. A basic fear of pollution by the impure, decomposing body comes from the contagion system, but it takes some time before it is fully realized that someone known as a person is dead and not actu-

ally a person anymore.¹⁶ Ritualization helps to deal with this situation. The rituals surrounding death may include rituals for the dying, for example the last sacraments in the Roman Catholic Church, but in most cultures death rituals will follow death. Ethnography has shown the enormous variety of rituals that exist in this field.¹⁷ Some major divisions can be made to bring some order.

In the first place, we may draw a line between people who believe in the continued existence of the soul in an afterlife, and people who do not have such a belief. A formal funeral does not necessarily imply a belief in an afterlife, nor does the absence of a clear funeral implicate the absence of such a belief, a point that was already made by Peter Ucko.¹⁸ For people who do not believe in an afterlife, rites of separation will be much more important than rites of incorporation, as there is nothing to be incorporated in. Rites of incorporation will be important for those who believe in an afterlife; they may include saying prayers and burning candles for the dead person's salvation, or offering food for the journey to the world of the dead. Thoughts about the afterlife will affect the rituals surrounding death in specific ways. For those who do believe in an afterlife, a second division can be made between those who believe the dead will have a (more or less) personal existence in the afterlife, and those who believe the dead will become ancestors with specific powers, working in the world of the living. In the latter case, either all the dead may be thought to become ancestors, or only some acquire that supernatural status (see the discussion on ancestors below, chapter 8.4.2).

Without historical information, human remains in the archaeological record can often not be linked to beliefs, but they can be linked to practices. A division that is useful in archaeology is based on the treatment of the body. From the extensive ethnographic literature on the subject¹⁹, a list of four primary ways of dealing with a dead body can be composed. These rituals may be followed by secondary rituals from one of the other groups (fig. 7.2) and are highly variable in many details.

1. **Inhumation.** The body is buried and decomposes in the earth. There are two possibilities for what follows:
 - 1a. The decomposed body remains where it is buried.
 - 1b. The remaining body parts (bones) are exhumed after some time. Then, see excarnation.
2. **Cremation.** The body is burnt, usually on a pile of wood. Then,
 - 2a. the bone fragments (or part of them) are collected and buried, whether or not in a container and whether or not with the remainders of the funeral

¹⁶ Boyer 2001, 212-215.

¹⁷ Ucko 1969; Weiss-Krejci 2011.

¹⁸ Ucko 1969.

¹⁹ Especially Hertz 1960; Meyer-Orlac 1982; Metcalf & Huntington 1991.

¹⁴ Turner 1967, 93-111.

¹⁵ Lame Deer & Erdoes 1972, Ch. 1.

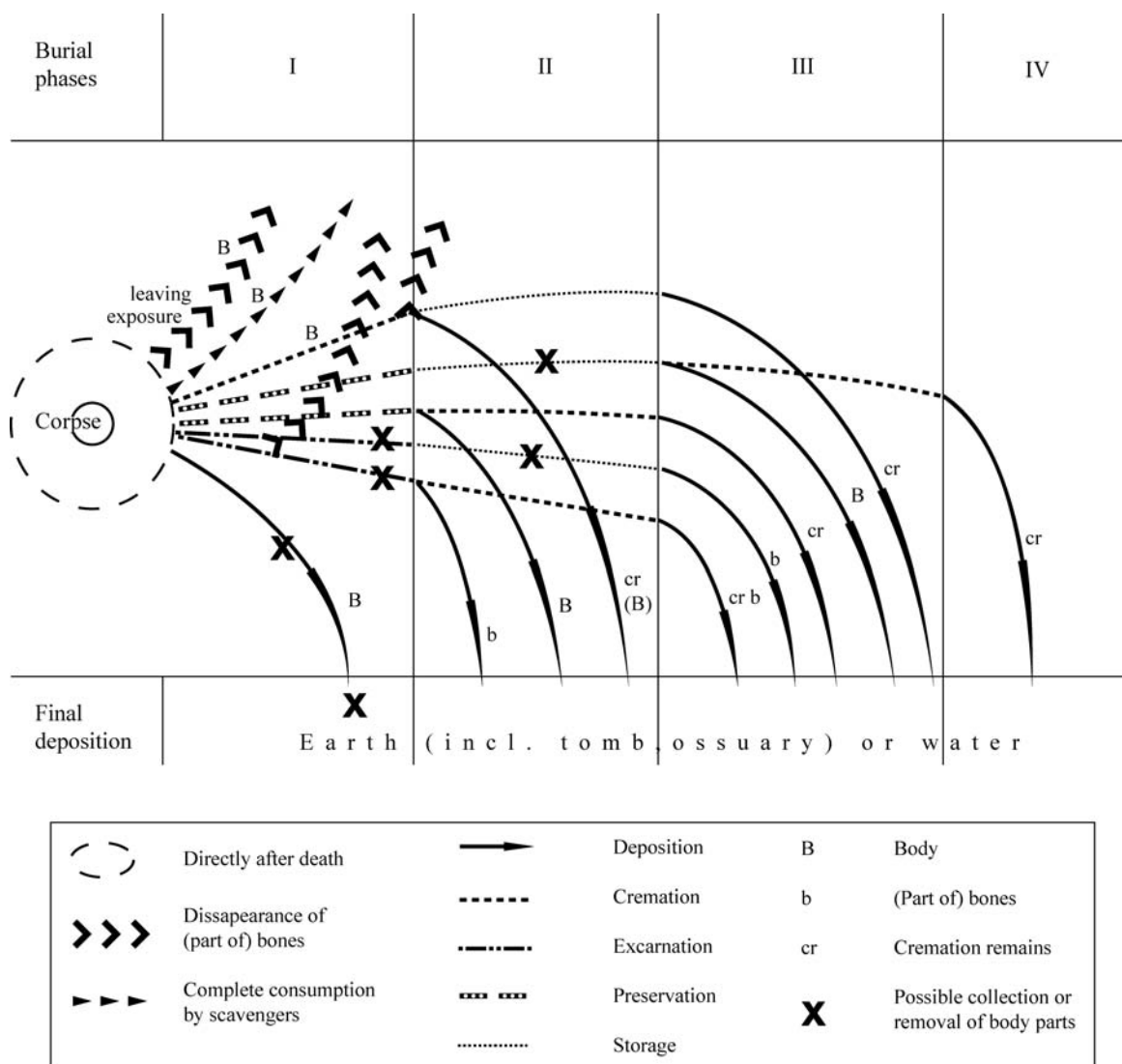


Fig. 7.2 Ways of dealing with the dead body and possible combinations of practices (not exhaustive), based on ethnographical sources. See also chapter 14. Adaptation of a diagram by Meyer-Orlac (1982, 139).

pyre, or

2b. the bone fragments are not buried but kept or spread somewhere.

3. Excarnation. The soft tissues of the body are allowed to decompose or the bones are cleaned. This may be achieved in several ways:

- The body is buried and later exhumed completely or partly.
- The body is exposed above the ground until it has decomposed. This may take place within or outside the house or the settlement²⁰; the body may be protected from animals or be exposed to them; the body may be cut into pieces before being exposed.
- The body may be boiled so that the bones can easily be cleaned.

- The body may be eaten, partly or completely, by group members (endocannibalism).²¹

After excarnation, the bones are left where they are, or:

3a. the bones are collected, cleaned if necessary, and stored (e.g. in an ossuary) or buried somewhere (secondary burial), or

3b. the bones, or a selection of them, are collected, cleaned if necessary, and kept somewhere to be used later (e.g. secondary burial or ritual), or

3c. the remaining bones are cremated.

4. Preservation. Measures are taken to prevent the body from decaying, for instance by mummification or desiccation. After mummification, the body can be buried or stored.

²⁰ Hertz 1960, 129.

²¹ Parker Pearson 2003, 52-54.

Primary rituals usually start immediately after death and may take some days. Secondary rituals follow after a specific period.²² If primary funerary rites are followed by secondary rites, the transition stage may be prolonged until the moment of secondary burial or even longer (fig. 7.2).²³ Then, a final ceremony marks the moment that the deceased is gone for good, and the living may take up their lives again. A special situation arises when someone died elsewhere and there is no dead body to deal with. Part of the funerary rites may then be performed in the same way, but without the body (e.g. a cenotaph, an empty grave).²⁴

Apart from the basic ways bodies can be disposed of, as described above, body postures and body orientations, containers for the body or its remains, and burial pits may vary. The funerary rites performed by the living may be accompanied by meals and visitors, dress-codes for the living, special or common clothes for the dead, objects symbolizing the dead person's life and his or her journey to the afterlife, objects representing the social status of the deceased or his or her relatives, different roles for men and women and for young and old attendants, special colours, special announcements, walking in specific directions (clockwise or counter clockwise), special sounds (bell tolling, salutes), special numbers (walking three rounds, 25 or 50 times bell tolling), special ways of transport for the body, a memorial sign on the grave, and many more. All these extras can vary according to status or class, age or sex, profession, or personal preference, of either the dead or the bereaved.

Various objects may, but do not need to, accompany the dead, the so-called grave goods. As we have seen, grave goods are rare in areas surrounding the terp region, but they occur in a small number of elite graves. Grave goods may be possessions from someone's lifetime, such as jewellery (a wedding ring, a brooch), objects that are related to the dead person's activities during life, or possessions of the bereaved they want to give to their beloved dead. The gifts may also be real or symbolic objects needed for the journey to the hereafter or for the life after death, for instance food, coins, or the paper houses and other objects that the Chinese burn for the dead.²⁵ People (spouses, servants, slaves or concubines) and animals may be killed, to accompany the dead person in the afterlife.

The rituals following death are not only dealing with the dead body. His or her possessions have to be dealt with as well (assuming that such a category exists within a given culture). They may be kept by the next of kin,

given away, or destroyed by burning or burying them. Objects with a special meaning or value may be treated in a special way. The swords of Bronze Age warriors, for instance, were deposited far from the settlement, probably after their owners went to another stage of life or died; this practice may have prevented these objects from unbalancing society.²⁶

7.3.2 Religious rituals

7.3.2.1 Agents, patients and instruments

Rituals in general can be described as the result of a kind of recipe, an 'action description'²⁷, in which the ingredients and the order in which they are used, are represented. Action description is directly linked to the cognitive action-representation system.²⁸ In religious rituals, some of the ingredients are 'special', by which is meant: connected to supernatural agents. Based on the way human cognition links actions to agents and objects, Lawson and McCauley defined three types of religious rituals according to the way supernatural agents are connected to them, the ritual form hypothesis.²⁹

In the first type, a supernatural being or its representative, or someone affected by it, is supposed to be the actor or agent. That is for example the case when a pastor blesses the congregation during a church service. Such rituals are *agent-special*. Many rites of passage are agent-special rituals: a marriage is solemnized by a priest in the name of a supernatural being, a or a child is baptized in the name of the Holy Trinity. Unless relevant written sources are available, it will usually not be possible to distinguish agent-special rituals from other types in archaeology.

In the other types of rituals, the supernatural being is implicated in another way. Two types can be distinguished, firstly the *patient-special* rituals. In patient-special rituals, the supernatural agent is the patient or direct object of the ritual, to be affected or influenced by it. Making an offering or saying a prayer are obvious examples. Secondly, rituals can be *instrument-special*, which implies the use of some specially empowered ritual element (an action or an object) as an instrument. The traditional term for instrument-special ritual is *magic*. Magic thus belongs to the category of religious rituals.

These types of rituals affect people's intuitions in different ways and influence the style of the performance. Agent-special rituals tend to be emotional events, to which other ingredients, such as feasting and fasting, drugs, or loud music can contribute. Patient- and instrument-special rituals are usually of a more sober charac-

22 Hertz 1960.

23 E.g. exhumation and deposition of bones in an ossuary follows five years after inhumation in some parts of rural Greece, Danforth & Tsiaras 1982.

24 Parker Pearson 2003, 55.

25 Mater 2008.

26 Fontijn 2002, 231.

27 Boyer 2001, 259.

28 Lawson & McCauley 1990, 87ff.

29 McCauley & Lawson 1990, 123ff. The original theory of Lawson & McCauley 1990 was elaborated in McCauley & Lawson 2002.

ter, compared to agent-special rituals within the same society.³⁰

7.3.2.2 Magic

Magic has always been a controversial theme within religious studies. The term *instrument-special* is preferred over *magical* in this study, because *magical* has acquired so many other meanings in the history of its use that its fundamental meaning is obscured. It was often considered to be of less importance, not really religious or ritual, and on one level with superstition. It is obvious that this way of looking at magic originates in a tradition in which institutions decide what is and what is not proper religion and ritual. As was already mentioned in the previous chapter, human beings have a capacity for magical thinking.³¹ This makes us feel that things we imagine may become real, and this effect will even be stronger when the desired effects are not only imagined, but also performed in some way. As was stated above, magic belongs to the domain of religion and ritual, although it has specific features of its own. In magic, supernatural power, in the form of an object or an action, is used as an instrument to create some desired effect. Such objects, for instance amulets, also play a role in the finds that are discussed in the case studies of both Englum and Ezinge.

Similarities exist between magical, that is instrument-special ritual and agent-special ritual, and between magical ritual and technological action. These actions are all aimed at specific results. Agent-special rituals can be recapitulated briefly as "... acts in which (1) someone (2) does something (3) to someone or something (4) in order to bring about some non-natural consequence (5) by virtue of appeal to superhuman agency."³² Magical actions are almost identical, but do not include (5): superhuman aid is not asked but forced.

Technological action may, in the same wording, be described as: acts in which (1) someone (2) does something (3) to someone or something (4) in order to bring about some natural consequence. Technological action does not aim at a non-natural result. However, for the performers of magical rituals, the difference may not be that large, as they will experience the intended result as a direct, expected consequence of their action. On the other side of the coin, the performers of technological actions do not always have a clear idea of the natural working of their action or confidence in its outcomes, especially when technology gets more complicated. To give an example: the process of dying yarns with indigo consists of a series of action units that in themselves do not seem to be related to the final result, which is a characteristic of ritual behaviour. The sudden appearance of

the blue colour in the end certainly feels like the result of magic, even if one is aware of the chemical process behind it.

7.3.2.3 Offering and sacrifice

Rituals that include sacrifice and offering are religious rituals in principle. They are patient-special rituals, that are meant to influence a supernatural being for the benefit of an individual or a group. The expected good may either be a general beneficial attitude of the supernatural agent or a more specific intervention for an individual's or a group's welfare: to assure good crops, success in warfare, protection against danger, peace, good health, a successful application for a job. Fertility of people, animals and land, which is often encountered in archaeological literature as the main or only explanation, is only one of many possible reasons to make offerings.

The terms *sacrifice* and *offering* do not have the same meaning. Offering as used here is the general term for the act of giving and for any gift to a supernatural being. It may, but does not need to, involve some form of destruction or modification. That way, the permanent character of the gift is emphasized. Sacrifice, again as used here, is a special kind of offering, which involves killing of a living creature, an animal or human being. *Votive offering* constitutes another subcategory, of offerings that accompany special requests or which are given to fulfil promises made to supernatural beings. The nature of a votive offering may be related to the nature of the request. A request for health, for example, may be accompanied by the offering of a representation of the part of the body that is affected.

The destruction of objects is sometimes called 'ritual killing'.³³ An important objection to this designation is that is actually a form of interpretation. It may be based on different ideas: that animal sacrifice is the basic and most proper gift to the gods, with all other kinds of offerings as derivatives, or that inanimate objects were somehow thought to be animated by the people who destroyed these objects. It is often not made clear why 'killing' would be a better term than 'destroying' or 'burning' (depending on what is done). For the sake of clarity, it is better not to use 'killing' when objects are concerned.

In chapter 6, a difference was made between supernatural beings with and without full access to strategic knowledge of people, that is: gods who can read people's minds, and those who cannot. This distinction probably plays a role in offering practice. Contra expectations, the most impressive offerings may not be aimed at those supernatural beings that are most important to people: the ones that are supposed to be able to read your mind. From our theory of mind (see chapter 6.2), it is self-evident that

30 McCauley & Lawson 2002.

31 Risen & Gilovich 2008.

32 Barrett 2004, 266.

33 E.g. Merrifield 1987, 30.

supernatural beings we ascribe the power to influence some part of human affairs, but not the ability to read our mind, will judge our actions rather than our intentions. Such supernatural beings will supposedly value offerings that cost something: real, substantial food (as opposed to an insignificant part) or complete, usable objects, or symbolic objects that make people's intentions clear. This category of supernatural beings often appears as an unproblematic (or even the only) supernatural category in archaeological interpretation; such gods are expected to be offered objects that are associated with their function. For example, agricultural tools will often be interpreted as offerings to a god that is associated with agriculture, meant to promote fertility. Although that interpretation is not necessarily wrong, there might be other meanings attached to such objects. To give an example, a rotary quern is not only associated with food and harvesting; it is also a round revolving object, which may serve as a symbol for entities with a cyclic nature, such as the family, nature or the cosmos. That implies that the deposition of such objects should not be interpreted too quickly as offerings to a god with a specific function.

For gods who are supposed to be able to read people's minds the good intentions of the giver are more important than the actual gift, just as they would be in the more intimate human relations.³⁴ In that case, offerings do not need to be valuable. This principle may explain those remains of offerings in the archaeological record that we as archaeologists do not think were very valuable, such as inedible parts of animals or miniature objects, or small animals instead of large animals. Such offerings have been explained as a kind of cheating, but that would be "a fundamental misconception of the proper nature of the gift" as Van Baal noted, though not distinguishing between gods with or without access to strategic knowledge.³⁵ The giver will never feel to be equal to the supernatural being involved (if it has access to strategic knowledge), and the offering can never match the beneficial effect that is expected from it. "Offerings are small naturally, and the real problem of sacrifice is not the small but the big offering."³⁶ For gods who are supposedly able to read people's minds, small offerings or *pars-pro-toto* offerings are appropriate when the intentions of the giver are good.

With this in mind, and in view of the finds from the terp region that will be discussed in Part 3, some practical aspects of offering and sacrifice still need to be discussed.

How is something offered?

The action that offering is, can take many forms. The thing that is offered will often be destroyed in the act;

it is either killed, eaten, buried, drowned, burnt, poured out, broken, hidden or made unusable in some other way. In the case of sacrifice, a victim may be killed prior to the sacrifice or as part of the sacrifice. The killing may be the actual sacrificial act, for instance when a victim is buried or burnt alive. Destruction withdraws the gift from human society and makes its destination irreversible. Destruction emphasizes that the offered item is no longer part of the human world.

Where are offerings made?

A special place will sometimes be called for to make an offering, but that does not need to be the case. Sometimes an elevated area is used, an altar, but the floor may do in many cases just as well. Offerings can also be buried. Liminal places, either man-made or natural, which are considered contact zones with the supernatural, are obvious places for offerings.

Who is offering?

Individual people can make personal offerings. Larger offerings or sacrifices will usually not be an individual but a family or public affair. The offering will then often be made by a special person on behalf of the group, be it one of the elders, the head of a family, a leader or king, or a religious specialist. Explicit rules may prevent non-ordained people from making specific types of offerings.

When is an offering made?

Offerings can be made on many occasions, as a ritual in itself or as part of a more elaborate ceremony. They will regularly be repeated, on a daily, yearly or seasonal basis or during crises. Offerings can be made on a specific moment of the day, monthly, at the turn of seasons, at the beginning of a year, to ask for good crops, for rain or for the rain to stop, for health and fertility of humans, animals and the land, when a house is built or when it is abandoned³⁷, to assure protection against a perceived danger, or to ask for victory in battle. Any occasion in which the relation between humans and gods is at stake can be accompanied by an offering, since such relations are in fact social relations, in which gift exchange plays an important role. This theme will be further explored in the next chapter.

What is offered?

Many things can be appropriate gifts for supernatural beings. This will depend, for instance, on the character of the supernatural being involved, on the occasion, or on availability. Offerings range from no more than some drops of water, to very large weapon deposits. For the sake of clarity, we can divide them into (somewhat arbi-

34 Barrett 2002b.

35 Van Baal 1976, 162.

36 Van Baal 1976, 164.

37 Van den Broeke 2002; Gerritsen 2003. Building and abandonment deposits do not need to be offerings.

trary and partly overlapping) categories. These do not all play a role as offerings in the terp region, but this overview gives an impression of the possible variation:

- Relatively small items, e.g. single coins, flowers, decorations or incense.
- Food, for instance a small part of a meal or a partial or complete animal. It is important to note that food offerings will often actually be eaten by non-supernatural beings.³⁸
- Liquids (milk, honey, oil, beer, wine, water or blood), often used as libations.
- First fruits from a crop or a part of a crop, firstborn animals or even children.
- Objects connected to the supernatural being in some way, e.g. objects symbolizing its power (the sun, a wheel etc.) or something it is known to value.
- Objects with some symbolic meaning but without practical function, such as:
 1. Miniatures. It is important to note that miniatures are usually not chosen as offerings because they cost less than the real thing, but for other reasons. For instance, miniature weapons were often deposited in sanctuaries in Gaul after it was demilitarized following the Roman conquest.³⁹ They formed the 'final tangible expression of a martial ideology'.⁴⁰
 2. Objects that are made of a material that makes them unusable, such as softwood ards⁴¹ or soft-metal axes.
 3. Figurines. Small statuettes of people or animals, which represent gods, people or animals.
- Tools and other manmade objects, complete or damaged, new or used. Examples are axes, agricultural implements, pots or grinding stones. Semi-manufactured products (half-finished wooden objects, balls of yarn) have also been identified as offerings.⁴²
- Valuable objects, often made of a valuable metal: weapons, jewellery or money. They may be offered as single pieces or in hoards. Well-known are the large deposits of weapons and other objects, usually interpreted as the spoils of war⁴³, in Danish and northern German wet contexts; they may have been promised to the gods in exchange for their help to bring victory in battle. Julius Caesar described similar practices by Gallic warriors.⁴⁴ Some theories that have been forwarded to explain the deposition of valuable objects will be discussed in section 8.6.1.

- A variety of animals, domestic or wild, has been used as a sacrifice, complete or partial. A specific selection is usually made.⁴⁵ Offered parts do not need to be large if the intended supernatural being is of an all-knowing character (see the section on ritual meals in the next chapter). Just like other types of food, sacrificed animals were often partly eaten during a ritual meal.
- Human beings were sometimes sacrificed in many societies of the past. Since human sacrifice often plays a role in the interpretation of conspicuous human remains, in the terp region and elsewhere, it needs to be explored in some detail.

Human sacrifice

The sacrifice of a human being will usually have been considered highly valuable. It has been argued that it functioned especially in agricultural societies, and has been interpreted as the ultimate exchange: a human life against the continuity of the group's life that was assured by good crops.⁴⁶ A historic example of this type has been described for Peru, where in 1622 a father received permission to sacrifice his daughter to the sun god; the girl voluntarily met her death when she was buried alive in a shaft at the top of a mountain, near the storehouses for her father's crops. She became a local deity of fertility and health.⁴⁷ A human sacrifice, however, is not necessarily associated with fertility. A victim may, for instance, be sacrificed as a scapegoat, being charged with the misfortunes of a community.⁴⁸ Ritual killing of a king for the benefit of a community, as known from ethnography⁴⁹, can also be termed sacrifice.

Human victims may come from the social group itself, perhaps chosen by lot, but also be slaves, prisoners of war or offenders of certain rules. It was probably often felt that it was human life itself that was appreciated by the god, not necessarily a beloved person, but that may depend on the character of the god. In some cases, beloved persons, or at least persons from within a social group, may have been believed to be preferred by the gods. It is conceivable that in particular all-knowing gods were assumed to demand beloved victims (since they could read the mind of the sacrificer, they would know how much these would cost), while gods who were not considered all-knowing would just be content with any human life.

Human sacrifice is not necessarily a social affair for the benefit of the group. Julius Caesar stated that individual Gauls sometimes tried to save their own lives when they

38 Van Baal 1976, 161; Boyer 2001, 242.

39 Derks 1998, 51.

40 Nicolay 2007, 244-245.

41 Bradley 2005, 85.

42 Van der Sanden 1996, 170; 1998.

43 Fabech 1989; Jørgensen *et al.* 2003.

44 Julius Caesar, *De bello Gallico* VI, 17.

45 E.g. Zimmermann 1970, 76.

46 E.g. Merrifield 1987, 22-23.

47 Parker Pearson 2003, 18-19.

48 Parker Pearson 2003, 17. This is one of the early ideas from religious and biblical studies. The word implies that animals may be used in the same way.

49 Merrifield 1987, 65; Metcalf & Huntington 1991, 179-188.

were ill or when they feared battle, by sacrificing someone else.⁵⁰ Although we do not know whether that is true, this practice brings to mind the human sacrifices that nowadays are thought to be performed sometimes on behalf of South-American cocaine traffickers⁵¹, or the recent killings of albino children in Burundi and Tanzania, aimed at the use of their body parts in magical rituals for the benefit of individuals.⁵² These are ritual killings of human beings, although, if used in magical actions, they are not human sacrifices in the strict sense. Death penalty and human sacrifice often may have been closely linked, as was already argued in chapter 5 in the section on the meaning of bog bodies. In Rome, the penalty for stealing grain was death; the victim was understood to be an offering to Ceres, the goddess of agriculture.⁵³ Human sacrifice is not considered acceptable anymore in most places, so it was abandoned or substituted by something else at some point in time.⁵⁴ It may have been replaced by animal offerings, or a human image made of wood, straw⁵⁵, dough or some other material. The offering of human hair, sometimes found in bogs, has been interpreted as a substitute for human sacrifice⁵⁶, as have deposits of shoes.⁵⁷ Both shoes and hair, however, might as well be explained as the remains of rites of separation (see above).

The above overview of rites of passage and religious rituals gives an impression of the variation that exists in these two categories of ritual. They were chosen because they are important ritual categories in themselves, but they also play an identifiable role in our research area. The multiformity of ritual practice can be ordered in many ways. An important distinction can be made between two modes of transmission of ritual and religious concepts: the doctrinal and the imagistic mode. The implications of these two modes go beyond ritual practice itself. They also may reveal aspects of the social organization, not only of the religious or ritual community, but also of society as a whole.

7.4 The doctrinal versus the imagistic mode

Although the variability of ritual practice may seem to suggest that anything is possible in ritual practice, it is not entirely random. At its basis are different kinds of

meaning (these will be dealt with in the next chapter), and underlying structures. An important distinction in this respect can be made between rituals in the doctrinal and in the imagistic mode.

In highly organized human groups, doctrine, institutions and the role of religious specialists may take on much greater significance than in less strictly organized groups. This is especially so when doctrine and rules are laid down in writing. In such religious systems, beliefs outside accepted doctrine are usually denounced as superstitious. Doctrinal religious systems, or rather the doctrinal mode, is one of the two broad categories of ritual that were defined by Harvey Whitehouse.⁵⁸

Whitehouse argued that there are basically two ways in which ritual and religious concepts are transmitted.⁵⁹ The first of these is some form of intellectual training that requires constant communication (teaching, memorizing, preaching) by which “relatively intelligible and explicitly articulated material” is transmitted, the *doctrinal* mode. The other is “through rare but exceptionally salient experience, so striking that its details remain engraved in memory”, the *imagistic* mode.⁶⁰ These two distinct modes in the transmission of religious concepts strongly influence political, social and conceptual aspects of religious systems, forming distinct ‘suites of mutually reinforcing features’ (table 7.1).⁶¹ It is this ‘bundling of features’⁶² that makes this classification into a workable hypothesis in archaeological interpretation, since it heightens our awareness of related phenomena.

The *doctrinal mode* combines with learned ritual meaning, diffuse social cohesion, dynamic leadership, rapid spread, a potentially universal religious community, a high degree of uniformity and centralized organization (table 7.1). Written knowledge often plays an important part in this mode and one is immediately reminded of the world religions. However, the model can be applied to other, less well-known religious practices in present and past as well. The doctrinal mode does not necessarily depend on written texts.⁶³ Rituals in the doctrinal mode will usually be uniform and repetitive; adherence to the rules is important in this mode.

The *imagistic mode* is associated with generated ritual meaning (that is, by the ritual itself), intense social cohesion, passive leadership, slow spread, ‘ethnic’ religious community (meaning that this kind of religious phenomena will usually not cross ethnic or language boundaries), low degree of uniformity, and decentralized organization.⁶⁴

50 Julius Caesar, *De Bello Gallico*, VI, 17.

51 Parker Pearson 2003, 20.

52 Cruz-Inigo *et al.* 2011.

53 Kirsch 2004, 55.

54 A famous biblical example is the intended sacrifice of Isaac by his father Abraham (Old Testament, *Genesis* 22). Upon the Roman conquest, human sacrifice was forbidden by the Romans in Gaul, as it was considered to go against the Roman concept of *pietas*. In Rome itself, it was abolished officially in 97 BC (Derks 1998, 340).

55 Kirsch 2004, 54.

56 Van Vilsteren 1996, 143.

57 Merrifield 1987, 134.

58 Whitehouse 2000; 2004b.

59 Whitehouse 2004b.

60 Both quotations Boyer 2005, 8-9.

61 Whitehouse 2004b, Ch. 4.

62 Boyer 2005.

63 Whitehouse 2004b, 8.

64 Boyer 2005, 9.

Table 7.1. Mutually reinforcing features that result from two cognitive ways of transmission of complex religious concepts (from Whitehouse 2004b, 74).

Imagistic mode		Doctrinal mode
infrequent	transmissive frequency	frequent
high	level of arousal	low
generated	ritual meaning	learned
intense	social cohesion	diffuse
fixed, local, exclusive	religious community	universal, inclusive
passive	religious leadership	dynamic
spontaneous exegesis	religious knowledge	orthodoxy
slow	spread	rapid
low	degree of uniformity	high
decentralized	organization	centralized

Practices from the doctrinal as well as from the imagistic mode bind members of groups together, but not in the same way. Imagistic practices “tie each participant to particular persons who happened to take part in the same salient events; by contrast, doctrinal practices foster a sense of generalized membership.”⁶⁵ For an example of rituals in the imagistic mode from our own society, we may think of the initiation rituals for some (Dutch) students’ unions (these may be considered closed, ritual communities). During these rituals, first-year students who have applied for membership are subjected to a period of humiliations, rules considering personal hygiene, often excessive drinking, and fulfilling obscure tasks. The constituting elements of this ritual may change every year, in line with the creativity of the organizers. When the initiates persevere, they will be accepted as members; moreover, the collective experience creates a bond between students of the same year that may last for the rest of their lives, with often some form of favouritism as a side effect. Rituals in the doctrinal mode do not create such bonds. People going to church on Sunday, for example, will know many of their fellow churchgoers, but the social contacts resulting from being a member of a church come from the opportunity to meet other people, rather than from the intensity of shared experiences.

It must be noted that these modes do not necessarily describe separate religious systems. Within a religious community, there may be imagistic as well as doctrinal practices and even mixed practices. Still, it may be clear that large variation in ritual practice is not indicative of the social and political features that are associated with the doctrinal mode, but rather of the imagistic mode and of the decentralized and small-scale social and political fea-

tures associated with it. That is an important conclusion if we want to learn something about the social organization of past societies from their ritual practices.

7.5 Ritual dynamics

Variation in ritual practice in itself does not make rituals dynamic, that is: changeable and adaptable. To understand the variation in ritual practice, it is not only important to realize that there are many types of rituals, each combining a large variety of ritual elements, the dynamics of ritual should also be taken into account. To start with, rituals in the imagistic mode are by nature much more dynamic than rituals in the doctrinal mode. While the rules of the latter are memorized, the rules of the first are reinvented every time a ritual is performed. Still, even rituals in the doctrinal mode can be adapted to new circumstances, if necessary. Some of the factors that play a role are mentioned in the following:

1. A ritual can be an *ad hoc* event, performed on a special occasion. It does not need to be repeated. Its elements may be derived from older or current rituals, in combination with other, somehow meaningful features. Such rituals may be associated with single events, for example catastrophes or new beginnings. Rituals can be abolished after one or a few performances when their immediate cause disappears, but also when they are considered unsuccessful or superfluous.

2. New circumstances may require the creation of new rituals. Because new rituals are usually based on elements from older rituals, they may resemble these older rituals in many details. This demonstrates that the meaning of these elements is not fixed once and for all, but is continually reinvented. As an example, we may think of the silent marches in the Netherlands that since the early 1990s are organized for the victims of random acts of violence or calamities. These marches are based on

⁶⁵ Boyer 2005, 22.

older traditions, such as the yearly memorial marches on the 4th of May in the Netherlands, commemorating the victims of World War II, or the much older custom of the yearly silent processions for saints in some parts of the country.⁶⁶

3. The details of rituals, ceremonies and traditions and their effectiveness will usually be discussed every time a ritual is performed. In the Netherlands, for example, discussions on the role of the king and his speech at the ceremonial start of the parliamentary year, or on the proper way to celebrate our national tradition of Sinterklaas, are rekindled almost every year. Many minor changes can result over time in an entirely different appearance of the ritual, but it may still be felt to be the same ritual or tradition. This not only applies to time, but also to space: rituals with the same name, meaning and purpose in different places may differ considerably.

4. Experiments have demonstrated that the intentions of the participants who perform a religious ritual are considered to be equally or even more important for the success of the ritual than the way the actions are performed.⁶⁷ This is particularly so when the supernatural beings involved are supposed to have full access to strategic knowledge: if a supernatural being can read people's minds, it will know their intentions when they perform the ritual; this is considered more decisive than the way the ritual is performed. In contrast, if the supernatural being is ascribed powers to interfere with people's lives but does not know what they think, it can only judge people's intentions by their actions (this is an inference from our social mind). In that case, the right way to perform a ritual is important as its success will depend on it.⁶⁸

5. Agent-special rituals are performed by qualified practitioners, on behalf of a supernatural agent. Their ordination connects them directly to this agent. This direct relation makes the actor who performs the ritual much more important to the ritual than the way it is performed.⁶⁹ As long as the religious specialist is properly ordained, the ritual itself is of minor importance. For example, marriage can only be lawful if an authorized official person performs the actual wedding ceremony⁷⁰; all other ritual elements of the wedding are extras that do not influence this basic purpose of the ritual.

6. Although the right way to do a ritual is usually considered to be important, this does not necessarily result in a strict following of rules. The proper performance of a ritual requires constant reflection upon its rules. This is especially so when ritual concepts are transmitted to new generations or to other people who are not yet fa-

miliar with them. Rituals can only survive the process of cultural transmission if they are adaptive. As all cultural concepts, rituals are either successfully transmitted, or disappear. Rituals are successful cultural concepts when they can be changed and adapted to new circumstances, not when they can only be static performances. This is why unchanged repetition is not the rule, but rather the exception. Rituals will always change in some way within only one or a few generations. Only in societies with a strong class of religious specialists and a codex of ritual rules that is considered to be sacred, rituals can survive unchanged for centuries. However, the prize of immutability is a loss of meaning. The Vedic rituals of Hinduism may serve as an example. This may have brought the great scholar of Vedic ritual, Frits Staal, to his famous statement that ritual "is pure activity, without meaning or goal".⁷¹

Rituals that are often repeated will lose some of their emotional edge in the process, even more so when the way they are to be performed is fixed. This can be illustrated with the example of a new ritual that was already mentioned above: the silent marches for people that were killed in catastrophes or were the victims of random acts of violence. They started as highly emotional, spontaneous expressions of grief and dismay in the imagistic mode. They have already turned into a full-blown ritual with certain rules, as can be derived from their appearance in municipal contingency plans, a feature of the doctrinal mode, and they are now turning into a tradition. Much of the emotional impact of the original ritual is lost in this process.

7.6 Conclusion

The way rituals are transmitted, the kind of supernatural beings that are involved (with or without full access to strategic knowledge), and the extent to which rituals can be adapted to new circumstances, determine the dynamics of ritual. Rituals that are always repeated in the same way do not give a complete picture of ritual acting, although they may include important archaeological categories such as burials and specific offerings. Even these, however, will not always be repeated in the same way.

Ritual practice in all its variety of different types and of constituent elements can be transmitted and remembered in two different modes. The first is the imagistic mode, in which salient experience engraves the details of the ritual in memory. The second is the doctrinal mode, in which learning and teaching of a doctrine and of associated ritual practice is of foremost importance. Both types may occur within the same society, but one of them is usually dominant. There is a connection between these modes and other features of the social and religious sys-

66 Margry 2008.

67 Barrett & Lawson 2001; Barrett 2002a and b.

68 Barrett 2002a and b.

69 McCauley & Lawson 2002, 120-122.

70 In countries where only an authorized civil servant can perform a lawful wedding, the state replaces a supernatural agent.

71 Staal 1989, 131.

tems, and these modes influence the character and dynamics of ritual practice. The imagistic mode is associated with variable ritual practice and with small-scale organization and intense social cohesion, while the uniform and frequently repeated rituals of doctrinal mode are suited to large-scale and centralized social organization.

This bundling of features may provide us with a tool that can be applied to test the hypothetical model of social organization in the terp region that was proposed in section 4.3.3. This model suggests that the social organi-

zation in this area changed during the research period, from a decentralized, small-scale society with chosen leaders in the pre-Roman Iron Age, to a slightly more centralized society with hereditary leadership and increasing social stratification in the Roman Iron Age. These changes may have gone hand in hand with increasing uniformity in ritual practice. What is needed to test that possibility is a set of data that is large enough to allow of reliable quantification. In chapter 11, the case study of Ezinge, this possibility is further explored.

8

Aspects of the meaning and interpretation of ritual practice

8.1 Introduction

Rituals are generally felt to be meaningful. Meaning can apply to what a ritual actually does, but also about how it is interpreted, either by participants or by onlookers from the outside such as western scholars. The answer to the question “What does this ritual mean?” must consider these levels and take them seriously.

In the previous chapters, the origin of ritual and religion in the human mind, and the diversity and dynamics of ritual practice were discussed. However, if we seek to understand specific rituals, or if we attempt to interpret the remains of rituals in the archaeological record, a general understanding of the diversity of ritual behaviour is not sufficient. We need to know, not only that many different elements can contribute to ritual practice, but also what these elements might mean.

An understanding of various aspects of ritual practice may help us to interpret the remains of rituals. The first of these aspects is symbolic meaning, which is a major constituent of the meaning of any ritual. Secondly, gift exchange plays a prominent role in many rituals that involve human or supernatural participants. Thirdly, different aspects of religious meaning, such as the character of supernatural beings or the concept of the sacred, contribute to the meaning of rituals. These aspects of ritual practice will be explored below. This chapter will end with some observations on the concept of meaning itself and on the unconscious preconceptions that may influence the interpretation of the remains of rituals in the archaeological record.

8.2 Symbolic meaning

One of the main themes concerning ritual is the use and meaning of symbols and symbolic acting. We feel that in rituals many elements do not speak for themselves, but refer to something else, to a deeper meaning that is hidden in the often trivial acts and objects that are part of the ritual.

Ritualized behaviour resembles symbolic action in many ways, and is often confused with it. In fact, symbolic meaning may be a later addition to an intuitively chosen action unit of ritualized behaviour. As was described in chapter 6, ritualized behaviour has its roots in our *precaution repertoire*; that may result in actions such as cleaning or ordering, or in the use of specific colours or numbers. The specific number or colour or ordering is not prescribed by the precaution repertoire, but

can be based on some association, which gives it symbolic meaning. To give an example: in traditional funerals in our part of the world, the coffin with the corpse is taken to the churchyard, usually after a service in the church. In some villages, it is still customary not to take the shortest route to the grave, but to walk a specific number of times around the churchyard first, to ward off evil. This act is clearly ritualized. The number of times, usually three, is based on a religious association, which adds symbolic meaning to the funeral as a whole. The symbolic meaning that is ascribed to a ritualized act is secondary to the act itself.

The use of symbols is a cognitive capacity. It originates in the human capacity of *decoupling*: we are able to think and talk about what is not here and now. To do that, we need, of course, language, which is our most outstanding use of symbols. In language, meaningless sounds and signs are combined and structured to form an extremely efficient tool for communication. Parallel to language, we have the ability to make and recognize two- or three-dimensional representations of reality. Language and images are basic to human communication, but these are not the symbols we are dealing with when we think about the use of symbols in ritual. Both language and images may also be used as symbols in a stricter sense of the word. What is usually meant by *symbols*, are words or images or objects or actions that do not only have a one-to-one relation with something in reality, but that have different layers of meaning besides; they refer to something beside their first and most apparent meaning, often to something that does not exist in visible reality at all.

Symbolic meaning is not a property of certain objects or acts or images, but a creation of the mind.¹ The creation of symbols in the mind is a process that is not mysterious, although it may be complicated. The meaning of symbols for the people who use them can, in principle, be explained. What we need for such an explanation is full knowledge of all contributing factors; this is possible when a symbol develops within our own society or cultural subgroup. The symbols of other societies, either in other places or in other times, are not that easy to explain, owing to the outsider's imperfect knowledge of these societies. Neither may symbols within one's own society with a long history reveal all their layers of mean-

1 Sperber 1975.

ing easily. An interpretation of symbolic meaning necessarily presupposes a holistic approach; it always starts with gathering as much information as possible, to form a comprehensive picture of the society involved.

A symbol in the strict sense is a sort of shorthand designation of something that is too complicated to designate otherwise, or needs such a shorthand designation in a certain context. A symbol stresses a specific characteristic of the symbolized matter; one common ground is sufficient. Something that is symbolized may be charged with emotions and ambivalent meanings (e.g., one's native country), which also become attached to the symbol (e.g., the national flag). A symbol may bring some notions of its own, thus enriching the symbolized matter with added layers of meaning. For instance, a scythe, meant to cut something living, sometimes serves as a symbol of death; its use implies an extra charge associated with harvesting and rebirth.

There are many ways in which words, objects, images, persons or acts can take on symbolic meaning. New symbols are created continually, consciously or not. Symbolic meaning can be based on a variety of associations, such as similarity in appearance, origin or function; bodily experience²; the intentions of the maker of an object³ (a sweater that is knit by a mother or grandmother, symbolizes her loving care); remembrance and history (e.g., Martin Luther King can be the symbol of the struggle for equal rights of Afro-Americans); a *pars pro toto* quality (e.g., blood referring to life); or mythological stories. A symbol may also invert the symbolized matter, or have opposite meanings in the same or in different cultures. In Christianity and Judaism, for instance, the snake became the symbol of evil, based on the myth of Paradise and the Fall⁴, but in Judaism a snake of brass is also a symbol of healing, which is derived from a mythological story from the period of the wanderings of the Jews in the desert for 40 years.⁵ The same association of snakes with health is found in Greek mythology, where Zeus gave a snake as a token to the divine healer Asklepios (= Aesculapius L.), after he made him immortal; this snake is still part of our symbol for the medical profession, Aesculapius' staff.

Our symbolic cognitive capacity enables us to see meaning in nearly anything; "... analogy and metaphor pervade every aspect of our thought and lie at the heart of art, religion and science", according to Mithen.⁶ Using analogy to describe the world is a fundamental cognitive capacity and one of the most common ways to create symbols. By analogy, we tend to perceive the same structures everywhere around us, the central theme in the

work of Claude Lévi-Strauss.⁷ Analogy is used to explain and clarify things in all human domains. It is also used to explain scientific concepts and functions in many scientific paradigms. Examples are the use of the computer as an analogy of the mind or (theatrical) performance as an analogy for ritual.

Symbolic meaning is not something that is fixed for once and for all. Things may take on symbolic meaning because of one or several of the above factors. They can be attached to a historic event or a development in society that is easier referred to by a symbol than by a full description. Other meanings and emotions may be added to it in time, but symbols also may lose part of their meaning when the memory of certain events or persons is gone, when mythology alters or is forgotten, or when the function of the original object has changed. Symbols may disappear again after a while. Modern media may cause a fast spread of new symbols, but that does not necessarily mean they last for long. Symbols that remain in use for a long time and that spread, are those symbols that easily attract new meanings from intuition. These new meanings deepen and widen the original symbolic meaning, and make a symbol relevant in different situations.

When looking for symbolic meaning, it is important to consider the following. Firstly, the functional meaning of something, its practical use, will always influence its meaning as a symbol, and can and should not be separated from it. For instance, a ceramic vessel is a container in the first place, used for storage, cooking or serving food. It may be used in rituals because a container is needed for something. Its form and function may (but do not need to) evoke other, symbolic meanings. It may be thought to resemble a womb, so that the life-sustaining act of cooking becomes symbolically associated with the origin of life. Pottery may also be associated with the earth because it is made of clay; therefore, pots may play a role in funerals, for instance as a container for human remains. Other meanings may still be added to this. The combination of function, resemblance and origin, characteristics that can be recognized by outsiders, may thus result in various levels of meaning, in which cooking and life giving, the origin and the end of life, birth, death and rebirth are intertwined.

Secondly, it should be realized that the meaning of symbols is heavily influenced by ontological views. If, for example, in an animistic worldview, animals are considered persons that live in villages and have family ties much like our own⁸, the basis for the possible symbolic meaning of an animal differs considerably from a naturalistic (modern western) worldview, in which animals

2 Douglas 1970.

3 Pfaffenberger 2001.

4 Old Testament, Book of Genesis 3:1-24.

5 Old Testament, Exodus 26:6-9.

6 Mithen 1996, 215.

7 Lévi-Strauss 1966.

8 Descola 2006, 148.

are denied any interiority. However, as archaeologists, we usually have no information on the ontological views of the people we study.

Thirdly, it is not difficult to come up with symbolic explanations as in the above example of pottery, reasoning from the principle of “the like working of men’s minds under like conditions”.⁹ However, it is important to remember that “there are pieces of symbolism that have purely local appeal; others seem to be restricted to particular regions, though not found everywhere within it; and others again are rare everywhere, but reported from all over the globe”.¹⁰ The use of symbols is a cognitive capacity, but we do not have a set of archetypal symbols ready in our mind. Things and creatures do not have an intrinsic symbolic meaning that can be applied to any situation. Symbolic meaning is created in the human mind; Individuals or groups of individuals give their own symbolic meaning, to objects, living beings, actions, colours or anything else. Successful symbols spread within and beyond social groups, but their meaning may change in the process. The capacity to use and understand symbols is there, but which language we will speak and which symbols we will adopt and understand, depends on what we learn and experience during life. Archaeologists and other students of human societies must be aware that they bring their own symbolic notions, which may influence their interpretations.

These considerations imply that we can approach the meaning of other people’s symbols only from a thorough knowledge of their lives and their material, social, political, economic and ecological environments. For archaeologists this means that it is difficult, but not principally impossible, to interpret the symbols used by people in the past. What we need is a comprehensive approach aimed at a complete picture of life within a given group, based on the scientific research and detailed description of every aspect of the archaeological record we are dealing with. In this study, Part 1 is meant to provide such a picture of the society that is investigated.

8.3 Gift exchange in ritual

As was discussed in the previous chapter (7.3.2), actions in which supernatural beings play a role, respond to the same rules as actions in which humans are agents or objects.¹¹ In the words of Justin Barrett, “... the sort of cognition ritual intuitions invoke is social cognition.”¹² This means that religious rituals are actually social acts, and that all the expectations, intentions, predictions and interpretations that are involved in normal social acts,

also apply to these rituals and their human and supernatural participants. Supernatural beings may have some counterintuitive characteristics, but they are expected to respond positively to positive intentions or actions, and negatively to negative ones, in the same way humans would do. When they need to be influenced, the supernatural agent is presented with veneration, a gift, a kind request or a promise, and is hoped to be beneficent in return. It is clear that exchange, more precisely *gift exchange*, is an important notion in such rituals. It will often also play some part in other rituals, religious as well as nonreligious. This important concept will be discussed in this chapter.

8.3.1 The concept of gift exchange

The concept of *gift exchange* was already discussed in 1925 by Marcel Mauss, in his famous ‘*Essai sur le don*’. It should be noted that Mauss thought exchange was the answer to human aggression, enabling mankind to live in relative peace rather than in a constant state of war.¹³ This presupposition is fundamentally different from the ideas this study is based on, namely that humans are well endowed with capacities that enable them to live in their natural and social environment. These do not only include aggression (which is a useful capacity when dealing with danger or during hunting), but also social capacities, including a moral mind. A constant state of war is not the primordial state of mankind (see also chapter 8.6.3 on the *human nature bias*). Notwithstanding this fundamentally different point of departure, the work of Mauss provides us with important insights into the phenomenon of gift exchange. It can still serve as a basis for a discussion of gift exchange.

Mauss made a distinction between societies in which gift exchange is the main way of maintaining relations and modern societies in which gift exchange has been replaced by trade in commodities with a value that can be expressed in money. That way, man has become a calculating, ‘economic animal’.¹⁴ Mauss regretted this change and described it as if he feared that gift exchange might eventually disappear altogether from society (“We still have people and classes who uphold past customs...”).¹⁵ However, although, of course, it cannot be denied that impersonal trade and the value of commodities is one of the main principles that keep modern societies going, gift exchange has not disappeared. In effect, the *raison d’être* of a major part of industry and trade is gift exchange. Just think of the enormous industry that is needed to create birthday and Christmas presents, or the gifts for Mother’s and Father’s Day; and of the accompanying advertise-

9 E.B. Tylor 1878, “Researches into the early history of mankind and the development of civilization”, quoted by Metcalf and Huntington 1991, 10.

10 Metcalf & Huntington 1991, 10.

11 E.g. Barrett 2002a and b; 2004.

12 Barrett 2002b, 186.

13 Cf. Corbey 2006.

14 Mauss 1970, 74.

15 Mauss 1970, 63.

ment campaigns that are aimed at our desire to find appropriate gifts for any situation.

The reason that gift exchange is still so vital, after so many years of commodity exchange, is that it is in effect one of the basic ways to establish, maintain and manipulate social relations, firmly rooted in our cognitive capacities for social life. Gift exchange is based on the principle of reciprocity, which is one of the basic principles that enable life in groups. In recent decades it has been recognized that reciprocity is not an exclusively human capacity; many animal species dispose of it as well, at least to some extent.¹⁶ It plays a minor or major role in all human relations, from the most intimate bond between parents and children up to the most impersonal relation between individual and state. Its universal meaning can be derived from sayings in many languages: e.g., ‘you scratch my back and I’ll scratch yours’ (this saying certainly seems to show its origin in primate behaviour); *do ut des* (L.); *quid pro quo* (L.) / *voor wat hoort wat* (Dutch). These sayings have negative counterparts (‘an eye for an eye’), showing that the principle of reciprocity can work both ways.

Gifts that potentially play a role in the exchange with natural or supernatural agents are not confined to objects. Mauss listed many more possibilities for suitable gifts to be exchanged between individuals and groups: courtesies, entertainments, rituals, military assistance, people, dances and feasts¹⁷, food, possessions, charms, land, labour, services, religious offices, and rank.¹⁸ In this study, the concept of gift exchange will be used in this broad sense, including all Mauss’ gifts and ranging from special, valuable objects to small services. The kind of objects that are chosen as proper gifts, either among people or between people and supernatural beings, are associated with quite distinct exchange events and networks. These may be recognizable in the archaeological record. An example is the early medieval elite network, which functioned in northwestern Europe thanks to the exchange of marriage partners, weapons with individual identity and jewellery.¹⁹

An important aspect of gift-giving in many relationships is that a gift is not randomly chosen; it carries something of the personality and identity of the giver, and it is aimed at a specific occasion in the life of the receiver. A gift emphasizes the identity of both the giver and the receiver and the character of their relationship. The gifts exchanged during rites of passage are instruc-

tive.²⁰ Someone coming of age, for instance, may receive presents from grandparents, parents, and friends. Because of the special occasion, these will be carefully chosen for the occasion and will reflect various aspects of the personalities of the givers, as well as of the new social role of the receiver. Coming of age may, in some families, be a proper occasion to give a family heirloom or a special book, thus implicitly emphasizing the continuity of the family, as well as the moral obligation to make the best of adult life. Such gifts may become cherished memorabilia, because they remind the receiver of her or his relationships with the givers, and of all the expectations that come with the new status and persona that was acquired at this occasion, which may or may not have come true.

Mauss noted that gift exchange contains three obligations: giving, accepting and returning.²¹ Whoever wants to establish or maintain relations, will have to present gifts. Gifts cannot be refused, if one wants to keep good relations with the giver. Receiving a gift in any material or non-material form creates an obligation: a gift has to be returned with something of similar or greater value. Presenting a gift creates the expectation of a counter-gift. Although these obligations and expectations may remain largely unwitting, this is the way people bind others to them.

The continuous unbalance created by giving and receiving is a driving force in human relations but also in the relations between humans and supernatural agents. If we believe that supernatural agents respond to the same stimuli as humans (and we do this intuitively), it makes sense to thank them for good things, and to ask them for help whenever we need it. We would feel that we had to give something in return, be it a promise, an offering, or proper moral behaviour. Proper moral behaviour is clearly an appropriate gift for the gods in exchange for something good, as it is in many kinds of human relations, for example between parents and children. This is even more so when the supernatural powers are supposed to be all-knowing. Improper behaviour can only be returned with misfortune. Gods or ancestors may be believed to be angry because the victim of their anger did not fulfil his obligations; they are to be blamed when the victim always has done his best to be a good person and maintain proper relations with them. Even nonreligious people, who cannot really blame anyone, may be heard to say: “I have never done anyone any harm, so why am I ill now?” Unwitting exchange relations are clearly at stake here. To restore good relations with supernatural agents, it will be necessary to do something that will be appreciated by them, give them worship, an offering, or

16 De Waal 2005, 201-209 on reciprocity among anthropoids; also De Waal 1996, 153-154: “Individuals with the mental capacity to keep track of given and received favors can apply this capacity to almost any situation. ... Once a quid pro quo mindset has taken hold, the “currency” of exchange becomes secondary. Reciprocity begins to permeate all aspects of social life.”

17 Mauss 1970, 3.

18 Mauss 1970, 11-12.

19 Bazelmans 1999; Nicolay 2014b.

20 See also Bazelmans 1999, 113-114.

21 Mauss 1970, 10-11.

improved moral behaviour. Something good will hopefully be given in return.

The theory of gift exchange was further explored by Annette Weiner. She concentrated on objects that are usually kept out of exchange relations, the so-called *inalienable possessions*.²² The crown jewels of royal families form a good example, but inalienable possessions do not need to be valuable to outsiders. They may include the products of specific crafts (e.g. textiles), or even ancestral bones. Inalienable objects will usually be kept within families for many generations, thus tying the family members to the past. "What makes a possession inalienable is its exclusive and cumulative identity with a particular series of owners through time."²³ They are important to their owners because they define the status and identity of individuals or groups (families) within societies, and they represent its values. They may be associated to ancestors, or charged with symbolic and other meanings. Losing these objects weakens the group's life force.

Weiner's study was concerned foremost with cultures in Oceania, but she recognized the importance of inalienable possessions in other cultures as well. For instance, the ancient European classification of property in movables and immovables is not concerned with portability, but with alienability.²⁴ The objects concerned may change over time. Land often belongs to the immovables, while livestock will usually be movable. An interesting category of immovables in ancient Europe consists of the possessions that are stored in chests.²⁵ These include textiles and other personal belongings that link people to their ancestry. Other potentially inalienable possessions are names, ceremonies or specific symbolic designs.²⁶

Weiner stresses that gift exchange is coloured by what is kept rather than by what is given. 'Keeping-while-giving' determines the social identity of the giver, and thereby "the styles, actions and meanings that create the exchange".²⁷ Inalienable objects can be exchanged as gifts, but that will only occur in exceptional circumstances. In that case, the gift is to be considered a temporary loan rather than a real gift, thus creating a strong bond between givers and receivers. Generally speaking, inalienable objects will only be passed on between generations within the same family. This applies, in principle, also to exchange relations with the supernatural. Inalienable objects will only in exceptional cases be part of offerings. The deposition of inalienable objects will usually not be an offering to a supernatural being, but rather be connected with family identity and its perpetuation.

8.3.2 The role of gift exchange in ritual

Gift exchange itself is often ritualized in some way. Some form of gift exchange is also part of many rituals. There are three ritual spheres, in which gift exchange plays a significant role, in a way that may leave traces in the archaeological record. The first of these is offering to the supernatural, which was discussed in the previous chapter. Gift exchange is also important in two other types of ritual practice: ritual or ceremonial meals, and fragmentation and enchainment.

8.3.2.1 Sharing, charity, ritual meals and feasting

Sharing is one of the basic principles that make living together possible. In small groups such as those of hunter-gatherers, "food and resources are shared on the basis of egalitarian and reciprocal principles".²⁸ Sharing food with one's group members will enhance the group's chances of survival in times of need. Sharing food is something in which all members of a group participate, sometimes as givers and sometimes as receivers, notwithstanding differences in hierarchy.²⁹ Sharing food will also create strong ties between individuals and reduce mutual aggression. Sharing is beneficial for all group members, as it creates a stable and safe living environment.

It is important to note the principles of equality and reciprocity here. Although hierarchical relations may exist in such a group, everyone will contribute to the group's needs some time, while all members of the group profit from sharing resources. In societies where individual property is more important and where access to resources is not so evenly distributed, sharing will be more problematic. When the rich agree on sharing their wealth, the poor will not be able to return the gifts, and the rich will not receive a counter gift. Both parties will feel uncomfortable with such an arrangement and the inequality will be a source of social tensions, or create dependency relations. This might, as was suggested in chapter 4.3, be the cause of the increasing dependency relations in the terp region during the Roman Period, when native leaders may have started to reward support with the gift of special objects they had acquired in their dealings with the Romans. These objects could not be returned with objects of equal value and meaning, and thus created an unbalance.

Mauss saw the problem of gift exchange between the rich and the poor in the light of his 'beginning of a theory on alms': the wealthy feel that the gods oblige them to give of their wealth and share it with the poor.³⁰ Mauss' 'beginning theory on alms' has all the elements neces-

22 Weiner 1985; 1992.

23 Weiner 1992, 33.

24 Weiner 1992, 32.

25 Weiner 1992, 32.

26 Weiner 1992, 11.

27 Weiner 1992, 150.

28 Høgh-Oleson 2006, 503; also Van Baal 1976, 165.

29 That hierarchical relations do not necessarily stand in the way of mutual sharing is, for instance, demonstrated by chimpanzee behaviour (De Waal 2005, 207-208).

30 Mauss 1970, 15.

sary for a somewhat extended theory on charity. The supernatural being in this scenario is an intermediary that enables the rich to give and the poor to receive without the normal obligations and expectations this would create between them. From the perspective of the rich, the supernatural being is the receiver of the gift via the poor and needy, and is supposed to return the gift to the rich giver with a beneficial attitude. In Christianity, this principle is explicitly phrased in the New Testament, where Jesus says, speaking of helping the hungry, the thirsty, the stranger, the naked, the sick or the prisoner: "...whenever you did this for one of the least important of these brothers of mine, you did it for me."³¹ The principle is known from other religions as well. From the perspective of the poor and needy, the gifts directly are received from the rich, but indirectly from the supernatural being, and will be able to return the gift to the gods with thanksgiving, worship or proper moral behaviour (which will often also benefit the rich). The rich will not expect a return gift from the poor receivers. Such a mechanism enables poor and rich people to live together in relative harmony.

This principle can help to explain a specific ritual feature that can sometimes be identified in the archaeological record and that is also known from written sources: the *ritual meal*. The ritual meal, as it is taken here, is closely connected to offering to the supernatural. It is a ritual in which an animal is sacrificed, but only a small part of the animal is offered to the supernatural being; the major part of the animal is eaten by a group of people. When it comes to sacrifice, this is actually the rule rather than the exception; sacrificed animals are hardly ever donated completely to a supernatural being.³² A modern example is the Mongolian *taxilag*, which is a complicated ceremony involving the sacrifice of an animal, the consumption of the cooked meat by a group of participants, and the consumption of the part that is offered to the god (the skull and lower limbs) by a religious specialist.³³

In the light of the above theory on charity, the ritual meal may be seen as a way of sharing food. "Eating a meal on a festive occasion also fills the stomach" as Roel Lauwerier put it, to stress that economic functions may well be combined with non-economic functions.³⁴ There is, for instance, historic and archaeological evidence from early medieval Scandinavia that sacrificed animals were donated by the wealthy people within a community.³⁵ It was considered to be important that all members of a group were invited and would attend the accompanying meal, to maintain or restore harmony. The ideal leader "... of the peaceful late pagan society, was a man, who was, in front of the Gods or God and his fellow hu-

man beings, sufficiently rich, willing and understanding to provide others with food, and sensible enough to solve problems through negotiation."³⁶ Providing meals was clearly something that was done in the sight of the gods, while solving conflicts was one of the more explicit aims of the communal meal.³⁷ The meat was consecrated, that is, dedicated to the gods, making them the receivers of the gift, though in this case there is no mentioning of offering part of it to a god. After the meal, the remains were collected and, for example in Eketorp, put in a water hole.³⁸

This example shows that solving conflicts and restoring harmony may be an important aspect of the ritual meal. Eating together in any society usually is a way to maintain good relations; eating together in itself is a sign of trust. It is only natural that communal, ritual meals are not only used to maintain relations with other group members, but also with supernatural beings. These beings are already implicitly present since they function as intermediaries between the givers of the sacrificial animal or other food and drink and the receivers of the meal. Including them in the meal by offering them a piece of the animal is a natural next step, since they are expected to react in the same way to positive treatment as we would do. The amount of meat offered does not matter that much, the willingness to share counts as enough.

All the aspects of the ritual meal and of feasting in general: the possibility of sharing between wealthy and poor without uncomfortable feelings, the mediating function of supernatural beings in this process, sharing with supernatural beings as a very natural way to maintain good relations with them, restoring harmony within a group, and the peaceful event that eating together potentially is, suit each other very well. They form a natural combination; meals may always have been ritualized in some way.

The term *ritual meal* as used here refers to communal, ritual meals that involve a supernatural being, which receives part of the food. It is part of the more encompassing phenomenon of feasting, which is not necessarily a religious ritual, although the supernatural will often be involved in some way. Feasting is 'a form of public ritual activity centered around the communal consumption of food and drink.'³⁹ Feasts will often be organized and offered by political leaders in the context of social and political relations, including members of the community and guests. The generosity of the patron or host are supposed to be returned with loyalty by his subjects or clients.

31 Matthew 25:40.

32 Van Baal 1976, 161; Boyer 2001, 242.

33 Humphrey & Laidlaw 2007.

34 Lauwerier 2002, 63.

35 Backe *et al.* 1993, 337-341.

36 Backe *et al.* 1993, 340.

37 This practice resembles the feasts that were described in Tacitus' *Germania* 22, see chapter 4.

38 Backe *et al.* 1993.

39 Dietler 2001, 67.

Since considerable amounts of food and drink may be involved, as well as cooking pots, containers for drinks and tableware, the remains of feasts and ritual meals may well be recognizable in the archaeological record. Tokens of hospitality and leadership in the form of large vessels and drinking cups often occur in the graves of leaders from the Iron Age and the Migration Period throughout Europe.⁴⁰ They underline that generosity and feasting played an important part in socio-political relations.

8.3.2.2 *Fragmentation, enchainment and accumulation*

Sharing is not confined to food. A special kind of sharing, in which complete objects are deliberately broken and the pieces are divided, was noticed in Neolithic find material from the Balkans by John Chapman.⁴¹ Although his research is aimed at the Neolithic, his finds resemble those of later periods and many of his ideas seem to be applicable to late prehistory as well. Since pottery with traces of intentional breakage and single human bones play a role in the case studies of both Englum and Ezing, the theory of fragmentation and enchainment is worth examining.

One of the arguments for this theory is that it is almost never possible to reassemble complete objects from the fragments that are found in the archaeological record, even when it is certain that we are dealing with closed contexts. There will always be fragments missing. This can often not be explained by formation processes alone. Moreover, fitting fragments are sometimes found in remote places. That suggests that fragments are deliberately removed and deposited elsewhere. Chapman argues that the exchange of fragments of objects that were broken (accidentally or deliberately) was widely used as a way of maintaining social relations by *enchainment*. Fragments of an object, or ever smaller pieces of it, may have been passed on again and again, thus creating chains of people who were connected by the possession of pieces of the same object.

Chapman objects to the notion that archaeology is 'the science of rubbish'.⁴² In an alternative approach, he states that in prehistory, people and objects were closely connected. The production of an object was actually a reproduction of a part of the personality of the maker; it implies a 'personal contribution to the value of an object'.⁴³ This means that when exchanging objects, people actually exchange parts of the personality of the maker. Broken objects will keep something of this personality so that the fragments still have a certain value, rather than becoming mere rubbish. They resemble dead human bodies that will neither lose their personality im-

mediately. Therefore, broken objects and human remains may be used in similar ways. Both carry something of somebody's personality.

Chapman identifies several related practices⁴⁴:

- people make, exchange and accumulate personalized objects;
- -an important aspect of enchainment is fragmentation: fragments may be exchanged and accumulated rather than complete objects;
- human bones may be included in exchange and accumulation;
- because of their significance, personalized objects are kept close to home;
- sets of personalized objects including human remains may be deposited, thereby formalizing relations of enchainment tied to particular places⁴⁵;
- there may be an exchange between the living and the ancestors through, for instance, burying objects, fragments, or sets of objects in pits and graves, or burning them together with houses;
- objects and fragments can be dispersed over the landscape, thus showing that the landscape may be involved in enchainment.

In practice, fragmentation and enchainment implies that people who would like to establish or maintain a social relationship or make an agreement, decide to break some object and divide the pieces among them. The fragments may be used in the same way later on similar occasions. I would suggest that it is not only the idea that objects are somehow personalized that makes this an understandable and meaningful practice. Remembrance must also be an important part of it: the memory of people, of events, of transactions or of agreements. Being exchanged at a certain event will add to the meaning of a personalized object. It can even be argued that the practice of fragmentation, enchainment and accumulation can exist without the idea that objects are personalized. The memories they invoke may be reason enough. Such practices still exist today. For instance, young lovers can buy silver heart-shaped pendants with a perforated line that can be broken so that each can keep half of the heart, thus stressing that they belong together.

The theory of fragmentation and enchainment can be connected to the theory of inalienable possessions that was discussed above, in several ways. In the first place, the meaning that is attached to personalized objects and their fragments, coming from their production by a specific person and from their role in specific events, may make them into inalienable possessions. In the second place, fragmentation may be part of the rare occasions that inalienable possessions are exchanged. Weiner

40 Dietler 1996.

41 Chapman 2000; also Chapman & Gaydarska 2007.

42 Chapman 2000, 4.

43 Chapman 2000, 5.

44 Chapman 2000, 5.

45 Chapman & Gaydarska 2007, 9.

found two classes of inalienable possessions: “those that should never circulate and those that under certain circumstances may be given to others either on loan, as copies, or in return for another of the same kind.”⁴⁶ The latter type creates strong emotional ties between the individuals or groups that partake in this kind of exchange. Former owners will always keep a claim on the object they temporarily gave away. To stress this claim, a piece of the object may be broken off before the gift is made. When the object comes back to its owner, the pieces can be reassembled.⁴⁷

According to Chapman, the single human bones that are often found in prehistoric settlements can also be explained as part of a practice of fragmentation and enchainment.⁴⁸ This implies that after exhumation, the bones were collected and passed on at various occasions. The ancestral bones enable the materialization of kinship relations. Human bones may become inalienable possessions, as defined by Weiner.⁴⁹ She describes the use of human bones as ornaments in the Archaic Maori Phase in New Zealand.⁵⁰ Human bodies were exhumed and reburied regularly; the bones were wrapped in special cloaks and reburied in ancestral land, thus stressing their inalienable character. The transformation of specific bones into family possessions functioned in stressing the genealogy and identity of these families. This use of human bones, exotic though it may seem, will play a prominent role in the chapters of Part 3.

The meaning of body parts as personalized objects survives in the Roman Catholic practice of keeping religious relics, mostly (fragments of) body parts of saints. A very modern practice was made possible by a change in the Dutch law on the disposal of the dead (*Wet op de Lijkbezorging*) of 1998. It allows cremation ashes to be split up, so that the ashes can be divided over several urns to be kept by more than one person. It also makes it possible to lock some of the ashes in pendants, to be worn by the bereaved.⁵¹

Besides as a social practice between people, fragmentation may have played a role in the exchange with supernatural beings, be they ancestors, gods or spirits. Not only, as was argued in the previous section, food, but also complete and fragmented objects may have been shared with supernatural beings. Potsherds or other fragments may have been considered proper offerings, equalling any complete object, because they carried something of the personhood of the maker of the object. It will be nearly impossible to ever identify such offerings in the archaeological record.

Fragmentation and enchainment have the potential to create relations, not only between people or between natural and supernatural persons, but also between people and the landscape. The deposition of personalized objects or their fragments in specific places in the landscape creates a relationship with the landscape itself. Supernatural powers that were thought to reside in such places may have served as passive mediators in this process. Places that were used for the deposition of personalized objects over a long time must have become meaningful places in collective memory; David Fontijn called such parts of the landscape ‘landscapes of memory’.⁵²

The idea of enchainment of objects or their fragments is an important hypothesis in the study of ritual in archaeology. It may be used to explain unusual finds assemblages, with or without human bones, as accumulated and deposited personalized objects or memorabilia. Yet, it is difficult to prove, and there is a large distance in time and place between the Neolithic Balkans and the terp region during the research period. A clear example of deliberate post-Neolithic use of fragments closer to the research area is a find from the town of Roden in the north of the province of Drenthe.⁵³ The assemblage was dated to the 8th or 7th century BC,⁵⁴ not long before the salt marsh area was colonized. A complete pot (or so it seemed) was found there, in a pit just large enough for it. After the excavation, it became clear that this pot actually consisted of the upper and lower half of two different pots. In this ‘pot’ 58 sherds were found, belonging to circa ten different pots, some charcoal, some pebbles, and a few hundred grains of corn. All finds were affected by fire. Whether the pit was located within or outside a settlement is unknown, since it was found during road construction. The find cannot be explained as anything but a deliberate deposit. This deposit must have been made on a specific occasion. Although we can only speculate on the occasion, it is well conceivable that the assembled pot and its contents were buried during a meeting, perhaps after making an agreement. The participants may have kept some fragments, while the remainders were buried. It is very clear that fragments were deliberately used here to mark some event. The deposit from Roden makes it clear that the meaningful use of fragments was not confined to the Neolithic Balkans. Still, it is not easy to identify in the absence of clear characteristics such as in Roden. In the case study of Ezinge, it is attempted to identify traces of deliberate breakage in order to detect the deliberate and meaningful use of sherds.

46 Weiner 1985, 212.

47 Weiner 1992, 41.

48 Chapman 2000, 6-7.

49 Weiner 1985; 1992.

50 Weiner 1985, 218-219.

51 Heessels 2008, 20.

52 Fontijn 2002, 260.

53 Taayke 1993.

54 Lanting & Van der Plicht 2002, 170.

8.4 Religious meaning

Some of the finds discussed in the case studies of Englum and Ezinge are taken to indicate specific types of supernatural beings. In view of that interpretation, this section will discuss some aspects of the supernatural. The concept of the supernatural, including spirits, gods and ancestors, is at the heart of religious beliefs. Ambivalent feelings are often associated with supernatural beings; they are usually feared rather than trusted and loved. Supernatural beings are difficult to deal with, and direct contact is to be avoided. The nature of supernatural beings (whether gods, spirits or ancestors) and the fear of the sacred contribute to religious meaning, in a way that may be visible in the archaeological record.

8.4.1 Gods and spirits

There is no basic difference between gods and spirits on a cognitive level. Spirits may be supernatural beings that only differ from gods in power and scale, but that does not fully describe the religious meaning they may have. In pantheism and animism, for instance, everything in the world has a supernatural quality, or is animated. In such a worldview, spirits can be considered personifications of the supernatural that is immanent in the world around us.

Gods and spirits may be conceived of as diffuse powers, or as quite personal characters. Gods may be thought to be occupied with diverse aspects of human life and nature, such as war, procreation, agriculture, the sea, or the underworld. These functions can also be combined. Spirits may have similar functions, but are usually attached to a specific location or operate on a much smaller scale. Political rituals, aimed at maintaining the political *status quo* or helping the political powers in times of crisis, may therefore involve gods, but ignore spirits. Spirits may be associated with a forest, a tree, a spring, a river,

the weather or a house. Gods as well as spirits are usually thought to be more or less occupied with and interested in the life of humans, but not necessarily in a positive way. They may be malevolent, benevolent or even completely uninterested in humans.

There can be many gods and spirits for all kinds of functions and territories in the mythological stories of one society, while in the mythological stories of another society, only one god is acknowledged with many functions and territories. A purely monotheistic mythology is very rare and may only exist in some small religious groups. Even in Judaism, Christianity and Islam there is a variety of supernatural beings (a devil, demons, djinns, angels, a mother goddess, holy prophets, saints, witches) in addition to the central creator god with full access to strategic knowledge (who can read people’s minds).

Gods and spirits can be classified as follows:

1. Gods and spirits who do not belong to the realm of the world (e.g. the angels in the many heavens of early-Christian gnosis; a far-off creator god).
2. Gods and spirits with a specific domain, without direct interest in the human world (e.g. a sea god; spirits of the forest).
3. Specialized gods and spirits with a function directly linked to the human world (e.g. a god of agriculture or of childbearing).
4. General gods and spirits directly linked to the human world, who have full access to strategic knowledge (e.g. an ancestor; an omnipresent god).

These categories are not necessarily exclusive; overlap may exist between them.

Based on cognitive capacities that every human being disposes of (see chapter 6.2), and on factors such as their history, natural environment, contacts and experiences,

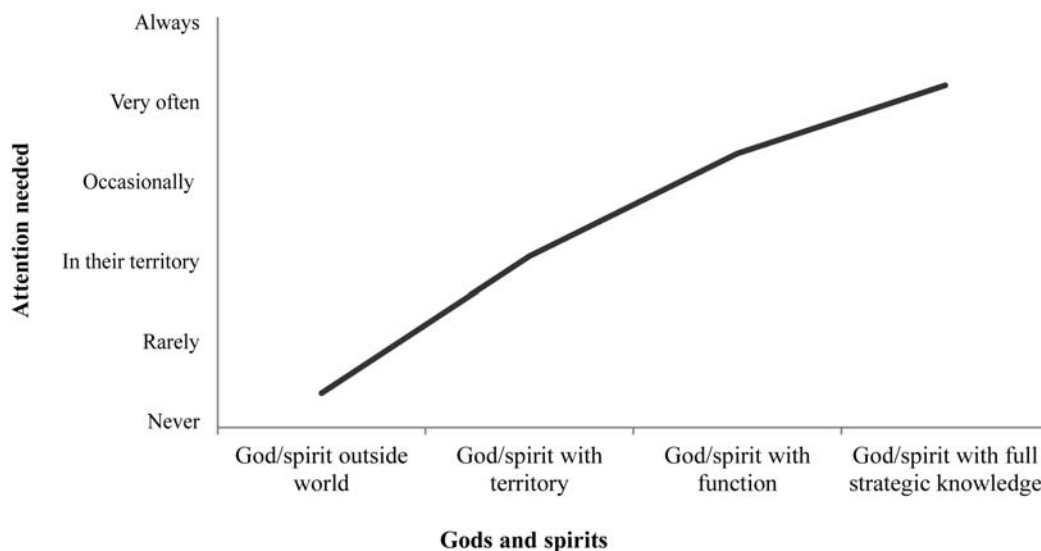


Fig. 8.1 Gods and spirits and the amount of ritual and religious attention they demand.

all human groups will develop their own set of supernatural beings, but these beings do not need to be related in mythological thought.⁵⁵ Each of these beings requires a specially adapted treatment, according to their characteristics. Gods and spirits who are not of this world (1) do not require ritual action, although there may occasionally be some rituals that commemorate them. Gods and spirits with a territory, without direct interest in the human world (2), may be thought to require ritual attention (such as an offering) when their territory (a forest, the sea) is invaded by humans. In that case, they need to be appeased. Gods and spirits with a function directly linked to the human world, but who cannot read people's minds (3), will require ritual attention when people's activities take place in their domain. When grain is sown in spring, an offering may be made to the god or goddess of agriculture. Outside these activities, these beings do not require ritual attention. Gods and spirits who are supposed to be really interested in the human world, and who have full access to strategic knowledge (4), are the most important. They will be felt to require proper behaviour all the time, and offerings at specified times. These types of gods and spirits, and the religious and ritual attention they require, can be represented in a diagram (fig. 8.1).

The place where rituals are performed and the way offerings are made, may be related to the type of god or spirit. A general god with strategic knowledge may be worshipped anywhere as it is always close by, but such a god may have a sanctuary nonetheless. Offerings on special places may be linked to specialized or territorial gods or spirits. Offerings to a heavenly god may be burnt, while offerings for the gods of the underworld or the earth (the so-called *chthonic* gods) may be buried in pits; that does, however, not mean that burning is always associated with gods residing in heaven, or that buried remains are always to be interpreted as offerings to chthonic gods. The notion of chthonic gods may be related to our own, often unconscious, traditional view on cosmology, involving a clear division between heaven, earth and underworld, with supernatural beings that are ordered accordingly. People in prehistory may have had other views on the cosmic order. The supernatural may, for example, have been conceived as a flowing force, permeating all areas of the world.

The characteristics of gods and spirits may lead to differences in ritual practice; such differences may be identifiable, as will be shown in the case studies of Englum and Ezinge. However, gods and spirits are not the only types of supernatural being that may play a role in ritual practice. Supernatural ancestors constitute another important category of supernatural beings in archaeology.

8.4.2 Ancestors

All people have ancestors, but ancestors do not always acquire the status of supernatural beings. When they do, they become spirits with partial or full access to strategic knowledge of their descendants. Ancestor spirits that really matter because they can read people's minds, may be direct ancestors, but also other deceased family members. They may remain individual, though deceased, members of a social group, but they can also lose their individuality and become ancestors in a more general sense, behaving the same as any other ancestor.⁵⁶ Their concern is the general welfare of the family or lineage or clan, and they are supposed to watch over their descendants and keep them on the right path.

The veneration of ancestors was and is widespread, even today. Well-known is the Roman domestic cult of the *lares*, the spirits of deceased family members.⁵⁷ Nowadays, many homes in China and Japan have small altars for the ancestors. That does not necessarily imply that every society in the past had an ancestor cult as is sometimes assumed by archaeologists, a point made by James Whitley: "the universal ancestor has gone from being a suggestion to becoming an orthodoxy without ever having had to suffer the indignity of being treated as a mere hypothesis."⁵⁸ Ancestor cult cannot be assumed, but needs to be demonstrated.

Whitley makes a number of remarks that have to be kept in mind whenever an ancestor cult is suspected from the archaeological record⁵⁹:

- Burial of the dead does not necessarily lead to the veneration of ancestors.
- To be called 'ancestors', the dead will have to be remembered by their descendants, although they may not be remembered as individuals but as part of a 'collective'.
- In many societies, the deceased do not automatically acquire ancestor status; those that are to achieve ancestor status have to go through special rites of passage.
- The place of worship is not necessarily the place where the ancestors are buried.

Whitley also pleads for more precision when using 'ancestors' as an interpretation, and for awareness of the distinctions that exist between different kinds of ancestors.⁶⁰ Some distinctions will be discussed in the following.

It is important to note the difference between the belief in ancestors as supernatural beings, and the memory and commemoration of ancestors for what they are: the

⁵⁵ Boyer 2013, 171.

⁵⁶ Boyer 2001, 209-210.

⁵⁷ Gragg 2004, 71.

⁵⁸ Whitley 2002, 119.

⁵⁹ Whitley 2002, 122.

⁶⁰ Whitley 2002, 125.

people from whom one descends. People may honour their ancestors, for example by bringing flowers or food to their graves, without believing they have become supernatural beings. Although these are ritual gifts, they are not meant to appease the ancestors. There are no sanctions when no one takes the trouble to bring these gifts to the grave, and the deceased are not expected to have any influence on daily affairs. Some people may sometimes use the presence of graves of ancestors (or alleged ancestors), or their descent from a specific ancestor, to lay a claim on a territory or power, without ever bringing these ancestors any gifts or venerate them in any other way. Although in these cases ancestors do play a passive role in people's lives, there is no ancestor cult involved.

However, it is not farfetched at all to believe that the ancestors still play a role in the lives of their descendants. Even in our society, there are many people who believe their deceased parents, grandparents or other relatives are still there to watch over them. It is not easy to accept that the dead have disappeared from the visible world for good, and only natural to believe that they are still here, somehow. Such caring but powerless ancestors are on one side of a gliding scale, with ancestors with real supernatural powers and full strategic knowledge of their descendants on the other side. In between is a variety of ancestors with more or less power and strategic knowledge, and of a more or less individual character.

Veneration of ancestors may show the same variety. On the one end of this scale are the ancestors that are honoured with candles or flowers or food, on the other end are the ancestors that are believed to have powers like those of gods with access to strategic knowledge, and that are worshipped accordingly, with offerings and proper behaviour. The *matronae* and *matres* of the Lower Rhine region, to whom many reliefs and altar stones were dedicated in the Roman Period, may have been ancestral mothers of this type. They are always represented as three women of different ages. The great diversity of names, the relation of these names to local (culturally defined) kin groups, their clustering and their distribution in the region, suggest that these matrons were tied to specific communities.⁶¹ This ancestor cult was probably a continuation of an older, pre-Roman ancestor cult, although it adopted Roman elements such as the statues.⁶² This example shows that a kind of ancestor cult may have been widespread in the pre-Roman Iron Age in northwestern Europe.

8.4.3 The sacred

It was noted in the introduction that supernatural beings are often feared rather than trusted and loved. The supernatural is often felt to be larger than life, a quality that is

known as *holy or sacred*, and that is opposed to the *profane*.⁶³ The sacred is an important notion in the meaning of religious rituals.

Early in the history of religious studies, the sacred was an important concept. For the German philosopher of religion Rudolf Otto, the sacred referred to the human experience of the *numinous*, the both fascinating and dreadful presence of the divine, which, according to Otto, constitutes the basis for all religions.⁶⁴ The French sociologist Emile Durkheim considered the sacred as a representation of the social group itself.⁶⁵ Otto and Durkheim both emphasized that the sacred was something set apart or forbidden.

The experience of the sacred is expressed in many ritual actions, such as kneeling or covering the head. However, it is not the experience of the supernatural that creates the sacred. Rather, the sacred is created by ritualization. It is ritualization that "gives rise to (or creates) the sacred as such by virtue of its sheer differentiation from the profane".⁶⁶

The experience of the sacred may explain some aspects of ritual behaviour, especially the way rituals are completed, with cleaning up, destroying and even killing. The sacred reminds us of the *contagious*, which plays a role in our hazard-precaution system (see chapter 6.2). In fact, in many cultures, little difference is made between sacredness and uncleanness.⁶⁷ Like dirt (to be precise: things that are thought polluting), the sacred is something that does not agree with daily life, so it is set aside or even removed from it. Everything and everyone that has been in contact with the sacred adopts something of its sacredness and therefore needs to be feared. The term *taboo* is often used for this state. It may be felt that such a person or object cannot return to normal life, or only with precautions taken.

Two examples from written sources illustrate this point very well. The first one is a description by Tacitus of a ritual performed by some of the Germanic tribes belonging to the *Suebi*.⁶⁸ These tribes venerated the goddess Nerthus, who was really Mother Earth according to Tacitus. This goddess was said to sometimes enter the sanctuary that was made for her, and take place on a cart that was standing there, covered by cloth. When her priest would perceive this, the cart, pulled by cows, would be led through the lands of the tribe during several days. The places that were visited were decorated, all iron was locked away and it was a time of peace. After

61 Derks 1998, 119-124.

62 Derks 1998, 127-130.

63 *Profane* is sometimes mistakenly used as the opposite of *ritual*, from the idea that ritual necessarily is a religious phenomenon.

64 Otto 1917.

65 Emile Durkheim, 1912: *Elementary forms of religious life*. Cf. Bell 1997, 24.

66 Bell 1992, 91.

67 Douglas 1966, 7ff.

68 Tacitus, *Germania* 40.

the cart with the goddess had returned to the sanctuary, slaves washed the cloths and the goddess herself (apparently an image) in a nearby lake. These slaves then (were) drowned in the same lake.

The second example is quite similar. The Old Testament relates a story in which David and a large retinue bring the Holy Ark from a temporary abode to Jerusalem.⁶⁹ Along the way, the Ark threatens to fall and one of the men in the retinue, Uzza, lays his hand on it in support. This angers the god and he kills Uzza on the spot for his carelessness. This story expresses very clearly the idea that the supernatural is unpredictable and ambiguous; though venerated, it can also be dangerous. It is better to stay out of its way.

The examples of the Holy Ark and Nerthus make us understand that objects that are consecrated to supernatural powers will turn into something sacred, which needs to be feared. Precautionary measures will have to be taken before, during and after the ritual. Contact needs to be avoided, structuring, orderliness and cleanliness are called for, in short, ritualized behaviour is a proper answer to this invisible contaminant. It will also work the other way around, as we saw above: ritualized behaviour will intensify the idea that something sacred is around. Both reinforce each other considerably.

The concept of the sacred/contagious is important in the context of archaeology because it explains why the remains of religious rituals are often collected and destroyed or buried. In the example of early-medieval Eketorp (see above, chapter 8.3.2), the remnants of a ritual meal were collected and thrown into a water hole.⁷⁰ The Romans used ritual pits, *favissae*, in which they deposited the remains of a ritual that had become *sacer*.⁷¹ Offering something to supernatural beings of any kind often involves destruction, hiding, or storage in a special place (such as a sanctuary). That not only underlines that the offered item is no longer part of the human world, but also that a consecrated object or creature has become something to be feared.

8.5 Aspects of the concept of meaning

Liénard and Boyer draw attention to the fact that on a basic level, rituals can be described as 'meaningless acts', since the action units have no obvious empirical goals.⁷² As was noted in chapter 6.5, they are not connected to the purpose of the ritual in the same way as the various acts that are part of washing the dishes are connected to its goal. Nevertheless, rituals are usually said to be meaningful to the people who perform them. What is actually meant by this?

Anthropologists and archaeologists often create general theories to explain rituals. Examples are the binary oppositions of structuralism that are easily identified in any situation, or the fertility paradigm that considers all rituals to be fertility rites.⁷³ Such theories have often proved their value in specific cases, but they cannot be expected to have universal meaning, as is shown by numerous deviating examples and counterarguments. However, the sometimes bizarre and rigid applications of such general theories⁷⁴ do nicely illustrate that scholars are as good at creating meaning out of anything as anyone else. The real meaning of rituals, however, may well be overlooked that way.

The first thing to note once more is that words, symbols, or rituals do not have intrinsic meaning, but play a role in and derive their meaning from cognitive processes. Meaning is something that is inferred in the human mind as a result of external stimuli.⁷⁵ When the meaning of a ritual is concerned, it should be asked what inferences are made in the mind of the participants of a ritual by its elements.

In the second place, 'meaning' is often used as referring to the symbolic information that is supposedly transmitted during a ritual. In this view, a ritual is a form of symbolic, social communication⁷⁶, conveying culturally coded meanings and based on a ritual grammar that is similar to the grammatical rules of language. It is, however, not clear what these grammatical rules of ritual might be or why rituals would be necessary to convey meaning.⁷⁷ As Boyer pointed out, rituals do not actually convey much information other than information about the ritual itself: when, how and by whom it should be performed.⁷⁸ A feeling of urgency is usually associated with this information. Thus, the information transmitted in the first place seems to be directed at maintaining the ritual itself.

In the third place, 'meaning' has many levels of meaning by itself. Asking what meaning a ritual or symbol had for the people who performed or used it, we use an *emic* (insider's) approach. Participants in a ritual can answer questions about the meaning of a symbol or the purpose of the ritual, why it is done in a certain way, and what they experienced by partaking in it. We may also ask for a hidden meaning that participants themselves may not be aware of, but that may be perceived by an onlooker from outside, an *etic* (outsider's) approach. Although in anthropological literature, *emic* and *etic* approaches

69 Old Testament, 2 Samuel 6.

70 Backe *et al.* 1993.

71 Merrifield 1987, 44.

72 Liénard & Boyer 2006, 816.

73 Cf. Versnel 1989.

74 Some striking examples from the fertility paradigm are given by Versnel 1989, 52.

75 Pyysiäinen 2001, 39.

76 E.g. Leach 1968, 524.

77 Pyysiäinen 2001, 39; Humphrey & Laidlaw 1994; Liénard & Boyer 2006, 817.

78 Boyer 2001, 232-233.

often exclude each other, there does not seem to be any good reason why that is so. The *emic* approach tries to do justice to people's feelings and intentions, and any explanation must take these seriously. However, there may be hidden meanings and structures that are only, if at all, clear for an outsider, or for an inside philosopher. This is in line with the subconscious level on which most cognitive processes are operating.

As an example, we can think of Christian baptism of infants. If we would ask the parents why they have their child baptized, they will probably answer that it is a tradition, that they want to present their child to god and have it blessed, that they want to please the child's grandparents, and/or that they belong to this church and want their child to be part of it too. Most parents will not give the answer that the child needs symbolical cleansing of original sin or that the water actually means death and that baptism is a ritual in which their child will symbolically die to be reborn into a new life. These symbolical explanations are, however, not at all far-fetched for people who know their bible, and are well known to Christian theologians. A capable non-Christian researcher, who would compare the elements of baptism with passages in the bible and with published Christian dogmatism, might come to more or less the same interpretation as a Christian theologian, but would probably stress the meaning of baptism as a rite of passage. Both types of explanation, *emic* as well as *etic*, reveal part of the meaning of this ritual practice. The one is no truer than the other is. It should be possible to combine these approaches.

Another important term in this context is *exegesis*. Exegesis is more than: 'this is just the way it should be done'. Exegesis is the explanation that performers of a ritual themselves or scholars inside or outside the practising group give to a ritual performance. It is searching for deeper, non-obvious meanings, based on all kinds of associations and comparisons. In the example of baptism, the symbolic meaning of water, at the same time cleaning, death-bringing and live-giving, and all its implications, belongs to the domain of exegesis. Whitehouse argues that spontaneous exegetical reflection on the meaning of rituals by participants is triggered by rituals in the *imagistic* mode and then based on analogical association; in the *doctrinal* mode, exegesis is derived from the prevailing doctrine; in that case, the participants of religious rituals will usually leave the explanation to religious specialists.⁷⁹ The theories of *etic* scholars such as anthropologists and archaeologists often resemble the exegesis by *emic* scholars.

Lastly, it is important to realize that the meaning we ascribe to phenomena such as rituals or the remains of rituals in the archaeological record, our interpretation,

may be influenced by preconceptions of which we are unaware. That is the subject of the next section.

8.6 Interpretative biases

Archaeological interpretation, as any scientific or scholarly field, may suffer from unconscious preconceptions of its practitioners. These will inevitably lead to biased interpretations. Unconscious biases in our thinking will become less influential once we realize we have them, so it is necessary to bring them into the open. There are some specific biases that are to be dealt with when studying the remains of rituals: the *homo economicus* bias, the contagion bias and the human nature bias.

8.6.1 The *homo economicus* bias

The interpretation of rituals by archaeologists has suffered (and still suffers sometimes) from a bias in our thinking that originates from an ethnocentric view on the value of goods and raw materials and on the economic rationality of human actions. On the one hand, offerings with only little economic value, such as miniatures or parts of objects or animals, are often interpreted as a kind of cheating, because from an economic perspective, it is hard to imagine that anyone, including supernatural beings, would value them. On the other hand, it is incomprehensible that objects that were hard to get, or that we would consider valuable, were just buried somewhere for good. Since this seems a very uneconomic and irrational thing to do, deposits of valuable objects have always attracted the attention of archaeologists.⁸⁰

An influential interpretation of such deposits was the *prestige goods model*.⁸¹ In this model, depositing valuable objects is related to the prestigious value of metalwork. Deposition will create scarcity by taking objects out of circulation (economic ritual consumption), thus maintaining or raising the prestigious value of similar objects that are still in circulation. Moreover, deposition of valuable objects adds to the prestige of that segment of society that has access to them and thus helps in maintaining the *status quo*. As a prestige-enhancing act, it will usually be felt to be important that the act of depositing valuable objects is witnessed; offering valuable objects is not a private religious affair.

Bradley opposed to the prestige goods model because of its anachronistic character, echoing basic principles of capital market trade such as scarcity, inflation, demand and profit.⁸² Fontijn, in the same line, noted that the creation of economic scarcity is an *etic*, functionalist explanation, only made afterwards; it describes the effect of this practice, but does not explain why it was practiced the way it was, nor what it meant to the people who par-

80 Fontijn 2002, Ch. 1 and 2.

81 Cf. Fontijn 2002, 5.

82 Bradley 1984.

79 Whitehouse 2004b, a.o. Ch. 4.

anticipated in the ritual.⁸³ The second objection is that the model does not explain that depositional practices are usually selective in some way: some object types were, for instance, always deposited in rivers, others only in graves or only in bogs. Specific objects obviously carried specific meanings, not necessarily or exclusively as economic or prestigious valuables.⁸⁴ These objections do not mean to deny that the deposition of valuable objects, either as offerings or within a social context, can also enhance someone's prestige. As any other ritual, depositional practice may function in influencing someone's prestige in a positive or a negative way.

Explanations that primarily take the economic value of objects into account are rooted in the idea that people in the first place will behave economically rationally. If seemingly irrational behaviour such as ritual cannot be denied, it must have some economic function, such as creating scarcity. Economic value is usually defined as something we, in our society, would think valuable, especially precious or semiprecious metals, ignoring other materials and other ideas about value. Moreover, other motives of human behaviour tend to be disregarded. "Economic Man is a bourgeois construction", as Marshall Sahlins put it.⁸⁵

This bias, which is common in modern western thought, can blind archaeologists to some aspects of human life that certainly were important in prehistoric times and still are in our society, for that matter. In the first place, most people are not occupied with making a profit all the time, and expensive objects are not necessarily their most cherished possessions. Secondly, the possession of valuable objects may be considered of secondary importance, compared to the greater goods of personal, social and religious harmony, so they may be given up deliberately. Thirdly, the gods, especially when they are ascribed full access to strategic knowledge, may well be thought to accept gifts with symbolic rather than economic value. As was discussed in chapter 7.3.2, this should not be considered cheating. Finally, economic motives do not stand alone; economic life is intermingled with other aspects of life, such as religion, ritual and politics, and should not be considered in isolation.

8.6.2 The contagion bias

A second bias when it comes to the study of rituals has to do with the use of contagious materials: the *contagion bias*. Our vision on contagious materials can be a decisive factor for our thoughts on the character of a finds assemblage. The first reaction of several archaeologists upon the find of the deposition of eight human skulls in a thick layer of animal dung in Englum (the case study of chap-

ter 10) was that it could not have to do with ritual, precisely because dung was involved. Dung was considered to be a material that, being so dirty, smelly and 'unholy', could never have been used in any ritual.

This bias has two causes. In the first place, our vision on polluting material may not correspond to other people's views; what is contagious is defined by culture. Each society has its own views on what is contagious material and what is not, and on levels of contagiousness.

In the second place, we intuitively think that cleanliness is of utmost importance when we are dealing with ritual, especially religious ritual. However, that intuition is incomplete. Contagious materials (blood, semen, saliva and faeces) do play a role in many rituals, and the use of contagious materials and the protection against it through washing or burning are part of many ritualized actions.⁸⁶ In many cases, the meaning of the contagious material is reversed into its opposite. What is normally considered polluting, is used as something clean or even cleansing in ritual. That is not as exotic as it may seem. In our society, for instance, Christians drink the blood of Christ (which is thought to cleanse humanity of its sins) in an either symbolic or transubstantiated form, to underline that they take part in the church, the body of Christ.

The strength of the use of polluting materials in ritual lies in the memorable effects of bringing "a semblance of order"⁸⁷, using paradox and contrast. Contagion and purification, which is an important feature of ritualized behaviour, reinforce each other considerably. The use of (or reference to) contagious materials evokes strong emotions, as does the purification that is associated with and called for by this use. These emotions make contagious materials pre-eminently suitable for rituals. That implies that it should not come as a surprise when, in the archaeological record, contagious materials are encountered in contexts that appear to be related to ritual.

8.6.3 The human nature bias

The humanities of the 19th century tended to stress the primitiveness of early humans or peoples in far places, and their remoteness to the moral concepts of the researcher. These preconceptions, and their philosophical precursors (especially Hobbes' war of all against all)⁸⁸, were at the basis of the assumption that human kind is violent and selfish by nature. It must be admitted that this idea seemed consistent with the atrocities of European history, and it was supported by the Christian doctrine of original sin. In this view, modern scientists were, by their rationality, at the moral top of humanity; everyone

83 Fontijn 2002, 5-6.

84 Fontijn 2002, 6.

85 Sahlins 1972, 13.

86 Liénard & Boyer 2006, 817; also Douglas 1966.

87 Douglas 1966, 4.

88 Cf. Corbey 2005, 128; 2006.

else was to be controlled by religion and the restrictions made by society.

This view has been very influential in the social sciences, including archaeology. The common assumption that humans are violent and selfish by nature has resulted in a negative view on human existence and on society in the past, as can be shown from many one-sided interpretations of archaeological finds. Broken human bones can, in this view, not be anything but the remainders of cannibalism⁸⁹; single human skulls must come from head-hunting⁹⁰; human remains outside cemeteries must be the result of human sacrifice⁹¹; slavery must be common in human societies from the early Neolithic onwards⁹²; and finds of stone and metal weapons in the first place demonstrate that people continuously waged war on each other.⁹³ It is one side of what I will call the ‘human nature bias’.

However, the human nature bias has two sides. On the other side is the assumption that humans are good by nature and that ‘primitive man’ was a noble savage à la Rousseau, living in a prehistoric Arcadia that was later ruined by modern society. Something of this can already be found in Tacitus’ picture of the Germanic peoples (see chapter 2.3).⁹⁴ In archaeology, this view of a prehistoric Arcadia is supported by the unconscious reluctance of many archaeologists to admit that the people they study may have done things that we think disagreeable. We rather see them living their simple subsistence lives in a friendly world that is somewhat similar to pre-industrial rural life, although that was no Arcadia for most people then. This view results in equally biased interpretations as its opposite. “Empathetic approaches are, unfortunately, more than likely to lead us back into imposing our own unacknowledged preconceptions”, as Mike Parker Pearson stated.⁹⁵ As Raymond Corbey has shown, these two perspectives are not only relevant to archaeological interpretation; they are at the centre of the debate in the humanities today.⁹⁶

Hans-Dieter Bienert recognized both sides of this interpretational coin when he discerned two classic lines of interpretation in the literature on the finds of human skulls in Neolithic settlements in the Middle East.⁹⁷ The first line implies that human skulls are to be interpreted as trophies, “representing victory over an enemy, and embodying the power of the victor”. This view is diametrically opposed to the second line of interpretation, which implies that human skulls are “connected with the

practice of ritual ancestor worship, with skulls symbolizing, as *pars pro toto*, the deceased members of a family clan.”⁹⁸ Similar interpretations, belonging to one of both sides, are encountered in nearly all archaeological literature on uncommon human remains.

Two examples illustrate the type of discussions that involve preconceptions on human nature. The first is the interpretation history of a cemetery with thousands of children’s graves from 700-146 BC in Carthage. Stager, who himself took archaeological, historical and epigraphic evidence as indications that these graves are the result of a long practice of child sacrifice, noted that some other scholars interpreted it as a cemetery for infants and children who had died of natural causes since they thought this sacrificial practice was too gruesome to be true.⁹⁹ A recent discussion shows that the dispute has not settled yet, although the most accepted view is now that there is no real evidence of child sacrifice.¹⁰⁰ Adherents from both sides use archaeological and other arguments to prove their point, but more or less conscious ideas on what archaeologists want or not want their or other people’s ancestors to have done are clearly still involved in the debate.¹⁰¹

A second example is the discussion on the interpretation of pits with numerous human remains and other finds in the Neolithic settlement of Herxheim. The human bones were interpreted by Boulestin *et al.* as the remains of cannibalism¹⁰², but there is no general consent on this interpretation. Ian Armit argued that a convincing case can be made for a funerary interpretation on the basis of ethnographic analogy.¹⁰³ According to Andrea Zeeb-Lanz, “the bones had been excarnated and smashed as part of a ritual without any intent to use flesh or marrow as nourishment”.¹⁰⁴

Interpretations from either side of the coin can be valid in specific cases. In this study, single human graves and bones will be explained by practices such as excarnation and ancestor cult, but it is acknowledged that many of the bog bodies found in the northwest-European moors and bogs might represent victims of human sacrifice. That interpretations from both sides can be right is not only caused by the ambiguity of the archaeological evidence, which can often be interpreted in more than one way.¹⁰⁵

89 Cf. Zavadil 2007, Peter-Rocher 1997 and Knüsel & Outram 2006.

90 Cf. Bienert 1991.

91 Cf. Green 1998, Aldhouse-Green 2001; Peter-Rocher 1997.

92 Cf. Parker Pearson 2005.

93 Cf. Thorpe 2005

94 Tacitus, *Germania* a.o. 5, 18-19.

95 Parker Pearson 2003, 104.

96 Corbey 2005, 137ff.

97 Bienert 1991.

98 Bienert 1991, 20.

99 Stager 1980, 2-3.

100 Schwartz *et al.* 2012.

101 An article titled “Carthage Is Trying To Live Down Image As Site of Infanticide. Archaeologist in Tunisia Disputes Long-Held View Of Ancients’ Practices” in the Wall Street Journal, May 26, 2005, demonstrates that the debate goes far beyond academic interest; archaeologist Mhamed Hassine Fantar is quoted “We didn’t do it”.

102 Boulestin *et al.* 2009.

103 Armit 2006, 5; 10.

104 Zeeb-Lanz 2010.

105 Green 1998, 169; Parker Pearson 2003, 104.

It is also caused by human nature itself, which is neither completely evil nor altogether good.

Humans are by nature bipolar apes, as De Waal put it¹⁰⁶, capable of atrocious as well as of altruistic and loving acts. The morally good, in the sense of helping and not hurting, can be overruled by fear, aggression or peer pressure, resulting in atrocious actions. Religious or other rules in a society may sometimes forbid violence and atrocious behaviour, but they may also permit, or even stimulate such behaviour. The influence of religion and society on human morality is not always for the good. This shows that the purpose of social rules, including religious rules, is not primarily to control the evil nature of human beings. Society rather is a manifestation of human nature; by nature, humans are social animals that need to live in groups. As such, they are capable of aggressive and cruel deeds within as well as outside their own group (whether or not sanctioned by society or religion), but also of moral behaviour and altruism. Without moral behaviour and altruism, living in groups would not be possible. We would not be here if that were different in the past.

Both loving acts and aggression can leave traces in the archaeological record. Archaeologists dealing with finds that affect their own moral feelings should be aware of their view on human nature, and of the bias it can cause when interpreting them. Such finds make it necessary to be very clear about one's arguments *pro* or *contra* an interpretation. The only way we can decide which side to choose when we are dealing with such finds, is to have an open mind, to be aware of our preconceptions, and to look closely at all the evidence.

8.7 Conclusion

The meaning of rituals cannot be reduced to only one aspect. Rituals may have practical and functional aspects, induce individual experiences and emotions, have social and religious connotations, and have symbolic meaning. That is not only the case for rituals but also for other practices; working the fields, cooking food, slaughtering, or forging iron are activities that do not need to be ritualized, but that often will have other meanings besides their primary purpose.¹⁰⁷ All these meanings are valid and contribute to the meaning of rituals and other activities as experienced by the performers and participants, although they may not all be aware of all these meanings or experience them all the time. Rituals have more levels of meaning than the symbolic or the religious, and technological activities are not limited to the functional. Singling out only one meaning while ignoring others will only give a very limited understanding of any practice. All these levels also play a role when dealing with finds from the archaeological record. They may complicate the interpretation of finds and finds assemblages considerably.

Rituals trigger our unconscious preconceptions on the motives of human behaviour, on the nature of pollution and polluting material, and on human nature itself. These preconceptions will colour our interpretations of ritual practice in the past. We can avoid such biases by admitting and realizing that we are not just neutral observers, and by basing our interpretations on the actual evidence.

The next chapter concludes this part on the theory of ritual in a practical mode, tailored to the needs of archaeology. It will be attempted to formulate criteria for the identification of the remains of rituals, and to approach their meaning in a more practical way.

106 De Waal 2005, 227ff.

107 E.g., Bekaert 1998, on iron forging in Bantu Africa.

9

The remains of rituals in the archaeological record

9.1 Introduction

At the end of this exposé on ritual and religion, it rightly might be asked whether the ideas and conclusions from the previous chapters can be applied to the objects and contexts that we are dealing with as archaeologists. In archaeology, we will never know all the details of the rituals we study, since we never have more than some material remains at our disposal. This final chapter on the theory of ritual will follow a bottom-up approach, contrary to the top-down approach in the previous chapters. The first part will deal with the identification of the remains of rituals in the archaeological context in general, and with the archaeological concept of *ritual deposition*. Then, we will zoom in on the terp region, and discuss the identification of the remains of rituals in the specific context of terp archaeology. The result is a set of criteria, a toolkit, that help to identify the remains of rituals. At the end of this chapter, we will return to the interpretation of rituals. It will be argued that the concept of the *cultural biography* may successfully be applied to rituals.

9.2 Identifying the remains of rituals

9.2.1 Ritual versus non-ritual

A study on the remains of rituals in the archaeological record cannot do without a discussion of the way such remains can be identified, since they are usually not self-evident. Apart from a small number of remarkable finds assemblages that cannot be explained as anything but ritual, the majority of ritual assemblages is so similar to the remains of other activities that they will easily go unnoticed. Many archaeologists, at least in the Netherlands until recently, have a somewhat difficult relation with ritual; this has changed during the last decades under the influence of British and Scandinavian archaeology. Still, while practical explanations are usually taken for granted, the researcher of ritual in archaeology will always have to defend why specific finds are considered the remains of rituals. On the one hand, the difficult relationship arises from the nature of archaeological remains. Technological and ritual actions are often intertwined and similarities in the archaeological record between the remainders of technological or household activities and ritual activities make it difficult to distinguish between them. Understandably, archaeologists are reluctant to make unfounded and arbitrary statements. On the other hand, the knowledge of ritual phenomena often is cli-

chéd. ‘Rubbish’ seems a much safer category than ‘ritual’. Dealing with the remains of rituals would be much less like walking on thin ice, if it were possible to formulate criteria by which the remains of rituals might be identified.

Only some of the rituals performed in the past have left traces in the archaeological record. Of these traces, only a small percentage will be recognized as such by archaeologists. The finds that are identified as the remainders of ritual activities are therefore in no way representative of ritual behaviour in the past. Often only those finds that cannot be explained in any other way, will be identified as the remains of rituals. The use of this *negative approach* will underestimate the actual number of ritual contexts even more: ritual contexts that can also be explained as the result of some practical act or as waste (e.g. the remains of butchering), or features without recognizable content will be overlooked. Moreover, finds will be erased from the ‘list of rituals’ as soon as some practical explanation comes up. This demonstrates that the negative approach is implicitly based on the assumption that ritual and practical activities are separate areas of human existence. However, rituals are very often closely related to ordinary, daily practices, and activities may have ritual as well as practical aspects.¹ “... both ritual and rubbish disposal activities may be subject to cultural rules which are closely related to the classificatory systems and ideology of a society”, as Joanna Brück put it.² That means that even rubbish may show characteristics of the intentional. Brück’s remark also applies to technological processes. For example, it is usually impossible to distinguish ritualized butchering from ‘ordinary practical’ butchering on the basis of the bone material in the archaeological record.

Brück is one of the authors who argue that ritual and non-ritual practices are not mutually exclusive and that secular activities are not governed by functionalist logic alone.³ Ritual and non-ritual activities are often difficult to distinguish because many of the presumed characteristics of ritual practices, such as repetition, structuring, or expressive action, may be shared by non-ritual practices. Brück carries this line of thought even further: “many aspects of day-to-day life ... have a heavily ritual-

1 Hill 1995; Brück 1999a; Bradley 2005; cf. Fogelin 2007.

2 Brück 1995, 255.

3 Brück 1999a.

ized character because cosmological principles are deeply embedded within the structure of habitual practice"; in traditional and prehistoric societies "everything becomes subsumed within the category of ritual".⁴ She therefore proposes to avoid the concept of ritual, and rather accept that in prehistoric societies "... all activities, both 'ritual' and 'secular', are shaped by a very different sense of rationality and a different understanding of causation to those prevalent in our own cultural context."⁵

However, while the traditional view on ritual as a separate, non-profane category fits in western post-Enlightenment rationalism, as Brück argues⁶, the opposite of this view, that actions in the past were based on a different sense of rationality, overestimates the functionalistic rationalism of our own cultural context. It also downplays the rationalism of past societies. Mary Douglas already fervently objected to the idea that so-called primitive man is by nature deeply religious, and that "all the varieties of scepticism, materialism and spiritual fervour are to be found in the range of tribal societies."⁷ As was discussed in previous chapters, ritual and religion are firmly rooted in cognitive capacities of prehistoric as well as modern *Homo sapiens*. Although ritual and religious features will be more prominent in some societies and individuals than in others, there is no reason to postulate a dividing line between modern and prehistoric humans in that respect. Every group of human individuals, now and in the past, chooses specific actions and events to be ritualized, rather than others. Not every gesture is ritualized, and not every potsherd is the result of a ritual. If we accept that ritual is a useful category (which is the starting point of this study), ritual will still have to be demonstrated, so criteria for their identification in the archaeological context will have to be defined, if possible.

9.2.2 Criteria

To overcome the negative approach to ritual in archaeology, several authors have attempted to formulate positive criteria for the identification of the remains of rituals. These criteria often depend on the definition of ritual that is employed, either implicitly or explicitly, by the researcher. For those who associate ritual with religion, for instance, criteria are often aimed at discovering cult centres or sanctuaries of some sort. The most well-known example of such criteria are those formulated by Renfrew to identify religious ritual. Renfrew describes ritual as subordinated to and arising *from* religious belief.⁸ His criteria are specifically aimed at the identification of cult places, of the representation of the divinity and of religious symbolism; they are not applicable to other kinds

of ritual. Since ritual does not need to be connected to religion, criteria for the identification of rituals should clearly not be limited to the identification of religious ritual and religious symbolism.

Patterning in the material culture that might indicate ritual activity has been called structured deposition since Colin Richards and Julian Thomas coined this term in 1984. Over the last decades, it has become a popular concept in archaeology. Different authors emphasized different aspects of this concept, which has given rise to a multitude of equivalents, such as *special, deliberate, formal, placed, unusual, symbolic, selective, or intentional deposit*.⁹ These adjectives are often used to avoid the use of 'ritual', for instance because 'ritual' is thought to be meaningless in the light of the argument of Brück (see above), or because the identification of a deposit as ritual is too general to be informative.¹⁰

Some of the adjectives used with deposition suggest criteria for the identification of ritual deposits. *Structured* deposition itself refers to patterning in material culture. In its extreme form, it implies that statistically significant, non-even patterning indicates intentional, meaningful actions in the past. However, as Duncan Garrow pointed out in his recent discussion of the concept, the processes of everyday life also create uneven patterning, no less than actions that might be called ritual.¹¹ Uneven patterning is caused by human activities so it cannot be considered meaningless, but it does not necessarily indicate ritual activity.

The concept of structured deposition is closely related to the concept of *selective* deposition. This concept is based on the fact that objects used during a ritual will not be chosen at random; some objects tend to be used during specific rituals and in specific contexts rather than in others. Unevenness in the distribution of specific classes of material culture might therefore be related to ritual activities. However, as is the case with structured deposition in general, uneven patterning can result from all kinds of everyday processes.

The concept of structured deposition is implicitly based on the idea that deposits are the result of specific behavioural regularities. This concept is usually combined with a definition of ritual that emphasizes repetitiveness. However, everyday human behaviour is repetitive itself. Thilderkvist described this as the *paradox of repetition*: "...if a type of deposit is not repeated it will usually not be interpreted as ritual, but if it is repeated too often it might not be considered a ritual either."¹² From what is known of ritual dynamics (see chapter 7), it will be clear that only a small part of ritual activities can be identified if we use repetitiveness as a criterion. Rituals are almost

4 Brück 1999a, 325.

5 Brück 1999a, 327.

6 Brück 1999a, 317ff.

7 Douglas 1970, x.

8 Renfrew 1985, 12.

9 Cf. Garrow 2012.

10 Morris & Jervis 2011, 70.

11 Garrow 2012, 110.

12 Thilderkvist 2013, 28.

never repeated in the same way. Indeed, in the archaeological record, identical finds assemblages are extremely rare. Comparable assemblages, however, are rather common; we are often reminded of other finds because of similarities in some of the details. If it can be established that these are the result of ritual activities, such partial similarities point to dynamic ritual behaviour.

The term intentional deposition is actually a pleonasm, because deposition is intentional by nature. The use of this term often refers to a characteristic of a deposit by which it is identified as a ritual deposit. It appears to be intentional, rather than random or accidental. This criterion does not depend on patterning, but may apply to once-only depositions. It requires that the researcher tries to reconstruct the event during which the deposition was made.¹³ Intentionality may be inferred from some special quality of a finds assemblage, for instance its place in the landscape or in a sequence of activities, deliberate destruction, the use of specific colours and structures, or other characteristics of ritualized behaviour. Intentionality is part of most criteria that are implicit in the adjectives used with deposition, such as formal or placed. It seems to be the best lead when we want to identify the remains of rituals.

Clearly intentional and deviating depositions are sometimes aptly called *odd deposits*, a term used by Brück.¹⁴ On the scale of structured deposits, odd deposits are on the opposite end of subtle, quantitative material culture patterning.¹⁵ Odd deposits are the type of finds assemblages that are so curious that they cannot be interpreted as anything but the result of ritual activity. However, such deposits are rare, and do not represent the full range of ritual practice in any context. Most ritual deposits are less conspicuous, and can only be identified in the framework of their archaeological context: the character of the landscape and of the site (e.g. a large or a small settlement, a natural feature), the period involved, and the results of previous research. The next section will concentrate on the identification of the remains of rituals in the specific context of terp archaeology.

9.3 The identification of rituals in terps: a toolkit

The identification of finds assemblages as the remains of rituals is clearly not self-evident. After the general discussion on the identification of the remains of rituals in the archaeological record above, a more practical approach to the identification of ritual will be employed below, taking conditions in the terp region of the northern Netherlands into account.

As was argued above, positive criteria are to be preferred to negative ones (“it must be ritual because it can-

not be something practical”), not only because these might widen the identification of the remains of rituals considerably, but also from the insight that negative criteria are related to the separation of ritual from everyday life, a position that is untenable. Any aspect of human existence may be ritualized, and ritual and practical or technological actions can be inextricably intertwined. That does not necessarily lead to the conclusion that everything is ritual, or that ritual is a meaningless category. Although most of ritual behaviour in the past is unknowable to us, the rituals that we may be able to identify can still give us valuable insights in past practices and in their backgrounds. There is every reason to search for indications of ritual practice in the archaeological record.

The non-ritual, random or practical is usually taken for granted and presented as if it does not need to be argued, although non-ritual finds and contexts can often not be identified with any more certainty than their ritual counterparts. In fact, if we, following Chapman, accept that archaeology is not the science of rubbish and that many of the fragments of artefacts we find are actually no rubbish at all but intentionally deposited, meaningful personalized objects¹⁶, the percentage of rubbish in any prehistoric or protohistoric excavation must be much smaller than is usually taken for granted. Nevertheless, part of the find material must still be rubbish that was disposed of, or the result of some non-ritual or random process. Identification of the remains of rituals implies that we can substantiate why specific finds are related to ritual. That is only possible if we know what to expect of accidental, non-ritual remains in the archaeological record under consideration, in this case of terps. That is where I will start, drawing on the experiences of myself and my colleagues as archaeologists in the terp region.¹⁷

9.3.1 The identification of the non-ritual

9.3.1.1 Features

As we have seen in chapter 3.3.1, early terps were only rectangular platforms, just large enough for one house. These platforms were made of dung layers and/or salt marsh sods. Fences, pits, ditches and watering holes, situated in the salt marsh, surrounded them. The groundwater level in this area was high and the salt marsh was flooded regularly. That implies that features such as pits could be used for occasional activities such as firing of pottery, but not, for instance, for permanent storage of supplies that needed to be kept dry.

Terps that go beyond the stage of the first platform have far more complicated stratigraphies. They consist of (accidental or intentional) heightening layers and the

13 Hill 1995, 99.

14 Brück 1999b, 152.

15 Garrow 2012.

16 Chapman 2000, 4.

17 In particular Johan Nicolay, Gilles de Langen, Wietske Prummel, Mans Schepers, Daniël Postma, Marco Bakker, and Theun Varwijk of the Terp Research Group of the University of Groningen.

remains of houses and other structures, into which on all levels many pits, ditches and wells have been dug. Some pits may have been used as small cellars to store food, but only where water tables were lower than the deepest part of the pit. Wells would occasionally be cleaned or repaired¹⁸, so objects that accidentally fell into wells could be retrieved.

After the use of dug features ended, they were back-filled with salt marsh sods or with soil from the terp itself. The artefacts that came with the filling soil could be contemporary with the backfilled feature, but also be considerably older. The time difference between the filling soil with its contents and the feature that was back-filled may amount to several centuries. Filled-in features sometimes were partly dug away later to backfill younger features again. As a result, artefacts from all periods can be mixed, increasingly so in later habitation periods. That is also one of the characteristics of the non-intentional: in terps, finds from several periods of habitation are usually mixed. It is well possible that such mixed finds were part of ritual deposits in the past, but these earlier deposits cannot be identified anymore.

9.3.1.2 Refuse

Refuse was not a problem for terp inhabitants as it is in our society. Metal could be melted and reused; offal and the remains of meals were eaten by pigs, dogs, crows or seagulls; broken or decayed wooden objects as well as wickerwork could be burnt; dung (which nowadays is often considered polluting waste) was used as fuel and as an insulating constituent of floors and heightening layers (see chapter 3.3). There was hardly any glass and the packing material that forms a major part of our refuse did not exist. Bones and sherds could be reused in different ways. What remained in the end to be disposed of cannot have been more than clean bone fragments, ashes from the hearth, cinders and slag from metalworking and other pyrotechnic activities, and sherds. This material did not constitute a threat to hygiene or health.

From a practical or hygienic point of view, it was therefore not necessary to burn rubbish; the extremely small percentage of burnt animal bone fragments in terp excavations indicates that it was indeed not normal practice.¹⁹ Special refuse pits were also unnecessary for hygienic reasons, although it can, of course, not be proved that refuse pits were not in use in terp settlements. Pits filled with sherds and bones are regular finds, but many of them may be ritual deposits. It is quite possible that the refuse pits that are often taken for granted in archaeological site reports actually did not exist in the terp region.²⁰

18 Ladders are sometimes found in wells from the Roman Iron Age (Hänninen 2008, 453-454).

19 E.g. Prummel 2008.

20 This not only applies to the terp region; see for instance Morris & Jervis (2011, 73) on pits in Anglo-Saxon contexts in England.

It is also unlikely that refuse was dumped in ditches and creeks. There was, for instance, no refuse found on the bottom of creeks and ditches during the excavation in the terp sole of the terp of Englum (the location of the case study in the next chapter). Although potsherds and bone fragments are usually found in the fill of ditches, they were part of the soil that was used for backfilling after the use of these watercourses ended.

There might have been rules concerning the disposal of rubbish that give it a structured appearance; it is, for example, conceivable that rubbish heaps were only allowed at a specific side of the house, while other sides were reserved for other activities. The few complete house plans that have been excavated with their immediate surroundings do not permit any conclusions on such depositional practice in our research area. Middens have not been found so far in or near terps in the northern Netherlands, and refuse was not dumped on dung heaps, to be spread over fields with the manure later, as will be shown in the next chapter. Dung heaps intended as depots for manure were not in use anyway, since dung was probably not used as a fertilizer on salt marsh fields (see chapter 3.3.3). In Noord-Holland, it was established that the floors of dwelling areas were empty of debris; rubbish seems to have been dumped in byres and in drainage ditches surrounding house plots.²¹ In the terp region, dwelling areas are usually not very well preserved; byres, such as in Ezinge (see chapter 11), do not seem to be the locus for dumping waste. It is likely that refuse was just thrown outside the house, near the platform, where it would be covered by other rubbish, heightening layers or sediment, or from where it spread over the terp and its surroundings. High floods could reach this material and sometimes washed it away. There was no need to dump it in special refuse pits, and it was almost certainly not dumped in creeks and ditches that were still in use. Another conclusion to be drawn is that it is very important to distinguish between primary depositions in dug features and the objects that came with the fill.

9.3.1.3 Material categories

The most common find categories in terps are potsherds and bones. Smaller categories are wood, stone and metal. Other categories such as glass and textiles are rare. Preservation conditions for organic materials are excellent. Human and animal bones, wood, dung, and botanical remains are usually well preserved. Iron objects from the early Middle Ages are regular finds, but iron from earlier periods is usually corroded heavily, if it occurs.

Complete pots in the archaeological record will often be the remains of rituals. Complete pots were not buried permanently in non-ritual practices. Accidentally, they may be found on the bottom of wells, owing to broken

21 Therkorn 1987, 109.

ropes. Complete pots may have been used as containers in storage pits, but they would normally (that is non-ritual) not be left there.

Broken pottery was recycled as a temper for clay, or for making spindle whorls or playing counters.²² Large fragments were sometimes reused and reshaped into small dishes²³, lids or other useful items. The remaining fragments were probably thrown away as described above. They gradually spread over the terp and were further fragmented by trampling. As a result, large or fitting sherds only seldom occur in discarded waste.

The bone material from terp sites such as Englum usually include many fragments of post-cranial as well as cranial fragments of cattle, sheep, horses and pigs.²⁴ This shows that all parts of animals were used, including bone marrow from the long bones, and the brains. Bones were also used to make a variety of implements. After a meal and after butchering, dogs had a chance to eat the remains and gnaw on the bones, as is shown by many gnawing marks on bones and by coprolite research.²⁵ Later trampling still added to fragmentation. Thus, refuse of butchering and meat consumption is characterized by the strong fragmentation of bones. Occasionally, dead animals may have been buried complete because they died of a specific disease or belonged to a species that was normally not eaten (such as horses or dogs in some regions and periods). However, there are no indications that specific species were excluded from consumption in the terp region; even horses and even dogs were occasionally eaten besides cattle, sheep and pigs.²⁶ If animals died of a disease that made them inedible, it is unlikely that they were cut into pieces. Deposited articulated parts of animals (the Articulated or Associated Animal Bone Groups, *ABGs*, defined by Hill)²⁷, will usually be the remains of rituals.

The excellent preservation in terps certainly goes for *wood*. Trees did not grow locally on the salt marshes, nor on a terp during the first centuries of a terp's existence.²⁸ The surface areas of the young terps were small and there were no suitable places for trees to grow, beyond the influence of seawater and sea wind. The inhabitants of terp settlement had to obtain wood from inland areas where trees would grow²⁹, or collect driftwood along the coast. That implies that all wood (even every twig) that is found in early layers of terps was brought there. On older terps with a sufficiently large surface area, some species such as elder (*Sambucus nigra*) may have grown, as macro-

botanical research indicates.³⁰ However, these trees and shrubs could not meet the demand for wood of the settlement, so wood still would have to be obtained elsewhere. The presence of wood, even if unworked, always needs an explanation. The primary use of wood on terps was in structures such as houses and wells. Fuel was scarce, so wood that had lost its function would usually end up as firewood.

Not only wood, but also *stones* needed to be taken to the area from elsewhere.³¹ That implies that every stone found in a terp is brought there with a purpose; stones were, for example, used as a tempering of clay, as cooking stones, or as grinding, hammering, whetting and polishing stones. A major part of the stones found in terps come from areas with surfacing boulder clay inland, where they were collected or exchanged. The large amount of stones found in many terps suggests they were easy to come by.

Some conclusions concerning the non-intentional and non-ritual can be drawn from the above:

- Refuse was not dumped in pits, creeks or ditches, but spread over the settlement.
- Except in features from the first habitation phases, finds from all periods are usually mixed, in terp layers and backfilled features.
- Discarded finds do not occur concentrated, except locally, directly near a platform, but are scattered over a wide area.
- It is important to distinguish deposits from objects that came with the fill of a feature.
- It is hardly ever possible to reconstruct pots from discarded potsherds.
- Animal bones are usually fragmented.
- Worked or unworked wood that was left somewhere was left there on purpose, since wood could be re-used as firewood.

Characteristics of the non-ritual in terp archaeology, as sketched above, cannot simply be reversed, resulting in characteristics of ritual. For instance, remains that are not scattered, or an assemblage with objects from only one period, cannot be interpreted as 'ritual' just like that. However, such finds do call for attention.

9.3.2 The identification of rituals

In the above, it was established how the 'non-ritual' can be identified. Or, since remains of rituals may well be hidden among the 'non-ritual', we should rather say: it was established how those finds and contexts may be identified that appear so accidental, either by the way the finds originally landed in the ground or by later distur-

22 E.g. Nieuwhof 2014b.

23 Nieuwhof & Prummel 2007, fig. 8.2.

24 Prummel 2008.

25 Zeiler 2009.

26 Prummel 2006; 2008.

27 Hill 1995, 16.

28 Schepers *et al.* 2013.

29 Bottema-McGillavry 2008.

30 Nieuwhof & Woldring 2008.

31 Nieuwhof *et al.* 2014.

bances, that they cannot be related to ritual. That leaves a rather large, grey area of inconspicuous finds that cannot with certainty be connected to ritual, but that might still be ritual deposits. This is the case, for instance, for the remains of ritual meals, which may be difficult to distinguish from ordinary offal (assuming that such a category exists), or for the deposited fragments of personalized objects, which may be very similar to household waste. In the case studies of the following chapters, it will be attempted to identify contexts that with relative certainty can be related to ritual practice, while acknowledging that many ritual contexts certainly will be missed.

A basic principle in the identification of ritual activity is that human activities are usually not random. People, now and in the past, normally act quite purposefully and rationally within their worldview, only seldom lose their belongings, and bring some order in their living environment. In most cases, certainly in terp settlements that remained occupied over a long time, people had time and opportunity to order their belongings, give them away, take them to a new home, or leave or deposit them somewhere. Even if they suddenly died, others could do that for them. Therefore, we can be confident that in general, usable and many unusable objects in the archaeological record are the remainders of intentional actions, rather than objects that were lost, overlooked or forgotten.

Moreover, terp settlements are not like Pompeii or Herculaneum. Remains found in terps do not represent a specific moment in history, a frozen moment in time from which the people have somehow disappeared. The pots and pans, the tools and other belongings that we find have not been left where they were last used or stored. The objects we find only rarely directly represent specific activity areas.

The identification of the remains of rituals may combine several approaches. First of all, finds should be examined as part of a specific context. Possible characteristics of ritual deposits, as well as contrasting characteristics of the non-ritual, then further help to identify them. Finds can also be compared to the remains of rituals that have been identified in other regions. Finally, arguments from ritual theory may be used to identify the remains of rituals.

1. Contextual approach

The first approach can be summarized in the words of Hill: "it is to consider in detail, using all the available evidence, how the specific material in a specific feature actually ended up there."³² That means that we will have to understand and describe the actions and processes that caused and influenced the finds and their context as we have found it, that is the 'life-history' of features and

assemblages.³³ Hill formulated a number of questions, which need to be answered when identifying ritual³⁴:

- a. How was this material and this context transformed after deposition? What is preserved and what is not?
- b. Which activities in the past produced the material we recovered?
- c. What happened to this material before it entered the archaeological record?
- d. Why did it enter the archaeological record; was this accidental or deliberate?

These questions should be answered as thoroughly as possible, before any interpretation can be attempted.

2. Characteristics of ritual deposits

In the above, criteria such as structuredness and intentionality were discussed on a theoretical level. The criterion of intentionality is also part of Hill's fourth question in the above. Here, it will be attempted to formulate practical criteria, or rather characteristics of ritual deposits, that can be applied to finds and features.

- *Selection.* Objects deposited during a ritual will not be chosen at random. That implies that specific classes of objects were selected to be deposited during specific rituals and in specific contexts rather than in others. Selection is, however, not an easy criterion, as was already noted in the first part of this chapter. It should be demonstrated that the supposed selection is not the result of non-ritual or random practices and processes.
- *Association or avoidance.* Directly linked to the previous criterion is the criterion of association or avoidance. It implies that specific objects are often found together, or never. It can also mean that specific objects are often found in specific contexts, or never.
- *Repetitiveness.* More or less the same finds assemblages are found frequently, indicating recurring rituals. It should be noted that only a limited number of rituals can be identified that way, as was argued repeatedly in the previous chapters.
- *Structure.* This criterion is not the structured deposition discussed above in 9.2.2, which is used as an equivalent of ritual deposition. The criterion of structure is concerned with the structures that come with *ritualized behaviour*. These may, for instance, include specific shapes or the use of specific colours.
- *Special places.* Objects found at locations that are thought to have a special meaning, especially so-called liminal places (e.g. rivers or thresholds), may often be ritual deposits (see chapter 7.3.1).

³² Hill 1995, 99.

³³ Hill 1995, 30.

³⁴ Hill 1995, 31.

- The *shape and size of a feature* can indicate ritual, in particular if it can be demonstrated that a feature was dug especially for the deposit concerned. For example, a pot may be placed in a small pit just large enough for it (see e.g. the deposit of Roden, chapter 8.3.2).
- *Special placement* may indicate ritual practises. Examples are upside-down pots or animal or human bodies in unnatural positions.
- *Single and multiple finds* have been contrasted to identify ritual (Bradley 1990, 6). Finds of single complete objects have often been explained as accidental losses, but they should not be ignored as possible ritual deposits. Multiple objects are often interpreted as being deposited in one go, but they might be consecutive deposits of single objects, especially in wet environments. Deposits of more than one object need not be ritual, but can be hidden caches in times of danger (see also below).
- *Special objects* are involved, for example miniatures, symbolic objects, or personal and potentially inalienable objects (see chapter 8.3) such as hair, nails, clothing, weapons, jewellery or human bone.
- *Complete objects* are part of the deposit. Complete objects were probably not discarded as waste. Accidental loss may account for some of the complete objects in the archaeological record, but often does not seem to be a satisfactory explanation for the complete objects in excavations. It should at least be explained why the objects were left behind when they could easily have been retrieved.
- The *utility* of deposited objects may be a criterion. In general, not only complete objects but also recyclable valuable materials such as metal, or imported base materials such as wood or stones may be part of ritual deposits. Edible food will usually not have been carelessly discarded.
- *Special treatment of objects* can be used as an indication of ritual (deliberately bent swords were, for instance, found in the river near Kessel-Lith, see chapter 5.3.1).
- The *presence of food remains* in a deposit can be used to distinguish between a ritual deposit and a non-ritual hoard.³⁵ It will not be part of the latter.
- *Irretrievability*. It has been considered of crucial importance whether a deposit could be recovered or not.³⁶ The distinction often corresponds to either dry or wet locations. Irretrievable objects must have been ritual deposits. If objects could be recovered without much trouble, they were thought to be have been buried to hide them (especially if valuable metal objects were concerned). If this criterion is used, it

should at least be explained how temporarily hidden objects were protected against decay in the soil.

These criteria are best used in combination; they can strengthen and confirm each other. It should be noted that these criteria can only be used in a positive way. They cannot be used as evidence to the contrary, in situations to which they do not apply. Rituals that are not repeated in the same way are still rituals. Special or complete objects, or a special combination of such objects in a deposit may suggest selection and ritual, especially when such deposits are recurring, but that does not mean that deposits without special or complete objects are necessarily non-ritual. Many objects used in rituals may have been damaged or fragmented on purpose prior to deposition. However, if a deposit does not show any of the above characteristics, we have no way of demonstrating that we are dealing with ritual deposition.

3. Deviations from the non-ritual

The criteria mentioned above may be complemented by a number of criteria based on the identification of the non-ritual as described in the previous section. As was noted there, the characteristics of the non-ritual cannot automatically be reversed into characteristics of the ritual. However, they may be used in combination with other criteria, as supporting evidence:

- There are indications of deliberate damaging.
- Fragments of one object are found together.
- Bones are not fragmented.
- Bones are found in articulation.
- Objects are complete.
- Objects or fragments are found together with special objects.
- Edible food was deposited.
- Depositions were made in one go and were covered immediately.

4. Arguments from ritual theory

Some additional arguments for the identification of rituals are provided by the theory of ritual.

- Purification, washing and cleaning, symmetry and exactness, ordering and arranging things, special numbers, and the use of special colours belong to the domain of ritualized behaviour.
- Finds near thresholds, entrances and boundaries may be part of rituals such as rites of passage.
- Not only complete or special objects, but also fragments of personalized objects may be used in rituals; single fragments of objects cannot be dismissed from ritual beforehand. Assemblages of fragments from many different objects might be meaningful fragments that were exchanged and accumulated before deposition.
- Personal belongings such as hair, clothes, jewellery or weapons often play a role in rites of passage.

³⁵ Bradley 1990, 11; Merrifield 1987, 36.

³⁶ Bradley 1990, 5; Simek 2003, 65.

- Polluting materials (blood, excrements, etc.) may well be used in rituals.
- Many rituals include communal meals, which can sometimes be identified from the remains of food and (broken) tableware.
- Only in exceptional cases (catastrophes, enemies), death will not be ritualized. Rituals will always accompany the death of group members, although these may be very simple. Outsiders may receive different treatment, but something will always have to be done to a corpse. That means that human bones will usually result from funerary rites or, possibly, human sacrifice, and cannot be dismissed as rubbish. Since burial customs in the coastal area of the northern Netherlands are largely unknown, all human remains will be treated as the remains of rituals in this study.

5. Comparisons

The fifth approach makes use of the characteristics of the remains of rituals from about the same period that have been identified elsewhere by other researchers. Objects that were part of deposits in those areas may also be meaningful objects in our research area, and may therefore be used as indicators of ritual here. From chapter 5, the following characteristics can be summarized:

- Remains of rituals have convincingly been identified outside settlements, especially in wet contexts, and within settlements, associated with, for instance, houses, wells, pits and boundaries.
- Human remains are variable: complete, single skeletons in various positions and with various orientations, sometimes placed on hay-like material; bog bodies; cremation remains; partial skeletons; and single bones, especially skulls, skull parts and long bones. Foot bones are sometimes missing from complete skeletons.
- Ritually deposited animal remains are usually of domestic animals. They occur as complete skeletons, partial skeletons, as single bones (especially skulls with and without mandibles and lower limbs or those combined); or as concentrations of non-articulated complete bones. Foot bones are sometimes missing from complete skeletons, heads may be twisted, legs flexed. Skeletal parts of different animals are sometimes combined.
- Ritually deposited pottery may be complete (serving as containers) or partial. Complete large, small or miniature pots can be placed upright or upside down.
- Worked wooden objects such as wheels and bows have been deposited semi-finished, used or worn out. Unworked wood was also identified as part of ritual deposits, especially non-local species.

- Besides these categories, deposited objects may include quern stones, polishing stones, ceramic artefacts, cattle horns, metal objects such as brooches and coins, weapons (especially in the western Netherlands and the central river area), human hair, balls of yarn and, very rarely, carved wood.

From the above it will be clear that there is no single criterion for the identification of the remains of rituals. The approaches towards the identification of ritual presented in this chapter together form a toolkit, rather than a single tool. This toolkit not only helps in the identification of the remains of rituals, it is also usable if we want to understand them. That also applies to so-called *odd deposits*³⁷ mentioned above, finds assemblages that are so curious that only incurable anti-ritualists will deny their ritual character. Even though they are usually identified as ritual by applying the negative approach (that is: other explanations cannot be conceived), it is worthwhile to describe them in terms of positive criteria in order to better understand them, and through them the remains of rituals in general. Part 3 will start with the odd deposit that was the incentive for this study, the find of eight human skulls in a dung heap in the terp of Englum in the province of Groningen.

9.4 Approaching the meaning of rituals: a cultural biography of rituals and symbols

Rituals that leave traces in the soil will only be a small part of the ritual activity within human societies, and we often do not know whether features and finds are the result of a ritual or of some other action. Despite these obstacles, we might nevertheless use these remains to say something about their meaning for the people who performed them, and about ritual activity within a society. Once we have decided that ritual actions are behind a specific finds assemblage (this step was elaborated upon in the previous sections), we have tools available that help us to approach the meaning of ritual actions for the people who performed them.

The first of these is a *holistic approach*, which is aimed at all aspects of life within a specific society, and in which detailed investigation of all material categories in an assemblage is combined with a thorough description of its context. This requires intimate knowledge of the archaeology of the area and period and of its results, and the motivation to make the most of the data in hand. If intentionality can be established, the deposit should not be isolated from its context, but be interpreted against the background of its social, cultural and natural environment. It should be attempted to answer questions such as: How did this assemblage come into being, that is, what actions and processes caused and influenced it? Was it

³⁷ Brück 1999a.

a *primary deposit*, in which the deposition itself was the main ritual, or a *secondary deposit*, which concluded a ritual that was performed above ground? What may have been the personal, social, economic, religious and/or political *occasion* on which the ritual was performed, and what may have been its intended purpose? What are the various *levels of meaning* of the ritual? And what are the mental, social or historical mechanisms underlying it?

To answer these questions, attention should be paid to:

- the *order of the actions*.
- the *origin of the ritual elements* such as actions or objects.
- the *place* where it was performed.
- the *participants*: who were they (age, sex, profession), how many were there, were religious specialists involved, was it an individual or a social affair.
- the involvement of the *supernatural* (as special agents, special instruments or special patients, see chapter 7.3.2).
- *ritualized behaviour*, that can be inferred from the presence of orderly structures, special colours or numbers, signs of purification, thresholds or boundaries, or other features from the precaution repertoire (see chapter 6.5).
- *symbolic meanings* of the various elements (actions, objects, place etc.).
- *technical actions* (e.g. butchering, cooking).
- the *function of objects* in the ritual.
- the *raw materials, technology, origin and history* of these objects.
- the way of *disposal* of objects and other remains involved in the ritual.
- signs of *eating* or feasting or another use of food.
- signs of the *doctrinal or imagistic modes* (see chapter 7.4).

The resulting narrative resembles a *specific cultural biography*.³⁸ The cultural biography has been an important concept in Dutch archaeology over the past decades. It has not only been used for the study of the life-paths of movable objects and the meanings these objects may have had in different cultural contexts, but also for houses and landscapes.³⁹ Writing the cultural biography of things directs the attention of the biographer to aspects that might not be noted otherwise.

Cultural biographies come in two kinds: *specific* biographies vs. *generalized* biographies.⁴⁰ A specific cultural biography follows the life cycle of a specific object. In his study of house plans in the southern Netherlands, for instance, Gerritsen compared specific biographies of houses, which resulted in a generalized biography of

houses in this specific region and period; thereby it was possible to show changes in the life cycle of houses and of settlements.⁴¹ It is often not possible to examine the biography of individual objects, but it may still be possible to construct a generalized biography, based on patterning. Fontijn's biography of Bronze Age swords and other bronze objects, for instance, is based on patterns in use and deposition, not on individual life cycles.⁴²

The concept of cultural biography might be useful when describing symbols and rituals. It brings with it the important notion that alien objects or ideas do not keep their original meaning, but are culturally redefined and put to use.⁴³ That is in accordance with the argument discussed in chapter 8, that meaning is not an attribute of things, but is created and recreated continually in people's minds. This also applies to the meaning and use of ritual elements and of symbols. Ritual elements and symbols may spread widely, but they will have their meaning and use redefined in any new context. This implies that we never can trust that remains of rituals from different places and times are the result of the same rituals and the same ideas, despite striking resemblances.

A cultural biography of a symbol should describe when it came into existence, its dissemination within and outside groups, on which associations it might be based, how and when and by whom it was used, whether meaning was added or lost during its time of use, and, if so, when it finally disappeared. Although it will only be possible to describe some of these aspects, that may help to reveal something of the meaning of the symbol for the people who used it.

Used for rituals, a comparison of specific biographies will add to the understanding of rituals and lead to generalized biographies. These can be constructed for particular rituals or elements of rituals that frequently occur. This enables us to identify categories of rituals. Applied to ritual elements, generalized cultural biographies can provide an understanding of the use of these elements in various rituals over time.

Comparing specific biographies leads to *generalized cultural biographies of rituals*, in which attention might be paid to some additional aspects:

- the *beginning* of this type of ritual and its possible relation with social, cultural, political or natural changes.
- the *origin* of the various elements in already existing rituals
- the *repetition* of the ritual over time (e.g., seasonal, irregular, or related to specific occasions)

38 Kopytoff 1986.

39 Gerritsen 1999; 2000; 2003 and Kolen 2005 respectively.

40 Fontijn 2002, 26.

41 Gerritsen 2003.

42 Fontijn 2002.

43 Kopytoff 1986, 67.

- *variations* in the elements of the ritual
- *changes* in the ritual over time and in different places
- the *end* of its use

It will almost never be possible to describe all these aspects on the basis of the archaeological record. However, a perceptive researcher with a thorough knowledge of the results of archaeological research of the area and period concerned, and a willingness to spend some effort and resources on the analysis of the material remains of a deposit, will often be able to make a partial biography. This will reveal at least something of the many levels of meaning of the ritual.

9.5 Conclusion

At the end of this chapter, we can draw the positive conclusion that it is possible to identify the remains of rituals in the archaeological record, and to approach their meaning. For the former, we have a toolkit of criteria at our disposal. For the latter, we can follow different lines of inquiry. These are not aimed at the ritual in isolation, but start from a holistic view on ritual practice as part of individual, social, cultural, economic, and political life. The first of these lines is a *detailed and thorough analysis of all components* of the finds assemblage and its context, using all the methods that the archaeological discipline has at its disposal for the study of contexts and of material culture: stratigraphy, c- and n-transforms, typology, distribution, dating and isotope research, bio-archaeological and geophysical research, the composition and origin of materials, etc. The results of this analysis can be used to answer the question: What were the actions and processes that resulted in the assemblage as we found it?

The second line of investigation is aimed at a *comprehensive description of life within a specific society*. The detailed investigation of all elements of the assemblage is combined with a thorough description of contexts on all levels, thus providing answers to the question: how do the various components of a ritual fit in the natural, social, economic, political or religious contexts of this society, insofar as we know it? In this study, the chapters of Part 1 were aimed to provide such a comprehensive description for the research area, and, with that, the necessary background for the finds that will be examined hereafter in Part 3.

In order to approach the various levels of meaning of the ritual, the third line of inquiry is a narrative, *aspecific cultural biography* of a ritual, that makes it possible to assess various aspects such as its religious or non-religious character of a ritual, the nature of supernatural beings involved, or the occasion of the ritual. Finally and ideally, specific cultural biographies can be compared, in order to create *generalized cultural biographies* of rituals, aimed at describing types of rituals and their history.

Although it will never be possible to reconstruct all details of the ritual as it was performed in the past, or to understand its full meaning, these lines of inquiry will allow an interpretation of the remains of rituals that goes beyond mere identification. It will usually be possible to reveal something of the practices and mechanisms that lay behind a specific finds assemblage, of the occasion on which a ritual was performed, and of its meaning on various levels.

At the end of this theory of ritual, a number of useful insights summarized from the above theory of ritual may be assembled to complement these 'best practices', and to prepare for the analysis and discussion of the finds that are at the centre of Part 3:

- ▶ Rituals are cultural phenomena that can be considered by-products of evolutionary advantageous capacities. Rituals may have an explicit purpose and they will always have an effect, but this effect should not be described in the perspective of Darwinian fitness, but in the perspective of the dynamics of the cultural, natural and social environments to which they belong (Ch. 6.3).
- ▶ Although rituals are often associated with religious concepts in some way (as agents, patients or instruments), and ritual behaviour easily leads to the inclusion of religious elements in rituals, rituals do not need to be religious (Ch. 6).
- ▶ Ritual behaviour makes use of themes from our precaution repertoire, such as pollution and purification; danger and protection; the possible danger of intrusion from outsiders; the construction of an ordered environment using symmetry, specific structures or forms, prescribed clothing, colours, numbers etc. Such elements in the archaeological record may be indicative of ritual behaviour (6.5).
- ▶ Religious rituals may include rituals to influence the supernatural (offerings), but also rituals in which the supernatural is instrumental (magic) (Ch. 7.3.2).
- ▶ Supernatural beings with or without access to strategic knowledge, meaning: gods who supposedly can or cannot read people's minds, may be identifiable in the archaeological record because they may be presented with different types of offerings. Supernatural beings that are most important to people, the ones that are able to read your mind, will be thought to require frequent ritual attention, but offerings to them do not need to be valuable since they will judge people by their intentions. Supernatural beings without that ability can only judge people by their actions and will be presented with substantial offerings or with symbolic objects that make people's intentions clear when the functions or territories of these gods are involved (Ch. 7.3.2).

- In the case of human sacrifice, gods with the ability to read your mind may be thought not to accept just any human being, but only a beloved person or a community member (Ch. 7.3.2).
- Public and costly offerings will usually play a role in establishing personal prestige and social status, but simple offerings do not need to be made by people of low social status (Ch. 7.3.2).
- Buried offerings do not need to be aimed at supernatural beings that are associated with the earth or the underworld (the chthonic gods), burnt offerings are not necessarily aimed at gods residing in heaven (Ch. 8.4.1).
- The diversity and dynamics of ritual implies that standard and generalizing interpretations (e.g., the common 'fertility offerings') are to be avoided. It also implies that rituals do not need to be repetitive and regulated, and that they can be adapted to new circumstances (Ch. 7).
- Since the supernatural world is an extension of the human world, offering can be considered a kind of gift exchange (Ch. 8.3).
- Gift exchange not only plays a role in offering, ritual meals or the practice of fragmentation and enchainment; gift exchange itself will usually be ritualized, or be part of other types of rituals and ceremonies (Ch. 8.3).
- Rituals may include primary deposits, in which the deposition itself is the main ritual, and secondary deposits, which conclude ritual actions that were performed above ground. Ritual meals may result in both types: the offered part of an animal that was eaten during the meal as primary deposits, and the left-overs of the meal, including the (partly) broken tableware as secondary deposits.
- Deliberate fragmentation of objects and human remains is postulated in the exchange of fragments (Ch. 8.3.2).
- Meaningful objects and memorabilia, such as exchanged fragments, may have been collected (Ch. 8.3.2).
- Inalienable possessions are meant to be kept within the social group. Only in exceptional cases, they may be given to outsiders, including supernatural beings, usually on a temporary basis (Ch. 8.3.2).
- Inalienable objects may be deposited during non-religious rituals that emphasize the identity, values and status of their owners, in family land or in graves of family members (Ch. 8.3.2).
- The sacred appeals to the same cognitive functions as the contagious, and may lead to cleaning and purification, but also to the destruction of objects and the death of people and animals (Ch. 8.4.3).
- Destruction and killing also emphasizes that something offered is removed from the human world (Ch. 7.3.2).
- Rites of passage are an important category of rituals. In the archaeological record, they are not only represented by graves, but also by, for instance, deposits of personal possessions or locations such as boundaries and thresholds (Ch. 7.3.1).
- Foundation and abandonment deposits may be considered rites of passage for houses (Ch. 7.3.1).
- Burial practice is not necessarily confined to either cremation or inhumation. It may include various primary and secondary practices involving human remains, over a long period of time (Ch. 7.3.1).
- Liminal places (either natural or manmade) are potential contact zones with the supernatural, and therefore the location of religious rituals, in particular offerings (Ch. 7.3.1).
- Everybody has ancestors, but these are not necessarily considered supernatural beings. An ancestor cult can only be inferred from concrete evidence such as offerings (Ch. 8.4.2). Flowers or food on graves are not indicative of an ancestor cult.
- Supernatural ancestors may keep their individual identity, or become part of an ancestor collective (Ch. 8.4.2).
- The graves of non-supernatural ancestors may be used to claim rights, land, status or leadership (Ch. 8.4.2).
- Rituals in the doctrinal or in the imagistic mode may be associated with different types of social organization. Rituals in small-scale, decentralized societies are more diverse and less regulated than rituals in large-scale, centralized societies, where the rules of many rituals are established (Ch. 7.4).
- The interpretation of the remains of rituals (or other finds) requires an awareness of one's preconceptions (Ch. 8.6).

Part 3

Remains of rituals in terps

Part 3 puts the theory of the previous chapters into practice, within the framework of the archaeological and historical context that was expounded in Part 1. The first two chapters, 10 and 11, are case studies, which deal with the finds from two terp settlements in the area of the river Reitdiep in the province of Groningen: Englum and Ezinge. Since the quality and quantity of the data from these sites differ considerably, these chapters each follow their own logic. The curious deposits of Englum require a qualitative analysis, starting with the deposit of eight skulls in a dung layer that was the incentive of this study. The large number of finds assemblages of Ezinge allows a quantitative approach. Both case studies can be considered complementary. In view of the little that is known about the common way to deal with the dead, one of the initial research questions, chapter 12 concentrates on only one category of finds: human remains, on the basis of an inventory of all human remains from the terp region. Chapter 12 also places the finds of human remains from Englum and Ezinge into perspective.

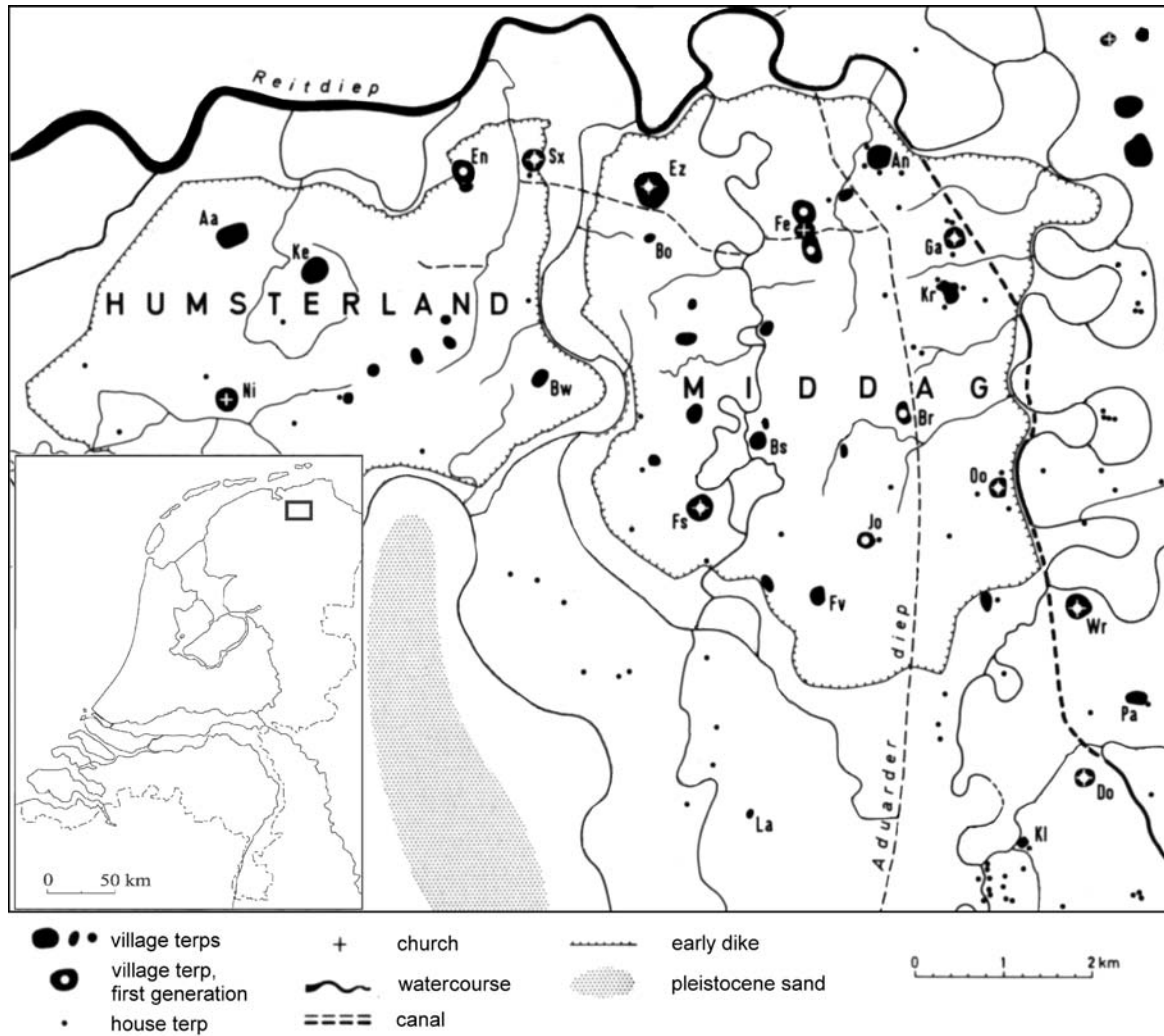


Fig. 10.1 Map of the Reitdiep area with terps, watercourses and early (medieval) dikes. Abbreviations: Aa: Aalsum, An: Antum, Bo: Bouwerd, Br: Brillerij, Bs: Beswerd, Bw: Barnwerd, Do: Dorkwerd, En: Englum, Ez: Ezinge, Fe: Feerwerd, Fs: Fransum, Fv: Fransumvoorwerk, Ga: Garnwerd, Jo: Joeswerd, Ke: Kenwerd, Kl: Kleiwerd, Kr: Krassum, La: Langeweer, Ni: Niehove, Oo: Oostum, Pa: Paddepoel, Sx: Saaxum, Wr: Wierum. After De Langen & Waterbolk 1989.



Fig. 10.2 The remainder of the terp of Englum with the escarpment, before the excavation. The grassland in front belongs to the terp; it was levelled in the early 20th century.

10

Case study I: Remains of rituals in the terp of Englum

This case study deals with the finds from a small terp excavation in Englum in the province of Groningen. After a general introduction (10.1), it starts with a detailed description, analysis and interpretation of the finds that gave rise to this study: the find of eight human skulls in a dung layer (10.2). Several more ritual deposits were identified in Englum. In view of the readability, the details of these deposits are included in an appendix (Appendix A); their interpretations are discussed in the second part of this chapter (10.3). The conclusions of this chapter have a preliminary character; their validity will be further examined in the following chapters.

10.1 Introduction

10.1.1 The excavation and its results

In the late summer of 2000, the terp of Englum was partly excavated by archaeologists from the universities of Groningen and Amsterdam.¹ The terp is one of a series on the left bank of the river Reitdiep in the northwestern part of the province of Groningen (fig. 10.1). A large part of this terp was destroyed during the early 20th century owing to commercial quarrying. Only about half of its original size remained. Hardly any finds from this period reached the archaeological museum collections; most objects in the terp disappeared together with the terp soil. The levelled area was low-lying, wet, and only usable as pasture during dry seasons. It was bordered by the escarpment of the surviving terp to the north (fig. 10.2), and by a medieval dike that incorporated part of the terp, to the west.

The reason for the excavation was a plan of the provincial authorities to restore the terp to its original size, using dredged material from the nearby river. This would seal the escarpment and make the archaeological strata inaccessible for a long time. Moreover, any surviving features in the levelled area would be destroyed by the necessary groundwork. An excavation was necessary to secure the information concealed in these features.

During the excavation, seven large trenches were opened in the levelled area (fig. 10.3). The six weeks that were allotted to the excavation team did not allow for a complete excavation of the levelled area. In most trenches, only the level directly under the top soil was excavated, since only the deepest part of features in the natural salt marsh soil were still to be found there. An exception was trench 4, situated at the foot of the remainder of the

terp. Here, deeper terp layers were still intact; this trench was excavated in three levels, around 20 cm apart. The escarpment of the surviving terp itself was also cleaned. The resulting terp section was 100 metres long and over 4 metres high in the west, sloping down to around 2 metres in the east (fig. 10.4).

Although the excavated area was limited, it revealed sufficient information to acquire an overall picture of the habitation history of the terp. Investigation of the natural salt marsh layers under the terp, combined with several radiocarbon dates and pottery typology, made it clear that habitation in Englum started in the 5th century BC. The first colonists settled on a salt marsh ridge in the Hunze tidal basin that by then had built up to the level of a middle salt marsh, by definition flooded during storms and high spring tides. From the start, houses must have been built on platforms. During floods, which regularly occurred until the first sea dikes were built in the 12th century, new sediment kept being deposited. Such younger sediment layers were visible in the eastern part of the section, against the slope of pre-Roman and Roman Iron Age terp layers.

In the pre-Roman Iron Age, Englum was situated close to the sea (fig. 3.1). Through the ages, the Hunze tidal basin filled up with sediment, by which the coastline gradually moved north (fig. 3.2). In the early Middle Ages, a new situation arose when in the area between the present provinces of Groningen and Friesland the influence of the sea increased considerably, resulting in the Lauwerszee (figs. 2.1 and 3.3). During this period, the river Hunze changed its course from the north to the west, becoming the present Reitdiep, directly north of the series of terps that included Englum as well as Ezinge.

The inhabitants of Englum adjusted to this dynamic landscape by raising and expanding their living area when necessary. The first platforms coalesced until the

¹ Nieuwhof 2008a.

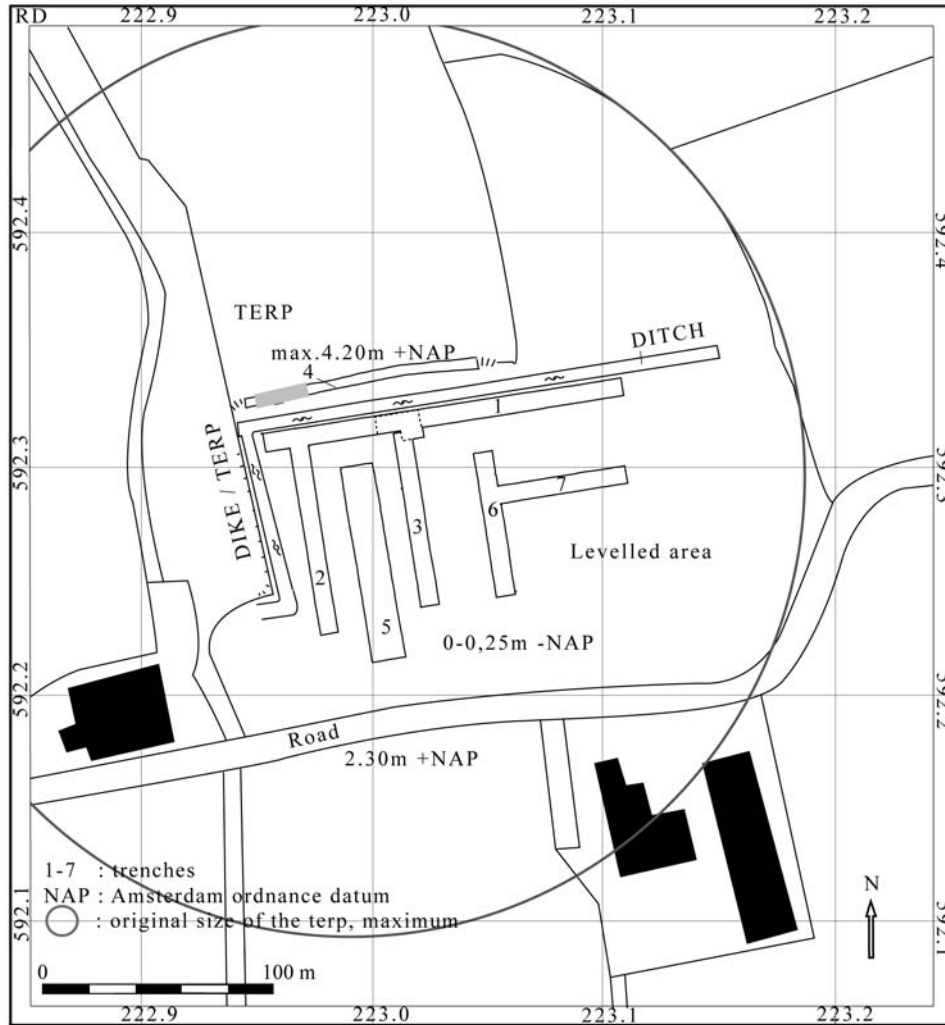


Fig. 10.3 The topography of Englum and the location of excavation trenches. The maximum circumference of the terp follows Jongma 2008. The grey rectangle represents the location of the dung layer with the deposit of eight human skulls.

terp was large enough to accommodate a small village. During the excavation, parts of some of the early platforms were discovered in the western part of trench 4 and in the adjacent section. This is the area where the first inhabitants must have lived. Because of the drastic disturbance caused by quarrying, no other housing remains were found during the excavation, except for part of the wall of a house from the Migration Period, much higher up in the large northern section through the terp in trench 4.²

From the pre-Roman Iron Age not only partial platforms were found during the excavation, but also a large amount of pottery, 360 kg. There were some complete pots, and fragments belonging to 115 pots from the 5th-3rd centuries BC and to 212 pots dating to the 2nd-1st centuries BC. This seems to suggest a growing population, but it should be noted that only a small part of the terp was excavated. The number of finds and features from

the early Roman Iron Age is considerably larger, just like in other parts of Groningen. In this period a substantial new layer was applied, by which the terp was raised and enlarged considerably. The increase is associated with the introduction of the Wierum-style, which has been dated to the beginning of the 1st century AD by Taayke³, but which might already have occurred somewhat earlier, at the end of the 1st century BC.⁴ Fragments of 639 individual pots date from this period. The expansion of the terp continued in the middle Roman Iron Age, although the number of finds from that period is much smaller than from earlier periods (only 75 pottery individuals). There are no finds that can be dated conclusively to the late Roman Iron Age. Habitation must have stopped at the end of the 3rd century AD, just like elsewhere in the coastal region (see chapter 3.2.5).

² Jongma 2008.

³ Taayke 1996d, 191.

⁴ Nieuwhof 2014b.



Fig. 10.4 Opening of the 3rd level in trench no. 4 (to the east), at the foot of the uncovered escarpment of the terp remainder (the large north section of the trench to the left).

We cannot make a reliable estimate of the population size in Englum, since the terp was not excavated in full and many finds and features have disappeared during commercial quarrying of the soil. There may have been no more than three or four houses during the pre-Roman Iron Age, but considerably more (5-10) in the early and middle Roman Iron Age. The relative scarcity of finds from the middle Roman Iron Age probably has to do with the location of the layers from this period in the terp; middle-Roman Iron Age layers did not make the terp much larger, but heightened it. These high layers disappeared during quarrying of the terp, leaving only a few deep features and artefacts to be found during the excavation. The same is the case for early medieval layers. However, extensive layers from the middle Roman Iron Age and the early Middle Ages are found in the section through the terp in trench 4. They clearly show that the terp was inhabited during these periods. Quarrying

cannot be the explanation for the missing finds and features from the late Roman Iron Age, as the stratigraphy shows. In the large section in trench 4, layers from the early Middle Ages directly cover layers from the middle Roman Iron Age. There are no late Roman Iron Age layers anywhere in this section or in the excavated area. The entire lack of finds and features from the late Roman Iron Age is therefore attributed to the hiatus in the habitation that has been established in many other terp settlements for that period, as was discussed in chapter 3.2.4.

10.1.2 Representativeness

During the excavation, some finds assemblages were uncovered that immediately were thought to be the remains of rituals.⁵ These finds, especially the deposit of eight human skulls in a dung layer, came to be the inspiration of

⁵ *Finds assemblage* as used here refers to all the finds from one feature.

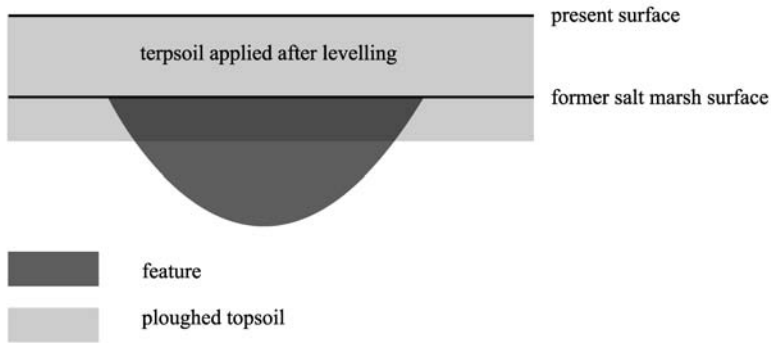


Fig. 10.5 Part of the features in the levelled area of the terp was mixed with the ploughed topsoil.

this study as was described in chapter 1. Close reading of the documentation later resulted in the identification of a total number of 17 finds and finds assemblages related to ritual.

The Englum finds constitute a good opportunity for the study of ritual in the northern Netherlands. In the first place, some finds were recognized as the remains of rituals already during the excavation, so they were treated and documented with extra care. In the second place, much first-hand information on contexts and find circumstances was available. Nevertheless, the excavation was not ideal in some other respects. There was an imbalance in the numbers of staff and inexperienced students participating in it; not everything the students did could always be supervised properly.

The representativeness of the finds is also influenced by some practical factors. Firstly, many features in the levelled area had severely been damaged during quarrying activities. During quarrying, terp layers were dug away until the underlying salt marsh surface was reached. This turned out to be far too deep for agricultural purposes; therefore, extra terp soil was dug off and applied to the levelled area. Together with the top of the remaining salt marsh, it formed an occasionally ploughed topsoil layer with a thickness of around 50 cm. That implies that, even from features that originally were dug into the natural salt marsh soil, the upper 20 or 30 cm is missing (fig. 10.5). Features such as wells, which were dug in from higher layers, miss much more. It may be clear that finds assemblages from incomplete features will often also be incomplete.

Secondly, the area was not fully excavated; not even the information that, despite commercial quarrying activities, was retained in the levelled area could be retrieved completely, due to lack of time and resources. The large section and the intact layers of trench 4 were excavated complete. In the other trenches, terp layers were missing, but deep parts of pits, wells and ditches from all periods of habitation were still intact. Pits were excavated complete, except where continuing drainage problems hindered digging, especially in the deeper trenches 6 and 7. Wells were only partly excavated, since deeper parts would not be damaged by the groundwork for the resto-

ration of the terp; this decision was regretted afterwards. Ditches were sectioned, but not excavated in full. Finds from excavated features and layers were collected as completely as possible, resulting in a total number of 991 find numbers. Wet screening was applied to many features, in order to establish whether the very small number of bones from fish and birds in terps might be caused by the common practice of manually collecting animal bones.⁶ It did not result in a larger number of small animal bones, thus supporting the hypothesis that fishing and hunting of wild birds was seldom practiced.

Despite these circumstances, the ritual finds from Englum were convincing enough to be presented here as a case study. The number of seventeen finds and finds assemblages that are considered the remains of rituals is high if we compare it to other excavations in terps and elsewhere. It must, however, be noted that, with the exception of the deposit with human skulls, a dog skin in an inverted pot and the buried skeleton of a big fish, these ritual finds assemblages were only recognized because I was searching for them during the post-excavation analysis. Otherwise they would probably have escaped the attention. Moreover, these finds date from a period of ca. 800 years, from the 5th century BC until the 4th century AD. In that light, the number of seventeen finds and finds assemblages related to ritual is extremely low.

The number of ritual deposits that were described for Englum must not only be assessed against this long period, but also against the background of a large number of finds assemblages that were not interpreted as the remains of rituals. Table 10.1 gives an overview of the numbers of features, compared to the contexts that were interpreted as 'ritual'. When reading the table, it has to be kept in mind that finds from sections are always relatively rare and that the chance of identifying special deposits in sections is very small. Nevertheless, three such finds have been made in the large northern section of trench 4 (A.1, 13 and 16). Moreover, deposits are not all equal in size; the extensive deposit with human skulls and related finds only takes a few numbered features. The large percent-

⁶ Prummel 2008, 117.

Table 10.1 Number of features interpreted as the remains of rituals, against features that were not interpreted as such.

Trench	number of features	of which ritual	catalogue number
1 and 1/3	11	-	-
2	14	1	5
3	36	1	7
4-north section	562	3	1, 13, 16
4-level 1	127	-	-
4-level 2	122	3	2, 4, 15
4-level 3	101	1	4
5	49	7	3, 8, 9, 10, 11, 12, 17
6	15	-	-
7	14	1	6
Total	1051	17	(= 1.6%)

age of 'ritual features' in trench 5 is notable; here, seven out of 49 features are thought to be related to ritual. The small number of ritual deposits in trenches 6 and 7 is at least partly caused by the difficulties with drainage during the excavation; the small number of finds in trench 2 is caused by some major disturbances, caused by levelling or by later digging.

Having established that the seemingly high number of ritual finds in Englum is actually rather low (no more than 1.6% of the total number of features was identified as being associated with ritual), it must be explained why it is that low. Over a period of 800 years, many more rituals must have been performed. Three factors play a role here.

First, the general problems with identification of the remains of rituals that play a role in any excavation, also apply here. Only some of the rituals that were performed in the past have left traces in the soil, either as deposits or otherwise, and of these traces, only a small percentage can be identified as such.

Secondly, during commercial quarrying of the terp-soil, half of the terp had disappeared, including all remains of rituals that it must have contained. Of the remaining features, the top was removed so that, although we can be sure that these features are not complete, we do not know to what extent. The function and use of most of these features cannot be established.

Thirdly, the quality of the excavation methods and documentation was not always high enough to be able to identify the remains of rituals. This problem is not confined to Englum, for that matter. The detailed information that is required when we want to study ritual is usually not obtained during excavations, not even when the *Kwaliteitsnorm Nederlandse Archeologie* (the quality standard for Dutch archaeology that was implemented in 2007) is applied. The number of features in late prehistoric or Roman Iron Age excavations is simply too high to be able to excavate them all in great detail; the avail-

able amount of time and resources is usually too low. This means that only some outstanding features will receive full attention.

It may be clear that these seventeen finds and artefact types do not represent the full range of ritual behaviour that existed in Englum, let alone of ritual behaviour in the terp area in general. Nevertheless, it may still be possible to use these deposits as the basis for some generalizations and as the starting point of a search for the remains of rituals in the terp region. Below, the remarkable deposit of eight human skulls in a dung heap, the primary case study, will be presented, analysed and interpreted as completely as possible. Other special finds from Englum will be discussed as a group in the second part of this chapter.

10.2 Eight human skulls in a dung heap in trench 4

10.2.1 The context

One of the deepest layers in trench 4 was a layer of dung, more than 15 metres wide and 60 – 80 cm high. It was visible in the levels 1 and 2 and in the large north section of the trench (figs. 10.4 and 6). The dung layer was found directly to the east of one of the early platforms. This earlier platform consisted of layers of dung and clay within a broad edge of salt marsh sods and by an adjacent ditch. At the eastern side of the dung layer was a similar ditch. This ditch was T-shaped at the surface, with one arm intruding into the dung layer (fig. 10.16, level 3). This ditch must have functioned in draining the dung layer of its liquid components. The dung layer was apparently an intentional extension of the living area of one or more platforms, including at least the platform on its west side. The ditch belonging to this earlier platform was filled in with dung when the layer was applied. The clay structure at the east side consolidated the dung layer. The eastern ditch was filled in with dung when the layer had dehydrated sufficiently; at the same time, a last

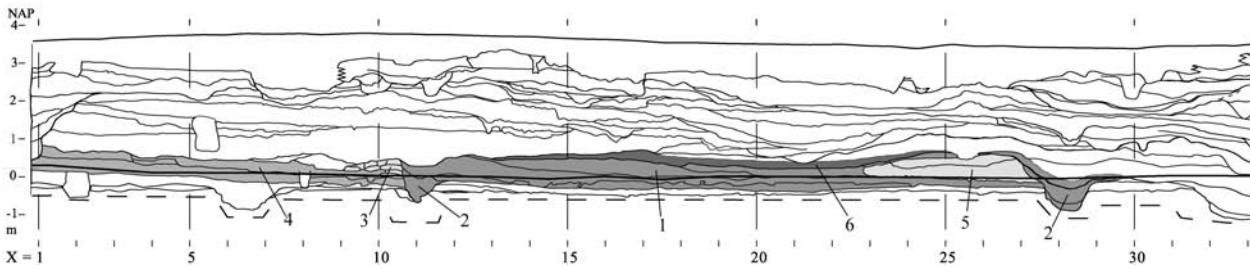


Fig. 10.6 Part of the field drawing of the northern profile of trench no. 4, a section through the terp of Englum. Black line: level 2; no. 1: dung layer; 2: ditches filled with dung; 3: sods of the western platform; 4: western platform; 5: clay structure; 6: covering layer of shells.

layer of dung was applied over the entire surface of the dung heap. After this, the dung heap was covered with a 10 cm thick layer of shells, consisting mainly of mussels (*Mytilus edulis*), but also some periwinkles (*Littorina littorea*). This layer of shells constituted a firm basis for new occupation.

The dung had nearly the same colour, smell and consistency as fresh cattle dung; exposed to the air, it blackened quickly. Fungal spores supported the identification as dung.⁷ The original dung cannot have been exposed to the air for long; there was no sign of any decomposition. The quantity suggests that it came from more than one farmhouse, including the one on the adjacent platform to the west (later activities erased all traces of this house). In the dung layer, some fragments of wickerwork were found, probably belonging to fences that were used to separate the animals in the stalls.

The northern boundary of the dung layer could not be established, since it was hidden in the remainder of the terp. The layer seemed to slope slightly to the south, suggesting that the southern boundary of the dung layer was just outside the trench. In the dung layer, some post-holes with the remains of poles were found. These did not belong to a specific structure in one of the excavated levels, but must have belonged to a house that was built on this new platform later.

The finds assemblage discussed here was found in the second excavated level. Level 2 was the first level that could be excavated over the full width of the trench. Level 1 was on the same level as the top soil of the levelled area, lying under the slope of the escarpment of the terp remainder, and was less wide than deeper layers. The most southern part of level 2 was situated outside the protection of the slope. After quarrying of the layers on top, oxygen had entered here, causing decomposition of the dung to start. Here, the dung had slightly decomposed and turned to black, humic soil.

10.2.2 Finds

During opening of level 2, a human skull was found in the dung layer (no. 1). Careful digging around it made

it clear that this was not a grave but only a skull without mandible.

Close to this one were two more skulls without mandible (no. 2 and 3), the frontal part of a skull (no. 4) and a skull that missed its complete upper half, almost certainly by ploughing (no. 5). This skull was situated directly under the top soil at the south of the trench (figs. 10.7-10). Close to these finds was a cluster of grey spots of ashes (fig. 10.7); among the skulls several similar spots were found as well. Most spots had a black rim, showing that the ashes had not been deposited in the dung, but were the result of small, smouldering, local fires. Under the cluster of ashes, a concentration of cattle bones was found. Human and animal bones were well preserved.

The finds, including the cattle bones, seemed to be lying in a semicircle with a diameter of approximately 1.5 metres. In search of other finds in this circle, the trench was somewhat enlarged to the south (trench 4A). There, on the assumed circle, another human skull was found (no. 8), and another large, angular spot of ashes. To the north, the dung was carefully dug away as well. Two large cranial parts were also discovered (no. 6 and 7) outside the assumed circle (fig. 10.11). Among the skulls were some human hand bones and teeth (table 10.3), as well as potsherds. There were no traces of digging around the skulls. They must have been placed on the dung, and were covered with dung afterwards.

All potsherds and bone fragments from around the skulls were collected, as well as the artefacts in the top soil of the extended trench 4A. Initially this material was thought to be normal settlement waste, in accordance with the first interpretation of the dung heap as a depot of manure that later was to be used as fertilizer on fields. That seemed to be a proper place for household litter. However, outside the finds assemblage the dung produced hardly any finds, despite wet screening. Apparently, the dung layer had not been used as a refuse midden.

The skulls and the associated finds were examined by several specialists.

⁷ Nieuwhof & Woldring 2008, 169.

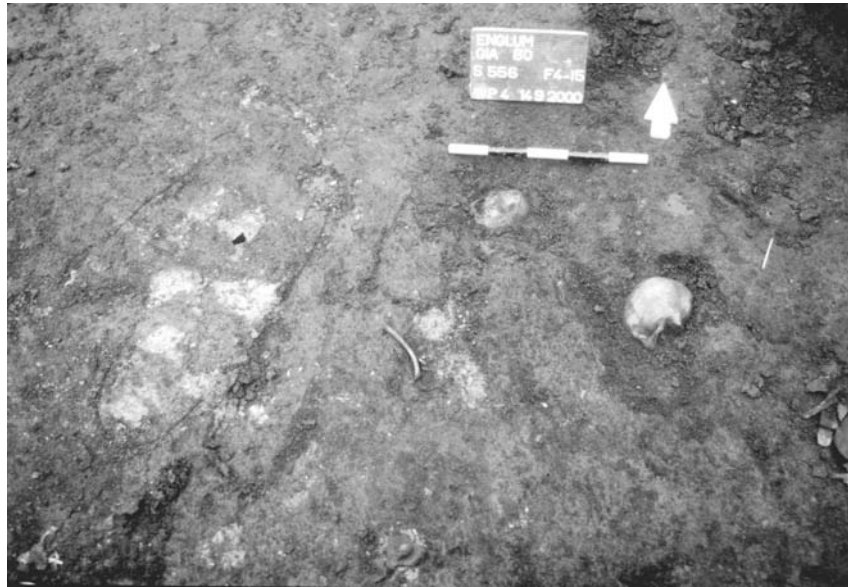


Fig. 10.7 The first human skulls found in a dung layer in the 2nd level of trench no. 4. To the left is a concentration of ash spots.



Fig. 10.8 Skulls nos. 1, 2, 3 and 4 (small part above right), some potsherds and animal bones.



Fig. 10.9 Human skulls and the concentration of cattle bones that was found under the concentration of ash spots (compare fig. 10.7).



Fig. 10.10 The find assemblage in the dung layer. Near the wall of the trench is skull no. 5, which was partly destroyed by ploughing. After the photo was made, the trench was enlarged here, thus creating trench no. 4A.

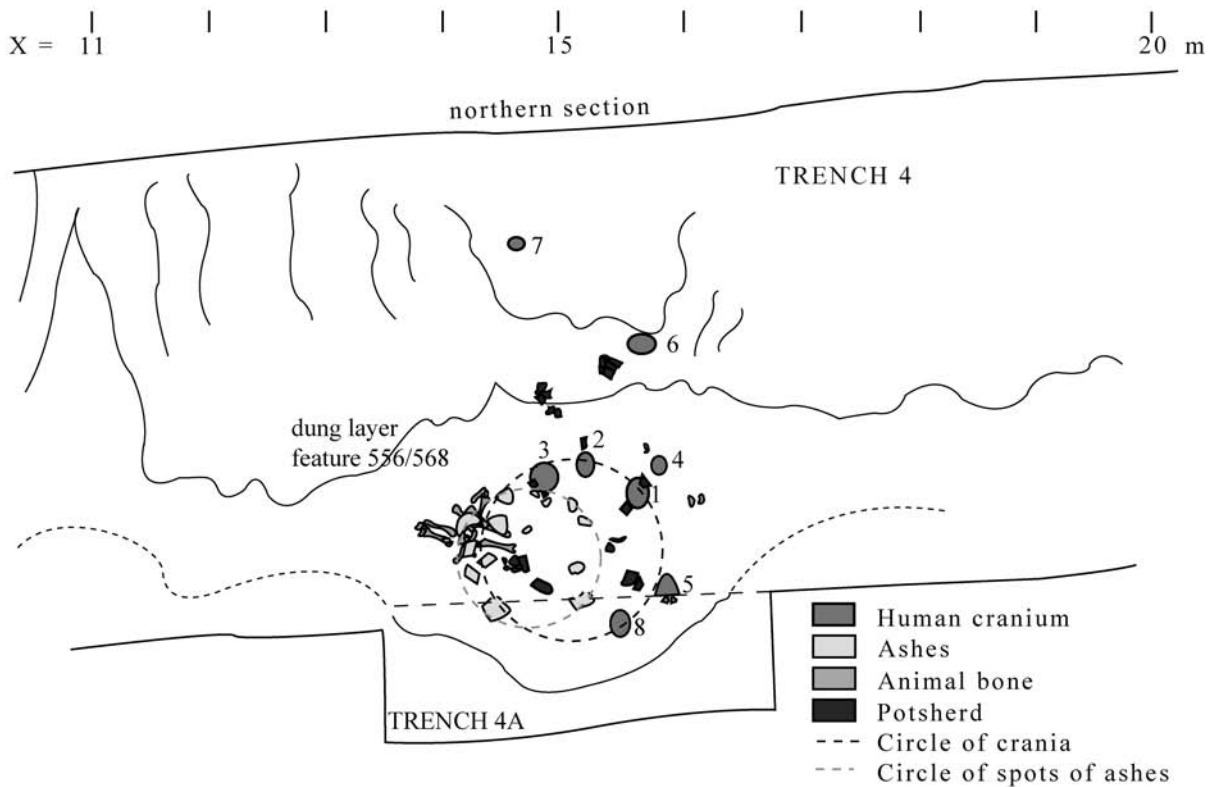


Fig. 10.11 Plan of the finds in the dung layer of trench 4.

10.2.2.1 Human bone

The human bone material was examined by Tuin (2008b; for details, see Appendix A.4). Six of the crania are female, one is male and of one cranium, the sex could not be determined (fig. 10.12). All crania come from adults or sub-adults, with ages ranging from 15 to 45. Mandibles, most teeth, upper vertebrae, and large cranial parts of some of the skulls, fragmented along the sutures,

are missing. None of the crania has cut marks; there are no traces of violence, indicating an unnatural death, or gnawing marks. One of the skulls, no. 3, shows traces of a disease, possibly malaria. Since the mandibles are missing and teeth have fallen out, it can be concluded that the skulls were only deposited here after the bodies had decomposed somewhere else. After decomposition, the cranial parts were collected and, then or later, taken to this location. That implies that the crania did not necessarily

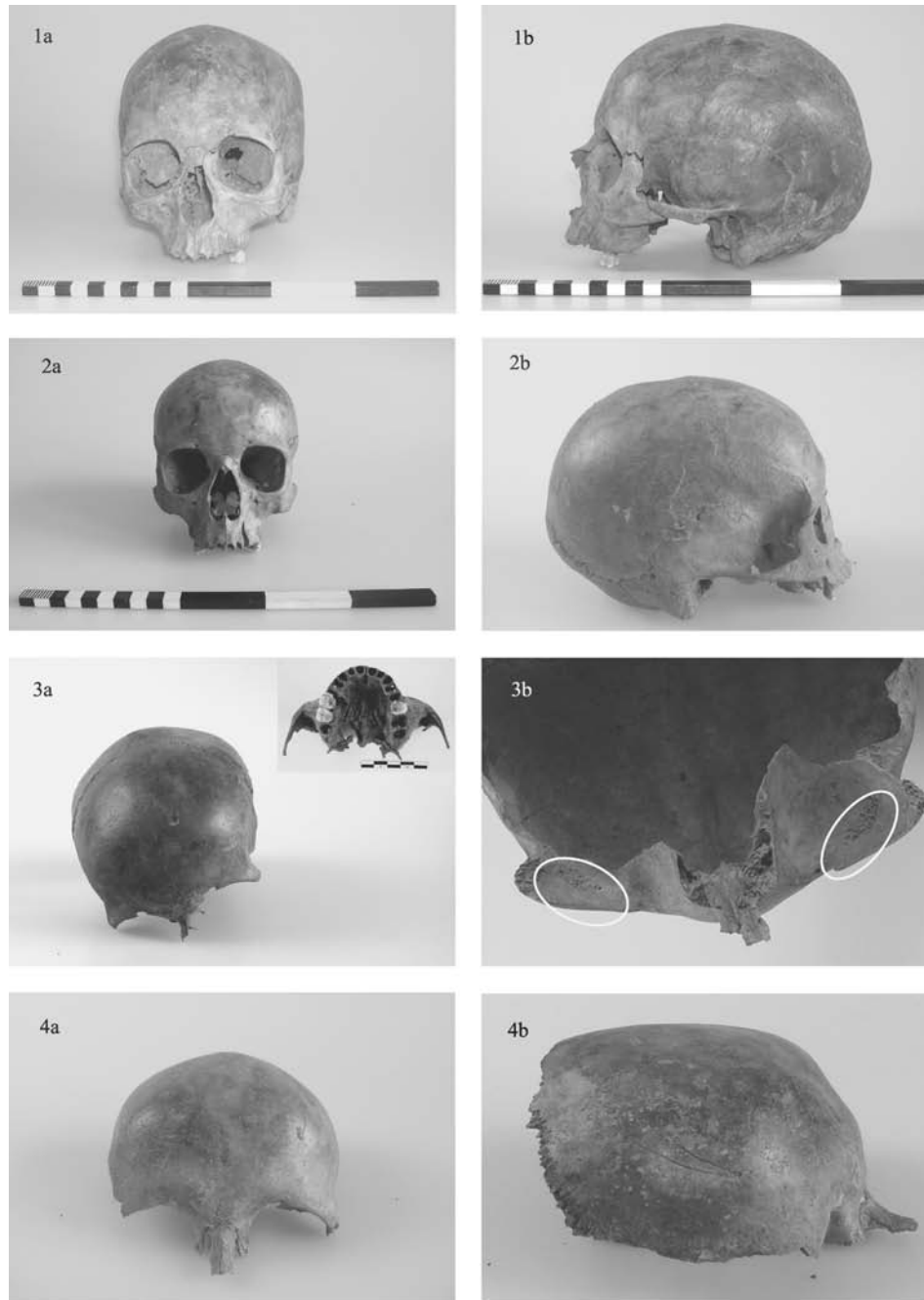


Fig. 10.12 The human crania and large parts of crania found in the dung layer of trench no. 4. The circles on cranium no. 3 indicate *cribra orbitalia*; cranium no. 4 shows natural, V-shaped grooves coming from a foramen.

belong to people who had died recently, or to people who had all died at the same time. It is conceivable that some of them had died long before.

Following this lead, radiocarbon dating of samples from all crania was carried out (table 10.2). The purpose of dating individual crania was to establish the relative age of the crania, as far as possible. The dates of the crania do not all overlap; they range from 2255 ± 35 BP (no. 1) to 2185 ± 30 BP (no. 7). Calibrated dates range between 398 and 164 cal BC, the middle pre-Roman Iron Age. Other radiocarbon dates from this context (see below)

range from 2280 ± 50 BP (dung sample) to 2190 ± 40 BP (residue from a pot). The skulls are probably all from roughly the same period. Nevertheless, it seems likely that these skulls belonged to people who died at irregular intervals within a period of several years or longer; the radiocarbon dates allow for a range of even 200 years.

Radiocarbon dating of samples from the salt marsh area is complicated because the marine environment appears to influence stable isotope concentrations, especially $\delta^{15}\text{N}$, not only in carnivores but also in herbivores

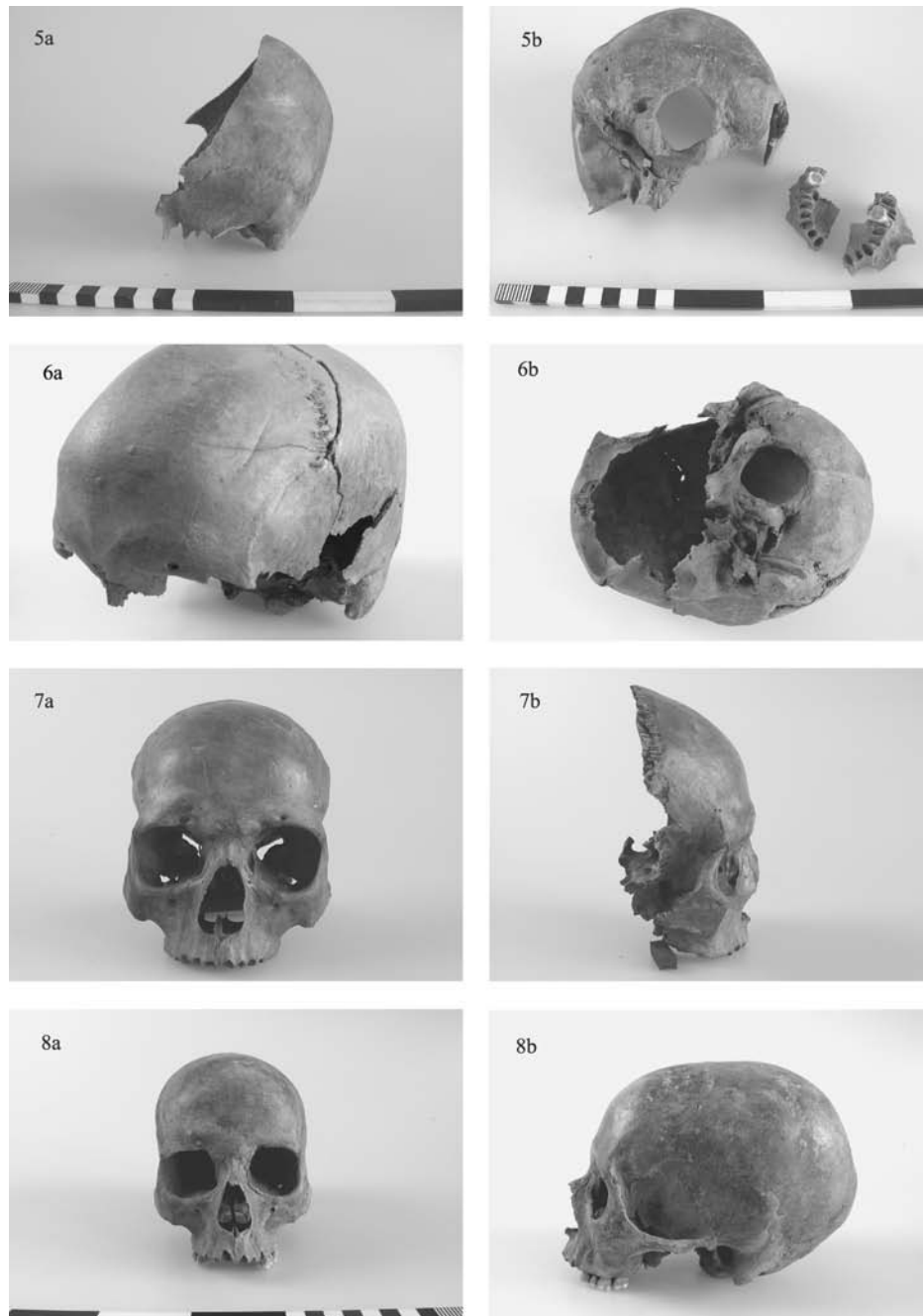


Fig. 10.12 continued.

(see also chapter 12).⁸ The stable isotopes of these skulls and other samples from Englum (e.g. the cattle bone from this finds assemblage) are no exception. $\Delta^{13}\text{C}$ contents of all samples are relatively high, but falls within the normal range of $-22.40 - -18.60$ ‰. $\Delta^{15}\text{N}$ percentages are unusually high (normal range $5 - 8$ ‰).⁹ This is probably not due to the consumption of marine protein, but to a higher $\delta^{15}\text{N}$ in the entire food chain of the salt marshes, starting with the vegetation.¹⁰ Whether a reservoir effect

should be taken into account when calibrating dates, is not known. A deposition date at the end of the 3rd century BC, at the end of the calibrated period, is in line with non-radiocarbon dates of the context (see below).

The deviating stable isotope values shed some light on the origin of the people these skulls belonged to. Although they all strongly deviate from human bone values from inland regions, the stable isotope values within this group of eight crania fall within a narrow range. This is an indication that these skulls belonged to people who were native to the salt marsh area. In theory, the analysis of nuclear DNA would provide the answer to the question whether these people were related. However, nuclear

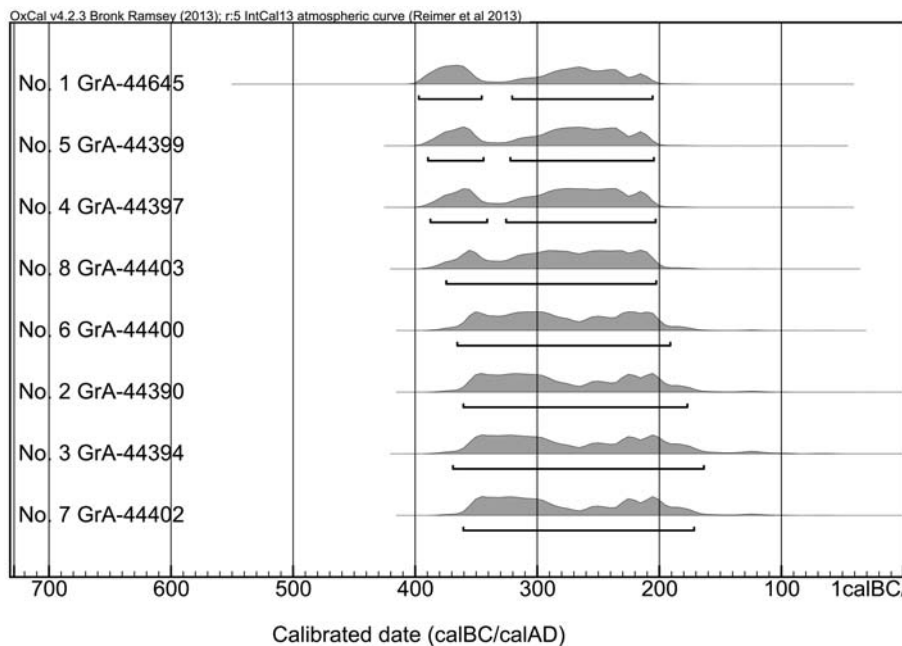
⁸ Nieuwhof 2008d.

⁹ Lanting & Van der Plicht 1996, 497.

¹⁰ Britton *et al.* 2008; see also chapter 12.

Table 10.2 Radiocarbon dates of crania. All data: Centre of Isotope Research Groningen. Table: following skull number; graphics: chronological order.

Skull no.	laboratory no.	$\delta^{13}\text{C}$ (‰)	$\delta^{15}\text{N}$ (‰)	years BP	Calibrated OxCal v4.2.3 (95.4%)
1	GrA-44645	-20.20	+12.69	2255 ± 35	398-346 or 321-206 BC
2	GrA-44390	-20.16	+12.64	2190 ± 30	361-178 BC
3	GrA-44394	-18.91	+13.38	2185 ± 35	370-164 BC
4	GrA-44397	-20.18	+13.10	2235 ± 30	388-342 or 326-204 BC
5	GrA-44399	-20.43	+13.27	2240 ± 30	390-345 or 323-205 BC
6	GrA-44400	-20.23	+11.52	2200 ± 30	366-192 BC
7	GrA-44402	-20.36	+13.68	2185 ± 30	361-172 BC
8	GrA-44403	-20.49	+13.16	2220 ± 30	375-203 BC



DNA usually does not survive in bone of this age, especially not if it has been covered by dung. Dung contains urea, which destabilizes DNA.¹¹ Moreover, the skulls were excavated without taking precautions against contamination with modern human DNA. Contamination with foreign DNA is likely, from the time of deposition as well as from the time of excavation and later. Teeth are a potential source of DNA because the dental enamel protects the DNA inside, but unfortunately, the dental enamel of all remaining teeth was cracked.¹² DNA-analysis was therefore not attempted.

10.2.2.2 Animal bone

The concentration of animal bones, which was found near the human skulls under grey spots of ash, consisted of the articulated parts of the legs and pelvis of cattle; two left thighbones indicate the bones belonged to two cows

(fig. 10.13).¹³ Besides these complete cattle legs, which seem to be placed in a pile with the joints bent, many bone fragments were found among the human skulls: 107 fragments of cattle bones (nearly 2 kg) and 68 fragments of sheep/goat bones (around 300 g).

The major part of the complete and fragmented animal bones belonged to five individuals: two cattle aged 3.5-4 years (parts of these were deposited in articulation), a younger cow and two young sheep. It is not certain that all bone fragments come from these five animals. There were some additional bones from newborn animals and from much older animals as well. Bones from other species were not found. Many of the bone fragments have cut marks, indicating that the animals were butchered and eaten. Cut marks also show that the complete cattle legs had been skinned, but the meat on these bones was not eaten, as the absence of indicative cut marks demonstrates. The remainder of these animals was available

¹¹ Hummel 2003, 71.

¹² Tuin 2008b, 114.

¹³ Animal bone from Englum was studied by Prummel (2008). This section is based on her results.



Fig. 10.13 Concentration of cattle legs, found in articulation. The white circles indicate parts that belong together. The drawing depicts the bones present. Note the two left thigh bones.

for consumption, possibly with the meat of a younger cow and two sheep. Tooth and gnawing marks made by dogs were found on several bones, including some minor tooth marks on the ends of the articulated legs.¹⁴ Dogs must have had a chance to chew the bones for a short while after these were deposited, but were stopped before they could move them.

10.2.2.3 Pottery

Among the skulls, 130 sherds were found, weighing 3900 g, an average of 30 g per fragment. Virtually all fragments belonged to only three, almost complete pots (fig. 10.14). Missing fragments may have been in the dung above the finds assemblage, which was removed by the mechanical digger. Some were in the topsoil of the small trench extension 4A. All pots date from the middle pre-Roman Iron Age (ca. 400-200 BC).

The three pots had some common features: they were cooking pots at the end of their lifetime, and they all had secondary holes in the base. One of the drillings (fig. 10.14, 218/1211) had not been entirely successful: a large spall had chipped off the base, so that the hole was not nice and round, but bigger and more irregular than it was probably intended. The original function as cooking pots could be deduced from the traces of burnt food inside, of boiled-over food on the outside of the rims, and of soot on the outside of the pots.¹⁵ Since holes in cooking-pots would make them useless, we may assume that the holes were made after their last use as cooking pots and before they landed in this finds assemblage. The holes were probably made for this special occasion. If the

pots were filled with a liquid substance, they would run empty, slowly or quickly depending on the viscosity of the liquid.

10.2.2.4 Structure

The skulls were oriented towards several directions, without any regularity. Neither was there any regularity in the location of male and female skulls, or in their ages. The only intentional structure may have been the circle (fig. 10.11). However, since not all skulls are included in it, this form might be coincidental. The position of the

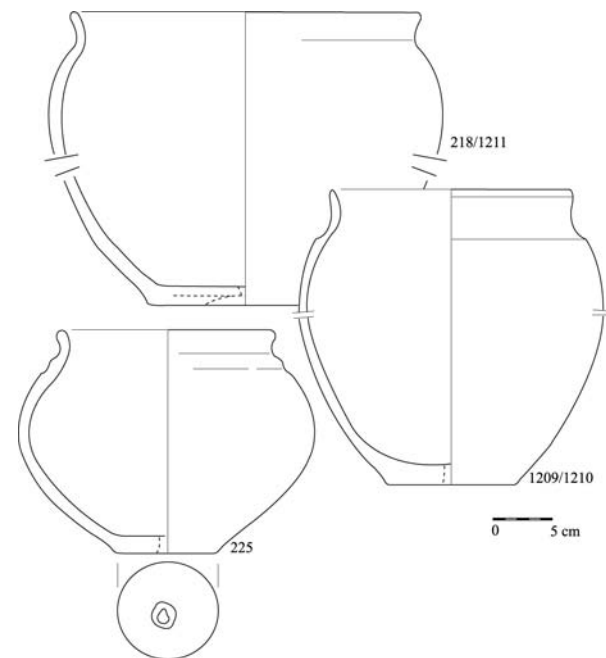


Fig. 10.14 Three pots with perforated bases. The pots were reconstructed from fragments found among the human crania in the dung layer; they were 50-75% complete. Numbers are research id. numbers.

¹⁴ Prummel 2008, 151.

¹⁵ Chemical research of residues and sherds did not show any recognizable substances (Tuin 2009).

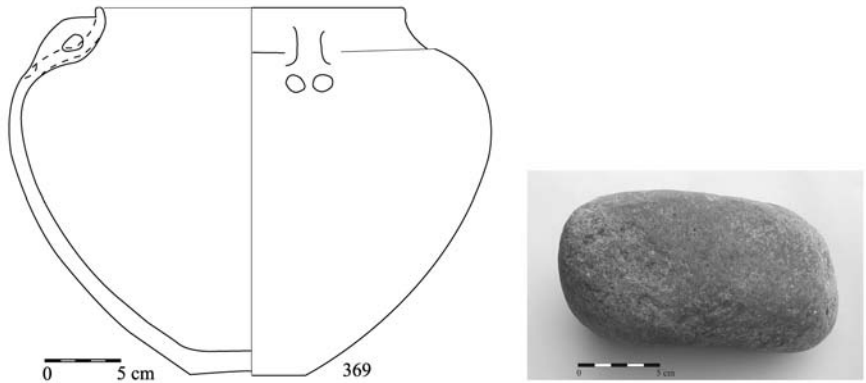


Fig. 10.15 A complete pot (no. 639-369) and a granite grinder (find no. 556) found in the dung layer.

skulls may elucidate this. The crania in the presumed circle (nos. 1, 2, 3, 5 and 8) were upright or lying on their sides. The crania outside the circle (nos. 4, 6 and 7) were upside down. Moreover, these cranial parts could easily be moved by, for instance, a dog, because of their easy-to-grab edges (fig. 10.12). It is possible that the crania in the 'circle' were placed upright and later fell on their sides when they were covered with dung, while the cranial parts outside the circle were moved there by dogs before the deposit was covered. This will not have oc-

cupied dogs for a long time since these crania did not contain anything nutritious anymore and were not interesting as bones to chew on (for the possible role of dogs, see also chapter 12.5.6), so it did not leave traces on the bone. Some gnawing marks on the ends of the cattle legs that were deposited in articulation show that dogs had access to the deposit. Additional evidence for an intentional circle comes from the spots of ashes: these form a somewhat smaller circle, a little eccentric above the finds (fig. 10.11). A somewhat smaller area was apparently set

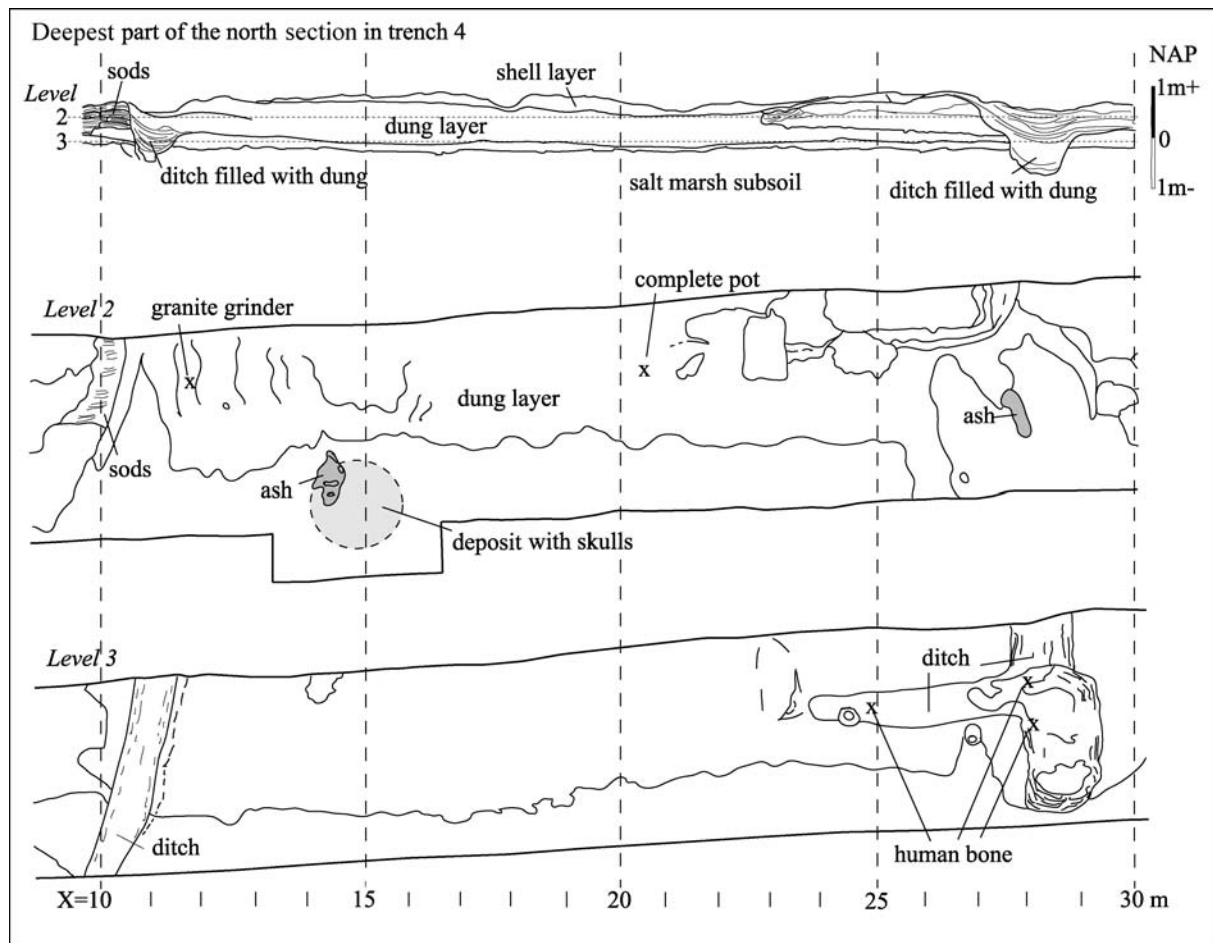


Fig. 10.16 Part of the northern profile in trench no. 4 with the corresponding levels 2 and 3, representing the location of the finds and features discussed in the text.

Table 10.3 Human bone fragments other than crania, in the dung layer and in the fill of the eastern ditch. After Van Beek 2001; Tuin 2008b, pers. comm. W. Prummel.

Find no., trench-feature no.	location	
no. 694, 4-556	near cranium no. 4, dung layer	Two hand bones: a distal fragment of <i>os metacarpale</i> 5 and an <i>os carpale</i> .
nos. 680 and 691, 4-556/568	near crania, dung layer	Two molars, not fitting one of the maxilla's of the crania.
no. 571, 4-704	in eastern ditch	Shaft of right fibula, with a possible cut mark in the middle of the shaft and possible gnawing damage at the ends.
no. 572, 4-704/708	in eastern ditch	Mandible of a child, aged 5 years \pm 16 months.
no. 817, 4-704/708	in eastern ditch	Cranial fragment: <i>os occipitale</i> .

Table 10.4 Dating of the finds and context of the assemblage in feature no. 556/568.

¹⁴ C-sample	material	years BP	calibrated OxCal 4.2.3 (95.4%)
GrN-25848	dung sample	2280 \pm 50 BP	410 – 202 BC
GrA-30879	residue from pot	2190 \pm 40 BP	380 – 163 BC
GrA-27787	cattle bone	2230 \pm 35 BP	385 – 203 BC
GrN-25935	two samples of shells from shell layer on dung	2250 \pm 20 BP and	391 – 351 or 303 – 209 BC and
GrN-25847		2215 \pm 30 BP	373 – 201 BC
see table 10.2	human crania	2255 \pm 35 BP – 2185 \pm 35 BP	398 – 164 BC
Pottery	typology (Taayke 1996b)		date
in dung layer	G3a and G3b		(450) 400 – 200 (150) BC
in shell layer	Ge4 and Gw4 with and without <i>streeband</i> decoration*		200 BC – 0 (AD 100)

* *Streeband* decoration is the most characteristic type of decoration of the hand built coastal ceramics from the late pre-Roman Iron Age (ca. 200 BC – 1st century AD); it consists of a number of thin parallel lines on the neck of a pot.

on fire after the deposit was covered. The location of the fire was slightly west of the original circle, probably because its position and size were not visible anymore after the skulls were covered with more dung.

10.2.2.5 Other finds

At some distance from the human skulls, several other finds were discovered in the dung layer and in the adjacent eastern ditch. Since these finds are close to the skull assemblage in space and time, they are probably related in some way (fig. 10.16). About 6 metres from the skulls, a complete pot of a middle pre-Roman Iron Age type was found in the dung. The pot was broken, probably due to the weight of the younger terp-layers above it

(fig. 10.15). Traces of soot and char on this pot show that it had been used as a cooking pot. The base of this pot was not perforated. Another find in the dung layer was a granite grinder, found around 2.5 metres northwest of the human skulls (fig. 10.15). This type of grinding stone was used before the rotary quern stones of basaltic lava from the Eifel region came into use in the late pre-Roman Iron Age.¹⁶

On the third excavation level, some additional single human bones and bone fragments were found in the dung layer and in the eastern ditch (table 10.3). None of these bone fragments fit the human crania. As mentioned above, this ditch had functioned in draining the dung layer. It was filled with dung when the layer had dried out sufficiently. On that occasion, some small human bones (a child's mandible, a skull fragment and part of a fibula) were deposited there, together with broken pottery (without drilled bases). A large spot of ash already had been found here in the second level. This turned out to be the location where the human bones were buried. Some potsherds were also found in this ditch. There were no complete pots, but a complete and nearly complete

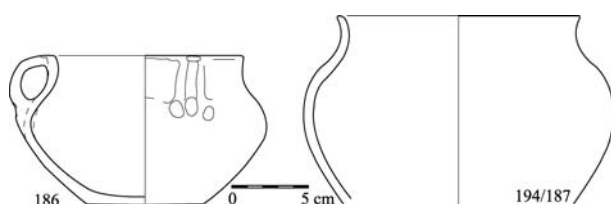


Fig. 10.17 Two reconstructed pots found in the dung fill of the ditch east of the platform. Numbers are research id. numbers.

¹⁶ Harsema 1979.

profile could be reconstructed (fig. 10.17). It is quite possible that the missing fragments were dug away during opening of the levels, or stayed behind in the part of the ditch that was not completely excavated (the insight that something special was going on in these ditches was only developed after the excavation was completed). The pots are both of the K1-type (K from *Klein*, meaning small), also from the middle pre-Roman Iron Age.

10.2.2.6 Dating

Dating of the finds assemblage is based on pottery types and radiocarbon dates (table 10.2 and 10.4). The pottery in the shell layer on top of the dung is from the late Iron Age, at least one generation younger than the pottery in the dung, but the shells themselves are not of this younger date. The shells (mussels and periwinkles) are probably not the remains of meals of shellfish, although they are edible species. It is more likely that they were collected on the mud flats of the nearby Wadden Sea, in order to create a firm layer to live on; the shellfish may have been dead for several decades when they were collected. After the shells were applied, the late Iron-Age potsherds were trodden into the shell layer. The radiocarbon dates show that the finds assemblage in the dung layer was deposited between 400 and 200 BC. It is not likely that the dung layer had lain open for long before it was covered with shells; in that case, the dung would have decomposed much further. After the shell layer was applied, the potsherds of a younger generation landed there. Therefore, the dung layer with everything in it must have been deposited at the end of the 3rd century BC.

10.2.3 Reconstructing events

When we combine all these data, it is possible to make a hypothetical reconstruction of what happened here:

1. Human crania (and some minor human bone fragments) were taken from a collection of human bones.
2. Holes were drilled in the bases of three used cooking pots.
3. Two cattle were butchered and skinned, perhaps with some other animals.
4. A first dung layer, 30 or 40 cm high (before settling), was applied next to an existing platform (or between several platforms).
5. Parts of the butchered cattle's legs were piled on the dung layer, probably near its southern edge; the human crania and additional small bones were placed there too, together forming a circle.
6. The pots were placed somewhere and filled with a liquid substance, which then seeped into the soil.
7. A communal meal followed, during which all or part of the meat of the butchered animals that had not been deposited in the circle was eaten. The

meat of the non-deposited remainder of two cattle, and perhaps of a calf and two sheep, was sufficient to feed a large party.

8. Some crania were moved and some cattle bones were slightly gnawed, probably by dogs. The skulls that were moved, were not placed back into the circle.
9. After the meal, the remaining animal bones were collected (incompletely, maybe accidentally adding some others that were lying around).
10. The pots, which were empty by that time, were broken.
11. The potsherds, together with the collected bones, were spread among the crania and pile of cattle bones.
12. Everything was covered with more dung soon after. The dung was probably thrown from a distance, so that the soft dung layer did not need to be entered. This caused most of the skulls to fall on their sides.
13. The dung above the circle of skulls and animal bones (actually a little more to the west) was set on fire. Because of the humidity of the dung, this only caused the dung to smoulder.

Later, after the dung had dried out and settled sufficiently:

14. A similar deposition, including human bones and potsherds, was made in the eastern ditch.
15. An extra layer of dung was applied and the eastern ditch was filled.
16. The dung above these objects was set on fire as well.

Later again, deposition in the dung heap of:

17. A complete and intact ceramic vessel, probably with contents.
18. A complete and undamaged grinding stone.

Finally:

19. A thick layer of shells was applied, thus creating a firm surface.

10.2.4 Was this a ritual?

Apart from the rather bizarre impression that it makes and the use of human crania, there are some clear reasons for the assumption that this assemblage is the result of a ritual. First, there are several positive arguments. The finds seem to be related and were found close to each other and on the same level, not to mention the circular shape of the deposit. The assemblage clearly is the result of planning, intent and structure. The sherds belong to only a few pots with identical characteristics. Legs of cattle were not spread over the area, but were piled up. Spots of ashes were found only above the circle and above the human bones in the adjacent ditch. The other finds in the dung probably are related to the skulls and its associated

finds. The complete pot and the granite grinder found elsewhere in the dung layer might well be linked to these finds in some way. The finds in the ditch on the east of the dung heap resemble the assemblage with the skulls; they consist of human bones and pottery as well. The conclusion that this was a deliberate deposition, most likely the remainder of a number of related rituals, seems to be justified.

Secondly, these deposits are clearly 'odd' deposits, to which the negative argument applies: a practical, purely functional explanation is not possible, although some tentative explanations have been forwarded informally, for example: "These were just bones from some cleared graves", or "This is just a refuse midden and the skulls accidentally landed there". Several arguments plead against these explanations. There is, for instance, no practical need for clearing graves in this area. There was enough space for settlements to grow and the same applies to (hypothetical) cemeteries. Moreover, the dung heap was not a refuse midden. Despite wet screening hardly anything was found in it, apart from the finds described above.

10.2.5 Methods for interpretation

Establishing that these finds are probably the remainders of rituals is only a starting point. More interesting is how to make sense of them. What was the occasion for the ritual? Why was it performed?

Interpretation of this ritual faces with some major problems. To begin with, the meaning of single human bones is hard to assess, since funerary ritual is largely unknown in this area. In Englum, one grave from the same period was found (see Appendix A.3). There are no parallels known for this find in the coastal area, nor anywhere else in the Netherlands, although human remains were found in other terps, sometimes, as will be shown in the next chapters, in dung layers and house platforms. Human skulls and other single human bones are rather familiar finds from many Iron Age sites in northwestern Europe, for example in Scotland.¹⁷ Seemingly parallel finds from the Neolithic Middle East are so remote in time and place that they cannot be used very well for the interpretation of these finds. Nevertheless, some of the same problems that the researcher is faced with when interpreting the finds from Englum (or Scotland for that matter) are also encountered when dealing with Neolithic finds, as was discussed under the heading of *The human-nature bias* (8.6.3).¹⁸

Any interpretation of the remains of rituals will have to start with a detailed description of the finds and their context, as a first line of inquiry. The second step is to account for the events and processes that caused the finds assemblage as we found it. The actions that resulted in

a specific finds assemblage through the filter of post-depositional processes can be reconstructed, although a reconstruction can never represent more than a small portion of past events. This was attempted above for the Englum deposit.

Although the reconstruction of the event is already revealing (we know now that the making of an extension to a habitation platform was the occasion for the deposition of the human skulls and related objects), it is possible to follow a third line of inquiry. We can be certain that the people who performed this ritual had a reason for performing it, as well as for the way it was performed. Therefore, if it was not a regular ritual, we can search for its meaning in the meaning of its components. When trying to understand what happened here, we should try to understand what skulls and other human bones, dung, cattle, the act of burning, pots with or without holes and circles may have meant, not only when used in a ritual, but also in practical, daily life. In other words: we should write a specific cultural biography of the event. Doing that, we may also discover something of the symbolic and ritual meaning of these elements. Symbolic meaning is based on (in principle) intelligible associations between objects, natural or supernatural beings, acts, events and aspects of human life and the surrounding world, as was argued in chapter 8.2. By investigating the ritual and non-ritual meanings of all components of the ritual, it is possible to acquire a fuller understanding of the event. The search for these meanings makes use of what is known of various aspects of life in the terp area, as described in Part 1 of this study.

10.2.6 Ritual elements

10.2.6.1 Human remains

The skulls may belong to relatives who were subjected to a normal funerary rite, or to outsiders or enemies, people who were subjected to unusual treatment. We will have to consider the possibility that they were war trophies, victims of head hunting or victims of human sacrifice. Do the crania give us any indication of that?

There are no cut marks or traces of violence on the crania. Decapitation would have left traces on the vertebrae, but vertebrae are missing. Osteological indications of decapitation that might be visible on crania, such as damage to the mastoid processes or occipital regions, are not visible on any of the skulls; in case of decapitation, at least some skulls may be expected to show such damage.¹⁹ It does not seem likely that decapitation was the cause of death.

The average age of the skulls (ranging from 15 to 45 with an average of 26-34) seems to be rather young from a modern, western point of view. That might be

¹⁷ Armit & Ginn 2007.

¹⁸ Bienert 1991.

¹⁹ Okumura & Siew 2013, 686.

taken as an indication that they died an unnatural death. However, these ages are not exceptional compared to the average age at death in contemporary cemeteries elsewhere, as was discussed in chapter 4. People generally died at a much younger age than nowadays, partly due to infectious diseases. One of the crania showed possible traces of malaria. Women must have run a high risk of dying during childbirth; that may well have been the cause of death of some of the young women, whose skulls were buried here. It can be concluded that their young age cannot be considered as an indication that these people were killed.

Although there are no indications from the skulls themselves that these people had been the victims of violence, either as war trophies, as victims of headhunting or as victims of human sacrifice, that possibility cannot be excluded either on the basis of the human remains. Still, the mainly female Englum skulls were probably no war trophies. Although Celtic as well as Germanic warriors are reported to take heads as war trophies, these would be skulls of male adversaries.²⁰

Based on the analogy of cattle-oriented societies in Northeast Africa and medieval Ireland, Roymans has suggested that cattle raiding may have been an important practice for the cattle breeders of the northwest-European Plain as well.²¹ It is conceivable that such raids included headhunting. However, apart from the cattle breeding analogy there is no evidence at all that raiding was practiced in the terp area. Of course, it is difficult to prove that raiding did not play some part here. Ethnographic evidence indicates that women, children and elderly people were often among the victims in areas where headhunting was practiced.²² However, evidence of headhunting usually consists of skulls that include mandibles and cervical vertebrae, often with specific damage as mentioned above.²³ If headhunting was practiced by the people of Englum, the heads must have been kept for a long time, so that they could decompose and fall apart. However, the presence of small, non-cranial human bones and bone fragments, as were found in Englum, cannot be explained as the result of headhunting practices.

It is also unlikely that the crania were coming from the victims of human sacrifice, as for instance Verhart has suggested.²⁴ If this deposit would have something to do with human sacrifice, these sacrifices must have taken place in the past; the last remnants then were deposited on this occasion. It is not unlikely that human sacrifice occurred in this area; it was probably practiced in the

nearby Pleistocene area in bogs and moors, as described in chapter 5. However, an important argument to reject human sacrifice as an explanation in this case is that human sacrifices are dedicated to supernatural beings; that will usually imply their removal from the community. The people who ended up as bog bodies were completely removed from the everyday world. Collecting the skulls of sacrificed people is not in line with human sacrifice. Offering skulls that were taken during headhunting is a possibility, but as was noted above, the presence of post-cranial bones renders this explanation unlikely.

The evidence of the bones permits another explanation. Mandibles, most teeth, upper vertebrae, and large cranial parts of some of the skulls are missing; several crania have come apart along the sutures. Some skulls show traces of weathering (nos. 4 and 7), of others, the fragile facial bones have disappeared (nos. 3, 6). This leads to the conclusion that the bodies, to which the skulls belonged, decomposed elsewhere (in or above the ground) and that, after this process was finished and they had disintegrated, remaining parts were collected and brought to this location. The other, less conspicuous human bones that were deposited must have the same origin. That implies that a funerary ritual in which excarnation was followed by collection of the bones and then secondary burial or other use (one of the rites in phase II or III in fig. 7.2), was one of the rites surrounding death that were practiced in Englum.

The almost exclusive use of crania suggests that a selection was made. The preservation of bone in the calcareous salt marsh soil is excellent, so these cannot have been the only bones that remained after burial near the terp itself. Skeletons without skulls are virtually unknown in the area²⁵, so skulls were probably not taken from graves. In principle, it is possible that the crania were taken from graves in the Pleistocene inland area. In that case, however, the crania would not have been preserved so well, because of the acidic soils in that area. Moreover, as was mentioned above, stable isotopes demonstrate that these people were native to the salt marsh area. Aboveground excarnation might account for missing body parts because these would have been removed by animals, water or otherwise. However, can it explain that the crania had remained? Moreover, the Englum find consists of well-preserved human bones, mainly crania but not exclusively so. There are some minor finds of other bones among the crania, notably some hand bones, and a mandible and a fibula fragment in the eastern ditch. How can we explain the presence of these bones if we assume the crania were selected deliberately?

A study of the human bones from a British Neolithic funerary monument, Adlestrop Barrow, clarifies this

20 Birkhan 1997, 822ff; De Libero 2009, 282.

21 Roymans 1999.

22 Armit & Ginn 2007, 128; Armit 2006.

23 Armit 2006.

24 Verhart (2006, 153) includes the northern Netherlands in the Celtic world and interprets the skulls from Englum in the light of assumed Celtic practices.

25 There is only one possible exception, from Ezinge; it will be discussed in the next chapter (Appendix C, cat. 111y).

problem.²⁶ Many of these bones appeared to have been scavenged by canines. This was inferred from damage such as puncturing, furrowing, and pitting and some spiral fractures, consistent with published examples of the results of scavenging by wolves or dogs.²⁷ These traces were found on long bones, pelvis bones and mandibles, not on ribs, hand bones or crania (it is not clear whether this bone material does include crania). Smith concludes that the bodies these bones had belonged to were “excarnated for a limited period during which time they were accessible to scavenging animals. The remains were then collected as part of a multi-stage mortuary rite ending finally in deposition within the monument.”²⁸ Smith includes an overview of the different stages of ‘canid assisted disarticulation’ from the work of Haglund (for the details, see chapter 12).²⁹ This demonstrates that canines consume and disarticulate the bodies of humans in a predictable order; in the end, only crania and a small number of other bones are left.

When we apply this scheme to the bones of Englum, it is clear that the crania and the small bones and bone fragments found in Englum fit this scheme. They might be the only bones left after aboveground excarnation, especially when scavengers such as dogs were involved. Although this implies that intentional selection was not the main cause of the presence of crania rather than other body parts, skulls still may have had an extra value. It was probably considered the essential part of a person, more so than other human bones.

It can be concluded that the evidence is not indicative of violent deaths. It is unlikely that these people were the victims of human sacrifice, nor were their heads taken as war trophies. Head hunting as part of raiding is not a likely explanation either. The non-cranial human bones that were found, though small, are inexplicable if these people were the victims of headhunting, war or human sacrifice. Aboveground excarnation with the aid of canines, most likely dogs, offers the best explanation of this assemblage of human bones. That process does not necessarily leave gnawing marks on the bones, but the presence of gnawing marks would, of course, make the evidence stronger. Only one of the bones from this deposit, the shaft of a fibula in the adjacent ditch (table 10.3), shows the kind of damage that may be caused by dogs. One of the other single human bones in Englum, found in a water pit from the middle pre-Roman Iron Age, also shows possible gnawing marks made by a dog (A.1). The analysis of some dog’s coprolites from Englum only revealed some animal bone fragments.³⁰ The evidence is

clearly not conclusive. The process of excarnation will be further examined in chapter 12.

The eight crania belonged to young women in particular. The oldest individual was a middle-aged man. We do not know whether there is any meaning attached to this distribution. It is quite possible that the personal identity of the bones that were collected and kept after excarnation was forgotten after a while, and that age and sex of the dead were not considered important. Such individual characteristics may not have had any influence on the secondary use of human bones.

10.2.6.2 *Dung and cattle*

The dung layer consisted mainly of the dung of cattle. This was inferred from the consistency of the dung during the excavation. The excavated dung layer measured 15 x 0.6-0.8 x >4 m. Before settling, it may have been over 1 metre high, so the volume of the dung heap was at least 60 m³. The large amount of cattle dung comes from a large number of cattle that must have been kept inside for a part of the day, at least at night during summer and winter, to be able to collect the dung (see chapter 3.3.3). Dung was not necessary as manure in the salt marsh area and was probably not used as such. Its main use in this area was as a construction material for heightening terps, for which it was very suitable thanks to its insulating qualities.³¹ Dung was also used as fuel, as could be inferred from the dried dung cakes found in Englum (fig. 3.7). Dung was thus used to make high, safe and comfortable living areas; it gave warmth and energy. Although in our society, dung is often symbolically associated with pollution, rusticity and backwardness, it may have been a symbol of good fortune, warmth and successful living in the communities of the terp region. This symbolic meaning must have played a role when dung was used in rituals.

The large amount of dung is in line with the results of animal bone research.³² Cattle bones were most numerous by far in Englum (74.8% in this period), leaving far behind other animals such as sheep (16.4%), horse (1.1%) and pig (1.4%).³³ Pigs and horses must have been a minor part of the livestock of the settlement. As was discussed in chapter 3, vast grasslands, usable for grazing livestock, were the main attraction of the salt marsh area for the early colonists. Cattle and sheep were not only a source of food (meat and, in particular, dairy products), but probably also an important factor in social life and in ideology. That can be inferred from finds of some rare finds of carved wood shaped like horned heads, inter-

26 Smith 2006.

27 Smith 2006, 674.

28 Smith 2006, 679.

29 Haglund *et al.* 1989; Haglund 1997a.

30 Zeiler 2009.

31 Zimmermann 1999.

32 Prummel 2008.

33 Percentages of number of bones of identified domestic animals in this period (n = 553 on a total number of bones of 643), see Prummel 2008, Table 8.2 and 8.4.

preted as cattle heads (fig. 3.6), and from younger historical sources, especially Tacitus' *Germania*.

In the ritual of this case-study, cattle played a major, though passive role. The parts of legs of two cattle were piled up in the circle. This is in line with the type of animal sacrifice that is accompanied by a ritual meal, as described in chapter 8.3.2. A part was offered to a supernatural being, while the remainder of the meat was probably shared and eaten by a group of people, making the ritual into an important social event.

10.2.6.3 Pottery

In the pre-Roman Iron Age, a household had a limited set of around 5 pots in use³⁴, for cooking, for storage of dry products and as containers for liquids. Only a few of the known pottery types, namely dishes and some small pots (only differing from cooking pots in size), may have served as tableware, but such pots are rare in this period. Out of 327 pre-Roman Iron Age (mostly fragmented) pots found in Englum, only 30 may have been used as tableware. Cooking pots have a limited lifespan. If they do not break, they need to be replaced when they become too dirty to be cleaned. Pottery can be used in rituals in several ways, for their own sake or as containers. In the latter case, special quality need not be required since the contents, rather than the vessel itself are of primary importance.

The complete pot in the dung layer that was dug in later (fig. 10.15) probably served as a container for some perishable substance. Pots with perforated bases, such as the fragmented ones that were found among the skulls, often have been interpreted as cheese moulds.³⁵ Perforated pots with inward curves, however, could only have been used for the production of soft cheese that would allow to be taken out after curdling. That probably was not the function of the former cooking pots with perforated bases used in this ritual. The layers of burnt residue found in them would give the cheese an unpleasant flavour.

Pots with perforated bases have been found in ritual contexts elsewhere, for instance in finds assemblages in the former lakes of Varbrogaard in northern Jutland (Denmark) and Käringsjön in Sweden.³⁶ These sites were interpreted as sacrificial places that were in use over a long period. In Oldenburg (Germany), the sherds of a complete large storage vessel with a perforated base was found, together with the cremated remains of parts of two cows and a pig; the find dates from the 5th or 4th century BC.³⁷ Searching for an explanation, the authors

mention the large *dolia* with perforated bases, which were used in the Mediterranean Mithras cult for catching blood, which then could seep slowly into the soil.

Pots with perforated bases are likely to have had a special function when used in ritual. Experimental research has shown that such pots, filled with porridge, give the impression that the porridge is slowly sucked out of the pot.³⁸ Such deposits were probably offerings, intended for gods or spirits or, as possibly in the case of Englum, for the spirits of the people whose crania were buried here.

10.2.6.4 Breaking, burying and burning

Breaking pots or burying them after use takes them out of circulation, just like the burning, killing, drowning, bending and other destructive acts that often occur in sacrificial acts. The reason for this ritual destruction may not only be to make them unusable and thereby symbolically emphasize that an offering is definitive. Things that have been part of a ritual, such as the remains of a ritual meal, tend to be considered as *sacred*. As was discussed in chapter 8.4.3, the sacred shares many characteristics with contaminating substances and may be a source of danger, to be taken out of reach. Ritual destruction may be an effective answer to that threat.

Burning something in the first place destroys it and takes it out of the everyday world, just like breaking and burying. Burning something also makes it go up in smoke, which can be a proper way of offering something to gods or spirits that are conceived of as being somewhere in the atmosphere or in heaven. Burnt offerings can be opposed to buried offerings, dedicated to chthonic gods. To oppose burning and burying like that, however, oversimplifies the matter. In the Englum ritual, the deposited objects were not burnt, but rather their matrix, the dung above it. This is more in line with burning as a symbolical cleaning or purifying act, a common trait of ritualized behaviour.³⁹ The pollution caused by handling human bones or dung apparently was balanced by burning part of the dung above the skeletal parts.

10.2.6.5 Circle

Circles may have a symbolic meaning, but this circle was perhaps considered just a proper, natural form for deposition, without symbolic meaning attached. The form might even be accidental. That some of the crania were found outside the circle and were not placed back after they were moved, may indicate that the actual performance of the ritual was felt to be more important than the final resulting deposit, and that the circle was not felt to be important at all. Nevertheless, the form does have some significance in this context, because the use of such structures, also or even especially when their use is not

34 Taayke 2007, 267.

35 Recently, Perry (2012) has shown that post-firing perforations of Anglo-Saxon cremation urns in Britain had a practical purpose: the urns had been used earlier for the preparation of food in which fermentation played a role (butter, cheese or beer).

36 Becker 1970, 151; Carlie 1998, 22.

37 Gabriel & Heinrich 1976.

38 Olofsson & Josefson 2007, 32.

39 Boyer & Liénard 2006.

entirely conscious, is one of the characteristics of ritualized behaviour.⁴⁰ It is evidence that we are dealing with a ritual.

10.2.7 Interpretation

Based on these data and meanings, it is possible to draw some conclusions on the character and meaning of the ritual that was performed here. The occasion for the ritual was the construction of an extension onto a habitation platform or several platforms. During building, eight crania and large cranial parts were deposited in the form of a circle, which indicates the ritual character of the deposit. The crania belonged to people who had died earlier, possibly even decades earlier. They may have lost their individual character in the meantime; their sexes and ages may have been of no importance. Offerings of a liquid substance in pots with perforated bases, and of parts of two cattle, were part of the ritual. The ritual was accompanied by a ceremonial feast, in which (considering the amount of meat of at least two cattle that was available) quite a large party may have participated. When the construction of the platform was completed and the dung had settled, the ritual was repeated while infilling the adjacent ditch, though on a smaller scale.

It was concluded that the people whose bones were buried here, were not the victims of human sacrifice and that their heads were not taken during battle or raiding, in particular because such practices do not explain the presence of small, non-cranial human bones and bone fragments. The most likely interpretation is that these skulls and other bones were the remains of dead relatives, ancestors we might say, whose corpses had been subjected to excarnation. Excarnation must have occurred during aboveground exposure, possibly with the aid of canines, most likely dogs. At the end of the excarnation process, the remaining bones were collected and kept, to be used in secondary rituals.

The reason for the deposition of ancestral remains may have been that it was felt necessary to warrant the protection of the ancestors when the existent living area was extended. If the new platform was to be used by all the residents of the terp, all families may have contributed one or several skulls and other bones, thus underlining joint use and ownership. Alternatively, one family may have felt the need to lay claim to power, land or just the raised area. In that case, the bones of dead relatives were buried here to support that claim. By burying the skulls, artificial ancestral grounds were created. That implies that the bones can be considered inalienable possessions as defined by Weiner⁴¹, which served to emphasize the identity of the families that were involved (see also chapter 8.3.2).

It is likely that the buried people were ancestors (or more generally dead relatives), but that in itself does not make this event into an ancestor cult. As Whitley has argued, ancestor cult cannot be taken for granted, but has to be demonstrated.⁴² The Englum ritual does meet Whitley's requirements, indicating that an ancestor cult is indeed involved. In the first place, these dead may be called 'ancestors' because they are remembered by their descendants and other relatives, although perhaps not as individuals but as part of a 'collective'. Actual descent was not considered important in that case. In the second place, this ritual could well be a rite of incorporation, in which the people whose bones were buried acquired special (supernatural) ancestor-status. Finally, although the place of worship in an ancestor cult not necessarily is the place where the ancestors are buried, this may indeed be the case in Englum. The offerings that were made during the ritual itself (the pots with their liquid contents and the pile of cattle bones) may have been aimed at the ancestors, rather than at some other supernatural being. An even stronger indication is that more offerings (a grinder and a pot, probably containing something) were made in the dung layer on later occasions. It seems likely that these deposits were offerings to the ancestors that were buried here, to ask them for help or to thank them for perceived favours.

It can be concluded that the ritual had more than one meaning. It not only was a ritual that accompanied the extension of the living area (a foundation deposit), but also a rite of passage, during which dead relatives acquired ancestor status. The large group of participants, butchering of two cows and the following meal, and the local burning of the dung layer, all contributed to the memorableness of the event. The components of this large-scale and unique event combined to make a lasting impact on the participants, which makes it a ritual in the imagistic mode. As was discussed in chapter 7.4, rituals in the imagistic mode are characteristic of small-scale societies with a low degree of organization, a theme we will return to in the next chapter.

If the assumption that this was a ritual in the imagistic mode is correct, it becomes immediately clear why such deposits have not been found more often. In that case, there was no standard ritual to be performed whenever a new habitation platform was made. Although rituals may often have been performed during the building of new platforms, they were probably reinvented over and over again, using many different components. Although the purpose of such rituals was probably the same: to establish a new domain, safeguarded by the protection of ancestors or other supernatural beings, the appearance of such rituals may have varied considerably, as do their remains in the archaeological record.

⁴⁰ Boyer & Liénard 2006.

⁴¹ Weiner 1992.

⁴² Whitley 2002, 122.

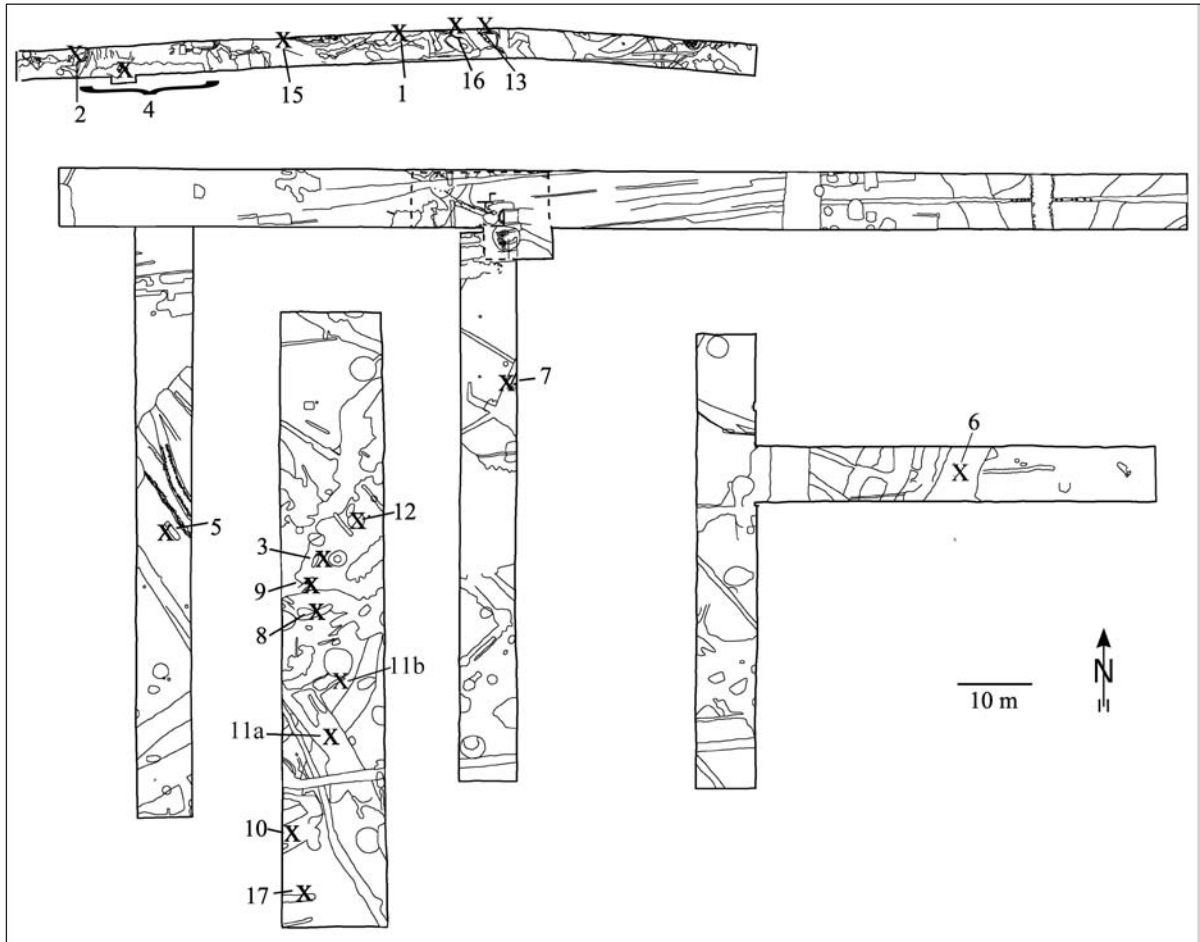


Fig. 10.18 Location of the remains of rituals that were identified in Englum. For details of the finds, see Appendix A.

10.3 Other remains of rituals in Englum

10.3.1 Introduction

During the excavation, two 'odd deposits' were immediately interpreted as the remains of rituals, besides the human skulls in the dung heap. One was a pit with two pots; one of these pots had been placed upside down and contained, dog bones and three playing counters; the other was a pit with the skeleton of a big fish and potsherds. The dog in the inverted pot were later found to be a dog skin; the big fish was identified as a cod (*Gadus morhua*). During post-excavation analysis, another fourteen conspicuous finds and finds assemblages were identified as the remains of rituals, which brings the total number to seventeen. These finds are all rather well dated and most of them come from well-established contexts. These finds assemblages include features with human remains, one of the areas of special attention in this study⁴³, pits with

a large number of potsherds and bones, part of a horse, cut off human hair, deliberately broken pottery, deposits of pots in ditches, potsherds painted with an organic pigment, and a pendant made of a *terra sigillata* sherd. The reader is referred to Appendix A for the details of the finds, including the reason why the find is thought to be related to ritual practice. They are described in chronological order.⁴⁴ The case of the eight human skulls discussed above has been added to the list for formal reasons (A.4). The location of these finds in the excavated area is represented in fig. 10.18. Table 10.5 provides an overview of the finds and their dates.

The detailed description in Appendix A serves as the cultural biography of each of these finds assemblages. It forms the basis of the discussion and interpretation of the finds below. Just like the deposit of the skulls described in the above, these finds can be interpreted on the basis of components that are visible in the archaeological record: the objects they consist of, their context, and the actions that contributed to the creation of these finds assemblages. That is also the order in which they will be discussed

43 Some human bones (a tibia of a newborn infant, three single bones from adults) were found during opening trenches in the topsoil of the levelled area. These unstratified finds might be of any date, from the pre-Roman Iron Age until the Middle Ages, and therefore were not included in the list.

44 These finds are referred to in the text with their number, preceded by A.

Table 10.5 The remains of rituals in Englum, in chronological order. Numbers refer to Appendix A. Nos. A.13 (TS pendant) and A.14 (painted sherds) are not included.

Catalogue no. (short description)	Date (centuries BC – AD)							
	5	4	3	2	1 BC	1 AD	2	3
1 (human bone in water pit)			?					
2 (hair in platform)								
3 (grave in salt marsh)								
4 (skulls etc. in platform)								
5 (pottery etc. in pit)								
6 (horse in creek)							?	
7 (pottery in ditch)								
8 (dog and pots in pit)								
9 (cod in pit)								
10 (pot in ditch)								
11a (pot in ditch)								
11b (human bone fragment in ditch)								
12 (human bone etc. in pit)								
15 (grave in terp)								
16 (pottery and bones in pit)								
17 (pottery in ditch)								

below. The active and passive social participants that can be inferred from these ritual deposits and finds give the opportunity to classify the rituals from Englum, including the skull deposit.

The finds from the appendix are not discussed per period but as a group, because their number is only small. Still, some trends can be distinguished. Firstly, there is a clear relation between the location of the finds and the size of the contemporary terp. Secondly, there seems to be a peak in depositional practice during the early Roman Iron Age. The following discussion results in hypothetical interpretations of the finds. These still need to be tested by comparing these finds to ritual deposits in other terps, in particular to the finds from Ezinge in chapter 11.

10.3.2 Discussion and interpretation

10.3.2.1 Material categories

Objects involved in the ritual deposits identified in Englum are pottery, human remains, animal remains, stones, and wood. Metal finds from the research period from Englum are very rare. Only a disc fibula from the middle Roman Iron Age might have been a ritual deposit, but its context is not clear.⁴⁵

10.3.2.2 Pottery

Pottery was part of most of the ritual deposits identified in Englum, with the exception of the inhumation burials (A.3 and 15) and the deposit of a partial horse in a creek (A.6). Pottery was found in the form of complete pots (all broken due to the weight of overlying terp layers or modern machines), as deposits of sherds from one or a small number of pots (some of them with traces of deliberate breakage, or with bases that were perforated prior to their last use), as deposits of sherds, as sherds of painted pottery, and as worked sherds, in particular a *terra sigillata* pendant and playing counters. Some pottery deposits (A.5, 7, 16) probably contain several pots from the same potter, as can be established on the basis of strong similarities in shape and fabric.

Complete pots were found upright (A.4, 8 and 11) or inverted (A.8). They were probably all used as containers. While A.11, found on the slope of a ditch, was a nicely decorated pot, the complete pot in the dung layer that was later deposited near the human skulls (see above) was a plain cooking pot, and the small pot of A.8 misses its handles. The handles may have been removed deliberately for some reason associated with the ritual, or had broken off earlier. In the latter case, the quality of the pottery used in a ritual was apparently not considered important, a conclusion that is in line with the use of cooking pots at the end of their lifetime in the deposit with the skulls. Pottery used as containers in rituals clearly was not the best tableware that was available.

⁴⁵ Tulp 2008, 78.

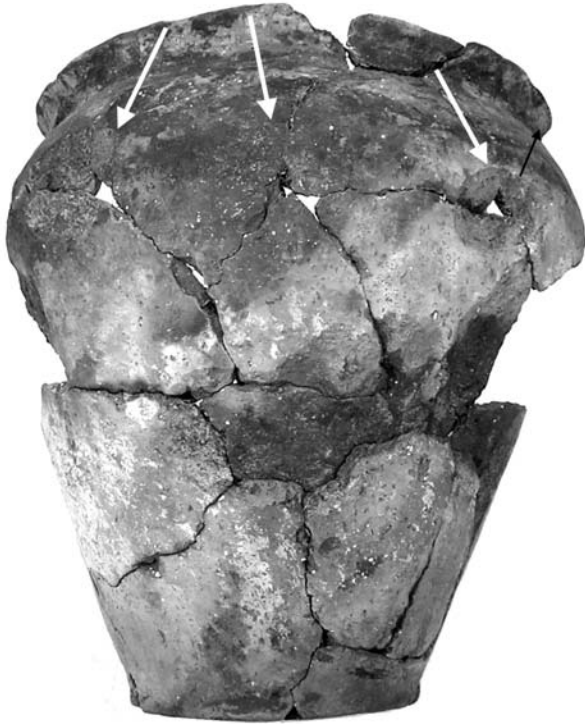


Fig. 10.19. A reconstructed pot, no. 252 from A.16 (H. 38 cm), with the breaking lines clearly visible. The arrows indicate places where spalls came off the surface.

The inverted pot contained the remains of a dog skin with head, lower legs and tail attached, and three playing counters. Inverted pots have been found elsewhere, for instance in settlements in northern Germany and Denmark, where they are taken as an indication of ritual.⁴⁶ An inverted beaker was part of a cremation burial near Jemgumkloster.⁴⁷ Pots in ring ditches in urnfields are often upside down.⁴⁸ In Schagen-Muggenburg I (ca. AD 300), a pit was excavated with seven inverted pots, which covered human cremation remains.⁴⁹ Another inverted pot was found under the threshold of a house.⁵⁰ Inverted pots have been explained as containers for offerings to chthonic divinities, or as a device to keep evil spirits down.⁵¹

Potsherds from which more or less complete pots could be reconstructed were found in Englum near the skulls in the dung platform described above, in pits (A.5 and 16) and in ditches (A.7, 10, 17). Fitting sherds were also found in a water pit (the earliest deposit, A.1), with the cod deposit (A.9) and in a large homogeneous pottery deposit with a human vertebra (A.12). It can be assumed that some of these pots had been broken deliberately as part of the ritual, but evidence is lacking. However, two

46 Beilke-Voigt 2007, 284-288.

47 Bärenfänger *et al.* 2008.

48 Kooi 1979, 135.

49 Therkorn 2004, 23.

50 Therkorn 2004, 48-49.

51 Åstrom 1987.

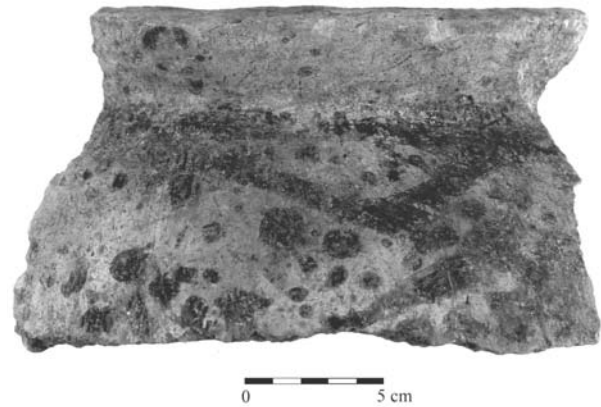


Fig. 10.20 One of the sherds from Englum with dots and stripes, made with an organic paint (no. 389-445).

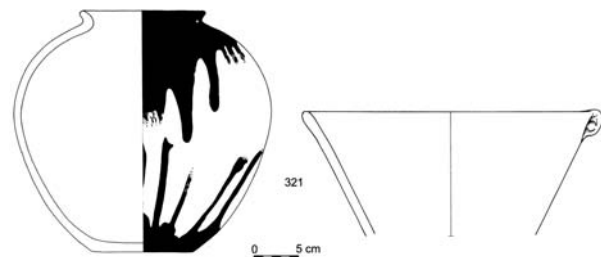


Fig. 10.21 Two pots from Paddepoel, one with organic paint from the base and from the rim, found in a rectangular pit. Date: early Roman Iron Age. After Van Es 1970.

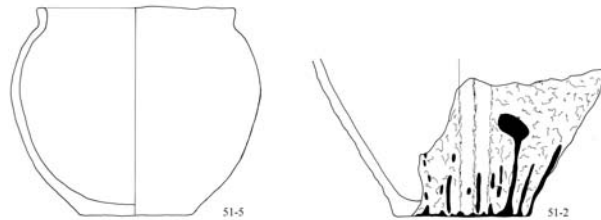


Fig. 10.22 A broken pot and a base with organic paint, found in a ditch in Wierum.

pots (both from the large deposit A.16) show clear traces of deliberate breakage (fig. 10.19).

Several *painted sherds* were found in Englum (fig. 10.20). Pottery with similar painted stripes and dots was also excavated in Noord-Holland, in contexts that were thought to be ritual. Chemical analysis of the pigment of the Noord-Holland material showed that it was possibly made of a mixture of blood and an inorganic component. This mixture had not been heated after it was applied.⁵² That implies that the paint was applied after the pots were fired, and that they were not used as cooking pots afterwards. Abbink therefore argued that the pigment mixture was applied on the pots at the end of their functional use as cooking pots, as part of their last use in

52 Abbink 1999, 294.

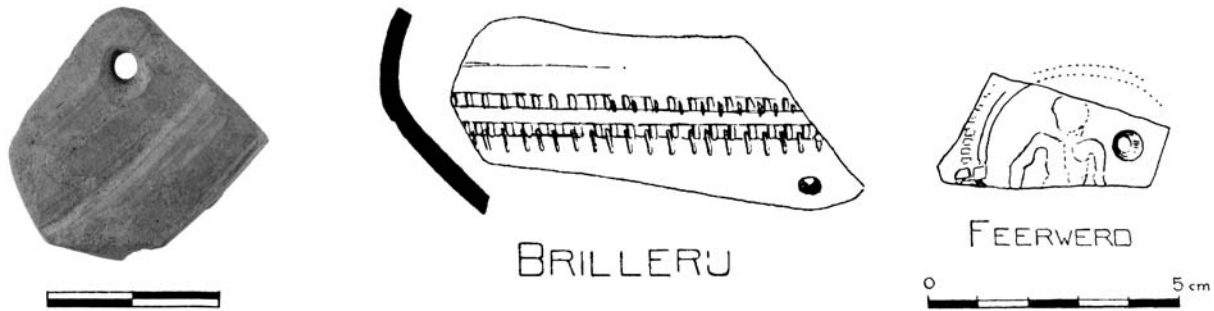


Fig. 10.23 Left: Pendant of an early Roman *terra sigillata* sherd from Englum (A.13). Right: two pendants of TS sherds from other terps in the Reitdiep area, dated to the middle Roman Iron Age (after Glasbergen 1944).

a ritual.⁵³ Although the chemical analysis can be interpreted in more than one way, and the composition of the pigment used on pottery in Englum and other terps may not be the same as the pigment used in Noord-Holland, it seems very plausible that such 'decoration' is associated with ritual.

The painted sherds from Englum date from the 1st and 2nd century AD. Sherds of similar date with painted dots and stripes are rather common in the terp region. For instance, in Paddepoel, not far from Englum, a broken pot had been decorated by having a liquid pigment run from the base over the wall of the upside-down pot, as well as from the rim (fig. 10.21).⁵⁴ It was found with a large fragment of a bowl in the dung fill of a rectangular pit. In Wierum, another terp in the Reitdiep area, a base with similar decoration was found with an almost complete broken pot, in the fill of a ditch (fig. 10.22).⁵⁵ Although the painted sherds from Englum were not found *in situ* or in contexts that could be related to ritual, the finds from Paddepoel and Wierum indicate that a ritual interpretation is not farfetched. Pottery that was painted with an organic substance may well have been used in specific rituals.

Worked sherds in Englum come in two kinds: playing counters made of hand-built pottery, and a pendant of a *terra sigillata* sherd. *Playing counters* are common finds in the terp region. In Englum, 33 playing counters were found in various contexts; three of them were found in the inverted pot of deposit A.8, together with a dog skin. Playing counters are usually made of potsherds. They may have been used in games. Their occurrence in a ritual deposit indicates that part of their meaning was symbolic. This meaning may be related to the popularity of divination and casting lots among the Germanic peoples, if we follow Tacitus.⁵⁶ More in general, they might be associated with good luck and fortune and thus can be considered objects with intrinsic power (magical or

instrument-special objects, see chapter 7.3.2). Playing counters may have been added to deposits in order to enforce their effectiveness.

A very special worked sherd is the pendant made of *terra sigillata* (TS), made of an early Roman rim fragment (A.13). It is interesting in this context because it may indicate a symbolic meaning of this material. The pendant is the only TS sherd that was found during the excavation. Pendants made of any other kind of hand-built or imported wheel-thrown pottery are unknown in the terp region, but TS pendants (though of later TS types) have been found in other terps as well, for instance in Feerwerd and Brillerij (fig. 10.23), in Ezinge (see chapter 11) and in Wijnaldum in Friesland, the latter in an early medieval context.⁵⁷ Some of these are decorated wall fragments, but there does not seem to be a relation between the decoration and the shape of the pendants. These finds have to be evaluated against the background of other finds of TS in Englum and other terps. This was the only find of TS in Englum, at least during the excavation. Whether TS was found during the period of quarrying is unknown.⁵⁸ TS of such an early date, the period of the first contacts with the Romans, is extremely rare in the terp region, but TS from the middle Roman Iron Age is common, also in nearby terps on the left bank of the Hunze/Reitdiep such as in Ezinge.⁵⁹

A high percentage of reused TS sherds is also known from northern Britain, another area outside the Roman Empire.⁶⁰ The use of modified, exotic sherds in northern Britain and in the terp region fits in a general pattern. Indigenous societies that come into contact with a dominant, expansive culture may react in many different ways to the new situation.⁶¹ Nevertheless, there are some similarities, especially in the use of foreign objects. Indigenous cultures never simply accept the material cul-

53 Abbink 1999, 313.

54 Van Es 1970, fig. 42.

55 Nieuwhof 2006b, 27.

56 Tacitus, *Germania* 10.

57 Volkers 1999, 153.

58 The scarcity of quarrying finds from Englum applies to all material categories.

59 Glasbergen 1944.

60 Campbell 2012.

61 Verhart 2000, Ch.1.

ture of the colonists as it is, at least not in the beginning. And: only a small selection of foreign objects is found interesting, and usually not for their original, functional use. Waste of the foreigners is often modified into objects with a symbolic function, for personal adornment or as prestige-enhancing possessions.⁶²

An example that is especially relevant here, is the use of Delft faience by native Americans who came into contact with Dutch fur traders in New Amsterdam in the 17th century.⁶³ Delft blue tiles and vessels were not used as such, but sherds of this ware were made into pendants, and served as grave goods. Only later, complete cups replaced the pendants in graves, but these probably still had a value and meaning that differed from the way they were used and valued by the Dutch. The native Americans near New Amsterdam, who were in direct contact with the Dutch traders, were the first to adopt these complete objects. Further from the settlement, where foreign goods were acquired by exchange, fragments were in use much longer.

The use of *terra sigillata* sherds in the northern Netherlands after the first encounters with the Romans fits in the pattern sketched above. The early pendant from Englum is a clear example of a fragment from the alien culture that is modified to create something new, with a meaning of its own. It may have enhanced its owner's prestige, but the use of *terra sigillata* rather than other kinds of Roman pottery indicates that it was a special quality of this ware, which made it suitable for such use. The warm orange-red colour is the most outstanding and unique characteristic of TS; it might account for the extra value that seems to be ascribed to TS. It cannot be established what this symbolic value was, although we may speculate on the symbolic value the colour might have had, related to life, warmth and protection. Pulverized TS sherds may even have been used as a pigment. It is possible that the pendant functioned as a protective amulet, which would classify TS as an instrument-special material. Whatever its meaning may have been, the TS pendant is a striking example of the use and significance of fragments of objects.

Human remains

Human remains were found in features from the entire research period. They consist of human hair, single bones and two inhumations.

The two inhumations date from the middle pre-Roman Iron Age (A.3), and from the middle Roman Iron Age (A.15). A.3 was found in the salt marsh outside the contemporary terp, A.15 was found in the terp itself. There are no indications of a cemetery anywhere on or near the terp, but there may be more graves hidden in

the terp remainder or in the area surrounding the terp. Nevertheless, two inhumations over a period of 800 years in a settlement with several households cannot be considered representative of common burial rite. The rareness of inhumation burials confirms that inhumation was not the usual burial rite of the period. Stable isotope values (see above) indicate that the middle-aged man from the middle pre-Roman Iron Age (A.3) was native to the salt marsh area. The woman (probably) from the middle Roman Iron Age (A.15) had less deviating values compared to inland individuals; she must have lived in the area for some time, but not all her life. She may have come to the area as a bride from an inland region. Although stable isotopes cannot prove it, it seems likely that these people were members of the Englum population. None of the skeletal parts show injuries or deformities, but the middle pre-Roman Iron Age skeleton was poorly preserved; the younger skeleton was far from complete.

Apart from the deposit of the human skulls and a small number of other single bones in the dung platform described above, single bones were found in three features: the water pit mentioned above (A.1), a ditch (A.11b) and a round pit which contained a large amount of potsherds and a human vertebra (A.12; see below). Like the skulls, these bones must have been collected after excarnation. One of them, the distal end of a radius (A.1), shows shallow, parallel scores, probably made by dog teeth. Just like the skulls in the dung platform, these bones may have been part of collections of inalienable and personalized objects before they were deposited as part of a ritual. If this interpretation is correct, these deposits played a role in establishing and maintaining group or, more specifically, family identities. The bones were deposited in areas that belonged to a group's territory or that were claimed by a group.

Human hair (A.2) was found in a dung layer in the floor of one of the early houses, dated to the first half of the 4th century BC. The find was not in the list of ritual remains that was published in the excavation report.⁶⁴ The insight that this might have anything to do with a ritual only came after studying the theory on rites of passage. Cutting off hair is a common rite of separation that may account for some of the finds of human hair in the archaeological record.

Animal remains

Animal remains in ritual contexts mainly belong to domesticated animals, namely cattle, horse, dog, sheep and pig. One deposit had a large cod as main component (A.9).

Cattle bones were found with the skull deposit described above, with the deposit of a partial horse in a

⁶² Van Dongen 1995.

⁶³ Verhart 2000, 27-28; Van Dongen 1995, 109-110.

⁶⁴ Nieuwhof 2008c.

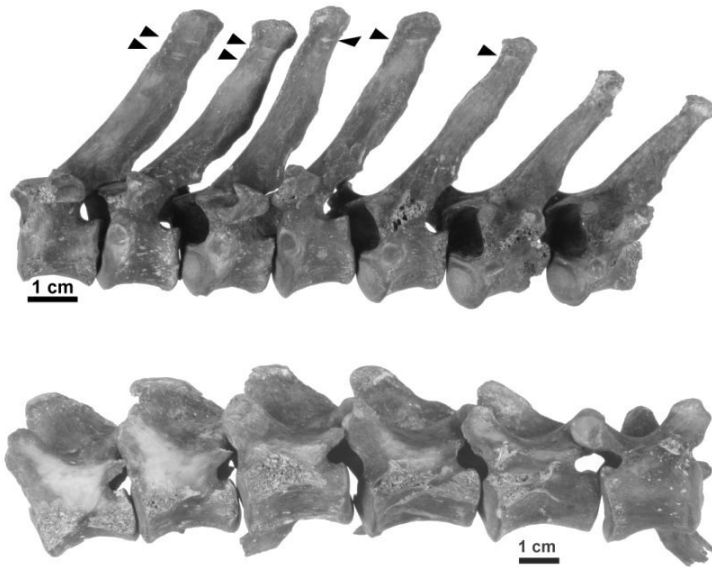


Fig. 10.24 Dog vertebrae: thoracales 10-16 (top) with cut marks and lumbales 22-27 without lateral processes, indicative of butchering. The bones were found in a ditch in the terp of Wierum and are dated to the 1st century BC – 1st century AD. From Prummel 2006.

creek (A.6), and in pits with pottery (A.5, 12, 16). Some of these bones were deposited complete; others, among them foetal and juvenile bones, show traces of butchering and consumption. A partial horse was found in a creek (A.6); fragmented horse bones were found in the pit with pottery and a human vertebra (A.12), but it is not certain whether these bones belonged to the deposit itself, or came with the fill. Complete and fragmented sheep bones, remaining from butchering and consumption, were found near the skulls in de the dung platform, in a pit (A.5) with a large pottery deposit (bones of a juvenile sheep), and with the partial horse (A.6). Some sheep bones were also found in deposits A.8, 9, 12 and 16, but these possibly came with the fill and may not have been part of the primary deposit. Pig bones come from two deposits, A.5 and 16. In both cases, the bones belonged to juvenile pigs. In pit A.16, seventeen bones of a sucking pig may well be the remains of a complete pig, which was eaten during the occasion of the ritual.

Apart from the bones attached to the dog skin deposited in an inverted pot (A.8), some bones of a young dog were found in a pit, together with a large quantity of pottery and other animal bones (A.6). The deposit with the dog skin stands out, not only because it was found in an inverted pot, but also because there are no direct parallels. The animal remains of Paddepoel, not far from Englum, produced some evidence for the killing and subsequent skinning of old or sick dogs. The skulls of these dogs were bashed in, but had not been removed together with the skins.⁶⁵ Deposits of head and feet, which might belong to deposited skins, are known from other species, in particular horse, elsewhere in Europe, for instance in Germany and Denmark.⁶⁶ Dogs, however, were usually

deposited complete in those areas.⁶⁷ The consumption of dog meat was rare but not uncommon in this period in the terp region; this can be inferred from the find of a series of dog vertebrae with cut marks from the same period in Wierum, another terp on the left bank of the river Reitdiep (fig. 10.24).⁶⁸ Dogs may have been eaten in a ritual context rather than as normal food. That makes it likely that the dog skin found in Englum was the offered part of an animal of which the rest was eaten during a ritual meal.

The only wild animal in a ritual context in Englum is the cod, which was found in articulation, but without head and tail; two of the vertebrae in the middle were missing, which indicates that the fish had been cut in two. The deposit thus consists of the entire edible part of the fish. It is unlikely that cod was caught in any quantity during the Iron Age; skeletal parts of cods are extremely rare in the terp region.⁶⁹ In Englum, the only other cod bone was found in the fill of the nearby pit with the inverted pot with the dog skin, A.8; it is possible that this bone (a *branchiostegal* from the head), belonged to the same fish.

Stones and wood

Stone objects were part of two deposits: a granite grinder was deposited complete in the dung platform near the human skulls described above; and three small stones, one of them burnt, were found with a large deposit of pottery and animal bones in a pit from the late pre-Roman Iron Age (A.5). Twigs and other pieces of wood were found in this same pit, but these were not collected. Twigs were also found in a ditch near a much later pottery deposit,

⁶⁵ Knol 1983, 167-168.

⁶⁶ Thilderkvist 2013, 34.

⁶⁷ Zimmermann 1970, 75.

⁶⁸ Prummel 2006, 35.

⁶⁹ Brinkhuizen 1988 and later unpublished excavation results.

A.17. The role of stones and wood in ritual deposits cannot be assessed on the basis of these finds.

10.3.2.3 Contexts

Contexts of depositions in Englum include a creek, ditches, pits and house platforms. The location of deposits in relation to the terp influences their representativeness. Out of fifteen finds assemblages, only four are found on the actual terp at the time of deposition (tables 10.5 and 6). Two of these were found on early platforms (human hair A.2; human skulls A.4), and two on the middle-Roman Iron Age terp (grave A.15 and pit A.16). All other depositions were made outside the contemporary terp.

This distribution has several causes. In the first place, the relative absence of ritual remains on the early platforms is quite natural considering their small surface. Platforms were only slightly larger than the houses that were built on them, so there was not enough space to dig pits or graves. Only rituals that had a relation with the building or living area (the human skulls and following depositions) or that were performed indoors for other reasons (the cutting of hair as part of a rite of separation) can be expected on the platforms themselves. During the Roman Iron Age, the terp had grown to over a hectare, which increased the possibility for making depositions on the terp itself considerably. In the second place, most traces of rituals on the terp itself were been dug away by commercial quarrying. The excavation was mainly conducted in the levelled area, which necessarily caused a bias towards features under later terp layers, outside the terp at the time of deposition.

Outside the terp, depositions were made in ditches and a creek, and in pits, among them a grave, all dug into the original salt marsh surface. These features were situated within the confines of the later terp at its maximum circumference. There is no doubt that depositions in the salt marsh are not confined to this area. Similar features and depositions are likely to occur in a wide area around the terp, covered by younger sediment.

Platforms

Only a small number of deposits from platforms or later terp layers were found. Since the early platforms were only slightly larger than the houses that were built on them, deposits in platforms can be associated with specific houses or households, even though remains of the houses themselves are no longer there. Deposits in early platforms are A.2, human hair cuttings, and A.4, the deposit of human skulls and related finds. The former is probably related to a personal rite of passage that was performed in the house on this platform. The latter was probably meant to create ancestral grounds before a house was built on this location, as was argued above.

Water pits and wells

Only one deposit, A.1, was associated with a water pit. This deposit, which is probably not complete, consisted of a human bone with gnawing marks and some fitting sherds, which were found among the sods that were used to fill the water pit at the end of its lifetime. The importance of fresh water, the violation of the earth by the shaft reaching into it, and the potential contact zones with the supernatural world that water pits and wells are as liminal zones, possibly combined to make digging and filling of wells and water pits into events that needed to be accompanied by rituals.⁷⁰ Conspicuous objects, however, have not been found in other water pits or wells from the research period in Englum. In a well from the 1st or first half of the 2nd century AD⁷¹, a pot was found, but this pot may well have served as a bucket; its handles had broken off. It must be noted, though, that, as was discussed above (10.1.2), most wells were not fully excavated. Moreover, offerings need not have been conspicuous objects. They could, for instance, have consisted of perishable materials or of sherds and animal bones that we cannot with any certainty identify as offerings.

Ditches

Ritual deposits in ditches are nearly all dated to the early Roman Iron Age. In one case, a complete pot was placed on the slope of a ditch, which probably was still open at the time (A.11a). All other deposits consist of concentrations of potsherds in the fills of ditches (A.7, 10, 17) or, in one case, of a human bone fragment (A.11b). The latter deposit fits in the hypothesis presented above, that human bones were deposited in features related to family identities and territories. The finds from Ezinge will provide additional evidence of that use.

The number of deposits in ditches is small compared to the number of ditches in Englum. The excavation method is undoubtedly responsible for this small number. Sections through ditches revealed relations between them, but the large number of ditches and the limited time span made it impossible to excavate them fully. Moreover, the awareness that such deposits might be found and could be important only came after the excavation.

Deposits of sherds in ditches were noticed because, whereas the fills of features often contain sherds and bone fragments from various sources, fitting fragments are usually not found together. These sherds were concentrated and belonged to a limited number of pots. Their location high in the fill indicates that they were deposited during filling of the ditches; they were not thrown

⁷⁰ For wells as *fons vitae*, see Huijbers 2007, 426ff. The meaning of wells as contact zoned with the supernatural still echoes in European fairy tales (e.g. (D.) *Vrouw Holle*), and in the use of wishing wells.

⁷¹ Nieuwhof 2008b, fig. 4.6, find. no. 825, id. 124.

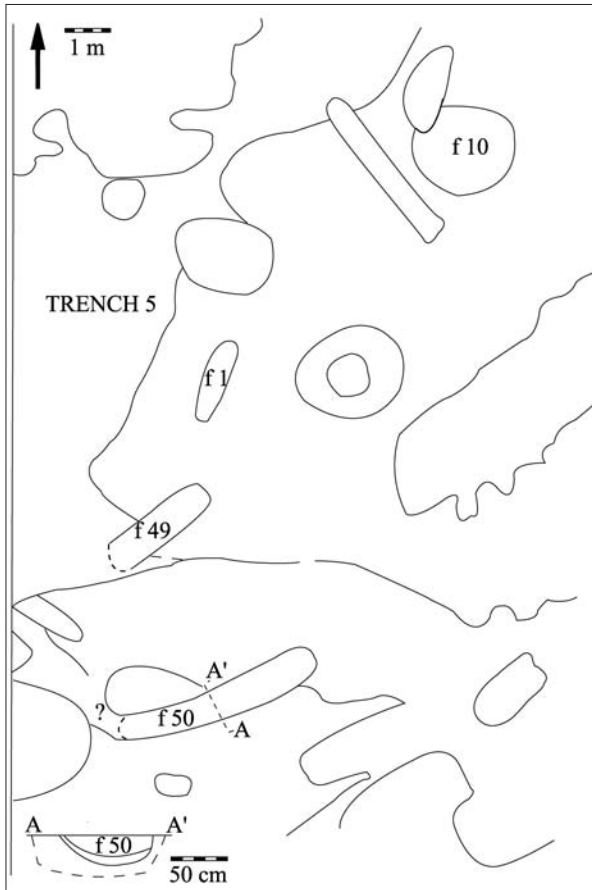


Fig. 10.25 Part of the plan of trench no. 5, with a middle pre-Roman Iron Age grave (feature 1, A.3); an elongated pit with, a.o., an inverted pot with a dog skin (feature 50, A.8), an elongated pit with, a.o., the edible part of a cod (feature 49, A.9); and a round pit with a human lumbar vertebra, associated with a thick layer of reeds and a large amount of potsherds and animal bone fragments (feature no. 10, A.12).

in the ditches while these were still in use. In two cases, A.7 and 10 (both from the 1st century AD), the sherds had been divided in two groups, which were deposited 1 metre apart on opposite sides of the ditch. Deposit A.7 contains broken pots of two generations. The elder generation is represented by pottery in the style that had been in use from ca. 200 BC until halfway the 1st century AD, the younger by pottery that belongs to the 1st century AD Wierum-style. The sherds are the remains of a ritual that apparently involved two generations within one household or within the settlement. A.10 and A.17 both involved one, very large pot.

Pits

Five depositions were made in pits; these pits were probably dug for the occasion of the ritual. Two types of pit deposits can be distinguished. The first includes two pits, A.5 and 16, which, though far apart in time, have several characteristics in common. They were both filled with a large, homogeneous pottery complex, belonging to a number of pots that could for a large part be reconstructed. Similarities in shape and fabric suggest that the same potter made several of these pots. Each of these depositions undoubtedly represents a single event; the pits were closed immediately after. Besides pottery, there were many animal bones, with an uncommonly high percentage of young animals. The rituals, during which these pots and bones were deposited, must have been connected with the household to which the potter belonged, or with the individual lifecycle of the potter. These deposits might be the remains of a rite of passage, perhaps

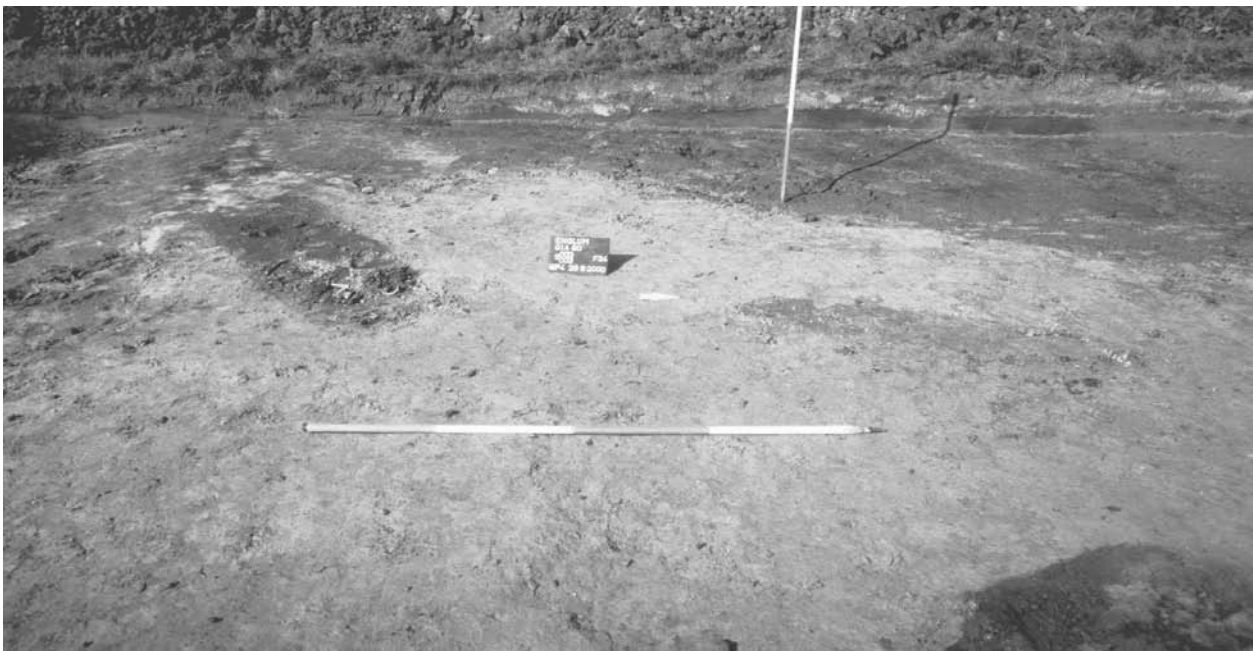


Fig. 10.26 Part of trench no. 5 after opening, to the west. The light coloured, elongated pit to the right is the middle pre-Roman Iron Age grave (A.3); the elongated pit to the left is A.9. The elongated pit of A.8 is just outside the photo, on the left. The three features were initially thought to be a burial site.

the wedding or death of a woman (if making pottery was indeed women's work, as was argued in 4.2). They possibly were accompanied by a meal, in which young animals were considered proper food. Both assemblages include fragments of very large pots, which may have served to make beer (see below). After the meal, the pots were broken and deposited. The incompleteness of the pots may be caused by formation processes, or because sherds were kept as personalized items, in memory of the event or of the deceased person. If these deposits indeed represent the same type of ritual, the long interval of ca. 500 years between them indicates that this was a type of ritual with a long history.

A second type of pits (A.8, 9 and 12), all from the 1st century AD, is clustered in trench 5, near an inhumation grave from the middle pre-Roman Iron Age (A.3). The elongated pits with the remains of a dog skin and playing counters in an inverted pot next to a second, smaller pot (A.8) and with a cod skeleton with pottery (A.9) were already noticed during the excavation, even before these features were excavated. At the time they were uncovered together with the grave, it was first thought that all three features were graves, belonging to a small cemetery (figs. 10.25 and 10.26). The pits of A.8 and A.9 had the same orientation, northeast-southwest, and the same elongated shape, and were found outside the contemporary terp, only 3.5 metres apart. Both deposits seem to be offerings: they consist of food that is taken out of the human world. The dog, which probably was eaten while its skin, with head, lower legs and tail attached, was offered in an inverted pot, was deposited together with a small pot, which may well have contained another food offering. The cod was an offering in itself. Both are curious deposits, which may somehow be associated with the nearby grave, even though there was a long time span between the grave and these deposits. A relation between these features is suggested by the proximity of the grave; it is situated only 1.5 metres north of the pit with the cod. Another pit from the same period, A.12, might be related to this grave as well; it was found within 6 metres from it. This pit was round, with a human vertebra as most conspicuous component. This deposit was probably not an offering, but potsherds and bones suggest that it possibly involved a communal meal. Its proximity to the grave suggests it may have to do with the same situation that caused A.8 and 9, although it was a different type of ritual. There were several other elongated and round pits near the grave, but nothing remarkable was found in them.

There is a period of at least 200 years between these deposits and the middle pre-Roman Iron Age grave. If the younger deposits are indeed associated with the grave, its location must have been remembered, probably because it was marked in some way. Perhaps there was a small mound over it; this is not unlikely, given the shallowness of the grave. Such a mound would have been included in

higher terp layers after the early Roman Iron Age, to be dug away in the early 20th century. Nothing was left of it during the excavation. There are no indications of other markers near this grave, but no other features cut over it at the excavated level. If we accept that the location of this grave was still known in the 1st century AD, the presence of the nearby ritual deposits may be taken to indicate that an important ancestor was buried here, or that this was assumed so in the early Roman Iron Age. The offerings of A.8 and 9 may be aimed at this alleged ancestor. The human bone in pit A.12 may have been deposited to create a link between this presumed ancestor and a specific group of people that lived in Englum during the 1st century AD.

10.3.2.4 *Associated actions*

Feasting

Many of the Englum deposits contain indications of ritual meals and feasting. Such indications consist of primary or secondary deposits, as was stated in the conclusions of Part 2. Primary deposits are substantial parts of animals, the rest of which was probably eaten (the cattle legs near the skulls in the dung platform; the partial horse; the dog skin). Secondary deposits consist of the remains of meals themselves: animal bones and potsherds, especially if the latter can be reconstructed to a limited number of pots. Such animal and pottery fragments were found in pits (A.5, 12 and 16), in ditches (A.7, 10 and 17), and in the deposit of the human skulls, which involved both primary and secondary deposits. The deposits in pits were usually found with animal bones, but the deposits in ditches usually consist exclusively of potsherds. Some ritual meals involved the consumption of very young animals (pits A.5 and 16).

Several deposits include or consist of very large pots, far too large for normal cooking.⁷² Although it is conceivable that such large pots were used to cook large quantities of food for communal meals, they may also have been used to make beer. The brewing process would account for the soot and charred residue that were found on several large pots. Although it cannot be proved that these pots were used for beer-making, drinking alcoholic beverages is a likely part of ceremonial feasting. Large containers, which have often been found in pre-Roman Iron Age elite graves elsewhere in Europe, are usually taken as evidence that drinking was an important part of social life as a sign of hospitality and generosity, functioning in maintaining the relationship between patrons

72 Large pots: id. 463 (fig. A.6) in deposit no. 5 (rim \varnothing 35, H. unknown); id. 718 (fig. A.10) in deposit no. 7 (rim \varnothing 32 cm, H. 32 cm); id. 74/75 (fig. A.16) in deposit no. 10 (rim \varnothing 26 cm, H. 30 cm); id. 252 and 255 (fig. A.21) in deposit no. 16 (rim \varnothing 35 cm, H. 38 cm and rim \varnothing 47 cm, H. unknown) and id. 367 (fig. A.22) in deposit no. 17 (rim \varnothing 37 cm, H. 42 cm).

and clients.⁷³ Drinking alcohol may have had a function in other social relations as well. It was possibly part of every ritual/ceremonial meal, with participants that may or may not have been social equals, also in Englum. According to Tacitus, meetings in this part of the world were accompanied by heavy drinking.⁷⁴ Drinking is intimately associated with “the institution of hospitality, and its frequent ritual and symbolic significance imbue drinking with a potent social value which is important in its many economic and political roles.”⁷⁵

Breaking

There is evidence that two pots in deposit A.16 were broken deliberately. It can be assumed that many of the pots in the other deposits were also broken deliberately, although direct evidence is lacking. The destruction and burial of the pottery and other materials used in rituals may have several reasons. In the first place, as was discussed in 8.4.3, objects that functioned in religious rituals can be considered sacred or contaminated. That makes it necessary to remove them from daily life. This may be the cause of the broken pottery in the skull deposit, A.4. In the second place, if ritual meals were part of funerary rites or other passage rites, the objects made by or belonging to the person involved could have been destroyed, to mark the transition. This might apply to A.5 and 16. In the third place, pottery used in a ritual meal or other ritual event could be broken and part of the sherds given to the participants as memorabilia and in order to create enchainment relations.⁷⁶ This practice might be the cause of a large part of the missing fragments of nearly complete pots. Lastly, pottery used in a communal meal could be broken, divided and deposited separately in order to symbolically underline an agreement. Two deposits in ditches, A.7 and 10, suggest this latter practice. In both cases, two concentrations of potsherds that clearly belong together were deposited 1 metre apart in the fill on opposite sides of ditches.

Offering

While ritual meals do not need to have a religious meaning (feasting may be part of non-religious events, such as rites of passage or reaching an agreement), the offering of part of the food clearly is a religious element. The supernatural beings involved may be ancestors or divinities. They shared in what the people ate; such offerings are meant to maintain or improve good relations with the supernatural.

The edibility or usability of the deposited objects may play a role in the identification of other types of offerings as well. Offerings include objects that are considered to

be appreciated by the supernatural, either objects of some use or value to the people who make the offering, or symbolic items such as miniatures. Such symbolic items have not been found or recognized in Englum, but deposits that may have served as offerings to the supernatural can be identified. Besides offered parts of animals, these include the cod (A.9), the complete pot standing on the slope of a ditch (A.11), the small complete pot that was found next to the inverted pot with the dog skin (A.8), the contents of the pots with perforated bases near the human skulls in the dung platform (A.4), and the grinder and the complete pot that were buried there later (A.4). The complete pots probably served as containers for food.

Offerings are religious rituals by definition. Other rituals might have a religious component as well, but it is usually not possible to identify them in the archaeological record.

Depositing

Ritual deposition, in the sense used by archaeologists, is a deliberate act by which objects end up beneath the surface of the earth, either in the soil or in water. Several procedures, types of deposition, can be distinguished:

- Type 1. Deposits are placed or thrown in natural or manmade features (lakes, rivers, moors, wells, ditches, caves, volcanoes, ravines), without filling them in.
- Type 2. Deposits are made during filling in natural features (creeks) or of manmade features that were dug for another purpose (wells, ditches, pits);
- Type 3. A deposit is simply dug in, or placed in a feature (pits) that is dug especially for the deposition and backfilled immediately after.
- Type 4. Deposits are placed somewhere to be covered with soil (heightening layers).

In Englum, all these types of deposition occurred. The partial horse (A.6) and probably the complete pot that was placed on the slope of a ditch (A.11a) belong to the first type. Several deposits belong to the second type: the filled water pit (A.1), and three deposits of pottery in the fills of ditches: A.7, 10 and 17. Deposits of the third type are most common; they include the cut off human hair that was buried in a platform (A.2), the grinder and the pot in the dung platform of A.4, both burials, the deposits with the dog skin and the cod (A.8 and 9) and probably also two pits full of pottery and animal bones (A.5 and 16). The deposit of eight human skulls with a pile of cattle legs and associated finds belongs to the fourth type.

The type of deposit may be related to the meaning of the ritual. The first type, which in our area usually implies deposition in a wet context, is possibly related to the liminal character of the location; such locations may be considered places of contact with the supernatural. The two finds from Englum in such locations, which may both

⁷³ Dietler 1990; 1996.

⁷⁴ Tacitus, *Germania* 22.

⁷⁵ Dietler 1990, 352.

⁷⁶ Following Chapman 2000; Chapman & Gaydarska 2007.

be considered offerings (a partial horse, A.6, and a pot, probably with contents, A.11a), underline this meaning. The creek, in which the partial horse was deposited, was in a transitional stage of silting up, not a watercourse anymore, but still not solid land either. This must have strengthened its liminal character. An open ditch may also be a liminal zone.

Type 2-depositions are associated with filling in structures, notably ditches and a water pit. The ritual might be called for by the intrusion into the earth of such features; in that case, rituals may also be associated with digging them. Such rituals are offerings, since the perceived disturbance of the powers of the earth is a religious idea. Deposits that might be interpreted as such have not been found in Englum, but most ditches and wells were not fully excavated for lack of time. None of the Type 2-deposits of Englum, however, has the characteristics of an offering. A better reason for these Type 2-depositions might therefore be social: digging and closing ditches has a clearly social aspect, since they demand a collective effort. Moreover, ditches probably functioned as boundaries of fields. Closing ditches and digging new ones must have been associated with negotiations between neighbours; rituals such as ritual meals may well have accompanied such negotiations. The deposits found in ditches, especially A.7 and 10 with concentrations of sherds on opposite sides of ditches, must be part of such rituals. The human bone from the fill of a water pit (A.1), together with fitting sherds, has a different character. It was not an offering either, but rather functioned in linking a specific group to this area, just like the skulls in the dung platform.

Type 3-depositions are variable. They include offerings, such as the grinder and the pot in the dung platform near the skulls, and the pits with the dog skin and the cod (A.8 and 9). Possible rites of passage, such as the hair deposit (A.2), also belong to this type. Two pits with pottery and animal bones (A.5 and 16) might belong to rites of passage or other rituals which involve the pottery of one household. The pit with pottery, bones and a human vertebra (A.12) is either of Type 2 or 3. It is unknown whether this was an existing pit that was filled in, or a pit that was dug for the occasion. In both cases, the human bone suggests that this deposit functioned in establishing or maintaining group identity.

There is one Type 4-deposition: the human skulls and other finds that were deposited during the construction of a new living platform (A.4). This ritual involved multiple actions and well-considered placement of human skulls and cattle legs. It is not primarily religious in character, but the associated offerings clearly show that it had a religious component. The supernatural beings involved were most likely the ancestors, whose bones were deposited here.

10.3.2.5 Social categories

Based on the deposited objects and actions associated with the ritual and contexts, which were discussed in the above, some of the meaning of the deposits from Englum can be approached (table 10.6). These meanings can be ordered according to the social categories they apply to: the individual person, the family or household, the community and the supernatural. Although these categories partly overlap, they provide different perspectives on these rituals.

The individual person⁷⁷

The clearest example of a ritual that is related to an individual person is the deposit of hair cuttings in the floor of a house (A.2). It was probably part of a rite of passage, in which the cutting of hair symbolized the end of a life stage. The symbolic TS pendant also belongs to this category, since it must have been owned and worn by a specific person. The deposit of the small pot in a ditch (A.11) might be an example of a small offering made by an individual.

In several deposits, individual potters were recognized. Deposits such as A.5 and 16 might be related to rites of passage of a specific potter, or they were part of rituals in which households were involved.

The inhumation graves were part of rites of passage for individuals. Nevertheless, although the deceased was an individual person, funerals are family affairs rather than individual rituals. Moreover, as we know, inhumation was not the common burial custom in this area. We do not know why these people were selected to be inhumed. Their selection may be caused by a personal quality or situation, but also by social considerations. They might, for instance, be the first of their families to die in a new place of residence⁷⁸, or even be selected as human sacrifices by their community in times of need. In the latter case, the supernatural is involved. There is no evidence to support or refute any of these possibilities on the basis of the evidence from Englum. The interpretation of inhumation burials will be addressed in the following chapters.

The family or household

The concept of *family*, as used here, refers to the extended family: all relatives that live nearby, but not necessarily in the same house. The position of separate households in relation to the family may change in the course of time; they may gain independence in times of growth, or unite in case of high mortality.

In the above discussion on human remains, it was argued that the bones of relatives were collected after ex-

⁷⁷ The use of *individual* in this context is not meant to indicate that this society was individualized.

⁷⁸ A suggestion made by Hiddink 1999, 58-59.

Table 10.6 Overview of finds assemblages that are interpreted as being related to ritual, in chronological order, with characteristics discussed in the text.

Catalogue number (Appendix A)	Finds	Contexts		Social category	Period
	complete object or large part of animal worked pottery deliberate breaking pottery from one potter many animal bone fragments	pit ditch water pit/well liminal/wet context platform		feasting/ritual meal individual ritual family/household ritual community ritual offering to supernatural (ancestor) offering to supernatural (god/spirit)	
1 (human bone) 2 (hair) 3 (grave) 4 (skulls etc) 4 (grinder) 4 (pot)	x x x x x	x x x x x	x x x x x	x x x x x x	MPROM
5 (pottery) 6 (horse)	x x	x x	x x	x x	LPROM
7 (pottery) 8 (dog) 9 (cod) 10 (pot) 11a (pot) 11b (human bone) 12 (human bone) 13 (TS pendant)	x x x x x x x	x x x x x x x	x x x x x x x	x x x x x x x	EROM
14 (painted sherds) 15 (grave) 16 (pottery) 17 (pottery)	x x x x	x x x x	x x x x	x x x x	MROM

carnation and became inalienable possessions of a family, to be used in rituals that served to establish or maintain a family's identity. The presence of human bones in a deposit can be taken as an indication of such rituals, and imply that the specific location belonged to or was made into a family's or a households territory. The deposition of ancestral bones creates ancestral grounds. The deposition of eight human skulls in a new platform is the clearest example, but the human bones of A.1 and 12 may have served the same purpose. The individuality of the ancestors whose bones were used may not have played any role, as was suggested by the seemingly random collection of human skulls in the dung platform.

The community

Rituals that served to stress the identity of a group, a family or household, also played a role in the community, since part of a group's identity is defined by contrast with other groups. This specifically seems to apply to a cluster of deposits from the early 1st century AD⁷⁹ near a grave from the middle pre-Roman Iron Age. Deposits A.12, a pit with a human vertebra, and A.8 and 9, which can be considered offerings, are part of this cluster. Because of its shallowness, it was argued above that at the time, a small barrow that marked its location probably covered this grave. It is thus conceivable that the location of this grave

⁷⁹ These deposits and other deposits that include Wierum-style pottery as well as preceding types (Gw4) are possibly somewhat earlier, depending on the date of introduction of Wierum-style pottery.

was still known in the 1st century AD. It must have been thought to be the grave of one of the early inhabitants of the terp, an ancestor of later inhabitants. Exceptional events may have put this alleged or real ancestor in the limelight and induced the offerings made in pits near his grave. It is conspicuous that these depositions were made in the early Roman Iron Age, when the population grew considerably, perhaps because of an influx of immigrants from the east (see the discussion in chapter 3.2.2). That would potentially have been a cause for social friction, whether or not the growing population included immigrants. Offerings to an ancestor emphasized continuity with the past, which could play a role in a dispute on power, land or other rights. This may have averted social tensions, but also have provoked them.

The first depositions of potsherds in ditches, as far as we can trace them, also date from the 1st century AD. It is quite possible that the ditch deposits were induced by the 1st century expansion, just like the cluster of pits near the ancestor grave. These deposits were made during filling of ditches, and may have been the remainders of the tableware that was used during communal meals that were held while negotiating and establishing new ditches between household territories. Such negotiations must have occurred frequently when the population and the terp itself were expanding rapidly during the 1st century AD. It must be noted that this interpretation implies that fields were surrounded by ditches, which not only drained the area but also delineated a household's territory and served as boundaries. That does not necessarily imply that all available land was divided among the households of the settlement. Areas further from the settlement may well have been communal property.

The supernatural

From the deposits made in Englum, two kinds of supernatural beings or concepts can be inferred: ancestors and one or more gods or spirits. The offerings in liminal places: a partial horse in a creek (A.6) and a complete pot in a ditch (A.11a), were probably made for some deity. Offerings made some time after the deposition of human skulls in the dung platform (a pot with contents and a grinder) suggest that the dead relatives whose skulls were buried here, were considered supernatural ancestors with some power, rather than just ancestors in a biological sense. The ritual during which these skulls were deposited may have functioned as a rite of passage, which made supernatural ancestors out of ancestral bones. The cattle legs and the offerings of a liquid substance in the pots with perforated bases then served as offerings to these ancestors. These substantial deposits seem to exceed the level of mere commemoration. Pits A.8 and 9 with offerings near an older grave also indicate that it was customary to make offerings to the ancestors.

It is remarkable that the number of deposits with a religious meaning is relatively small in Englum. As many as ten deposits can be considered primarily non-religious. Of course, all interpretations are rather speculative. It is, for instance, possible, that the deposits with potsherds and the remains of young animals, A.5 and 16, are actually the remains of a ritual meal that were considered sacred/contaminated, which would make them religious deposits. Such an interpretation seems less likely for the broken pots found in ditches.

10.4 Summary

This chapter on the remains of rituals that were identified during the excavation in the terp Englum started with the case of eight human skulls, piled-up cattle legs, broken pottery and bone fragments in a massive dung layer in Englum. The assemblage dates from the middle pre-Roman Iron Age. It was interpreted as a deposit made during the construction of an extension to a habitation platform. Due to the deposit of human skulls, this platform became part of the ancestral grounds of a family or household. This event may also have functioned as a rite of passage, during which bones of relatives were transformed into active, supernatural ancestors. Offerings to these ancestors were made during this event, and later in the platform.

Another sixteen finds and finds assemblages were also identified as the remains of rituals in Englum. Although the seventeen finds and finds assemblages in total may seem a large number when we compare them to other excavations, they are actually few when we compare them to the 800 years of occupation and the many features that were not identified as ritual. The nature of ritual itself, formation processes, quarrying of the terp soil and difficulties with the identification of ritual in the archaeological record in general are responsible for this low number. Performing rituals must have been far more important in the lives of the inhabitants of Englum than the number of finds assemblages suggest.

The number of deposits in and on the terp itself is relatively low, a bias which is caused by levelling. In the next chapter, it will become clear that the remains of rituals in a terp can be numerous. The excavation in Englum concentrated on the levelled area, in which many features were preserved that date from the period before terp layers were applied there. Features involved in ritual deposition outside the actual terp include a creek, ditches, a grave and pits. From the location of many deposits outside the terp at the time of deposition, it can be inferred that many ritual deposits must still be hidden in the wide area around the terp. The area surrounding terps is usually not excavated, so this kind of deposits is hardly ever found. From the Englum deposits, we can learn what they might look like.

Only the deposits of human skulls and associated objects in a dung platform and of the dog skin in an inverted pot can be considered 'odd' deposits. They were identified as ritual deposits already during the excavation. Most finds that were discussed in this chapter were, at first sight, not that odd, but could be identified using the toolkit of criteria from chapter 9. They often consist of no more than rather inconspicuous sherds and bones. Human remains occur as inhumations, single bones and human hair. Pots in ritual contexts were placed upside down, had perforated bases, were deliberately broken, or were painted with an organic paint, prior to the ritual. Several deposits include large parts of very large pots, which probably served to make beer or to cook meals for a communal, ritual meal. Animal remains in ritual deposits include domesticated animals (cattle, horse, sheep, dog and pig), and once a fish, a cod. Such finds are far from the fancy objects and conspicuous depots that are often associated with ritual in prehistory. Ritual practice in the past clearly contains much more than that.

Intentional breaking can be assumed in several cases; one deposit provides actual evidence of intentional breaking. There may be several reasons for intentional breaking: the objects used in religious rituals are considered sacred or contaminated; the objects of a person's past life stage are destroyed as part of a rite of passage; pottery is broken and given to the participants of events as memorabilia and possibly in order to create enchainment relations; or pottery is broken and deposited in separate parts in order to underline an agreement. All these reasons probably played a role in Englum.

The rituals in Englum were variable. It is possible to distinguish four categories into the act of depositing itself: deposition in natural or manmade features (usually wet contexts) without filling them in (Type 1); deposition during filling in manmade structures that were not dug for the occasion of the ritual (Type 2); deposition in pits dug for the purpose of deposition or simply digging in (Type 3); and deposition on the surface, followed by applying a layer of soil to cover it (Type 4). These types can partly be related to specific types of ritual.

These rituals can also be ordered in social categories, according to the participants that play a role in them: the *individual* person; the *household or family*; the *community*; and the *supernatural*. These categories overlap: rites of passage emphasize membership of a social group, an individual may bring an offering to a supernatural being, a funeral concerns the family and the community. Rituals for individual persons in Englum include the cutting of hair as a likely rite of passage, and the use and deposition of a pendant made of a *terra sigillata* sherd. *Household or family rituals* often involve human bones. These were probably collected after excarnation, kept for a while, and then deposited in rituals, which served to establish and

maintain group identity. Many offerings may also have been aimed at the well-being of the household.

Community rituals are concerned with the relations between different households. Three types of rituals identified in Englum belong to this category. The first is the practice of depositing broken pottery in ditches, sometimes in two separate concentrations of mutually fitting sherds. Such deposits are interpreted as the conclusion of the process of determining new household premises. A second group consists of deposits made near a much older grave, which may have been considered the grave of an ancestor at the time. In that case, it must have been marked in some way. Offerings to this real or alleged ancestor may have emphasized the relation of a specific family with the past, which possibly played a role in claims for land, power or other rights. Both types of community rituals took place in the 1st century AD, during a period of rapid expansion of the population and of the terp itself. Thirdly, feasting or ritual meals often may have been part of community rituals. They can be inferred from primary and secondary deposits: deposits of parts of animals, the rest of which must have been eaten during such a meal, and reconstructable pots and animal remains.

Identifiable rituals that involve the *supernatural* include rituals that are meant to influence the supernatural (offerings), and practices in which the supernatural is instrumental, as objects with intrinsic power. In Englum, parts of animals, complete pots with food and a granite grinder probably served as offerings. Playing counters and *terra sigillata* sherds may have been considered luck-bringing objects. Two kinds of supernatural beings can be recognized: ancestors and gods or spirits. An ancestor cult can be inferred from offerings in relation to human bone deposits; they were associated with the human skulls in an early platform, and with the alleged ancestor grave. Two deposits, both found in wet contexts (Type 1 deposits in liminal places), were interpreted as offerings to gods. All offerings for ancestors were of Type 3: they were dug in, or buried in pits that were dug for the occasion. The offerings for ancestors have some other characteristics that relate them to the earth even more: one pot related to ancestor cult was placed upside down, while the three pots in the deposit with human skulls had perforated bases. The ancestors were apparently thought to reside beneath the earth's surface.

The finds of Englum provide some evidence of different mortuary rituals. The two inhumations found in Englum, dating from the middle pre-Roman Iron Age and the middle Roman Iron Age, demonstrate that inhumation was one of these ways, but they clearly do not represent common burial custom. If we accept that the world of the ancestors was conceived of as being beneath the surface of the earth, single inhumation graves can be interpreted as special ancestor graves. Excarnation was

also practiced, possibly by aboveground exposure, with or without scavenging animals involved. After excarnation, the remaining bones were collected to be used in other rituals. They may have been considered inalienable possessions. There are no indications of cremation burial in Englum.

The descriptive, contextual analysis of the Englum finds presented here and in Appendix A, is comparable to the *specific cultural biography of rituals*, which in chapter 9 was brought forward as a useful tool in the analysis of ritual finds assemblages. It appears possible, based on the above analysis, to say something about the meaning these specific rituals must have had, although the interpretations remain hypothetical. Though interesting in itself, it would be even more interesting if we could also acquire a picture of ritual in a more general sense and in a wider geographical area, a *generalized cultural biography of rituals*, and reveal something of their history as cultural concepts. Such an approach cannot be based on a small number of specific rituals, such as presented above, but needs many more examples. These ritual deposits need to be compared with finds from other sites; that will be the purpose of the next chapters. Some questions from the above summary may serve as points of attention:

- The deposit of the skulls was an improvised ritual for the occasion of a particular event. It was apparently a ritual in the imagistic mode, which is characteristic of small-scale societies with a low degree of organization. Can rituals in the imagistic mode, or its opposite: the doctrinal mode, be recognized in Ezinge?
- The deposit of the skulls in the house platform has no clear parallels, but are there similarities with foundation deposits in platforms elsewhere?
- The remains of rituals identified in Englum only include everyday objects. Is that also the case in Ezinge?
- Intentional breaking of pottery probably plays a role in several types of ritual, but it is hard to prove. Does the case study of Ezinge provide additional evidence of this practice?
- Do feasting and ritual meals play a recognizable role in ritual practice in Ezinge?
- Are the four categories that can be distinguished into the act of depositing useful elsewhere?
- Are the four social categories that are based on the role of rituals in social life useful elsewhere?
- Can community rituals associated with establishing boundaries and with claims on ancestry be identified in Ezinge?
- Can religious and non-religious rituals be distinguished in Ezinge?
- Can objects that were identified as having intrinsic power in Englum (playing counters, *terra sigillata* sherds) also be identified in Ezinge?
- Can the use of memorabilia, personalized objects and inalienable possessions be identified in Ezinge?
- Were human bones used to create ancestral grounds also in Ezinge and elsewhere?
- Can an ancestor cult or commemorative practices be recognized in Ezinge?
- Can the assumption that excarnation, possibly with the aid of scavengers, was practiced in Englum, be supported by evidence from other sites in the terp region?
- What is the meaning of the single inhumations?
- Can the connection between the ancestors and the world beneath the earth's surface that was established in Englum, be confirmed by additional evidence from Ezinge?
- What are the possibilities and problems of the deviating stable isotopes in the salt marsh region?
- Is the peak in ritual practice in the 1st century AD, and the special character of these rituals in Englum, really associated with a strong population increase, and can it also be identified in terps with a different excavation history such as Ezinge?

With these questions in mind, we can approach the finds from the excavation in Ezinge.

11

Case study II: Remains of rituals in the terp of Ezinge

This case study concentrates on the terp settlement of Ezinge, which was excavated in the 1920s and 1930s. A large number of ritual deposits can be identified in the finds assemblages from these excavations; this large number allows a quantitative approach. The general introduction to this chapter (11.1) is followed by a discussion of the material categories and of the contexts of the finds (11.2). This discussion leads to classification and interpretation of the finds that were identified as the remains of rituals (11.3). The vast dataset makes it possible to trace changes in ritual practice and in social organization through time (11.4). The conclusion to this chapter presents an overview of ritual practice in both Ezinge and Englum (10.5).

11.1 Introduction

11.1.1 The excavations at Ezinge

The terp of Ezinge is situated only 2 km east of Englum (fig. 10.1). Between 1923 and 1934, Albert E. van Giffen conducted extensive excavations in Ezinge, as was already briefly discussed in chapter 2. The results of the excavations in Ezinge were only published in a preliminary form.¹ In 2011, the Netherlands Organisation for Scientific Research subsidized a research project aimed at the find material from Ezinge.² In view of the study on the remains of rituals, special attention was paid to the identification of such remains. The following is based on the results of that search.

Ezinge is a particularly good comparison site for Englum, since both terps are only about 2 km apart. Moreover, both terps were so-called village terps, the location of settlements with several houses in each habitation phase. Habitation on both locations started in the 5th century BC, with comparable earliest radiocarbon dates³ and pottery types. From the pre-quarrying size of both terps (Englum 12 ha, Ezinge 16 ha), it can be inferred that the

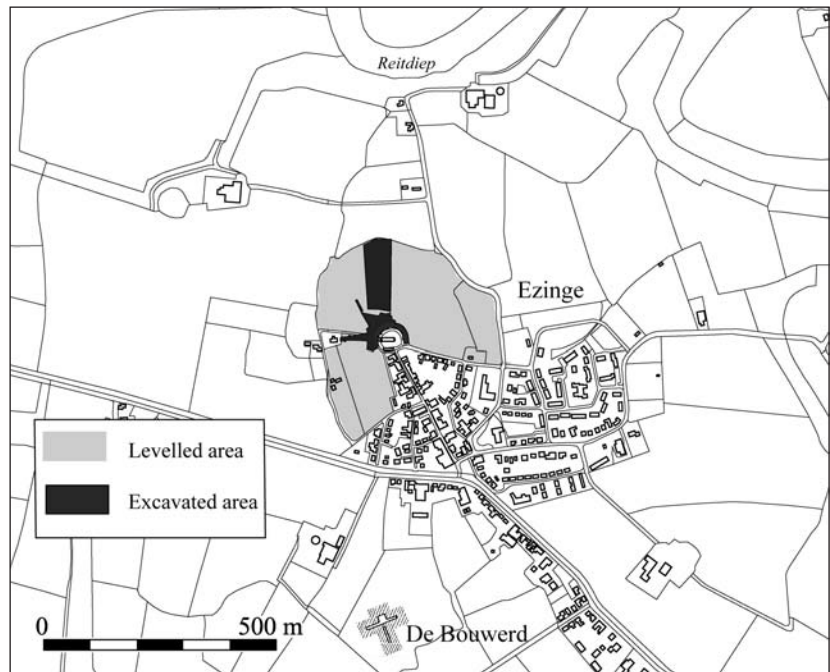


Fig. 11.1 Topography of Ezinge with levelled and excavated area.

settlement of Ezinge was somewhat larger than the settlement of Englum, at least in the Middle Ages, but the difference may not have been that large during the pre-Roman and Roman Iron Age. Ezinge is also higher than Englum, with terp sections with a maximum height of 5 metres rather than 4 metres in Englum. This is partly due to layers from the late Roman Iron Age and the Migration Period in Ezinge, which do not occur in Englum. As was discussed in chapter 3.2.4, Englum and many other terps were abandoned in the 4th century AD, but Ezinge is an exception. Here, habitation continued.⁴

1 Van Giffen 1926; 1928a; 1931; 1936.

2 An NWO-Odyssey project; see Nieuwhof 2014a.

3 The oldest radiocarbon date from Ezinge comes from a post from one of the earliest houses: GrN-4368: 2300 ± 65 BP. The oldest radiocarbon date from Englum is from a dung sample from one of the earliest platforms: GrN-25934: 2320 ± 30 BP.

4 Nieuwhof 2013a.

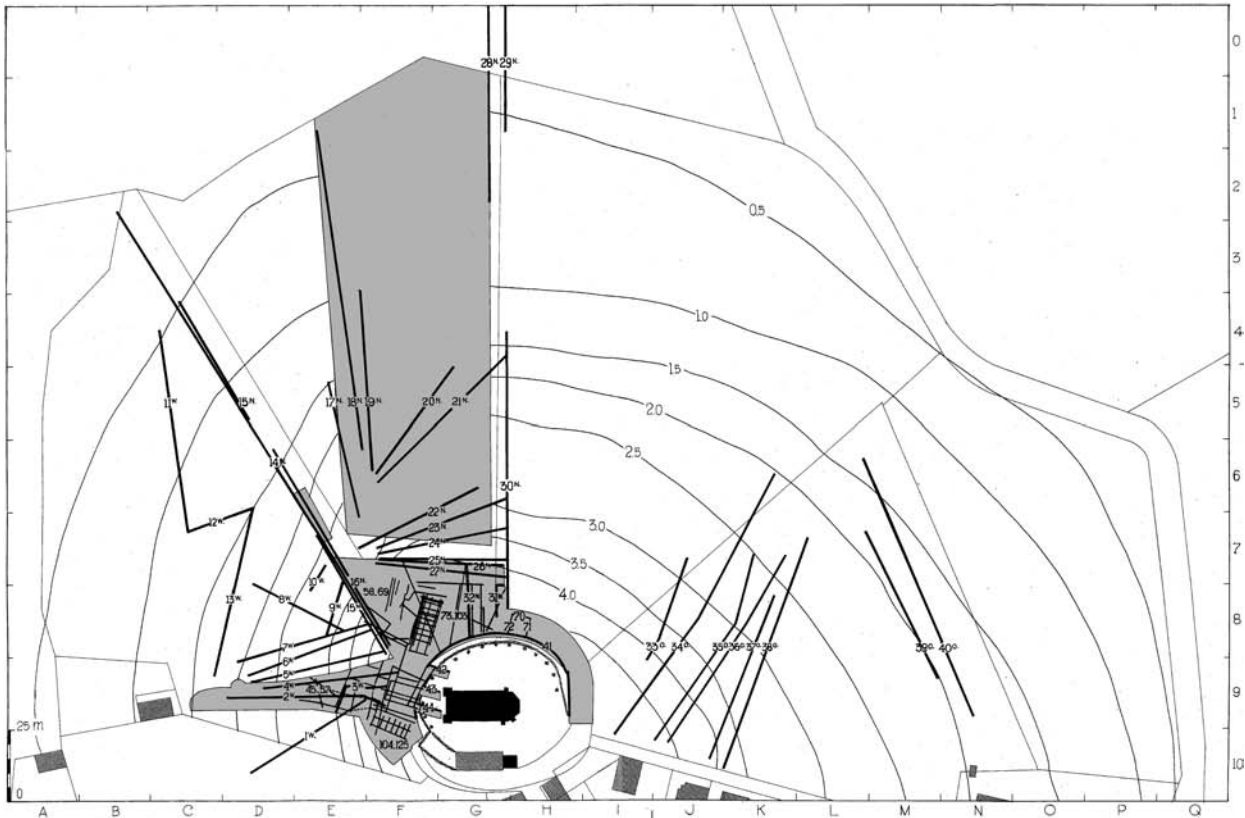


Fig. 11.2 The location of sections (thick black lines) and trenches (grey areas) in Ezinge.

Commercial quarrying for terp soil levelled an even bigger part of the terp of Ezinge than of Englum (fig. 11.1). During the period of commercial digging, a number of large terp sections were documented and some trenches were excavated (1923-1930). Between 1931 and 1934, a large-scale scientific excavation was carried out, summing to a total of approximately 1.5 hectares of excavated area, no more than about one tenth of the original terp (fig. 11.2). In the eleven years the investigations lasted (there was a pause in 1928), about 325 field drawings were made of sections and trenches. In the 1950's, BAI draughtsman Praamstra edited the field drawings, and transformed them into a usable documentation set. The documentation set does not entirely meet modern standards, but it meets the basic requirement that finds can be linked to contexts. Documentation of excavated finds and finds assemblages consists of short descriptions in the finds register and corresponding numbers on the field drawings, representing the location of the finds.

Waterbolck published an overview of the phases of occupation based on the preparatory work of Praamstra.⁵ If we take the number of houses published by Waterbolck, combined with the number of pots per period, as a lead habitation must have started in the early 5th century BC.⁶ Until ca. 200 BC, there were one to three houses in the

excavated part of the settlement. During the late pre-Roman Iron Age, this number increased to around four. The expansion and population increase that coincided with the introduction of the Wierum pottery style in the entire Groningen terp region (see chapters 3 and 10) probably started already in the late 1st century BC. It reached a peak in the 1st century AD, with five to six houses. After this maximum, the number of houses decreased to an average of two to three concurrent houses in the middle Roman Iron Age. The size of the entire village may have varied between two to six houses in the middle pre-Roman Iron Age and around 15 houses in the early Roman Iron Age.

Excavation levels in Ezinge were not horizontal planes, as is common in Dutch archaeology nowadays, but followed the stratigraphy as far as possible. It appeared difficult to follow contemporary surfaces, especially further from the centre of the terp. Finds and features in one excavation level therefore do not always have the same date. The excavation focused on the settlement and the structure of its houses in the centre of the terp. This area was excavated in as many as 22 levels. Contexts outside houses, such as pits and ditches, received less attention and were probably not all recognized as such at the time.

A large trench was excavated within the confines of the terp, north of the settlement of the pre-Roman and Roman Iron Age (figs. 11.1 and 2; Appendix B, Northern

⁵ Waterbolck 1991; De Langen & Waterbolck 1989; Waterbolck 1995, 19.

⁶ Nieuwhof 2014b.

trench). Part of the ditches and other features that were uncovered there belong to the settlement of the research period. Unfortunately, this area was excavated in only one level and the number of datable finds is relatively small. Only a small number of features can be dated. This has implications for a comparison with Englum. While in Englum the majority of finds comes from features in the salt marsh surface that surrounded the contemporary settlement, most of the finds from Ezinge come from the heightened settlement itself, within or near houses. The two datasets from the excavations in Englum and Ezinge therefore provide complementary rather than directly comparable information on ritual activities in this area during the pre-Roman and Roman Iron Age.

11.1.2 Representativeness

Several factors influence the representativeness of the finds assemblages that were identified as the remains of rituals in Ezinge. The first is the limited size of the excavated area, which covered only about a tenth of the total terp. The second is the less than optimal documentation of finds and contexts, even though the excavation is rather well documented compared to other excavations from the early years of professional archaeology. A third factor is the selective collection of finds in Ezinge.

Although the find material from Ezinge is sizeable, the number of finds from Ezinge is relatively low if we compare it to the finds from other terp excavations. For example, Englum yielded 991 find numbers in a period of only six weeks, while 2053 find numbers were recorded during the years 1923-1934 in Ezinge. About the same ratio occurs in the pottery from both excavations: in Englum, 350 kg of pottery was collected, in Ezinge 'only' 1025 kg. These differences cannot be attributed to different preservation conditions; these are very similar in both terps. It is also highly unlikely that the density of finds in Ezinge was lower than it was in Englum.

There are several possible causes for this relatively low number of finds from Ezinge. In the first place, when seeing through the documentation of Ezinge over the years, one cannot but conclude that in some years the documentation of the excavation was more detailed and precise than in other years. This unevenness probably also applies to the number of collected finds.

Secondly, selective collection of finds plays a role in this relatively low number. It is clear that finds were collected when they were expected to be usable for dating purposes, when they had a clear relation with one of the houses or other structures, or when they were noticeable in any way. Pottery research clearly indicates that rims and relatively complete pots are overrepresented. The 1025 kg of pottery from Ezinge includes as many as 223 complete pots or at least complete archaeological profiles, the 350 kg of pottery from Englum only 19. In Englum, about 10% of the total pottery assemblage consists of rim

sherds, in Ezinge 21%.⁷ Although the procedure is described nowhere, it may be assumed that inconspicuous finds, for instance wall sherds, especially from heightening layers outside houses, were not collected as a rule.

A third cause for the relatively low number of finds is the unfortunate circumstance that unworked animal bones were usually not collected, although they sometimes were recorded in the finds register. It is likely that they were recorded only when they were conspicuous for some reason, or when Van Giffen took a personal interest in them. A large number of metapodia of cattle and, to a lesser degree, horses were collected because Van Giffen was planning to do research on the size of these animals.⁸ Animal skulls, cow horns or complete skeletons are sometimes explicitly described as such, but that does not necessarily mean they were collected. Human remains were usually not collected either. Many human bones, especially skulls, and even complete skeletons were given away or sold to visitors to the excavation. Workers and local youths allegedly used skulls for practical jokes and other activities.⁹ The result was that, although human remains were sometimes recorded (or hinted at) in the finds register or on field drawings, they usually did not end up in the collection of an archaeological collection that is still accessible.

Finally, during the 80 years of storage since the excavation ended, finds have gone missing. They were recorded or drawn at the time, but cannot be found now. The archaeological depot keeps ten large drawers, containing 110 kg of unnumbered sherds from Ezinge, mostly wall sherds. Many of these sherds have traces of glue, indicating that they were once part of restored pottery. Some of these sherds could be reunited with pots on the shelves. That implies that many incomplete pots on the shelves were more complete in the 1930s when they were found and restored than they are now. Therefore, in the following discussion, not only real, tangible finds but also paper, that is recorded finds, and pottery that was recorded as complete but is only fragmented now, are taken into account if the records are considered trustworthy.

Summarizing, from a comparison with other terp excavations, for instance Englum, it is clear that the total find assemblage from Ezinge that is available for study, is not complete. A major cause of the incompleteness is selective collection of finds that were thought interesting during the excavation. Therefore, one might even argue that the recorded finds from Ezinge are biased towards objects from ritual deposits. In the following, it is attempted to take into account that the find groups from most contexts are not complete.

⁷ Nieuwhof 2014b, tabel 2.

⁸ Prummel *et al.* 2014.

⁹ Delvigne 1984, 27.

11.2 Results

11.2.1 Introduction

The excavation in Ezinge resulted in 2053 numbered finds and finds assemblages, including 220 soil and botanical samples. About 1550 finds and finds assemblages are from reliable contexts. Of the other approximately 500 finds and assemblages, the numbers are confused or were not noted on a field drawing, or they are collections of finds from various contexts or unstratified finds. Among the latter category are several ‘goodies’, such as bronze, Roman statuettes or a bronze, Roman, portable balance.¹⁰ These may well have been ritually deposited, but nothing is known about their contexts. Context dates rest on datable finds, in particular pottery, and on the stratigraphy. Around 1400 finds and finds assemblages are from the research period, the pre-Roman and Roman Iron Age, including finds from sections. The latter are ignored here, unless their relation with a structure such as a house or a platform is clear.

The criteria of chapter 9 were applied to dated finds of which the contexts are clear. Finds and finds assemblages that were identified as possibly resulting from ritual practice (further called ritual deposits) deviate from the random and ordinary in terps. It is possible that this inventory includes finds or finds assemblages that are not the remains of rituals but of other human activities or of random processes. However, since most of the finds assemblages that were identified as ritual deposits were selected for more than one reason, the number of errors is probably not large enough to undermine the argumentation. These finds assemblages usually contain at least one of the artefact types that were also used in rituals in Englum or in neighbouring areas: complete or nearly complete objects, broken, but restorable pottery, pottery with traces of deliberate breakage, perforated bases or paint, miniature pots, human remains, special animal remains, wooden objects other than parts of buildings, and objects that might be related to rites of passage, such as jewellery, human hair and textiles. Some types of finds are objects with a possibly symbolical meaning (e.g. *terra sigillata* sherds; cattle horns). Other objects are included because analogue finds are thought to be ritual elsewhere (e.g. horse hair, which may be deposited for the same reason as human hair). Besides the finds themselves, special locations such as thresholds, pits and ditches, and specially placed objects are considered indicative of ritual deposition.

In total, 350 finds assemblages from the pre-Roman and Roman Iron Age were identified as probably related to ritual activities. These assemblages together involve 629 objects, ranging from single *terra sigillata* sherds to com-

plete skeletons of humans and animals. Appendix B provides a descriptive overview of all finds assemblages from Ezinge that might be the remains of rituals, per excavation level. Each level is accompanied by an excavation plan of the relevant phase. For easy reference, find numbers in the text are usually preceded by the corresponding level number in Appendix B, finds from the large northern trench by ‘North’.

The selective collection of finds and the poor recording of contexts hamper a qualitative approach of the remains of rituals from Ezinge, comparable to the analysis of the finds from Englum. However, the large number of finds from Ezinge allow a quantitative and comparative approach, which enables the detection of patterns and trends. The descriptive data from the overview of Appendix B.1 are not readily usable if we want to understand and quantify ritual practices in Ezinge over the centuries. These data are therefore summarized in four different tables, per period (table B.1), per artefact type (table B.2) and per context (table B.3). The cross tables B.4,a-d show associations of objects and deposits of single objects. While table B.1 makes use of a detailed periodization, the other tables cluster the data in four major periods, which are used throughout this chapter:

- Middle pre-Roman Iron Age (MPROM), including finds from the earliest phases of occupation (ca. 500 - 200 BC);
- Late pre-Roman Iron Age (LPRM), including finds from the middle/late pre-Roman Iron Age (ca. 200 BC - 0).
- Early Roman Iron Age (EROM), including finds from the late pre-Roman Iron Age/early Roman Iron Age (ca. 0 - AD 100/150). This period starts with the introduction of Wierum-style pottery, possibly already at the end of LPRM.
- Middle Roman Iron Age (MROM), including finds from the early/middle Roman Iron Age (ca. AD 100/150-300).

In the following, the different material categories and the contexts of the finds will be discussed. Actions associated with ritual practice, such as breaking and offering, are not discussed separately, as was the case in the previous case study on Englum, but in the current text. The analysis does not discriminate between the different kinds of objects, since we do not know what their meaning was to the people who deposited them. All ‘objects’, ranging from complete animal and human burials to single beads and *terra sigillata* sherds, will be counted as one. The finds are analysed against the background of the total number of finds assemblages or deposits and of the total number of deposited objects that are involved in these deposits. These provide slightly different perspectives on ritual practice in Ezinge. A statistical account is given in Appendix B.3.

¹⁰ Knol 2014.

Table 11.1 Deposits with pots and the number of pots that were probably deposited complete, per period.

	Deposits with more or less complete pots		Number of complete pots...		...of which probably deposited intact			
	n	% of total number of deposits	large/small	miniature	large/small	%	miniature	%
MPROM	9	13	10		5	50		
LPROM	25	35	33	5	26	79	5	100
EROM	35	48	53	5	24	45	4	80
MROM	56	41	56	13	31	55	11	85
Total	125	36	152	23	86	57	20	87

Table 11.2 The ratio of the Minimum Number of Individuals of small and large pots in settlements in the northern Netherlands. Miniature pots are not included.

	MPROM		LPROM		EROM		MROM		total	
	n	%	n	%	n	%	n	%	n	%
Englum (Nieuwhof 2008b, Tabel 4.1).										
large/medium pots and bowls/plates	113	98	194	92	575	90	70	93	952	91
small pots	2	2	18	8	64	10	5	7	89	9
total	115	100	212	100	642	100	75	100	1044	100
Midlaren-de Bloemert (Nieuwhof 2008e, Tabel 14.4).										
large/medium pots and bowls/plates	33	100	98	88	796	92	965	90	1892	91
small pots	0	0	13	12	72	8	109	10	194	9
total	33	100	111	100	868	100	1075	100	2087	100
Ezinge (Nieuwhof 2014b, Tabel 3).										
large/medium pots and bowls/plates	576	94	392	88	911	91	403	75	2282	88
small pots	34	6	51	12	92	9	131	25	308	12
total	610	100	443	100	1003	100	534	100	2590	100

11.2.2 Material categories

The following deals with the material categories that play a role in ritual deposits in Ezinge. The list is longer than it was in Englum. Besides pottery, animal bones and human remains, also ceramic artefacts, objects of wood, stone and metal, artefacts made of bone, antler and horn, textiles and glass beads play a role.

11.2.2.1 Pottery

Many finds assemblages that are considered the remains of rituals contain pottery in some form: whole or broken pots, or sherds. Some pottery shows special features such as traces of deliberate breakage, perforated bases made after firing or stripes and dots of paint. Such these traces also occurred on sherds in ritual deposits in Englum. This section examines the pottery from Ezinge used in ritual practice and the adaptations that were made to it for the purpose of a ritual or as part of it.

Pottery deposits

Pots and large deposits of sherds together make out exactly a third (33.3%) of the total number of deposited objects, as summarized in table B.2. More or less complete

pots are part of 36% of all ritual deposits (table 11.1). Although the number of 152 large and small pots that belong to these deposits may seem large, this number is small if we compare it to the total pottery assemblage in Ezinge: they constitute less than 6% of a total number of 2590 pottery individuals from the research period (table 11.2).

A ritual pottery deposit ideally consists of complete or reconstructable pots or of relatively large sherds from one period. Sherds preferably show some of the features mentioned above (paint, traces of deliberate breakage, perforated bases). If a deposit includes sherds of pots made by the same potter, it is likely that the sherds are not random sherds in the fill of some feature, but belong together and are part of a deposit. A fine example of such a ritual pottery deposit is N-1207, dated to the early Roman Iron Age. It contains three broken but reconstructable pots (all cooking pots), a complete miniature pot with paint stripes from the rim (fig. 11.7), and 9.5 kg of sherds with an average weight of 92 g, including several painted sherds, a perforated base, and at least seven out of 20 pottery individuals with an uneven surface, which suggests they were made by the same potter. The finds assemblage

Table 11.3 Number of pottery deposits (containing pots or >1 kg of sherds), as a percentage of the total number of deposits (D), and the components of pottery deposits. >1kg: more than 1 kg of potsherds; L: large pot(s); S: small pot(s); M: miniature pot(s); db: sherd(s) with traces of deliberate breakage; pb: perforated base(s); pa: sherd(s) with paint. Percentages of L, S, M and their characteristics relate the total number of pottery deposits.

	pottery deposits		>1kg		L		S		M		db		pb		pa	
	n	% D	n	%	n	%	n	%	n	%	n	%	n	%	n	%
MPROM	12	17	7	58	5	42	4	33			2	17			1	8
LPROM	28	42	4	14	13	45	13	45	4	14	1	3	2	7	1	3
EROM	40	58	10	25	21	53	15	38	5	13	6	15	9	23	8	20
MROM	61	46	12	20	21	34	28	46	12	20	2	3	3	5	15	23

does contain some weathered or worn sherds, which may or may not be part of the deposit.

Pottery assemblages of more than 1 kg of sherds¹¹ are included in Appendix B if they include special features such as traces of deliberate breakage, perforated bases made after firing or stripes and dots of paint, or if they are associated with more or less complete or reconstructed pots. Finds assemblages with many weathered and eroded sherds from different periods are not included, nor are deposits with small sherds of many different pots. Such pottery assemblages probably represent waste. Some large assemblages of burnt sherds from hearths without other finds, which might well be ritual deposits, are ignored because it is possible that they were used to pave these hearths. Large deposits of sherds (>1 kg) are known from all periods. They are most numerous in the early Roman Iron Age, when they make up 14% of all deposits (table B.4.c). An overview of pottery deposits from all periods is presented in table 11.3.

Complete pots

It is highly unlikely that complete pots were lost, or overlooked when a house was abandoned. Burying pots or leaving pots behind must be intentional, so complete pots are always included as ritual deposits. Only one, relatively small, narrow-mouthed pot (J-1184) and five small pots (N-192, I-758, G-946, N-1200, O-1400) have survived whole, besides a much larger number of miniature pots. Small pots are clearly less susceptible to the heavy weight of terp layers. One complete pot found in a well with a broken rope was left out, because a purely functional explanation of this find is likely.

Pots that could largely be reconstructed from deposited sherds were included as complete pots, because the sherds were apparently deposited all at once and may well come from rituals that involved intentional breaking of pottery. Owing to the pressure of terp layers, many pots that were deposited intact must have broken only after deposition. It is usually not possible to distinguish such pots from pots that were deposited broken from the

material itself. Of the 125 finds assemblages that contain more or less complete pots (table 11.1), many were specifically recorded as containing a 'pot', a 'small pot', or a 'broken pot' in the finds register, which indicates that the shape of these pots was still recognizable. It is likely that many of these pots were intact at the time of deposition and broke afterwards. Among the pots that were recorded as sherds but could be reconstructed, undoubtedly some were deposited intact, although they were not specifically recorded as pots. An example is a finds assemblage from a ditch from the early Roman Iron Age (RS-416), which was recorded as 'sherds from ditch'; it was possible to completely reconstruct a large pot out of these sherds, which would be nearly impossible if it had been deposited broken. Even pots that were deposited intact and only broke after deposition usually miss some sherds, due to formation processes, accidental removal of sherds during the excavation, or finds processing after the excavation.

Table 11.1 shows the number of more or less complete pots per period and, in the last columns, the percentages of pots that were probably deposited intact, based on the descriptions in the finds register and on actual surviving pots. These percentages change over time, raising from 50% of the total number of complete pots in the middle pre-Roman Iron Age (this percentage does not mean much since it is based on only ten pots) to no less than 79% in the late pre-Roman Iron Age, then decreasing to 45% in the early Roman Iron Age, and rising again to 55% in the middle Roman Iron Age. Miniature pots are counted separately since they differ from larger pots considerably in use and survival rate. The percentage of whole miniatures is much higher than the percentage of whole, larger pots, ranging from 80 to 100%. These percentages are based on the actual remaining pots (fig. 11.7). Apparently, miniature pots were usually deposited intact; because of their small size and compactness, they were less likely to break after deposition.

Different types of pots

Pots come in wide- and narrow-mouthed large pots, small pots (including beakers), dishes and miniature

¹¹ The lower limit of 1 kg is rather randomly chosen.

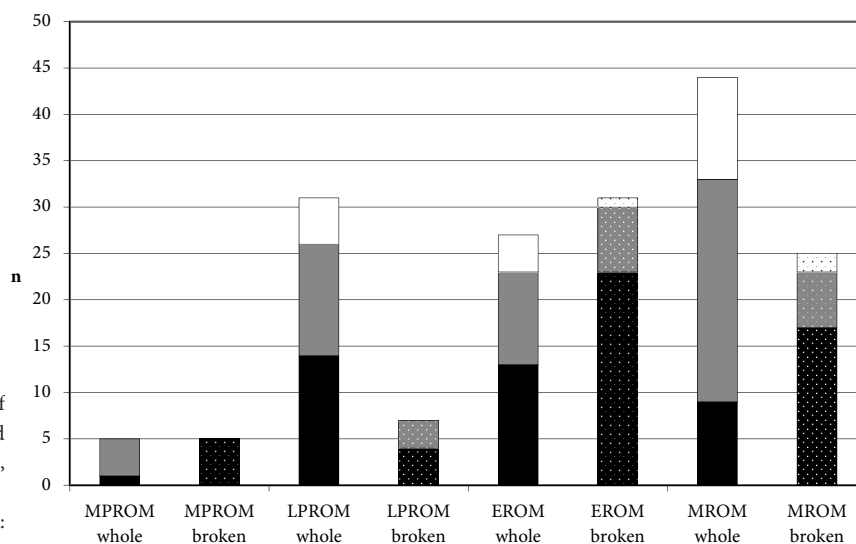


Fig. 11.3 Ratio of different categories of pottery according to their sizes, deposited whole or more or less complete but broken, per period.

White: miniatures; grey: small pots; black: large pots.

Table 11.4 Percentages of Ge-types (narrow-mouthed pots) and V-types (wide-mouthed with decorated rims) in the total Ezinge pottery assemblage and percentages of complete pots of these types in pottery deposits. Miniature pots are ignored in these numbers.

	MPROM	LPROM	EROM	MROM
Ge-types				
% settlement pottery	-	5.9%	7.4%	7.3%
% pottery in deposits	-	12.1%	7.5%	10.7%
V-types				
% settlement pottery	18.9%	14.4%	15.3%	10.3%
% pottery in deposits	-	12.1%	13.2%	10.7%

pots.¹² In daily practice, these forms were used in different ways, but pottery was not very specialized. Large, wide-mouthed pots with decorated rims (V-types) were used for storage and sometimes for cooking; wide-mouthed pots without decorated rims (Gw-types) were the usual cooking pots; narrow-mouthed pots (Ge-types) usually served as containers for liquids. Ge-types do not occur before the late pre-Roman Iron Age. Small pots (K-types) were sometimes used for cooking, as soot and residue testify, but they were probably most often used as tableware and drinking vessels, in particular during the Roman Iron Age, when they take the form of *situlae*. Dishes (S-types), which are rare, were probably used to serve food; in Ezinge, only one dish was found in a ritual context (P-1423). Miniature pots are defined as having a diameter of less than 8 cm; some are extremely small, for instance Q-407a, with an outside diameter of only 4 cm (fig. 11.7). The shape of miniature pots usually does not fit in a typological scheme, which makes them difficult to date without other finds. Their use prior to deposition is not really known; if they had a practical use, they may have served as containers for ointments, fat or other substances that were used in small quantities. They may also

have served as children's toys, or were perhaps made by children.

All these types occur in ritual deposits from Ezinge. The diagram of fig. 11.3 shows the ratio of different sizes of pottery, deposited either intact or broken, per period. Some trends are clear from this diagram. Among the pots that were deposited intact, small pots and miniatures constitute a large percentage already in the late pre-Roman Iron Age; in the middle Roman Iron Age, they form the majority of all deposited pots. Among the pots that were deposited broken, large pots are in the majority during all periods. This is especially so in the early Roman Iron Age. The dominance of large pots among the pots that were found broken suggests that it may partly be caused by the chance of breaking under pressure after deposition, which is considerably higher for large pots than it is for small pots.

V-pots in ritual deposits usually have traces of soot or residue, which indicates they were in use as cooking pots. Their often large sizes make them suitable pots for cooking large meals or for brewing beer. The percentage of both Ge6 and V-types in the total settlement pottery assemblage is around 10% (table 11.4). If we compare these percentages to the occurrence of these types in pottery deposits, some minor differences appear which may

12 Categories of pottery as defined by Taayke (1996b).

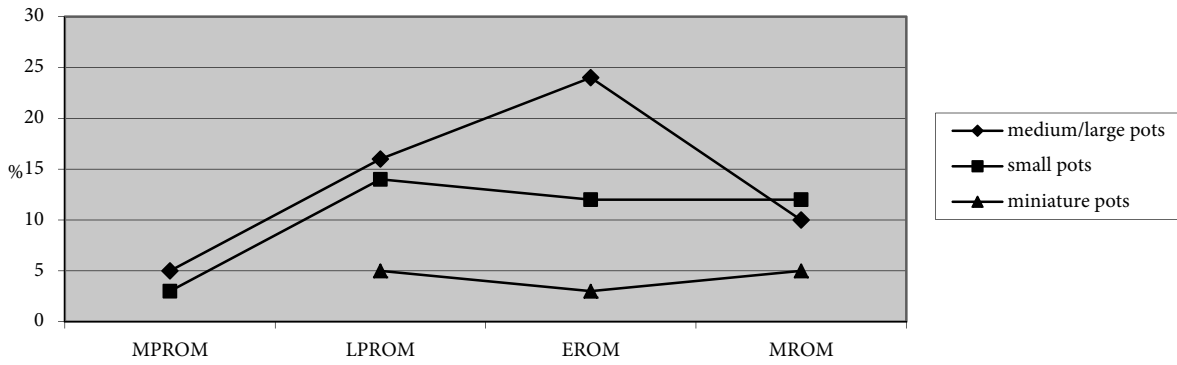


Fig. 11.4. The proportion of large, small and miniature pots in ritual practice over time: percentages of the total number of deposited objects.

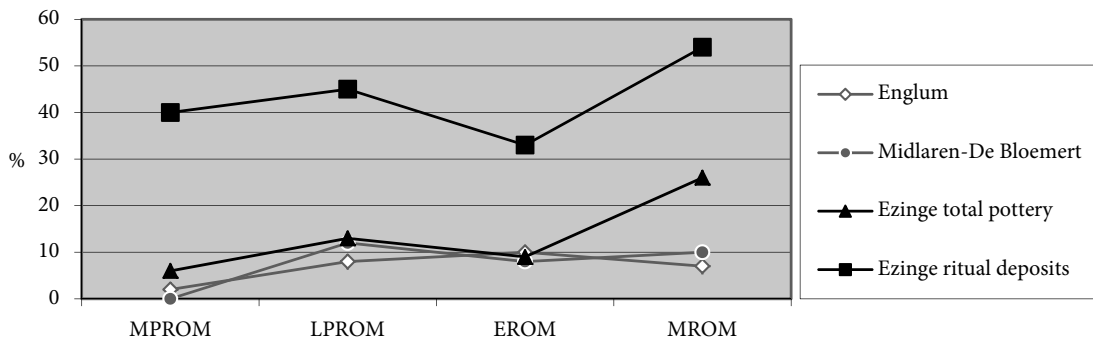


Fig. 11.5 The percentage of small pots of the total number of large and small pots in pottery assemblages from three settlements and in ritual deposits in Ezinge.

represent actual preferences in the use of pottery types in rituals. Ge6-types are slightly overrepresented in ritual deposits, except in the early Roman Iron Age. V-types, however, are underrepresented until the middle Roman Iron Age; that suggests they were not the first choice if pottery was needed in rituals. Perhaps they were too large to be useful in common ritual practice, for instance when containers for offerings were needed.

The percentage of deposits with complete pots (either intact or broken) strongly increased from the middle pre-Roman Iron Age onwards, reaching a peak in the early Roman Iron Age (table 11.1). This peak is in particular caused by a strong increase in the use of large pots, as indicated in fig. 11.4. Most of these large pots were deposited broken (see fig. 11.3). The relative increase of large pots in the early Roman Iron Age is also apparent from the proportion of large, small and miniature pots, as shown in fig. 11.4. This figure as well as table 11.1 shows that during the middle pre-Roman Iron Age, pottery constituted only a small part of the total number of deposited objects. The percentages of small as well as large pots strongly increased in the late pre-Roman Iron Age and miniature pots were added to the repertoire. The percentages of small and miniature pots remain about the same, but the use of large pots further increases to 24% of all deposited objects in the early Roman Iron Age. This percentage strongly diminishes in the middle Roman Iron Age. In this period, the percentages of large,

small and miniature deposited pots approach each other, with small pots as the most frequently deposited kind of pottery.¹³

The percentages of small and large pots mentioned above can be compared to their occurrence in pottery assemblages from settlement contexts. In normal settlement assemblages, small pots are common, but in considerably smaller numbers than large pots. In settlements with comparable pottery assemblages, such as Englum and Midlaren-De Bloemert (northern Drenthe), small pots constitute only 9% (on average) of all pottery (table 11.2). In the total pottery assemblage of Ezinge, the percentage of small pots is comparable to these other settlements, until the middle Roman Iron Age. In that period, no less than 25% of all pots in Ezinge were small. The percentages of small pots in ritual deposits in Ezinge are considerably higher than in the total settlement assemblage, a difference of at least 24% in all periods (fig. 11.5). Small pots were apparently selected for ritual use relatively often if a container was needed. In the middle Roman Iron Age, 55% of all deposited pots were small pots.

13 The large category of 51 *terra sigillata* sherds, which is new in the middle Roman Iron Age, hardly influences these percentages. If TS is not included, large pots make up 13% of the total number of deposited objects, small pots 15% and miniature pots 6%, instead of resp. 10, 12 and 5%.

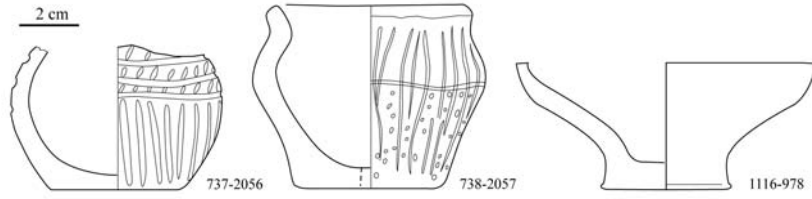


Fig. 11.6 Two decorated miniature pots (H-737 and 738), found in neighbouring houses, both with sherds. H-737 is complete, apart from the rim; H-738 has a perforated base. Q-1116 is made of a small or miniature pot.

The high percentage of small pots in the total pottery assemblage of the middle Roman Iron Age in Ezinge, compared to other settlements, is striking. It is not caused by selective finds collection in Ezinge; although the polished and often decorated beakers that occur in the middle Roman Iron Age may have been more consistently collected than less conspicuous sherds, such beakers only form a very small part of the small pots of this period in Ezinge. Most of them are no more eye-catching than the

small pots of earlier periods. That implies that the large percentage of small pots is reliable and must reflect a local preference for small pots in general, not only in ritual practice. It is possible that during the middle Roman Iron Age, communal meals were frequently held in Ezinge, requiring a high number of drinking vessels. That suggests a central political role for the settlement of Ezinge in this period, and possibly a higher degree of organization than before.

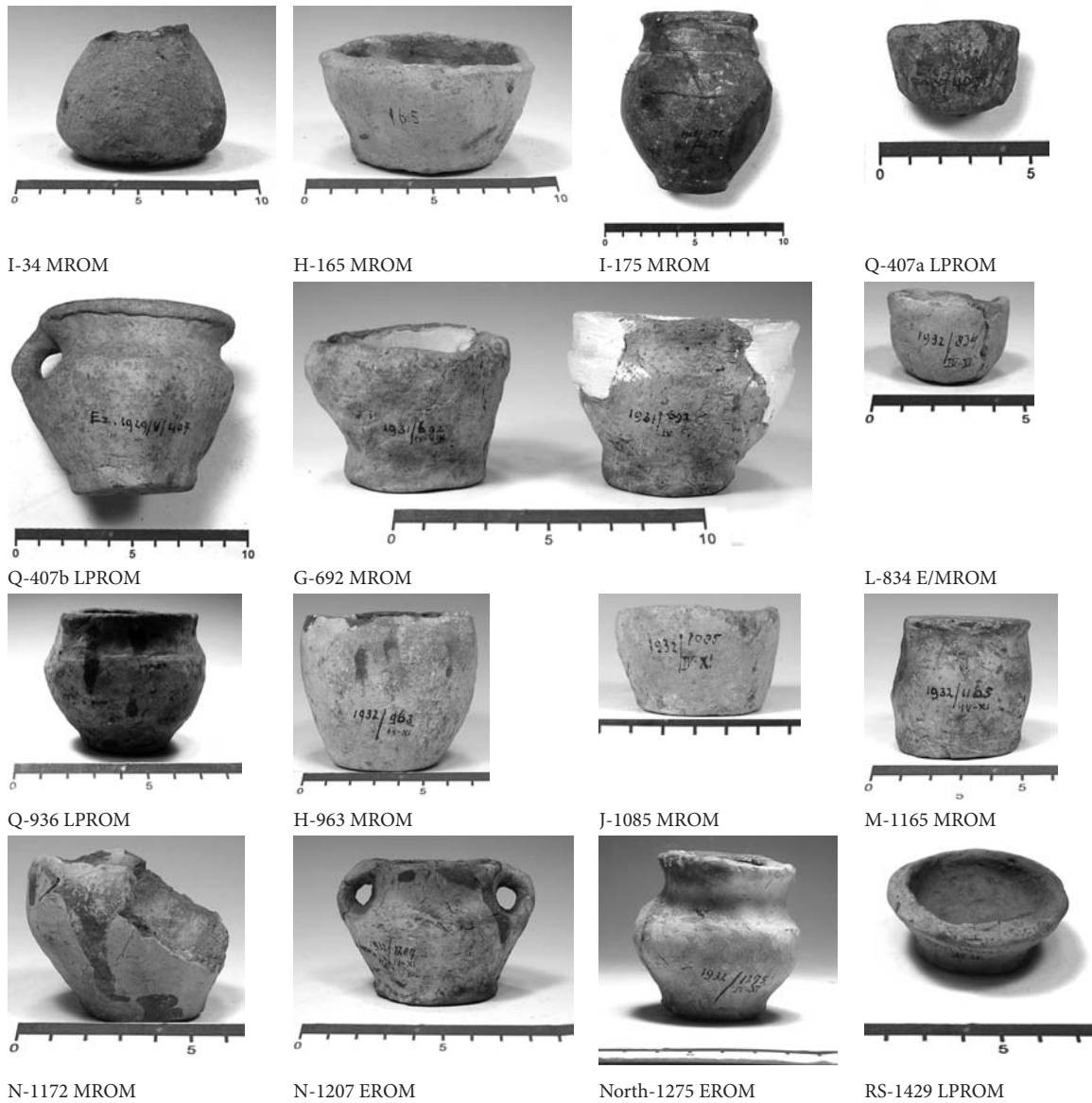


Fig. 11.7 Miniature pots from ritual deposits in Ezinge with find numbers and dates.



Fig. 11.8 Sherds resulting from an experiment with breaking sherds. Left: Sherd with organic temper, with damage caused by pressure with an antler awl. Middle: Sherd with organic and grog temper, hit by a pointed stone. The impact point in the centre is damaged. Right: Grog-tempered sherd, hit by a round stone. The surface surrounding the point of impact is damaged.

Miniature pots often have been associated with ritual practices elsewhere, for instance in northern Germany and Denmark or in Zuid-Holland, where they are considered foundation deposits (see 5.2.1). In Ezinge, miniature pots were most often deposited during the middle Roman Iron Age (n = 13), when they occur in 9% of all ritual deposits (table B.4.d). All 23 miniature pots from the research period found in situ in Ezinge are part of deposits that are considered ritual, for instance because they were associated with large and small pots or with pottery with traces of deliberate breakage or paint. Only four of the miniature pots from Ezinge were found without other objects, apart from inconspicuous sherds, but their locations suggest ritual deposition. One of them, a

reworked small pot (Q-1116, fig. 11.6), comes from the middle of a byre. Two others, North-1191 and 1275 (fig. 11.7), both from the early Roman Iron Age, were found with sherds in ditches. The fourth, a nicely decorated pot without rim, H-737 (fig. 11.6), comes from a house from the early 2nd century AD; in the neighbouring house, a decorated miniature pot with a perforated base was found (H-738, fig. 11.6), also with sherds. These two are the only decorated miniatures in Ezinge. The analogy and the perforated base indicate ritual deposition. Considering the fact that all miniature pots seem to come to the end of their use in ritual deposits, it is likely that miniature pots were often especially made for ritual use.

Inverted pots, traces of deliberate breakage, paint and perforated bases

Indications of ritually deposited pottery involve deliberate breakage, perforated bases, and dots and stripes of organic paint (table 11.3). Such traces were identified as probably belonging to ritual practice in the previous chapter on the finds from Englum. Also just like in Englum, an inverted pot (Q-1143) was found only once in Ezinge, in the byre of a house from the late pre-Roman Iron Age.

Deliberate breakage

Only deposits with one or more sherds with clear evidence of deliberate breakage were included in the numbers presented in table 11.4, but it is only seldom possible to establish that pots were broken deliberately. One type of evidence was discussed in the case-study of Englum (Appendix A.16; fig. 10.19). The identification of other traces of intentional breakage was tested by a small experiment, using some of the numerous unnumbered sherds from Ezinge. Although the experiment did not meet all the requirements of experimental research, it did yield some useful results. It foremost demonstrated that sherds do not break easily. Complete pots might break by falling, especially if they hit something hard before or when reaching the floor, but single sherds of the ware



Fig. 11.9 Base, tempered with grog and stone grit, with traces of deliberate breakage (impact points), found with large part of a cheese mould and a whetstone; the deposit (O-202) is dated to the late pre-Roman Iron Age.

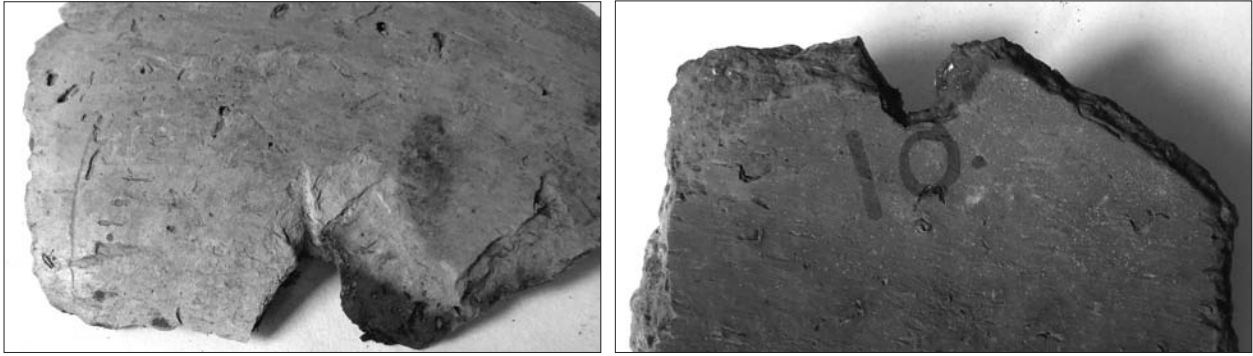


Fig. 11.10 Two sides of an organic and grog-tempered wall sherd, with damage caused by exerting pressure with an iron awl placed under an acute angle from the outside when the sherd was held upright.

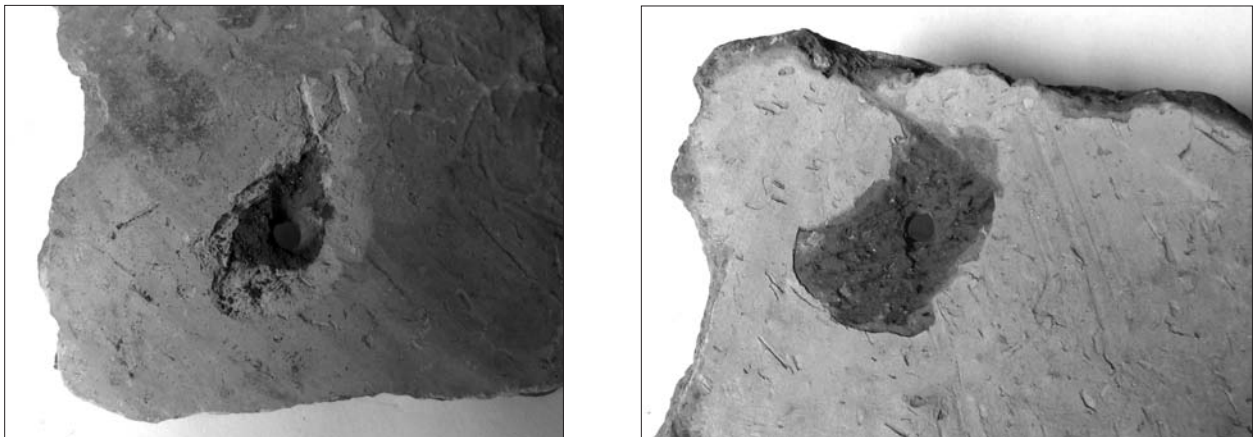


Fig. 11.11 Organic tempered sherd with iron inclusions. Left: a hole was accidentally made when trying to break the sherd, by placing an iron awl under an acute angle on the sherd and exerting pressure while rotating the awl. Right: the back (inside) of the same sherd. A spall has come off. The linear damage at the top of the sherd dates from before the experiment.



Fig. 11.12 Sherds with traces of breaking by a sharp object. Left: Some of the sherds of one pot from find no. 512, from a ditch or pit from the early Roman Iron Age (found in a profile). The pot, was deposited broken but nearly complete. The rim was broken off separately. Right: Two sherds from UV-1416, dated to the early 1st century AD, both with organic temper; the left sherd has impact damage at two places (right and below).

that was in use in Ezinge usually do not break if they fall on a floor, not even on a stone floor (which the houses of Ezinge did not have). A complicating factor is the diversity of the fabrics. Every sherd reacts differently to pressure and blows, due to difference in hardness, thickness, even-

ness of the fabric, temper and the location of the sherd on the pot. The extent and location of the surface damage that accompanies breaking (at the side of impact or at the back) depends on these factors.



Fig. 11.13 Small, complete and whole pot from the early Roman Iron Age (N-192), with a secondary hole where the base meets the wall. The hole was closed during restoration.

The experiment involved hitting the sherds with different tools from different angles. The tools were an antler awl, an iron awl, a knife and a stone with a round and a pointed end. The experiments showed that pressure with an antler awl only breaks relatively soft sherds with an organic temper¹⁴; if the awl is placed on a sherd and then hit by a stone, it will also break harder sherds. Pressure with an iron awl produces a break more easily. The use of an awl, either antler or iron, always results in a break with a slightly damaged impact point (fig. 11.8). An excavated example is a base sherd, O-202 (fig. 11.9), which was probably broken into four parts by using an awl or perhaps a pointed stone; it has four breaks and characteristic surface damage on the impact points along the breaks.

The use of an iron awl can be identified if the awl was not placed at a right angle on the surface of the pot, but askew. This position comes quite natural if an iron awl was used to break a complete pot from above or from the inside. Exerting pressure, combined with a rotating movement, usually will cause a break. This method leaves characteristic indentations, which regularly occur on the Ezinge pottery, and which form the majority of identified traces of deliberate breakage (figs. 11.10 and 12). An awl usually will cause a damaged surface on the front as well as at the back of the sherd, sometimes with a groove where pressure was exerted. Some of the indentations may be perforations that failed; the awl, if rotated, can be

¹⁴ Organic, plant temper, often with the addition of some grog, is the most common type of pottery temper in the entire terp region during the late-pre Roman and Roman Iron Age. For Ezinge, see Nieuwhof 2014b, 63-64.



Fig. 11.14 Sherd from a breakage experiment. The damage on the right is caused by the rotating point of an iron chisel, in an attempt to make a hole. The attempt was stopped because it took too long. Below, a nice round hole made by turning around the point of an iron knife, from the front and the back; it took less than 10 minutes to complete. On the left is a break with surface damage at the point of impact, made by an iron awl that was hit by a stone.

used to make a hole in soft sherds with an organic temper (fig. 11.11), but the indentations that were broken holes appear more rounded.

Hitting with a stone appears the easiest way to break sherds (fig. 11.8). It usually causes several breaks running from a centre, with a damaged surface on the front and sometimes on the back as well, on and surrounding the point of impact. Still, the damage of the surface is limited. Unfortunately, it is not possible to distinguish deliberate breakage with a stone from accidental breaking by falling on something hard. Only if the same kind of impact damage occurs on different places on a pot, deliberate damage is indicated. This was the case with two large pots from the middle Roman Iron Age from Englum (fig. A.22).

In the Ezinge material, traces of deliberate breakage occur on pottery from all periods (table 11.3). Evidence of deliberate breakage often must have disappeared during the restoration of pottery; the significance of such traces was not acknowledged at the time. Even secondary holes were sometimes closed during restoration (fig. 11.13).

Perforated pot bases

Pot bases with secondary holes occur in 14 assemblages, dating from the late pre-Roman Iron Age onwards (table 11.3). They are taken as an indication of ritual practice because of the Englum-case study, which includes three pots from the middle pre-Roman Iron Age with perforated bases that were thought to be used for making an offering of a liquid substance.

Round holes are easily made by rotating the point of a knife or an iron awl on the surface, from one side or from both sides (figs. 11.11 and 14). An awl only produces a small hole. Some holes are angular and were probably

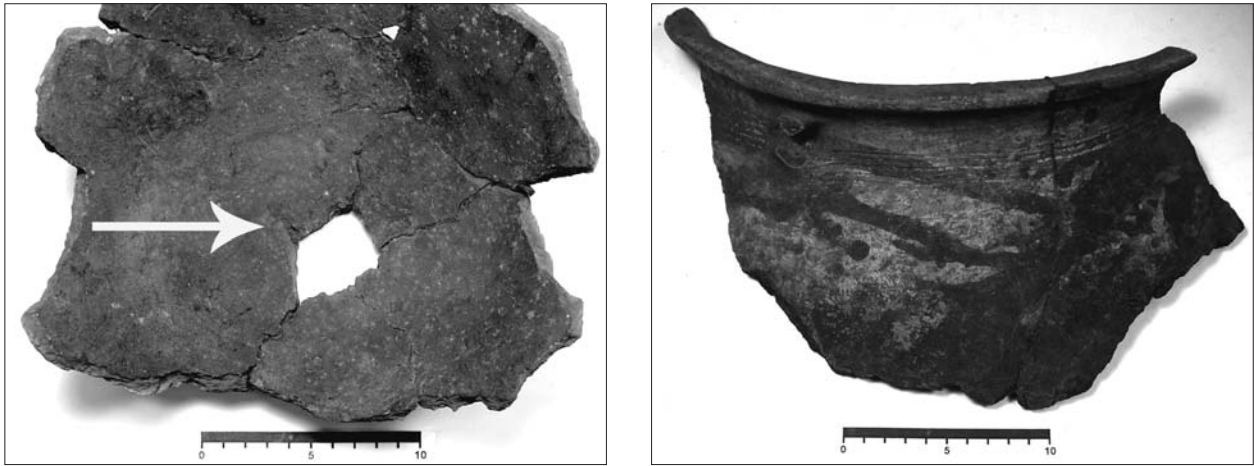


Fig. 11.15 Two sherds from a large rectangular pit filled with dung (P-1423 and RS-1445), dated to the late pre-Roman Iron Age. To the left, a base (with organic and grog temper) with a secondary hole. The white arrow indicates a straight cut, starting with a point of impact, which must be made by a sharp tool such as a knife or a chisel from the inside. To the right, a sherd with paint stripes. Several complete pots come from the same context, as well as some exotic sherds from the west of the Netherlands (see fig. 11.20).

made by cutting with a knife (fig.11.15). The differences underline the *ad hoc* character of secondary holes.

As was mentioned in the previous chapter, perforated bases may have had a functional purpose, but residue in the perforated pots from Englum indicates that they were used as cooking pots prior to deposition; the holes were clearly not related to this former use. That is also the case for many of the perforated bases in Ezinge.

Perforated bases not only occur in large pots, but also in small and even in miniature pots (see fig. 11.6). The perforated bases from Ezinge all belong to pottery deposits with one or several complete pots, or with a

large amount of sherds. Other features such as deliberate breakage or paint are often found in these deposits too (table 11.3). That underlines the ritual use of the perforated bases. Still, the possibility that perforated bases sometimes had a practical use, cannot be excluded.

Organic paint

The ritual meaning of organic paint is indicated by finds from Noord-Holland and from the terp region, for instance Wierum and Paddepoel, as was discussed in the previous chapter. In Ezinge, organic paint on pottery occurs from the middle pre-Roman Iron Age onwards, but



Fig. 11.16 Two restored pots from the early Roman Iron Age with vague paint stripes from the base upwards. The left pot has a perforated base and was probably deposited complete. It comes from a pottery deposit in a pit, which also included a cattle phalange (Q-412 and 417). The right pot was probably deposited broken with another broken pot, over 1.5 kg of sherds, including sherds with traces of intentional breakage, and a bone awl. The find number, 1204, was not noted on a field drawing so the context is unknown. It probably belongs to level N.



Fig. 11.17 Two small, sloppy pots, possibly made for ritual use. Left: H-151, right: H-960. The handle of the left pot is reconstructed.

it is most common in the Roman Iron Age (table 11.3). Painted sherds are part of deposits with pots and other objects that suggest ritual deposition, and they are often found together with deliberately broken pottery and perforated bases. Painted stripes and dots, often rather vague now, occur on miniatures, small pots and large pots that were deposited broken or intact (figs. 11.15 and 16). Paint stripes from the rim on a number of miniatures (fig. 11.7, Q-936, N-1172, N-1207), which clearly did not function as cooking pots, demonstrate that such paint stripes are not caused by boiled-over food or food spatters. An exemplary deposit with painted pottery (North-1272) comes from a ditch from the early Roman Iron Age. It consists of a nearly complete large pot with perforated base, a small pot deposited intact, and half of a large pot, all with (now vague) paint stripes that were applied from the base and the rim (the latter only on the small pot). The vagueness of the paint (e.g. fig. 11.16) indicates that the paint is quite vulnerable and may only have been preserved in specific contexts, such as dung layers or fills with a high content of organic matter. The painted sherds in Ezinge do support the interpretation made in the previous chapter that they are part of ritual practice, especially during the 1st and 2nd century AD, the date of most of this pottery.

Quality

Pottery used in ritual deposits is usually ordinary pottery, familiar from all kinds of settlement contexts. There are a few exceptions. An example is the nicely decorated small pot J-1176, dating from the 1st or early 2nd century AD (fig. 11.20), which comes from one of the much later graves of J-1343. It must have been an heirloom of several generations, chosen because it had a special meaning to the deceased or to his family. There are no indications that high-quality ware was preferred for containers used in a ritual. On the contrary, some of the pots in ritual deposits are so sloppy that they do not fit into the common

typology. Although such pots might just be beginner's work, it is quite possible that sloppy pots were sometimes quickly made especially for ritual use. Irregular pottery, probably especially made for ritual use, also occurs in ritual contexts in Noord-Holland.¹⁵

In Ezinge, possible examples are H-151 and H-960 (fig. 11.17), and many of the miniature pots (fig. 11.7). These pots are made without much care. Their production may have been an occasional procedure, outside of normal pottery production. They were perhaps just fired quickly in the hearth. Many of the better-finished and shaped pots used in ritual are lopsided and distorted, which suggests they were production failures (fig. 11.18). Most of them were probably functional, and used for drinking or cooking prior to their use in ritual. One small, intact pot has a crack, caused by a tempering particle, which must originate from firing (I-758). This pot was probably not functional; it ended up complete in a ritual deposit.

Several pots from ritual contexts were deposited without a rim (fig. 11.19). One of these is an atypical miniature pot from the 3rd century AD (I-34, fig. 11.7). It was found together with a *terra sigillata* sherd, close to a very large pot (I-33). Taking of the rim might be part of ritual practice, but some of the broken rims from Ezinge were rounded off prior to the use of the pots in ritual (e.g. find no. 1567 and UV-1672, fig. 11.19). These pots were apparently used for a while without the rim before they were finally deposited. Another incomplete pot is Q-1116 (fig. 11.6), a miniature bowl that was made of the lower part of a small broken pot. The use of damaged, reworked pots indicates that their quality was not considered relevant, as long as they could serve as containers. The same observation was also made in the previous chapter concerning a small pot without handles (Appendix A.8) and

¹⁵ Abbink 1999, 242.

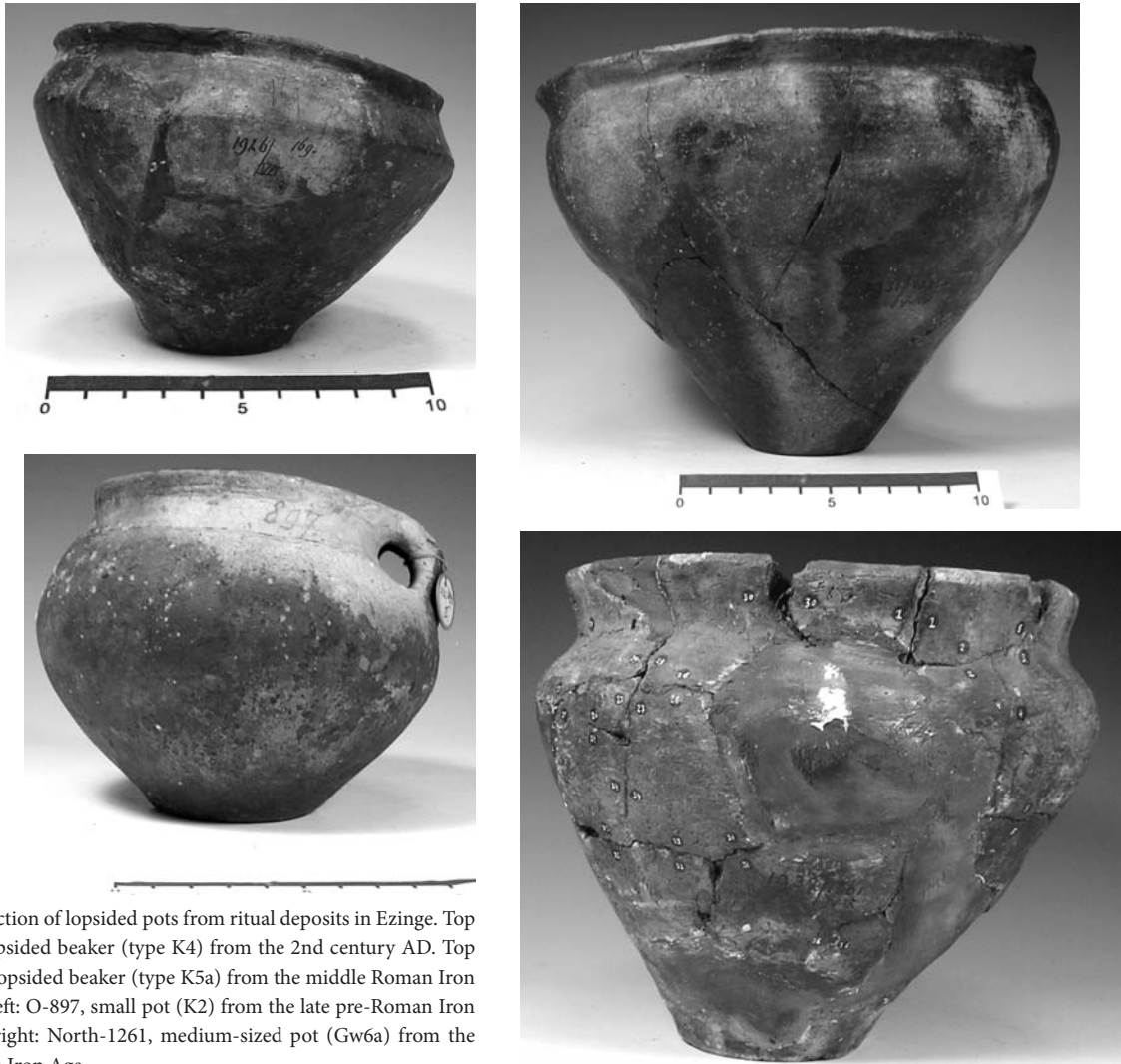


Fig. 11.18 Selection of lopsided pots from ritual deposits in Ezinge. Top left: H-169, lopsided beaker (type K4) from the 2nd century AD. Top right: H-707, lopsided beaker (type K5a) from the middle Roman Iron Age. Bottom left: O-897, small pot (K2) from the late pre-Roman Iron Age. Bottom right: North-1261, medium-sized pot (Gw6a) from the middle Roman Iron Age.

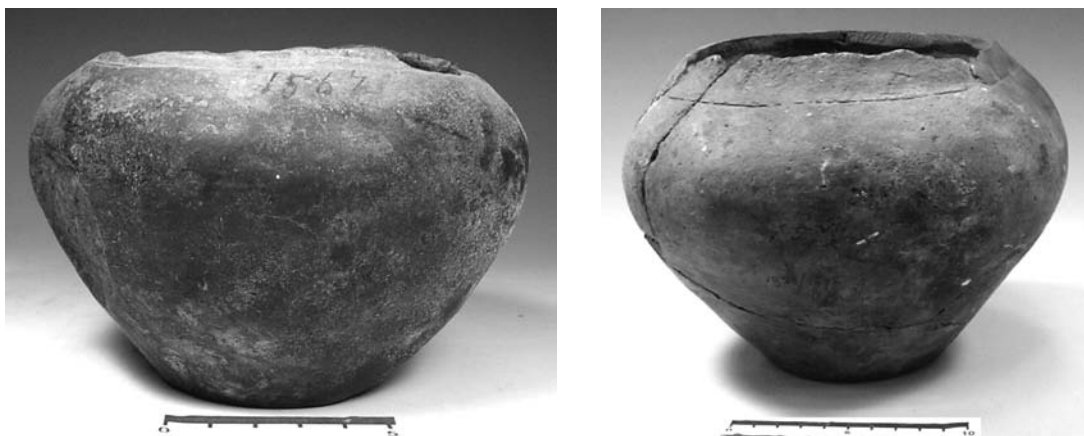


Fig. 11.19 Selection of pots used without rim, from ritual deposits in Ezinge. Left: find no. 1567, a small pot from the late pre-Roman Iron Age with a partially rounded, secondary rim. Right: UV-1672, a pot from the middle pre-Roman Iron Age, found in the earliest platform.

cooking pots with thick layers of charred residue in the deposit with the skulls in Englum.

The selection of pottery for ritual practices apparently was primarily based on practical considerations rather than on some symbolical meaning, at least when contain-

ers were needed. Many pots that were deposited intact must have served as containers, probably to make offerings. The examples above show that any pot could serve that purpose. Rather than using a well-made pot that was still intact and functional, a sloppy pot was quickly made

for the occasion, or production failures or damaged pots were singled out for ritual use.

Pottery from afar

Hand-built pottery, used for storing and preparing food, was usually made locally. It is not difficult to make and only requires local raw materials; the investment in materials and time is not very high, while the resulting product is heavy (a large pot weighs several kilograms), space consuming, and breakable. It was not worth the effort to trade and transport ordinary hand-built pots. Some wheel-thrown pottery was imported, but in most settlements in the northern Netherlands it only appears in small numbers. In Ezinge, 17.1% of the Minimum Number of Individual pots in the total pottery assemblage from the period from AD 100-400 consist of wheel-thrown pottery, at least if we count all *terra sigillata* sherds (but see below); without *terra sigillata*, the percentage is only 2.3%.¹⁶ Wheel-thrown pottery clearly constitutes only a minor part of the total pottery assemblage. Most pottery was certainly hand-built in the settlement itself.

A small number of hand-built pots have deviating shapes or decoration, which do not fit in the regional typology, but their fabrics do not differ from the normal settlement pottery.¹⁷ These deviating pots apparently do not represent imported ware. They were probably made in the settlement itself, but by potters who came from elsewhere. In chapter 4.2, it was argued, on the basis of pottery research and of ethnographic evidence, that pottery production was probably women's work, and that pottery with deviating shapes, made from local raw materials, is probably the work of women who came to a settlement as spouses.

Potters from afar can explain part of the sherds with deviating shapes or decoration. There is still another category of deviating ceramic material: that of individual foreign sherds and pots, in fabrics that do not seem to belong to the local ware. Such sherds and pots stand out as something different in assemblages with indigenous ware. In Ezinge, foreign pottery has been identified from the west of the Netherlands (Noord- and Zuid-Holland), from the present province of Friesland (Oostergo and Westergo), from the south (Rhine-Weser-Germanic pottery, most of it from the end of the Roman Iron Age), and from several regions in Germany (fig. 11.20).

One of the miniature pots, I-175 (fig. 11.7), also belongs to this group; it seems to be inspired by Roman pottery. The Roman connection suggests some form of trade, but the pots and sherds from faraway places are all isolated, unique samples of hand-built pottery, which is not in accordance with the standardization that comes with the production of commodities. Complete, foreign

pots are all relatively small, well finished and sometimes decorated. Rather than regular trade, they might represent gifts that were received during visits to other settlements or from visitors. Because of their relatively low weight, small pots were less problematic to transport than large cooking pots. The non-indigenous pots found in Ezinge (and elsewhere) indicate that communities within a large area, from the west of the Netherlands until far into Germany, maintained contacts and paid each other visits on occasion.

Apart from more or less complete, relatively small pots, there are single sherds from elsewhere. These sherds might be the remainders of pots that were brought to the settlement complete, but despite their conspicuousness, other sherds from the same pots were not identified. It is quite possible that they came to the settlement as sherds, rather than as pots. They can be taken as an indication of the significance of the use of fragments in maintaining social relations. These sherds may have been fragments of personalized objects or memorabilia, which were exchanged on specific events. That way, people and events were connected and remembered.

If this interpretation of the finds of foreign pottery is correct, sherds and pots from elsewhere must have had a special meaning to their owners. Pots that were acquired as gifts may not have been used in the same way as locally made pots. In Ezinge, several foreign sherds and pots finally ended up in ritual deposits, with other objects or possibly alone.¹⁸ Some examples illustrate how foreign pottery was included in ritual deposits. A Frisian sherd, G-943(-2251)¹⁹, was deposited in a house, with two pots of local types and the lower half of a pot with a perforated base; one of the local pots was painted. Another Frisian sherd, H-711(-3238), was deposited with twelve indigenous large rim sherds, including half of a small pot, and a piece of flint, right near a house. Noord-Holland sherd M-1166(-1814) is part of a large deposit with pottery and animal bones. N-1106(-1272) was deposited with a small, complete pot. The beautiful small pot J-1176(-4225), which probably came from northwestern Germany in the 1st or early 2nd century AD, was deposited in a grave, decades or even a century after the pot was made. The small pot M-1168(-4230) was also deposited decades after it came to Ezinge.

The latter examples demonstrate that such objects were kept for a long time before they were finally deposited. That supports the interpretation that they were meaningful objects, and also, as was suggested in the previous

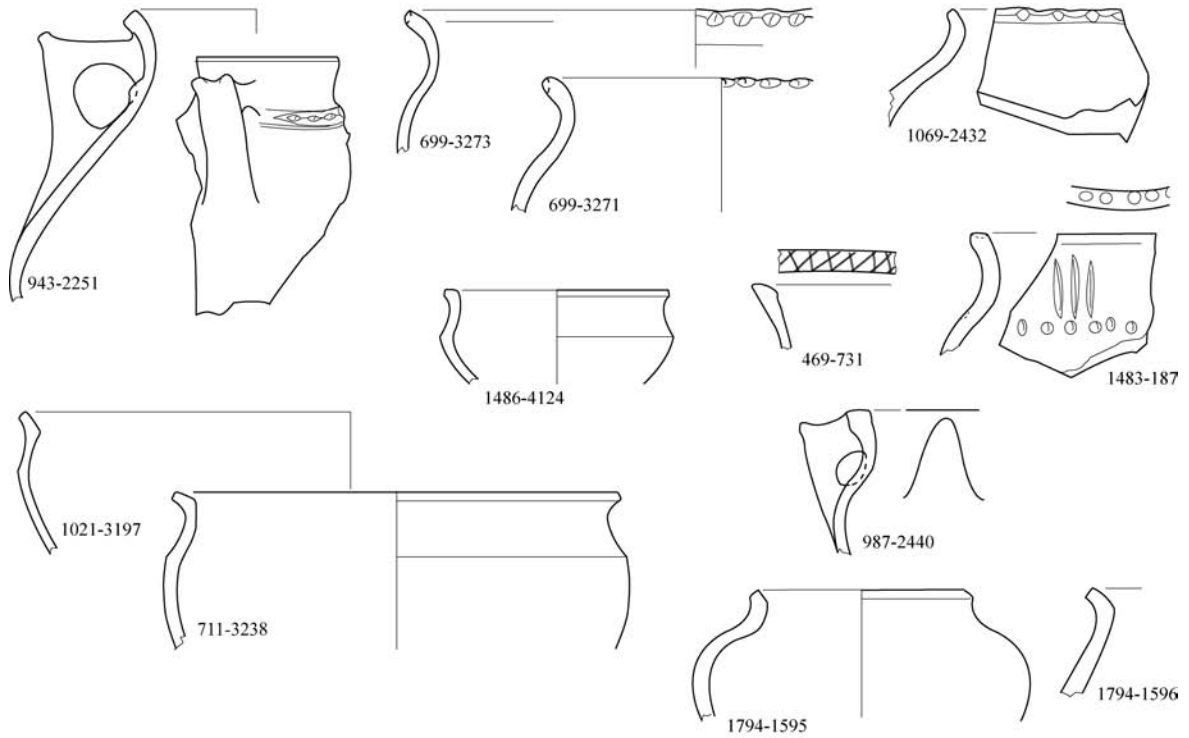
¹⁶ Thasing & Nieuwhof 2014, 138.

¹⁷ On the basis of macroscopic evidence.

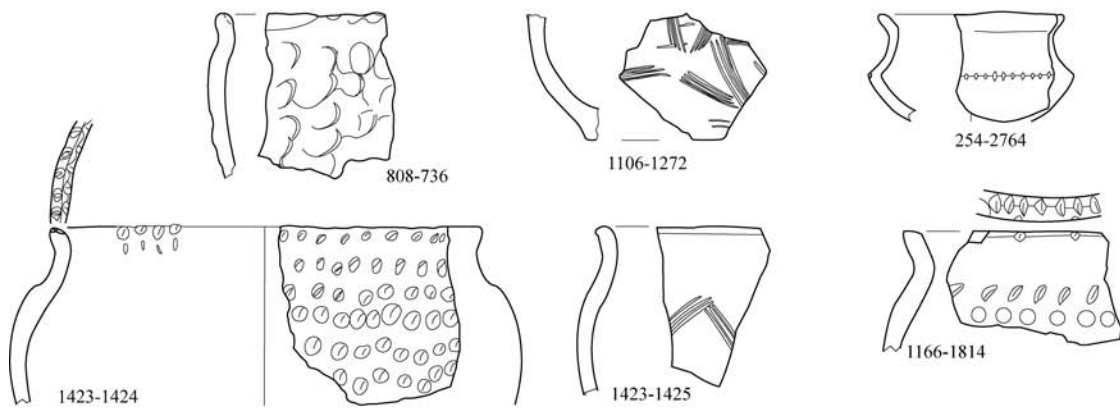
¹⁸ Besides the ones mentioned in this paragraph, foreign sherds are part of deposits I-254, North-1191, N-1104, P-1423. Single sherds are not included in the list of ritual deposits.

¹⁹ These numbers include a pottery identification number that refers to fig. 11.20.

Pottery from Friesland



Pottery from Noord- or Zuid-Holand



Pottery from northwestern Germany

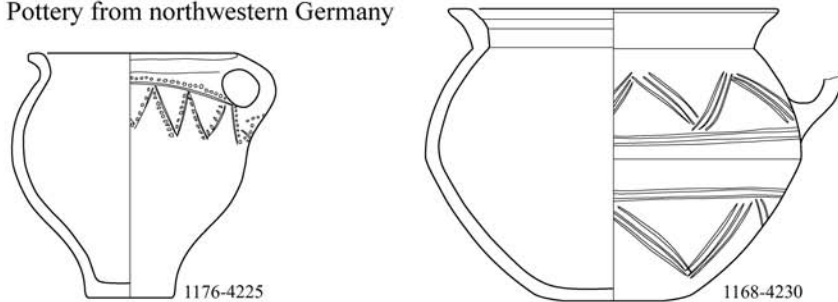


Fig. 11.20 Foreign pottery from different regions found in Ezinge. Numbers consist of find numbers and pottery identification numbers. Compare Taayke 1990, resp. 1996c for pottery from Friesland (Oostergo or Westergo); Van Heeringen 1992 and Diederik 2002 for pottery from Noord- and Zuid-Holland; Schmid 1965 and 2006 for similar pottery from northwestern Germany. Scale 1:4.

chapter, that households or families had collections of memorabilia, heirlooms and other meaningful objects.²⁰

The function of pottery in ritual

Pottery in ritual deposits was deposited intact, more or less complete but broken, as fitting sherds of an incomplete pot, or as separate fragments.

Intact pots will often be the containers of offerings. They may have been broken prior to deposition if the offering took place aboveground, for instance when offerings of liquid substances were made with the aid of pots with perforated bases. The overrepresentation of whole, small pots in ritual deposition during the entire pre-Roman and Roman Iron Age must be related to the size of the offerings for which they were used. Food offerings apparently often were just small portions of food. As was argued in 7.3.2, they do not need to be large if this supernatural entity is of an all-knowing nature. A small portion of the available food in a small container is sufficient. It is conceivable that even miniature pots could serve as containers for food, for instance fat or butter. The occurrence of miniatures with perforated bases (H-738, fig. 11.6; M-1172, fig. 11.7) suggests they were sometimes used to make small libations. Large pots in deposits with broken pottery are more likely the remainders of ritual meals, in which the food and drinks for the human participants were cooked or served, than the container for the offering made to a supernatural participant.

Many pottery deposits not only include intact or broken pots, but also sherds that must have broken earlier. Such sherds might belong to the fill of a feature, or they were accidentally collected with the remains of deliberately broken pots, right before deposition or during the excavation. It is also possible that they were meant to be part of the deposition as meaningful fragments; that can be inferred from the foreign sherds that occasionally occur in deposits.

The inhabitants of Ezinge maintained social contacts with other communities in a wide area, from the west of the Netherlands to Drenthe and northwestern Germany and possibly beyond. Communication may have involved the exchange of pottery-making women, of pots and of potsherds. The exchange of pottery-making women, probably marriage partners, resulted in family ties with many different groups. During visits, nice small pots served as gifts. During special events, sherds were divided as mementos.

The presence of foreign sherds in ritual deposits demonstrates that fragments did play a role in depositional practice. Many of the sherds that are found with complete objects may not be accidental parts of the fill

of a feature or waste. They may have been deposited with these objects as meaningful objects in their own right.

Through foreign sherds and pots, we have indirect evidence of ritual events, during which objects were exchanged as gifts. The friendly contacts that involved these different types of ritual exchange were undoubtedly not limited to far-away groups. It is more than likely that not only foreign pottery, but also pottery from the region or the settlement itself was often considered meaningful and worth to collect and keep as personalized objects or memorabilia. Since pottery styles of neighbouring groups are very similar, however, contacts between neighbours are much more difficult to detect than contacts with groups with clearly different pottery styles.

11.2.2.2 Ceramic artefacts

Ceramic objects, other than pottery, form a second large category of objects in ritual deposits in Ezinge. Ceramic artefacts include many loom weights, spindle whorls and playing counters, and a small number of sling stones and kitchen utensils such as lids and baking sheets, cheese moulds and spit rests. Together they make out 17.4% of all deposited objects. Ceramic artefacts are usually complete. Many of them are too large to be accidentally lost.

Loom weights

Loom weights come in four different types, as defined by Taayke.²¹ Dates as used here are adaptations of Taayke's original dates, based on the stratigraphy and associated finds. Most of the loom weights found in Ezinge date from the Roman Iron Age.

Loom weights are necessary for weaving on a warp-weighted loom, in order to keep the warp tensioned. The number of loom weights that is used depends on the width of the fabric, the number of threads and the fineness of the yarn. Two loom weights per 10-20 cm are certainly required for an even fabric.²² That implies that in their 'natural habitat', under a loom, they are not found alone, but rather in dozens. One such set, consisting of 20 loom weights, was found in a house from the 1st or early 2nd century AD (K-58/59, fig. 11.21). These loom weights are all of the same type and making; most of them are undamaged. A loom may have been standing where these weights were found. Leaving them where they were used might well be part of the rituals that accompanied the abandonment of the house. Not far from this set of loom weights, a complete but broken rotary quern was found (K-60), which may also have been left as part of an abandonment ritual (see below). Two more large sets of loom weights were found in Ezinge, indicat-

²⁰ Even today, pots may serve as treasured heirlooms and memorabilia because of their specific history and the values they represent. An example is the Roman jar from his mother's inheritance, described by Bazelmans (2012).

²¹ Taayke 1996b, 43; 57.

²² I draw on personal experience.



Fig. 11.21 Sixteen loom weights from a set of 20 (K-58/59), found in a house from the 1st or early 2nd century AD.



714a



714b



713



715a



715b

Fig. 11.22 H-713: three loom weights, from the floor of a house. H-714a: a spit rest shaped as a bovine head that was found in a hearth with clay lining in the same house (714a). H-715: another loom weight and a miniature pot, situated near the hearth. These objects were left in the house when it was abandoned. The deposits are dated to the 1st or early 2nd century AD.

ing that this practice was not uncommon; the context of these sets is unknown.²³

The loom weights that were found alone or in very small numbers must have been taken out of their usual context under the loom and deposited somewhere else. Loom weights are part of 7-10% of ritual deposits in all periods, except the late pre-Roman Iron Age (table B.4.a-d). Many of them are found with other, complete, artefacts such as large or miniature pots. An example is L-1108, found near a house and dating from the early Roman Iron Age. This deposit consists of three broken pots, two of them burnt, two loom weights with traces of burning, and the worked, unburnt fragment of a human skull (see below). Another is H-713, which consists of three complete loom weights and three sherds with similar rims, probably originating from pots made by the same potter. This assemblage was found in a house from the 1st or early 2nd century AD. Near the hearth of this house, another loom weight of the same type and making was found (H-715), with a miniature pot. In the hearth, which was preserved complete, was a spit rest, shaped as a cattle head (H-714). All these artefacts were left behind when the house was abandoned (fig. 11.22).

Fig. 11.22 H-713: three loom weights, from the floor of a house. H-714b: a spit rest shaped as a bovine head that was found in a hearth with clay lining in the same house (714a). H-715: another loom weight and a miniature pot, found near the hearth. These objects were left in the house when it was abandoned. The deposits are dated to the 1st or early 2nd century AD.

Spindle whorls

Most spindle whorls are made of clay²⁴, but bone spindle whorls also occur, especially in the middle pre-Roman Iron Age. Spindle whorls are small enough to lose, especially since spinning may be done outside while walking. However, most of them (2/3 of all bone and ceramic spindle whorls) were part of deposits with other objects (tables B.4.a-d), which suggests that most spindle whorls, including those that were found alone, were deposited as part of rituals. Spindle whorls are part of 15% of all deposits from the middle pre-Roman Iron Age, more than any other artefact type (table B.4.a). The percentage of spindle whorls later decreases to 6-8%, but it remains a common artefact type in ritual deposits.

Spindle whorls were found alone (or with some sherds), with another spindle whorl, or with other objects. They were, for instance, associated with ceramic playing counters in two deposits from the middle pre-Roman Iron Age (RS-447 and 474), with a cattle skull in the early Roman Iron Age (M-1198), with *terra sigillata* sherds in the middle Roman Iron Age (H-150; I-250),

and with a crucible in the middle or late Roman Iron Age (G-23; fig. 11.32). One spindle whorl was possibly associated with a human burial (P-400). The occurrence of spindle whorls in all kinds of deposits suggests that they had a symbolic meaning that went beyond their functional meaning.

Loom weights and spindle whorls are both associated with textile production and therefore, assuming that this was women's work, with the life of women. Deposition of such objects may have been part of rituals involving a household and of rituals associated with the lives of women. Because of their possibly symbolic meaning that went beyond their functional use, they may also have played a role in other types of rituals.

Playing counters

Playing counters are usually made of wall sherds of pots. Only three playing counters in Ezinge were made as such (fig. 11.23). To make them usable as playing counters, sherds were more or less rounded. Some playing counters are decorated, but most of them are just plain sherds, sometimes even with soot or cooking residue from their former existence as part of a cooking pot. The sizes of the pieces from Ezinge vary from 10 to 72 mm, but most pieces are around 30 mm.²⁵ The total number of 33 playing counters from Ezinge is low compared to the same number that was found during the much smaller excavation in Englum. It is likely that many slightly reworked wall sherds were not recognized and collected during the excavation. Besides playing counters made of hand-built pottery, there are eight pieces made of *terra sigillata*, and playing pieces made of antler and bone.

Most of the 21 playing counters in ritual deposits in Ezinge date from the middle pre-Roman Iron Age. They occur in 13% of all deposits from that period. They do not occur in deposits from the late pre-Roman Iron Age and only in small numbers in later periods. Although they are small enough to allow for accidental loss, most playing counters were associated with other objects (tables B.4.a-d). Playing counters from the middle pre-Roman Iron Age were, for instance, part of deposits under or in early platforms (possibly RS-469; UV-1561 and 1672). Two of them were found with ceramic or bone spindle whorls, in and near a house (RS-447 and 474). Three playing counters were found near the threshold of one of the phases of house 11 (RS-429). Playing counter Q-411 was deposited near the threshold of a much later phase (1st century BC or AD) of the same house with an unknown iron object and two pieces of flint. In the middle Roman Iron Age, playing counters were often deposited with pots (e.g. H-152 and J-1184).

The common interpretation of playing counters is that they were used in 'board' games. Playing counters

²³ Nieuwhof 2014b, 99-105.

²⁴ Nieuwhof 2014b, 95-99.

²⁵ Nieuwhof 2014b, 111.

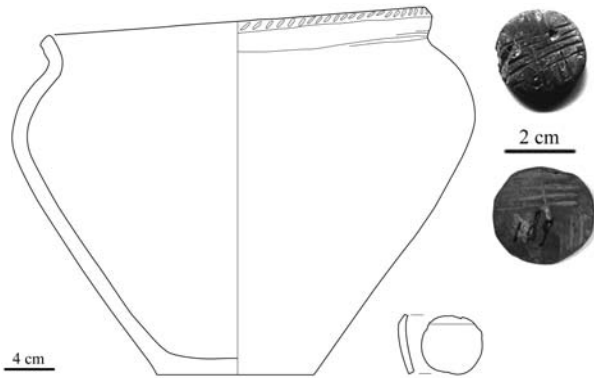


Fig. 11.23 Playing counters in ritual deposits. Left: H-152, a deposit of a complete, lopsided pot and a playing counter in a house from the middle Roman Iron Age. Top right: RS-474, a decorated playing counter from the middle pre-Roman Iron Age that was made as such; it was found with a bone spindle whorl in a house. Bottom right: N-189, a playing counter made of a decorated small pot from the early Roman Iron Age from a house.

may also have been used as counting or calculating pieces (for which pieces of different sizes may be practical), or for casting lots. Games and casting lots are by their nature associated with luck and good fortune. It is likely that this meaning is also attached to the playing pieces, perhaps even more so if their owner was successful. Playing counters were probably considered objects with intrinsic power, instrumental in ensuring prosperity. Deposition of such objects transferred their intrinsic force to the soil or to the person who made the deposition. Such deposits might be expected in or near houses, where most of them indeed were found (see table B.3). Instrument-special objects such as playing counters may also have been added to depositions to make them more effective.

Ceramic discs

A small finds category, which occurs only in deposits from the Roman Iron Age, consists of large, disc-shaped, ceramic artefacts: lids, baking sheets, and a small number of objects of unknown function. Lids are often decorated, usually have a handle, and fit pots of various sizes. Lids



Fig. 11.25 Large, complete lid (N-855) from the early Roman Iron Age, broken into quarters.

were deposited without pots several times, apparently for their own sake. L-834 consists of two whole, small lids (fig. 11.24), a miniature pot and an object made of a sheep bone, possibly a bead. The large lid N-855 was broken into four, probably deliberately (fig. 11.25).

Fragments of baking sheets are part of several deposits. One baking sheet, of which parts are included in three different deposits, stands out (fig. 11.26). Most of its fragments were part of deposit L-1103, with a small pot and a large pot with paint stripes running from the base. This deposit was associated with one of the phases of house 27, dated to the 1st or early 2nd century AD. One fragment was part of deposit L-1104 in the same house, with two bone handles, one of human bone (fig. 11.55) and one of sheep bone, and a cattle metapodium, all unburnt. These objects were left in a hearth when the house was abandoned. A third fragment of this baking sheet was found in the neighbouring house, with a wooden bowl (L-1105). It is highly unlikely that these three deposits

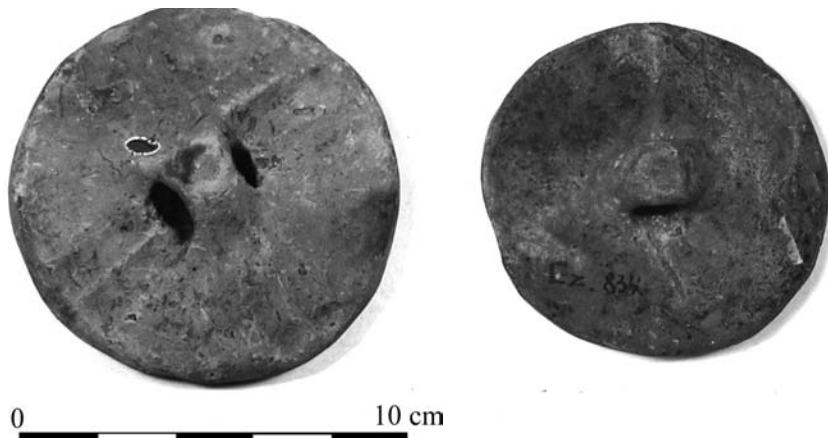


Fig. 11.24 Deposit L-834, dated to the 1st or early 2nd century AD, consisting of two small, whole lids (diameters 9 and 10 cm), a miniature pot (see fig. 11.7) and an object made of a sheep bone, possibly a bead.



Fig. 11.26 Restored baking sheet, of which the fragments were dispersed over three different deposits in two houses (L-1103, 1104 and 1105).

represent discarded waste that was dispersed over the settlement. The baking sheet must have been divided over three deposits on purpose, thus underlining the relationship between different households or generations.

A third group of disc-shaped artefacts consist of three objects of unknown function. They resemble lids, but have a large central hole, and are better finished and more elaborately decorated than early-Roman Iron Age lids. They are perhaps lids in a younger, middle Roman Iron Age style, in which the holes functioned as handles. Two of these objects (J-1087 and K-1091) are identical, apart from their size; they were undoubtedly made by the same potter (fig. 11.27). These objects, which clearly belong together, were deposited some metres apart in the floor of the same house, the one (K-1091) about 10 cm deeper than the other, and with other objects: a *terra sigillata* sherd, a broken whetstone and a bronze bead.

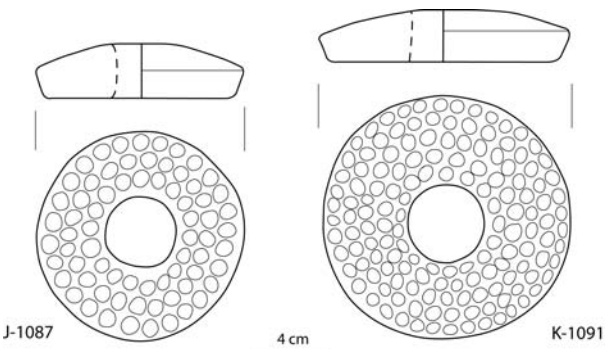


Fig. 11.27 Two whole ceramic objects, probably lids from the middle Roman Iron Age, from two different levels in the same house.

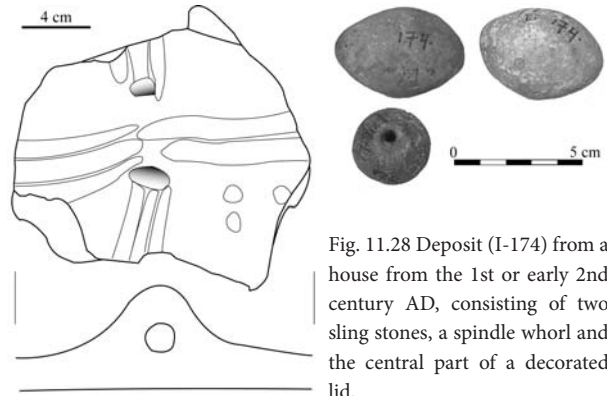


Fig. 11.28 Deposit (I-174) from a house from the 1st or early 2nd century AD, consisting of two sling stones, a spindle whorl and the central part of a decorated lid.

Other ceramic objects

Apart from the common ceramic artefacts discussed above, some rarer ceramic artefact types occasionally occur in ritual deposits: sling stones, spit rests and cheese moulds or sieves. A nearly complete cheese mould from the late pre-Roman Iron Age (O-202) was found with a broken base that was described above (fig. 11.9). Although this object is not complete, the association makes it likely that this is a ritual deposit. Two other deposits of kitchen utensils, a funnel (I-32) and a cheese mould or sieve found with a painted sherd (K-778), date from the middle Roman Iron Age.

Sling stones form a very small category. Two elliptical sling stones from the Roman Iron Age were found in a house with a ceramic spindle whorl and the central part of a lid (I-174, fig. 11.28). Some sling stones that were found relatively far from the centre of the village were ignored as possible ritual deposits because it might be argued that they were thrown without being retrieved.

One of the two spit rests found in Ezinge, shaped as a cattle head, was already described above. Another, much earlier spit rest with a less conspicuous shape (RS-470), was found near a hearth in a house from the middle pre-Roman Iron Age with a complete wooden bowl and a number of (unburnt) sherds, some of them with traces of deliberate breakage (fig. 11.29). These objects were probably left behind as part of the rituals associated with abandoning the house.

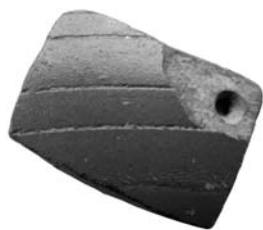
11.2.2.3 Terra sigillata

At least 172 sherds of *terra sigillata* (TS) were found during the excavation. TS sherds are probably overrepresented, since they are attractive and easy to recognize. Besides TS, there are 10 sherds of different Roman wares and 10 sherds of imported *terra nigra*-like pottery. Many of these sherds come from sections, are unstratified finds, or are of late, 4th-5th century AD wares.²⁶ In other terps, for

26 Late Argonne, African Red Slipware and possibly one fragment of Oxfordshire ware (Volkers 2014); 35 sherds (MNI = 25) date from the 4th or 5th century AD.



Fig. 11.29 RS-470, a spit rest and a wooden bowl, found near the hearth of a house from the middle pre-Roman Iron Age (same scale).



H-248a



H-248b



864



H-25



H-958

Fig. 11.30 Worked terra sigillata sherds from Ezinge. H-248a and b: two pendants (one half); 864: pendant or bead of middle Roman Iron Age TS, from a Migration Period context; H-25: playing counter, found in a hearth with a narrow-mouthed pot and a partial dog skull; H-958: five playing counters from a set of six, made of one vessel and found near a house. Photo's: T.B. Volkers.

instance Wijnaldum²⁷, TS often has been found in early medieval contexts, but the stratigraphy and associations with other finds show that most of the TS finds in Ezinge come from contemporary contexts. TS sherds from the 1st century AD, such as the one from Englum, have not been found in Ezinge. Of the 137 recovered sherds from the middle Roman Iron Age, around 40 were found in situ in trenches from the research period; they are described in Appendix B. A small number of 'paper' sherds, which were recorded but are missing now, are included.

Many TS sherds were modified in some way. Volkers noticed that out of 137 sherds from the 2nd or 3rd century AD, 105 sherds (77%) show traces of working or use.²⁸ They have been chopped, are evened along the break, have rounded corners or unnatural straight breaks with grooves along the fracture, or are made into squares, playing counters, pendants or other objects without practical use. None of the sherds of late TS or African Red Slipware and none of the small number of sherds of different types

of imported Roman ware are modified. The 137 sherds from the middle Roman Iron Age represent a Minimum Number of Individuals of 121. Of these, 92 are represented by one or a few reworked sherds, 28 do not have traces of working or handling, and one is represented by three sherds from different contexts (nos. 235, 349 and 496), of which one is worked. None of the original vessels is even remotely complete or reconstructable; most of them are represented by only one, usually rather small, sherd.

Seventeen TS sherds were deposited alone, without other finds, if we may believe the finds register. Nine single TS sherds were, for instance, deposited in the yard of house 30 (H-28-30; J-38-44), in an area of about 25 m². The five surviving sherds from this group all come from different vessels. In the same area, a large pot and a miniature pot were deposited with a TS sherd (I-33-34). Within the house, a TS playing counter was found in the hearth, with a broken narrow-mouthed pot and probably a partial dog skull (H-25).

TS sherds from different pots, or sherds of one vessel that were worked separately, were sometimes found

²⁷ Volkers 1999.

²⁸ Volkers 2014.

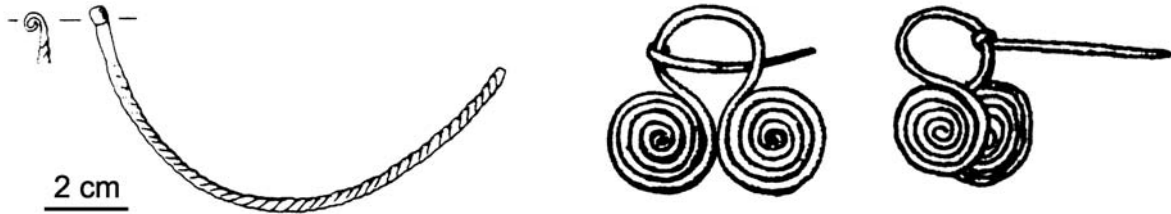


Fig. 11.31 Left: bronze neck ring, N-1334 (after Miedema 1983, fig. 124). Middle: drawing of double spiral brooch Q-94 (from Van Giffen 1936). Right: drawing of double spiral brooch N-1279 (H. 3-4 cm), also made shortly after the excavation (drawing archive GIA/RUG). This brooch and the neck ring, both dated to the 1st century BC, were found near the same house.

together. Outside the west wall of house 27, two such deposits were found (fig. 11.30). One consists of four different TS sherds (H-957), the other of six small playing counters, made of the same vessel and in the same technique (H-958).

Two fitting sherds from one vessel, which were both worked and reused after breaking, come from a ditch in the northern trench (North-1298). These sherds belong to the same vessel as another TS sherd in the same area, North-1295, which was found with a brooch. A fragment, probably of this same vessel, was also found in house 25. It had been deposited with a decorated disc (see fig. 11.27), a bronze bead and a broken whetstone (K-1091).

TS sherds were sometimes made into pendants (fig. 11.30). Pendants made of TS sherds are also known from other terps, as was already discussed in the previous chapter. Deposit H-248 consists of three sherds, two of which were pendants. Find no. 864 is a pendant or a bead, which was found in a Migration Period context, with ARS and late TS sherds and one other, worked, middle Roman Iron Age TS sherd. Worked TS sherds were apparently kept for a long time before being deposited.

The frequent occurrence in probable ritual deposits indicates that TS sherds were objects with a symbolic meaning. The worked sherds support the suggestion made in chapter 10, that TS was not imported in the terp region as luxury tableware. The inhabitants of this region seem to have been more interested in TS ware as a base material than as functional, prestigious ware. TS sherds may have been taken home by veterans, or were perhaps acquired by exchange with groups living closer to the Roman Empire. Large sherds were broken into smaller

pieces and worked. This was only done to *terra sigillata*, not to other local or imported wares. That supports the conclusion made in the previous chapter that it must be a unique quality of TS, such as the colour, which was found interesting and which made the sherds meaningful and desirable. The playing counters that were made of TS indicate that the use of TS was thought to improve the quality of playing counters. The improvement might entail that such playing counters would bring their owners more luck than ordinary playing counters. That implies that TS itself was associated with prosperity and fortune. This special quality must be responsible for the long period that TS was used for making sherd objects, rather than as tableware. This use of TS sherds only ends after the 3rd century AD.

11.2.2.4 Metal objects

Metal objects from Ezinge are relatively rare, undoubtedly due to the fact that metal detectors were still unknown when the terp was excavated.²⁹ Most of the surviving objects are made of bronze. Only one iron object has been preserved (RS-1430), a chisel, found in the byre of a house from the late pre-Roman Iron Age. One other iron object (Q-411) was recorded in the finds register but is missing now. Bronze objects such as brooches, hairpins and large and small rings are more numerous, though not common. Most of these objects are complete. A few coins were found but, as far as they were found in situ, they are not from before the late Roman Iron Age (e.g. G-948). Some special bronze objects date from the Roman Iron Age: three statuettes, representing Jupiter, a soldier and a cock³⁰, and a portable balance.³¹ Unfortunately, only the bronze cock was found in situ, in a sunken hut from the Migration Period. Just like TS, the statuettes and other objects of Roman origin may have acquired meanings and were possibly used in ways that differed from their original meanings and use.

Metal objects were probably usually remelted when their use ended, so their survival in the archaeological

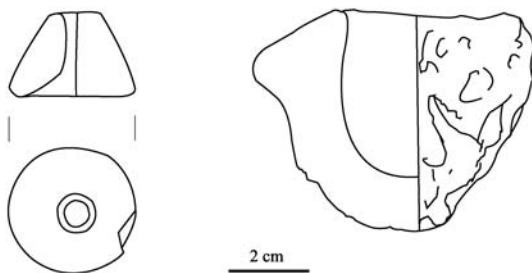


Fig. 11.32 A crucible and a spindle whorl from the end of the Roman Iron Age, found together. Their context is not clear.

29 Knol 2014.
 30 Zadoks-Josephus Jitta *et al.* 1967, I, 28-31; Galestin 1990; Knol 2014.
 31 Van Giffen 1926, Afb. 12.

record indicates either loss or deposition. Although brooches or hairpins may occasionally have been lost without being retrieved (a hairpin, six brooches and a needle were found alone, in or near houses; fig. 11.31), these finds have been included as ritual deposits. Five deposits in which bronze jewellery was associated with other objects (see below) indicates that this category of artefacts did play a role in ritual deposition.

To what extent metal objects were made locally is unknown. A find connected with metal production is a crucible from the end of the middle or late Roman Iron Age (G-23; fig. 11.32). It was deposited with a spindle whorl, in a context that is not entirely clear. It was probably used for casting bronze. The association with a spindle whorl indicates that this deposition was possibly not related to metal working itself, but rather had to do with a household that was occupied with metal production.

Some examples illustrate the way metal bronze objects occur in ritual deposits. A bronze ring was buried with two horn combs in the byre of a house from the middle pre-Roman Iron Age (T-1563). A brooch from the early Roman Iron Age was found with a large pot (M-1162). In the middle Roman Iron Age, as many as four deposits combined a piece of bronze jewellery with a *terra sigillata* sherd, besides other objects (I-251; J-764; K-1091; North-1295). Bronze jewellery can be considered personal possessions. As such, brooches, pins and arm and neck rings may have played a role in rituals that were associated with the lifecycle of individual people.

11.2.2.5 Wooden objects

A variety of wooden objects came to the light in Ezinge: parts of wheels, bowls, a yoke, decorated wood, a spade, and others. The majority of the wooden artefacts date from the pre-Roman Iron Age, undoubtedly due to the

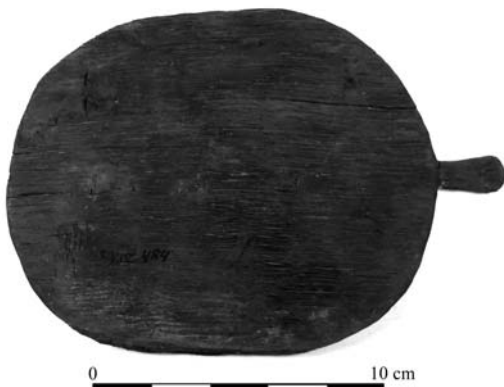


Fig. 11.34 Worked wooden board from the middle pre-Roman Iron Age (T-484), which may have been used to serve food.

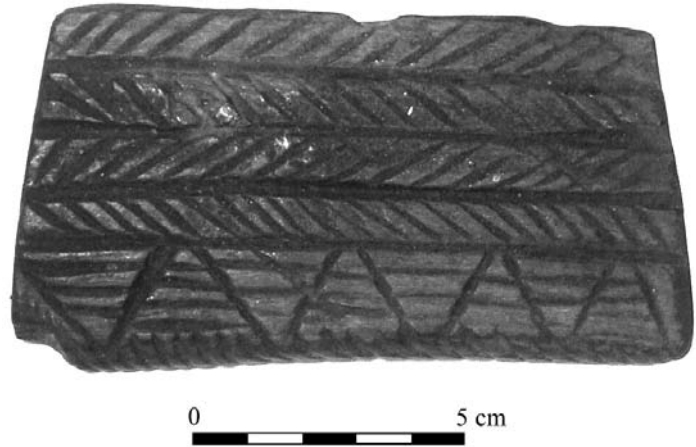


Fig. 11.33 Small wooden plank (RS-1010) from the late pre-Roman Iron Age, decorated on the front and on one of the long sides.

better preservation of wood in deep terp layers. In a landscape without trees, wooden objects are still useful as firewood after they are discarded, so their presence needs an explanation.

The most striking find is a small, decorated and all-over well-finished plank (RS-1010), which was found in the byre of house 15 (fig. 11.33). It is a unique piece, one of the very few decorated wooden artefacts from the northern Netherlands. Its meaning may have been purely symbolic; there are no indications that it was attached to something. That makes it likely that this object was ritually deposited.

Wooden bowls may have had the same function in rituals as pottery, as containers. Five wooden bowls were recorded, but only one of them (RS-470, fig. 11.29) has survived. It was found near a hearth with a spit rest, a hammering stone and sherds. Another wooden bowl from the middle pre-Roman Iron Age, RS-1361, was found in a byre. Two wooden bowls date from the early Roman Iron Age: N-1196 and M-1251. They were both found near houses, N-1196 with a small pot. A slightly younger wooden bowl (L-1105) was found in a house with part of a baking sheet (see above). A small board with a handle from the middle pre-Roman Iron Age, which was possibly used as a lid or to serve food, was found near a wall in one of the early houses (T-484, fig. 11.34).

Four small wooden pegs may have functioned as the spindles of spindle whorls, or as weaving tools. Two of them (Q-408 and T-475) were found with bone spindle whorls. The other two were found with two playing

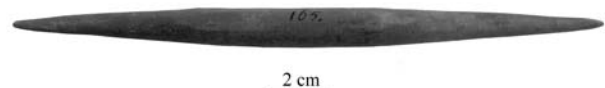


Fig. 11.35 Wooden spindle (H-165), found with a miniature pot and a bone handle, in a house from the middle Roman Iron Age.

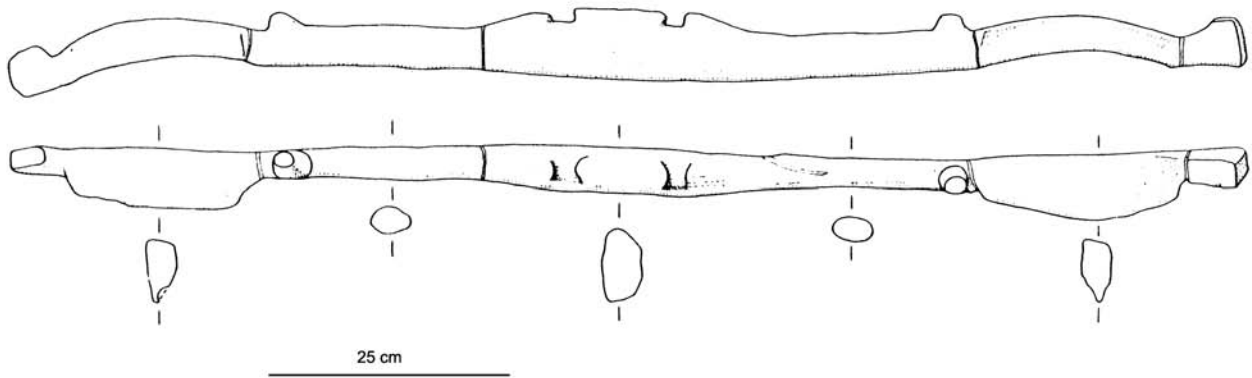


Fig. 11.36 Yoke, found in the byre of a house from the late pre-Roman Iron Age (Q-414). From: Miedema 1983, fig. 234.

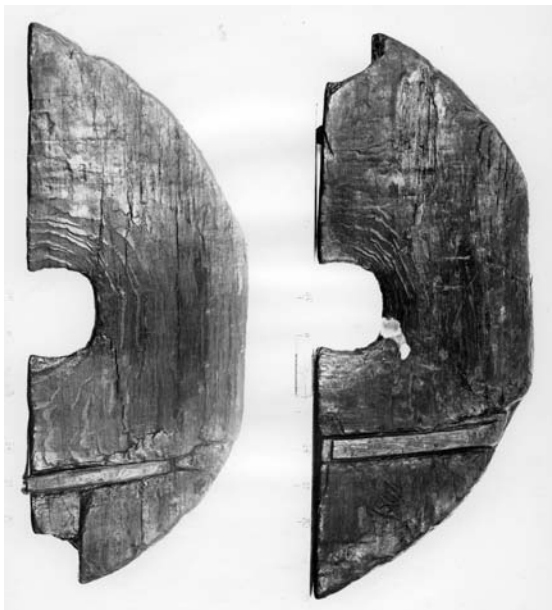
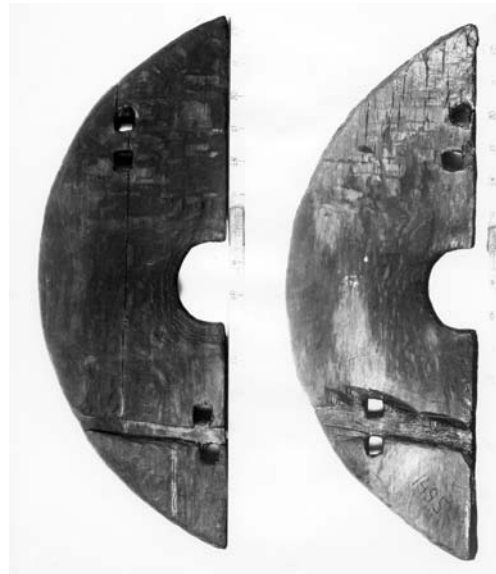
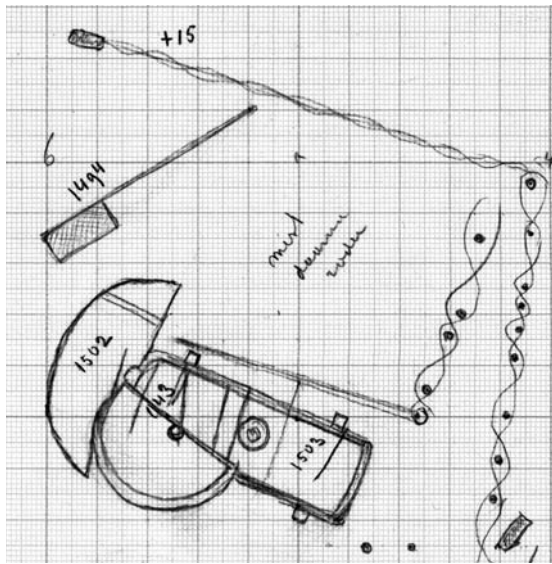


Fig. 11.37 Wooden spade or paddle (UV-1494) and three parts of disc wheels (UV-1495, 1502, 1503), found in the oldest excavated house in Ezinge. Field drawing and photo's RUG/GIA.



fig. 11.38 Deposit of wooden wheel segments and construction wood in the middle of a byre (Q-1178). Photo RUG/GIA.

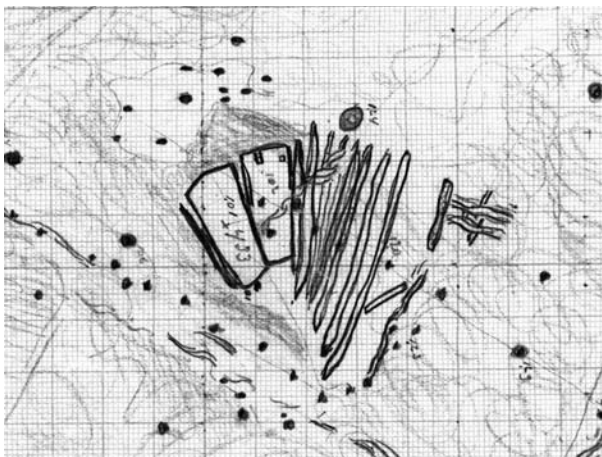


Fig. 11.39 Q-433, a deposit of stakes and short planks found right outside a house, dated to the late pre-Roman Iron Age. Archive RUG/GIA.

counters and deliberately broken sherds (RS-443), and with a miniature pot and a bone handle (H-165, fig. 11.35). The associations make all of them likely ritual deposits.

Considerably larger wooden objects are a wooden spade or paddle, which was found in the oldest excavated house and survives only as a drawing (UV-1494; fig. 11.37), and a yoke, which was found in the byre of a house from the early 2nd century BC (Q-414, fig. 11.36). These objects were both left behind when the houses were abandoned.

Since wood is scarce in the terp area, the presence of many large wooden objects is surprising. This applies especially to the large disc wheel parts, which seem to have

been placed with care in several of the early houses. In one case, a deposit which consists of three wheel parts in the oldest excavated house, it was explicitly stated that several wheel parts were lying on a black burnt layer (UV-1495/1502/1503, fig. 11.37).³² Although these wheel parts were found near a hearth, it is not likely that they were meant to be used as firewood when the house was still occupied; in that case, the floor would not have been burnt, or, if the house was burnt when it was still occupied, the wheels would have been burnt as well. Moreover, the parts are too large to be used as firewood in the hearth of a house. That also is the case for another, slightly younger, deposit which includes at least two wheel parts; this deposit includes still other large pieces of wood, probably construction wood (Q-1178; fig. 11.38). A disc wheel part, N-189a, was found in a house from the early Roman Iron Age. All deposits with parts of disc wheels seem to have been placed in houses after habitation ended, probably in the context of ritual abandonment practices.

Besides disc wheels, spoked wheels or parts of them occur. The oldest was found in the byre of a late pre-Roman Iron Age house (Q-905). Although the finds register recorded the find as a wheel, only one sixth of it survives now. A (partial) spoked wheel from the early Roman Iron Age also comes from a house (M-845). Both wheel deposits must be part of the same type of abandonment practices as the disc wheels. A third deposit of a partial spoked wheel, also from the early Roman Iron Age, is of

³² The drawing of one of the wheel segments was incorrectly interpreted as a rotary quern by Kooi & Van der Ploeg (2014, 86-89).

a different character. It was found with a fossil ammonite in a pit (O-1107).

The field drawings show several other deposits of large pieces of worked wood, although these were usually not recorded in the finds register.³³ Many large pieces of wickerwork were also left behind in or near houses, as well as the lower parts of posts and of wickerwork walls, sometimes up to 1 metre high. One of the large piles of wood, P-924, consists of wickerwork and construction wood from the house, as was noted in the finds register. Another consists of stakes and short planks with holes (Q-433; fig. 11.39). All this wood must have been deliberately covered by heightening layers at some point in time, rather than being used as firewood or for some other practical purpose. These piles of wood date from periods of continuous habitation. When a house was abandoned, usable objects could have been removed; that is, unless there were rules or traditions to prevent this. Such rules or traditions must belong to the ritual or symbolic sphere.

11.2.2.6 Stone objects

The stone material from Ezinge consists of small boulders and artefacts made of boulders, pieces of flint, parts of rotary querns of basaltic lava, fossils, and a hammer axe.³⁴ Since stones do not naturally occur in the salt marsh area, all stones and stone artefacts must come from elsewhere. Most of the stone artefacts found in Ezinge are considered to be deliberately deposited, for two reasons. In the first place, they are often associated with other, complete objects. In the second place, they are sometimes found in places, especially hearths, which suggest ritual deposition. Sometimes unused stones also occur in ritual deposits and might well be meaningful components. Since the number of unworked stones is very small, they are mentioned in the overview of Appendix B when they occur, but they are not included in the tables.

Worked small boulders

Worked stones were in use for various purposes, such as grinding, hammering, polishing, rubbing, sharpening or whetting or as lapstones or anvils. These functions are often combined in one tool. Most of the worked stones from ritual deposits in Ezinge fall into one of two categories of tools with more than one function: whetstones and cubical lapstones. Cubical lapstones start as round boulders. Because they are used on different sides, they gradually change into more or less cubical shapes. Sources of stones for both types of tools were found only 5 km south of Ezinge, in surfacing boulder clay near the present village of Noordhorn.³⁵

Most of the cubical stones date from the middle pre-Roman Iron Age and were found in houses. Four of them come from hearths of different phases of the oldest excavated house (UV-1491, 1492, 1493; fig. 11.40). None of these stones was burnt. One of them, UV-1492, was found with an antler awl, which underlines that these deposits must have been placed in the hearth after its last use, probably as part of ritual practices associated with the abandonment of the house or with the application of a new floor layer. Other cubical stones were also deposited in or near middle-pre-Roman Iron Age houses (T-1280, RS-1511 and T-478). The cubical stones of later periods were sometimes part of large deposits, especially M-1255, which was deposited in a house from the middle Roman Iron Age, with 6.8 kg of sherds, including painted sherds, a bone handle and horsehair.

Most whetstones are made of quartzitic sandstone, of the same origin as the cubical stones. The earliest imported whetstones in Ezinge date from the 3rd century AD.³⁶ Whetstones are regular finds from all periods of habitation. Since many of the deposited whetstones are still usable and were often found with other objects, most of them can be considered ritual deposits. An example is P-1422, a deposit from a pit in house 27 that consists of 5.4 kg of sherds, including deliberately broken sherds and a perforated base, and a burnt whetstone (see also level N). Another is H-168, a large part of a broken whetstone with a *terra sigillata* sherd and a loom weight in house 11.

Rotary querns

Rotary querns of basaltic lava were imported in the terp region already in the late pre-Roman Iron Age. Most finds of rotary querns concern large fragments. One deposit consists of two large parts of a runner and a small pot (H-968). Another is half of a bedstone, which was found in a house (I-761). Only one complete upper or lower stone was recorded, but not collected; this find dates from ca. AD 100 (K-60; fig. 11.41). According to the field drawing, it was broken into wedges and found close to a set of loom weights in house 30 (see above). The find is reminiscent of a complete but broken upper stone of a quern of basaltic lava, found under the hearth in a contemporary house in Paddepoel II, not far from Ezinge and Englum.³⁷ Cutting traces show that this stone was broken deliberately (fig. 11.41).³⁸

Ancient stone objects

An ancient hammer-axe and two fossils were already antique at the time of deposition. Besides these distinctive objects, unworked flint and flint artefacts from the Neolithic regularly occur (fig. 11.42).

33 Unnumbered piles of wood, for instance, in N-house 18; O-house 15; RS-house 12.

34 Nieuwhof *et al.* 2014.

35 The origin of the stones was established by H. Huisman (Nieuwhof *et al.* 2014).

36 Nieuwhof *et al.* 2014, 178ff.

37 Van Es 1970, find no. 152.

38 Hopman 2013.



Fig. 11.40 Cubical stones and an antler awl from hearths, belonging to different phases of the oldest excavated house in Ezinge. Left to right: UV-1491, 1492 and 1493.

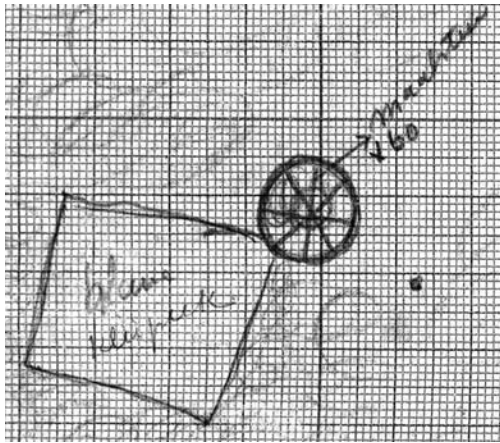


Fig. 11.41 Left: Ezinge field drawing of a rotary quern (K-60), dated to ca AD 100. Drawing: archive RUG/GIA. Right: rotary quern from Paddepoel II, with traces of cutting. Photo from Hopman 2013, 81.

The hammer-axe, of a type that was in use in the late Bronze Age and the early pre-Roman Iron Age³⁹, is part of a deposit in a house from the late pre-Roman Iron Age, with three large pots, a miniature pot and a dog skull (RS-1429). Some damage on the edge of the artefact indicates it was used for hammering, but when this happened is not clear. Since the terp region was not inhabited when the hammer-axe was made, it must come from the Pleistocene interior. The hammer-axe might be a pick-up, a gift, or even a family heirloom from before the time this family came to the salt marsh area, to be deposited after several centuries. Evidence from the Pleistocene inland suggests that hammer-axes were often ritually deposited there as well, usually in wet contexts.⁴⁰ It has been suggested that such pick-ups in the terp area were considered magical objects and served as a defence against evil powers, comparable to the 'thunderstones' of historical times.⁴¹ Although the meaning of such objects may have changed considerably over the ages, especially under the influence of Christianity, some beneficial effect must have been expected from it when it was deposited.

The two fossils are both smooth and shiny, which suggests they were frequently handled. RS-473, a sea urchin, was found with a sheep skull in a middle pre-Roman Iron Age context. The sea urchin probably comes from the western part of the Drenthe Plateau. The second fossil, O-1107, is an ammonite, of a species that can be found in the eastern part of the Netherlands (Twente) and in adjacent Germany.⁴² It was found with part of a spoked wheel in a pit from the early Roman Iron Age. Both fossils may have come to Ezinge by exchange, possibly as gifts. These fossils do not have a practical function and must have been valued because of some inherent meaning or power. Just like playing counters and *terra sigillata* sherds, they can be considered instrument-special objects.

Out of 17 pieces of flint that were collected during the excavation, eight are from secure contexts from the research period.⁴³ These pieces were probably pick-ups from the area near Noordhorn, just like many of the other stone objects. Some of them are Neolithic artefacts, which are common finds there. Only one or two pieces may have been used for some purpose after they were taken to Ezinge. Q-411b has rounded edges from

39 Feiken & Knol 2006, 77; table 1.

40 Niekus 2000, 165-166.

41 Boersma 1969, 236-237.

42 Pers. comm. G.J. Boekschoten, VU University, Amsterdam.

43 The flint objects were examined by D. Stapert, L. Johansen and I. Woltinge (Nieuwhof *et al.* 2014).

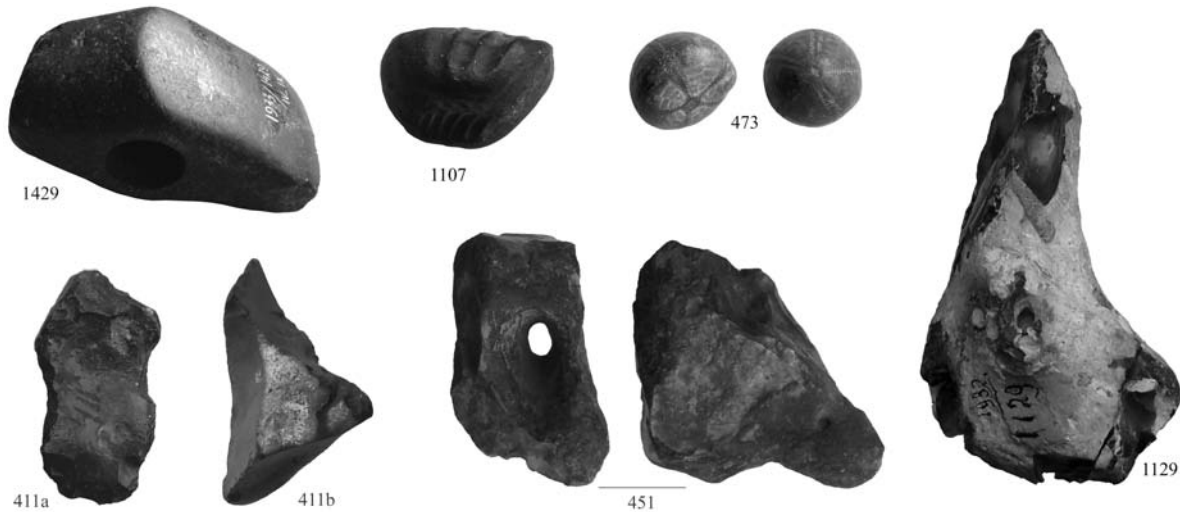


Fig. 11.42 RS-1429, a hammer-axe from the late Bronze Age or early pre-Roman Iron Age, from a late-pre-Roman Iron Age context in Ezinge. O-1107, a fossil ammonite, found with a part of a spokes wheel in a pit from the early Roman Iron Age. RS-473, a fossil sea urchin found with a sheep skull, probably from the middle pre-Roman Iron Age. Q-411, RS-451 and RS-1129: flint from various contexts. Scale 1:2.

some unknown use. RS-1129 was used for hammering, but when this happened is not clear. Several pieces of flint were not used at all.

Flint apparently was not collected as a useful raw material. Just like the hammer-axe and the fossils, pieces of flint were probably considered curious or somehow meaningful objects. Their symbolic meaning might be related to inherent qualities such as their strange shapes (two of them, RS-452 and find no. 1040 have natural holes), their sharpness, or their possible use as firelighters, although that was not how they were used in Ezinge. Just like the fossils and the ancient hammer-axe mentioned above, they may have been considered instrument-special objects, possibly expected to avert evil.

Such a symbolic meaning is in accordance with the location of some of some of these pieces. Two of them were found with iron, a rope and a ceramic playing counter near the threshold of a house from the late pre-Roman or early Roman Iron Age (Q-411). A small, unburnt flint nodule was found in the hearth of a middle pre-Roman Iron Age house (UV-1721). The large piece that had been used for hammering (RS-1129) comes from the byre of a house from the late pre-Roman Iron Age. Two Neolithic flakes, H-711 and J-764, come from middle-Roman Iron Age contexts; they were both found in or near houses, one with a small pot and 1.2 kg of sherds, the other with a bronze ring and a TS sherd. The association with other objects and the location of one of these deposits near a threshold support the interpretation that pieces of flint were considered meaningful objects. They did not accidentally land in ritual deposits, but were deliberately added to enhance the effectiveness of these deposits.

11.2.2.7 Miscellaneous: textiles, combs, hair, beads

A collection of artefacts from different types of material are discussed as a separate material category because they share several characteristics. Just like the bronze jewellery described above, textiles (probably the remains of clothing and sometimes described as clothes in the finds register), combs and beads were closely associated with individual persons, and can be considered personal belongings. That makes them suitable objects for deposition during rites of passage. Many of these finds are striking, if only for their early, pre-Roman Iron Age date. Combs, pieces of fabric and beads in the terp region are usually from later periods, or are dated later.⁴⁴

These objects are quite special in other respects as well. Bronze jewellery as well as artefacts from this group were either found alone or associated with each other (fabric and glass bead; bronze ring and combs), which makes them into an exclusive group, at least during the pre-Roman Iron Age. They are hardly ever found with sherds or other artefacts from this period, although sherds are part of the majority of finds assemblages. Only one piece of fabric from the middle pre-Roman Iron Age (UV-1500) was deposited with a different artefact, a bone handle. In the Roman Iron Age, such artefacts sometimes occur with pottery or other objects (table 11.5).

Beads are rare in all periods. The earliest bead, made of amber, was found in the first platform (UV-1530).⁴⁵ Slightly younger is the worked vertebra of a rare fish, a meagre (*Argyrosomus regius*), which was probably used as a bead or pendant and may have served as an amulet (RS-452).⁴⁶ It probably belongs to house 16, of which

44 Miedema 1983; Schlabow 1974.

45 Beads were examined by W. van Bommel-van der Sluijs (Nieuwhof & Van Bommel-van der Sluijs 2014).

46 Prummel *et al.* 2014, fig. 1.

Table 11.13 Pieces of fabric (clothing?) and jewellery, which are thought to be deposited as part of rites of passage.

MPROM (8 deposits = 12% of the total number of deposits in this period)	
RS-421	fabric
RS-423a	fabric
T-487	fabric
UV-1500	fabric and a bone handle
T-1512	2 horn combs
UV-1500	amber bead
UV-1541	bronze hairpin
T-1563	2 horn combs and a bronze ring
T-1578	horn comb
LPROM (12 deposits = 17% of the total number of deposits in this period)	
Q-94	brooch
T-506	brooch
Q-915	fabric
Q-1001	fabric
RS-1006	fabric and glass bead
RS-1013	fabric
RS-1128	fabric
Q-1259	fabric
N-1279	brooch
N-1334	brooch
N-1348	fabric
RS-1459	fabric
EROM (5 deposits = 7% of the total number of deposits in this period)	
P-79	human hair
P-403	fabric
Q-913	fabric
L-825	brooch
M-1162	brooch and complete large pot
MROM (7 deposits = 5% of the total number of deposits in this period)	
L-810	brooch
L-1096	bead, incomplete large pot and 1 kg of sherds
I-251	2 bronze hairpins and 1 TS
J-764	bronze ring, piece of flint and 1 TS
K-1091	bronze bead (?), 1 TS, decorated lid, whetstone
North-1295	brooch, 1 TS and 1 <i>terra nigra</i> -like sherd
J-1793	2 glass beads and 3 TS

only a small part was excavated. RS-1006, dating from the late pre-Roman Iron Age, is the oldest glass bead found in Ezinge. Two glass beads of the same type and date as RS-1006 were also deposited in a much younger, middle-Roman Iron Age context, with three TS sherds (J-1793). Glass beads may have been passed on from generation to generation for a long time before they were finally deposited.⁴⁷ Late pre-Roman Iron Age beads were not found in strings. Single glass beads may have had a purely decorative function, or had an additional meaning as amulet. That also applies to the early amber bead and for a piece of amber from the middle Roman Iron Age

(I-992), which may not only have been raw material to make beads, but also an object with an intrinsic meaning, an instrument-special material.

The five horn combs that were excavated in Ezinge all date from the middle pre-Roman Iron Age (fig. 11.43). Some of these combs survive only half. The combs come from three contexts; the two combs of T-1512 were found on and near a pile of wickerwork; T-1563 and 1578 were both found in the same house (house 9), probably in different phases. The two combs of T-1563 were deposited with a bronze ring. Combs from the late pre-Roman and Roman Iron Age are not recorded. Another fragile material, pieces of fabric, does not occur in contexts from the middle Roman Iron Age. The absence of such objects in the Roman Iron Age might be caused by the preservation conditions for such delicate organic materials, which were probably less favourable in higher terp layers; it may also represent changing ritual traditions.

Human hair may have been cut off and buried for the same reason as personal belongings, to take leave of the past during rites of separation. There is only one recorded find of human hair from Ezinge (P-79); the hair was collected and is still part of the Ezinge collection in the archaeological depot. After almost 90 years in a paper bag, it is still recognizable as human hair, although it is partly crumbled (fig. 11.44). Most of the hair is protected by dung, which was the matrix of the find.

It now seems a very insignificant find, but it was recognized during the excavation as something special and it is very similar to the strip of hair that was found in Englum (see Appendix A.2). The find consists of hair clippings with a length of a few centimetres, which must have been cut off in one go and were buried at once; otherwise, they would not have remained identifiable.

Besides human hair, horsehair was found. These finds might have the same meaning as deposits of human hair. The deposition of horsehair possibly marked a transition in the life of a horse, for instance when it became mature. One of the five horsehair deposits is recorded as 'braided hair' (T-1590). Two of the deposits (UV-1533 and T-1590), both from the middle pre-Roman Iron Age, include a piece of rope. A specific rope may have been associated with a particular horse in the same way as per-

⁴⁷ Pre-Roman Iron Age beads also occur in early medieval contexts, see Van Bommel-van der Sluijs 2011, 40.

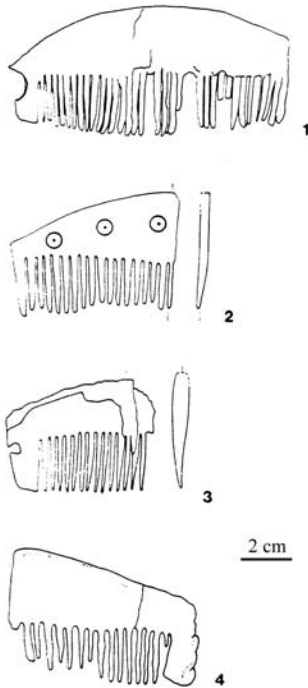


Fig. 11.43. Fragile horn combs from the middle pre-Roman Iron Age. 1 and 2: T-1563; 3 and 4: T-1512. From Miedema 1983, fig. 166.

sonal belongings were associated with people. Both deposits were buried under houses. A late-pre-Roman Iron Age find of horsehair (Q-90) comes from the same dung layer as the deposit of human hair (P-79). Finds of horsehair from the Roman Iron Age appear to be of a different character. A middle Roman Iron Age find of horsehair (M-1255) was found with 6.8 kg of sherds, a bone handle and a cubical stone.

Most of these personal objects in layers in and near houses were probably simply dug in: they are Type 3-depositions, as defined in the Englum case study (see chapter 10.3.2). The two combs of T-1512, found on and near a pile of wickerwork are a Type 4-deposition: they were placed and then covered by a heightening layer. These combs connect rites of separation for humans to abandonment rituals for houses.

11.2.2.8 Animal remains

Ezinge is not an ideal location to study the use of animals in ritual practice, since animal bones were not collected systematically. Animal bones were only collected, or recorded, when they stood out for some reason. A bias towards ritual deposits is therefore to be expected for recorded finds of animal bones (see also above, 11.1.2). Only metapodia of cattle and horses were collected more or less systematically, but these cannot be used to assess the role of animals and animal bones in ritual practice, because we do not know what they represent. Whether they were collected from small or large assemblages of complete or fragmented bones is unknown. They are therefore only included in the list of ritual deposits if they belong to deposits that were thought to be ritual for other reasons. The list includes several 'paper' animal depos-



Fig. 11.44 Human hair clippings found in a dung layer between two houses (P-79), date late pre-Roman Iron Age or early Roman Iron Age.

its, which were mentioned in the finds register or on a field drawing. The identification of the species is necessarily based on the finds register. Since Van Giffen was an archaeozoologist, his identifications are considered trustworthy. Collected bones and bone artefacts were examined as part of the Odyssey-project.⁴⁸

Skeletons

Several complete and partial animal skeletons date from the middle pre-Roman Iron Age. They were almost certainly deposited during rituals. The oldest and most notable of these deposits is the famous building deposit (UV-1555), which was only published by Van Giffen in 1963. It consists of the articulated (but incomplete) parts of a horse, a cow and a sheep (see Appendix B.1, level UV), which were found against the lower part of the wall of the oldest excavated house (fig. 4.2). A complete or partial sheep in a house platform, buried above a large pottery assemblage, was recorded in the finds register (UV-1561). The third deposit of an animal in this period, again in a house platform, concerns a dog; the description in the finds register indicates it was buried complete (T-1569).

Two animal burials date from the Roman Iron Age. The word "sheep", possibly indicating a sheep skeleton, was noted down on one of the field drawings, in the fill of a pit that was dug in a house from the early Roman Iron Age (level N). The pit was then covered with sods, to which a wooden bowl and part of a baking sheet were added (L-1105). The second animal burial, a horse that was buried in a rectangular pit in level H, is probably from the 3rd century AD. The horse was carefully placed; the forelegs were bent against the body, indicating manipulation (fig. 11.45).

⁴⁸ Prummel *et al.* 2014.



Fig. 11.45 A horse burial from the middle Roman Iron Age (level H), to the north. Photo RUG/GIA.

Among the complete skeletons of animals are two shells of marine animals: a whelk (*Buccinum undatum*) and a cuttlebone (the inner shell of *Sepia officinalis*). Both shells probably come from the nearby shore. The whelk (M-1646) was found with a cattle skull (M-1647), close to a pottery deposit and a dog skull (M-1650 and 1651). These finds date to ca. AD 100; their context is not clear. The cuttlebone (J-47) was found among a large number of TS sherds and other objects that were dispersed over an area of about 25 m², probably the backyard of house 30. The association of these conspicuous shells with likely ritual deposits suggests they were objects with an intrinsic meaning, possibly instrument-special objects.

Bones

Apart from partial or complete animal skeletons, single bones and other remains were collected, or at least recorded. Cattle metapodia and smaller foot and anklebones are the most numerous animal remains in ritual deposits in Ezinge. Although we do not know what the large number of metapodia are representative of, there are some deposits with metapodia that stand out. For instance, deposit N-1306 includes eleven rim sherds of ten different pots from the late pre-Roman or early Roman Iron Age, besides six cattle metatarsi and a horse metatarsus. A metacarpus and a metatarsus of a horse were found in a pit that contained three small pots from the late pre-Roman Iron Age (O-897). In the latter case, there may have been more of the horse than just the metapodia that were collected. In the first case, all metatarsi are of

different sizes, suggesting they come from different animals and were selected for the purpose of the ritual.

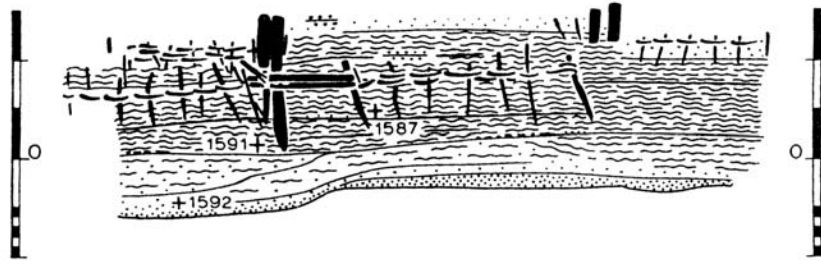
Foot and anklebones of cattle and horses were probably used as playing pieces in games. This must have given them an intrinsic meaning associated with luck and good fortune, just like ceramic playing counters (see above). Foot bones may also have played a role in divination practices.⁴⁹ Foot bones of cattle and horses occur several times in ritual deposits, especially from the middle Roman Iron Age. The most striking deposit is J-36, which was found in the same area, in the backyard of house 30, as the TS sherds and the cuttlebone mentioned above. It consists of five tali of cattle, one of which is filled with iron, and a pierced horse phalange. The combination of worked and unworked bones demonstrates that they were both used for the same purpose. Cattle foot bones and a pierced horse phalange were also found in five different deposits in pits and in a ditch in the backyard of house 11 (Q-412/417; RS-415; RS-416, RS-418; RS-425/426/427), all of which date from the late pre-Roman or early Roman Iron Age. This household was apparently occupied with the deposition of playing pieces or with divination during this period. Knucklebones of sheep, which are well known as playing pieces from the early Middle Ages onwards⁵⁰, were not collected or recorded in Ezinge.

Skulls of dogs are the largest category of animal remains besides foot and leg bones of cattle. They occur in

⁴⁹ Therkorn 2004, 57ff.

⁵⁰ Knol 1987.

Fig. 11.46 Section drawing with finds near the threshold of a house from the middle pre-Roman Iron Age (level T). No. 1587: enterolith of a horse; no. 1591: bone spindle whorl and bone handle; no. 1592: small pot. Archive RUG/GIA.



all periods, except the early Roman Iron Age. There are no indications that the dogs were killed; they may have died of natural causes before their skulls were deposited. In the middle pre-Roman Iron Age, dog skulls were deposited in a house (T-1565) and twice in two arms of a creek, probably during the final stage of filling in (UV-1746 and 1747). A deposit from a house from the late pre-Roman Iron Age consists of three large pots, a miniature pot, a late-Bronze Age hammer axe, and a dog skull (RS-1429). A peculiar deposit in a house from around AD 100 includes, according to the finds register, part of a fox skull besides a dog skull (M-1177). Dog skulls from the middle Roman Iron Age come from houses; H-25 was found in a hearth, with a nearly complete pot and a TS playing counter.

Deposits of complete skulls of cattle and sheep are considered ritual deposits, since all parts of cattle and sheep were normally used in some way, including the skull.⁵¹ Only one sheep skull was found; it was deposited with a fossil sea urchin in a middle-pre-Roman Iron Age context (RS-473). Cattle skulls occur three times. Two of them were deposited in the early Roman Iron Age: one (M-1198) with a spindle whorl outside a house, another (O-1684) possibly in a hearth. A cattle skull from ca. AD 100 was found with the whelk described above (M-1646). Parts of a cattle mandible were found with a small pot, a loom weight and slag in a former hearth that probably had been used for some pyrotechnic activity (O-862; fig. 11.59).

Besides bones, two cattle horns and a sheep horn were recorded. The sheep horn and one of cattle horns (Q-88 and 97), which both date from the late pre-Roman Iron Age, were found close to each other in the same dung layer (a layer in which also human and horse hair were found, see above). Cattle horns deposited in bogs inland indicate that they probably had a symbolic meaning.⁵² The find of a sheep horn in Ezinge indicates that the symbolic meaning of horns may not be limited to cattle.

A number of records mention unspecified 'bones' of several species, namely horse, sheep, cattle and bird (resp. N-346, I-1076, Q-1150 and RS-1434). Since these bones have been recorded, it is rather certain that they stood out for some reason, probably because there were many com-

plete bones of one animal or of one species. That suggests deposition in one go, which makes them into likely ritual deposits, although nothing is known about these bones. Only one of the recorded bird bones, a tarsometatarsus of a crane (*Grus grus*) that was found in the byre from the late pre-Roman Iron Age, was collected. Since 'bones' were recorded in the finds register, there was probably more of this uncommon bird. Another curious find was recorded as an enterolith⁵³ from a horse (T-1587); it was found between the stakes of a wickerwork wall, directly near the threshold of one of the phases of a house from the middle pre-Roman Iron Age (fig. 11.46). The uncommonness of the enterolith as well as the location justifies identification as a ritual deposit. It must have been considered a strange object with a symbolic meaning, which might be related to the hardness of the stone and its origin in a living creature. It may have been considered a forceful, instrument-special object.

It can be concluded that sheep, cattle, horses and dogs were the main animal species in depositional practice in Ezinge. Pig bones are relatively rare in the terp region.⁵⁴ Pig is also the only domesticated animal that never occurs in deposits in Ezinge.⁵⁵ Besides domesticated animals, there are some rare wild species, such as fox, crane and marine shells. These wild animals are incidental and quite exotic elements in ritual practice. Partial animals, such as the horse, cattle and sheep in the early building sacrifice, can be interpreted as the offered parts of animals that were eaten during a ritual meal, in this case at the occasion of the building of a new house. Complete animals such as a dog and possibly sheep were found in platforms under houses, one of the sheep in a pit, the other under the platform with a large amount of potsherds. That indicates they were not dumps of animals that died of infectious diseases. They may have been animals that were offered during building or occupation of the house, to ensure the wellbeing of the household. The sheep were possibly only partial, and may have been the offered parts of sheep that were eaten during a ritual meal; the dog was buried complete in the house platform.

⁵³ *Maagbal* in Dutch.

⁵⁴ For instance in Wierum and Englum, see Prummel 2006; 2008.

⁵⁵ Only twelve pig bones were collected in Ezinge; they were all worked into awls and needles (Prummel *et al.* 2014).

⁵¹ Thilderkvist 2013, 76.

⁵² Prummel & Van der Sanden 1995.

The role of animals in ritual practice

Sheep and cattle are the main providers of meat and of secondary products such as dairy and wool. The role of cattle often has been stressed, while sheep are usually ignored when their role in social life and their associated symbolic meaning are concerned, but the general impression from the deposits in Ezinge is that both species were equally important in ritual practice and may not have differed much in symbolic meaning. Both species regularly occur in deposits, in similar ways: as complete or partial skeletons, as skulls and as horns. The number of finds, however, is small, so this conclusion is only preliminary.

Dogs and horses were probably not kept for their meat, although both species were occasionally eaten in the terp region. The remains of dogs, especially dog skulls, are quite numerous and seem to represent a ritual practice that remained unchanged over the entire research period. Dog skulls are often associated with other objects, in particular pottery. Apart from two deposits in creeks during the earliest phase of habitation, all dogs are associated with houses. The role of dogs in ritual will further be discussed in chapter 12.

The remains of horses are rare. The partial skeleton that was part of the building sacrifice that was associated with the oldest excavated house, and the horse enterolith that must have been found in the stomach when a horse was butchered, indicate that horses were sometimes eaten, at least in the pre-Roman Iron Age. Other finds of horse remains concern hair, which were interpreted in the above as possibly belonging to rites of passage, parallel to such rites in the lives of people. That suggests that individual horses in some respects were treated as persons. That may also be inferred from a horse burial. The middle Roman Iron Age horse burial, found in the northern part of the settlement (level H) is considered a ritual deposit rather than a dumped carcass, if only for the apparent manipulation of the limbs. It was buried alone, just like humans in the research period, and on a similar location (see below). The flexed legs are reminiscent of crouched human burials. A small number of horse burials from this period, often with legs in this position, are known from other terps. They usually appear to be relatively old, for example the approximately 23 year old mare that was found in an unknown Frisian terp; this horse was probably buried after it had died of natural causes.⁵⁶ The similarities with human burials suggest that the rare horse burials from the research period actually represent funerary rites for (perhaps special) horses, rather than sacrificed animals. As was noted by Beilke-Voigt, the care with which dead animals were treated is indicative of a special relation between people

and animals, whether they had died of natural causes or were sacrificed.⁵⁷

Bone, antler and horn objects

Artefacts made of antler, bone or horn, are sometimes part of ritual deposits. Many of them belong to assemblages with other complete objects, which supports a ritual interpretation. Antler was imported to the area as a raw material; bone and horn come from local animals. Bone artefacts in deposits were usually made of sheep and cattle bones, but an awl (RS-912) and a needle (RS-1004), both from the late pre-Roman Iron Age, were made of pig bones; a handle from the early Roman Iron Age was made of a horse metatarsus (L-1154). A curious implement of unknown function consists of a sheep molar, which was mounted in a cut horse metatarsus (H-249).

Besides metapodia without use wear, a number of cattle metapodia with traces of use were collected; these may have been used to prepare leather.⁵⁸ They were probably not recognized as artefacts during the excavation. The presence of used metapodia in a small number of assemblages with unused metapodia (Q-1258; K-779) indicates that these unused metapodia cannot always simply be considered offal from butchering. Metapodia, both used and unused, may have had an inherent meaning that made them appropriate elements of ritual deposits.

Antler tools are usually too large to be accidentally lost somewhere. The antler artefacts from Ezinge include various tools (fig. 11.47), which were probably used as hoes (H-155; North-1101) or for hammering (P-404). H-155 was found with a spindle whorl. Two short antler awls from the middle pre-Roman Iron Age (UV-1484 and 1492) were associated with the oldest excavated house; one of them (UV-1492) was found in a hearth with two cubical stones. A sixth antler artefact (O-876) is a playing piece with a decoration of small circles, from an early Roman Iron Age context.

The antler playing piece was found with a piece of a cattle rib with two holes, possibly a button or a buzzer (fig. 11.48).⁵⁹ A similar object was found in an area between two houses, with a (now missing) worked piece of wood (Q-909). If such objects were indeed used as buzzers, they may be toys, but also symbolic or instrument-special objects. As such, they were suitable objects to be used and deposited during in rituals.

Horn combs were already discussed above, as personal belongings that may have been deposited during rites of separation. Bone handles form another category of objects that might be personal belongings, although they are not related to a person's appearance. One handle (UV-1500) was found with a piece of fabric. Bone

⁵⁶ Knol *et al.* 2014.

⁵⁷ Beilke-Voigt 2007, 249-250.

⁵⁸ Prummel *et al.* 2014.

⁵⁹ The term *buzzer* indicates a small object that, attached to a string, produces a buzzing sound when spinning around.

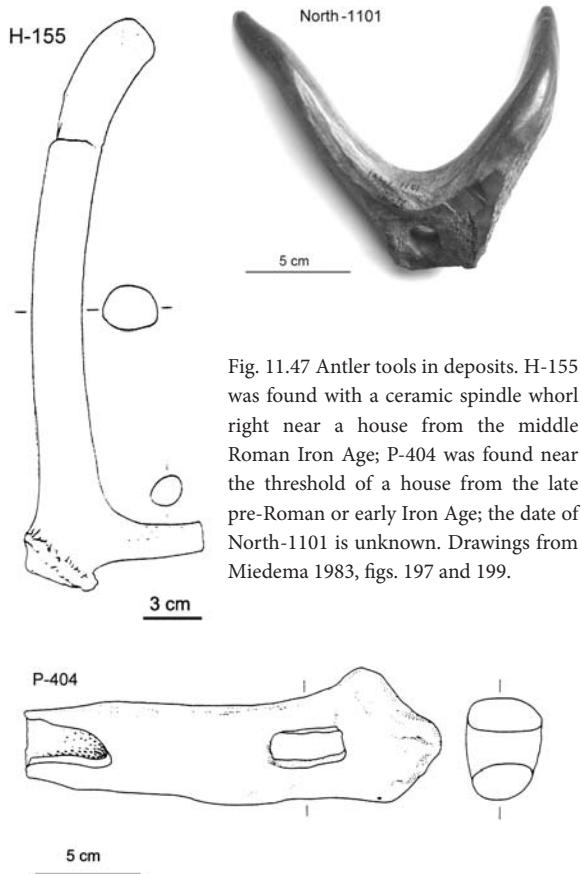


Fig. 11.47 Antler tools in deposits. H-155 was found with a ceramic spindle whorl right near a house from the middle Roman Iron Age; P-404 was found near the threshold of a house from the late pre-Roman or early Iron Age; the date of North-1101 is unknown. Drawings from Miedema 1983, figs. 197 and 199.

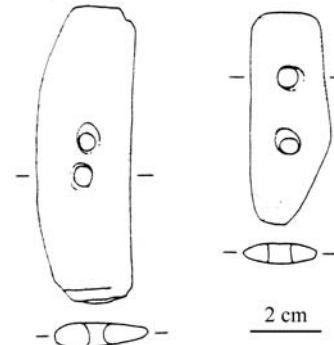


Fig. 11.48 Buzzers or buttons made of cattle ribs, both found near house 13. Left: O-876; right: Q-909. Drawings from Miedema 1983, fig. 213.

11.2.2.9 Human remains

Only a small number of human remains were recorded or collected during the excavation at Ezinge. The human remains from Ezinge that were recorded in some way (either in the finds register, or as a picture or a symbolic representation on a field drawing) are described in detail in the *Catalogue of human remains from the terp region*, Appendix C.111. Because of the lack of interest in human remains during the excavation, this list of human remains is probably not complete. The catalogue includes finds from all excavation campaigns, a total number of 31 finds of skeletons and single, worked and unworked, bones, and some small fragments of cremated bone.⁶⁰ The following discussion will concentrate on the finds from the pre-Roman and Roman Iron Age, which are summarized in the tables 11.6 and 11.7. Short descriptions of the human remains from Ezinge are included in Appendix B. Since the role of human remains in ritual practice is still to be established, they are treated in the same way as other categories of finds. The ‘objects’ in the tables of Appendix B therefore include human burials as well as single human bones.

Inhumations

Of the 13 human inhumation burials in table 11.6, eleven are certainly from the research period. No. 1924/VI-97 might be of a later date, and the skull with BAI no. 1925/VI-7 may have been found alone, rather than being collected from a complete human burial (see also chapter 12). Only two skeletons, one lifted *en bloc* (J-1343), were recovered. Only one burial (find no. 170) was published.⁶¹ The number of burials is small and cannot represent the entire population of Ezinge. Nevertheless, it gives us more information on burial customs within a terp settlement than any other terp, with the exception of the Feddersen Wierde in Germany.⁶² In the following, the locations of these burials, the body postures, the presence

handles were probably used to haft knives, iron awls and other equipment, or, on a rope, as door handles or to carry water containers. Tools with bone hafts may have been deposited complete, with the iron tool intact. Poor preservation of iron usually will have caused the blade or awl to disappear. Seven handles made of animal bones (most of them of sheep, one of horse) and one made of a human humerus (see below) were found in assemblages that were identified as ritual deposits. Two of them date from the middle pre-Roman Iron Age: UV-1500 and T-1591; the latter was found with a spindle whorl near the same entrance as the horse enterolith mentioned above (fig. 11.46). All others are from the Roman Iron Age. A conspicuous assemblage is L-1104, a sheep bone handle, which was found with a handle made of a human humerus, part of a baking sheet, a large pot and a cattle metatarsus, in a hearth.

Just like tools with handles, spindle whorls may have been part of the common equipment of individuals, probably women. Bone spindle whorls are most common in the middle pre-Roman Iron Age (table B.2). There does not seem to be a difference between bone and ceramic spindle whorls in depositional practice. Their occurrence in ritual deposits was discussed under *ceramic artefacts*.

60 These results were published earlier (Nieuwhof 2013b; 2014c).
 61 Van Giffen 1928a, 44.
 62 Haarnagel 1979.

Table 11.6 Human burials from the pre-Roman and Roman Iron Age in Ezinge, in chronological order. Catalogue numbers refer to Appendix C.

period	level-find no.	catalogue no.	location	position skeleton	orientation head	details
MPROM	UV-1538	111y	10-15m north of house 7	?	?	possibly partial skeleton
LPROM	RS-no number (1)	111c	in/under house 15	supine	northwest	only upper half excavated; found with a forked branch 'on some grass'; probably adult female
	RS-no number (2)	111dd	probably near a house	supine	south	
	no. 170	111d	within 5-10 m of houses 11, 16 and 21	supine	west	
	N-803	111k	in/under a house	supine	southeast	
	BAI 1925/VI-7	111b	unknown	?	?	only skull collected, possibly from complete skeleton
LPROM/ EROM	P-415	111h	5-10 m west of house 11	strongly flexed; on its right side	c. south	with some sherds, two cattle foot bones and spindle whorl; close to 111g
EROM	O-no number	111g	5-10 m west of house 11	crouched; on its right side	northeast	close to 111h
MROM	J-1343east	111t	c. 15-20 metres northwest of a contemporary house	supine	northeast	eastern of two graves
	J-1343west	111u	c. 15-20 metres northwest of a contemporary house	supine	northeast	western of two graves; adult man, suffering from degenerative osteoarthritis; with small pot
	H-no number	111v	some metres west of house 26	?	?	
	G-950	111m	some metres west of house 27	?	?	
?	1924/VI-97	111a	10-20 m east of the houses excavated east of the church	?	?	in a section

or absence of grave goods, and the association with other graves will be discussed, in order to enable an interpretation of these burials.

Two burials were found inside or, more likely, under houses in the house platforms (RS-no number (1); N-803). They are either Type 3-depositions, that is: dug in in the floor, or Type 4-depositions: placed in the house platform during its construction (see chapter 10.3.2). The other burials were found outside houses, usually at some distance but within 10 or 20 metres. This short distance suggests that all burials belong to specific households. They were buried in farmhouses or in the yards of farmhouses, although dates are not always precise enough to establish a relation with a specific house or house phase with certainty. That is also the case for the two graves that were found when excavating sections in the early years of the excavation (find nos. 170 and 1924/VI-97). It should be noted that the area further from the settlement has not been properly excavated; there might be burials in a wider area around the settlement than could be established here.

Insofar as recorded, most bodies were in supine position. One of these skeletons (find no. 170; fig. 11.49) was found 'on some grass'.⁶³ Two skeletons, both from the late pre-Roman/early Roman Iron Age and found near each other, were found in different positions. One of them

was lying on its right side in crouched position (O-no number; fig. C.52); the other (P-415) was also lying on its right side; this body was tightly flexed (fig. 11.50). The body must have been forced in this position by binding the legs to the corpse. The arms were apparently left free. The right arm was lying behind the body. The left arm probably disappeared during the excavation, one of the shoulder blades was placed on the ribcage. The head was bent backwards, as if the pit was just too small for the body. The strange position of the body in the pit, which appears too deep but also too small for an intended burial pit, suggests that the pit had been dug for a different, practical purpose. The body must have been buried in it when the pit was filled in, which makes this unusual burial into a Type 2-deposition (see chapter 10.3.2). A spindle whorl, found near the head, was possibly added as a grave gift, or was part of the filling soil, just like some sherds and bones with the same find number. Two cattle phalanges were also collected from this pit. Foot bones of cattle or horse were found in several features nearby, so these are probably intended additions to the fill of the pit.

Besides these spindle whorl and cattle phalanges, grave goods are associated with two other burials. A small decorated pot, J-1176 (see above, fig. 11.20), was found near the feet of one of a pair of skeletons numbered J-1343 (fig. 11.51). It was already antique at the time of deposition and might have been a heirloom. A third inhumation with a possible grave gift is RS-no

63 Van Giffen 1928a, 44.



Fig. 11.49 Human burial, probably adult woman, from the late pre-Roman Iron Age (1926-170), to the south. Photo RUG/GIA.

number (2), which was accompanied by a forked branch that had been placed along the upper body. Its meaning is unknown.

Most burials were found as single graves, but in two cases, two graves were close to each other. The earliest of these pairs dates to the late pre-Roman/early Roman Iron Age and consists of the two graves with bodies in uncommon positions, one crouched and one tightly flexed, which were discussed above. There may be several decades between these burials. The skeleton that was excavated first, probably the later of the two (O-no number), appears to have been found in a terp layer; it probably was a Type 4-deposition. A burial pit was not identified. The skeleton that was excavated the following year (P-415) was found in a quadrangular pit. It is an exceptional burial, also because it probably was a Type 2-deposition. Both burials are located within 10 metres of a contemporary farmhouse (house 11). The location of the older burial in the pit was probably remembered, possibly by marking it in some way; the younger burial may have been placed close to it on purpose.

The two graves numbered J-1343 (fig. 11.51) form a second pair. They are dated to the 3rd century AD and located 10-25 metres from a contemporary house (house 27 or 27a). Unlike the earlier pair of graves, these two are very similar in body posture (supine) and orientation (northeast). This pair of graves may perhaps forebode the trend that set in during the 3rd century, when cemeteries appeared in the northern Netherlands with inhumations and cremations, as was concluded in chapter 5.

Only two skeletons were collected and could be examined by a physical anthropologist.⁶⁴ One of these, the western grave of J-1343, shows traces of a painful illness: the left shoulder and right hip of this man were damaged by *degenerative osteoarthritis* (see Appendix C.111t-u). The second skeleton (find no. 170) does not have deformities. One skeleton was possibly incomplete (UV-1538), but details are not known. It is possible that the damage only occurred during the excavation. If it occurred shortly after death, it is conceivable that parts of this body were used in secondary rituals, as may be inferred from the finds of single human bones.

Single bones

Table 11.7 includes 13 finds assemblages of single human bones, 10 of which are dated to the research period. Only in a small number of cases, the bones themselves were collected or preserved. It is very likely that human bone fragments were often not noticed during the excavation and therefore not collected. Most of the recorded single bones are skulls or parts of skulls. In one case (RS-1560), 'human bones' are mentioned without specification. An inconspicuous human skull fragment such as UV-1701 was only collected because this was one of the rare finds assemblages that were collected rather complete, including the animal bones. It was only identified when the animal bones were examined.

The locations of these bones and the modifications of some of them reveal something of their meaning. Three of the skull parts and the shaft of a humerus were

⁶⁴ B.P. Tuin (ArcheoInzicht), unpublished report 2011.



Fig. 11.50 Contracted human skeleton, in a rectangular pit from the end of the late pre-Roman Iron Age (P-415), to the south. Photo RUG/GIA.



Fig. 11.51 Two graves from the 3rd century AD (J-1343), to the northeast. The left skeleton was lifted *en bloc*. Photo RUG/GIA.

worked: two skull bowls, a small, perforated object that may have served as an amulet, and an object that can be interpreted as a handle (figs. 11.52-55). All worked bones date from a relatively short period, from the 1st century BC to the early 2nd century AD. None of the unworked single human bones or bone fragments is dated later than the early 2nd century AD. Four human skulls were recorded. These date from after the research period, or are of unknown date. Two of them, North-1282 and 1310 (Appendix A.111s), are finds from the northern trench. One skull of unknown context and date (Ez.125) misses the upper part; it was apparently cut out.

Four of the single bones were found inside a house, three of these in byres. Seven of the single bones were located near houses. Most of them are probably Type

3-depositions: they were dug in (see chapter 10.3.2). Only the earliest bone fragment, UV-1701, was not directly associated with a house. Just like two dog skulls mentioned above, this fragment was found in the upper fill of a creek (probably a Type 2-deposition). Most of the worked bones were found outside, close to houses, except for the handle, which was found in a hearth (table 11.8). This distribution does not seem to indicate a depositional pattern, apart from the association with houses. During the early Roman Iron Age all human remains were deposited outside houses; it will be argued below that this choice of location is intentional.

Most of the unworked single human bones were found alone; only RS-1560 was found with sherds, and UV-1701 was found with sherds, bones and whetstones.

Table 11.7 Single human bones from closed contexts in Ezinge, in chronological order. Catalogue numbers refer to Appendix C.

period	map and find no.	catalogue no.	location	description
MPROM	UV-1701	111bb	high in the fill of a creek/ under an early terp layer	skull fragment
	RS-1560	111z	in the byre of house 10	unspecified human bones, found with sherds
	RS-1452	111x	in the byre of house 10	upper part of a skull
LPROM (end of 1st century BC)	RS-1431	111w	in the byre of house 9	skull fragment
	O-1687	111aa	probably outside a house	worked bowl
EROM	UV-1780	111cc	probably outside a house	worked bowl, with a playing counter and sherds
	N-190	111e	within 5 m west of house 11	skull or skull fragment (left parietal bone is preserved)
	L-1164	111q	within 5 m east of house 25	skull fragment and a mandible, with gnawing marks
	L-1108	111p	within 5 m east of house 27	small, perforated object made of a skull, together with three pots and two loom weights
MROM (early 2nd century AD)	L-1104	111o	in a hearth in house 27	handle made of a humerus, found with a pot, part of a baking sheet, a handle made of sheep bone, and a cattle metapodium
LROM-MP	G-955	111n	in a layer	skull
?	North-1282	111r	not clear	skull of a child
	Ez.125	111ee	unknown	skull without upper part, probably cut out

The worked bowl UV-1780 was found with sherds and a playing counter. The handle, L-1108, was part of a deposit in a hearth that was already described above, with another handle made of sheep bone, a pot and part of a baking sheet, which connects this deposit to two others (L-1103 and 1105). The small, perforated skull part L-1108 was found with three pots and two loom weights

near the same house (possibly another phase) in which the handle was found. Working human bones was apparently part of the traditions of this household, perhaps more so than of other households. The two skull bowls, which were found only about 10 metres apart in small trenches at the end of the excavation, may also have belonged to one (unknown) household.

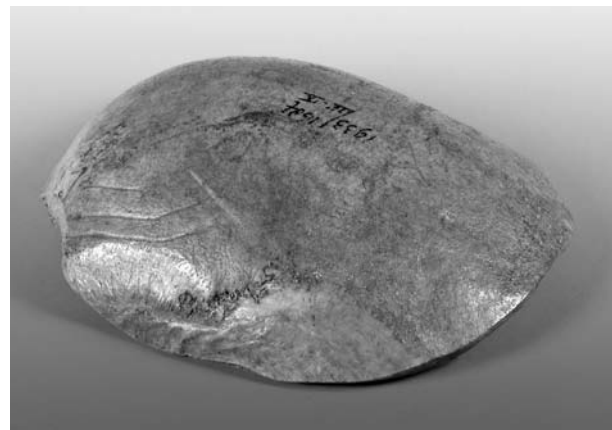


Fig. 11.52 Worked skull bowl from the late pre-Roman Iron Age (O-1687). Photo: John Stoel, Groningen Museum.



Fig. 11.53 Worked skull bowl from the early Roman Iron Age (UV-1780). Photo: John Stoel, Groningen Museum.

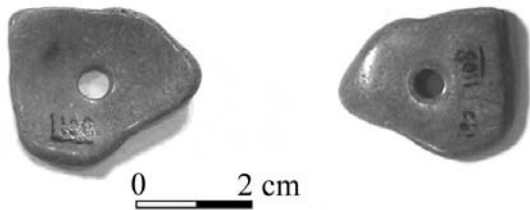


Fig. 11.54 Worked fragment of a human skull from the early Roman Iron Age (L-1108).



Fig. 11.55 Handle made of a human humerus, with parallel scores probably made by dog teeth (L-1104).

Table 11.8 The location of human remains in Ezinge as far as known, including finds from terp profiles. The designations *inside* and *outside* refer to houses.

	skeletons		unworked single bones		worked bones	
	inside	outside	inside	outside	inside	outside
MPROM	-	1	2	1	-	-
LPROM	2	3	1	-	-	1
EROM	-	1	-	3	-	2
MROM	-	4	-	-	1	-

Interpretation of human remains

Inhumations

As was the case in Englum, single human graves pose various problems. Why were some people selected to be interred, while others were apparently submitted to different rites? Were they esteemed members of the community, or outsiders? Did the buried dead die of natural causes, were they executed because they had offended social rules, or were they killed as human sacrifices? If inhumation was not normal, what was the normal burial custom?

The small number of inhumations indicates that inhumation was only practiced on special occasions or for exceptional people in a positive or a negative sense. Interpretations of inhumation graves outside cemeteries elsewhere focus on the exceptional character of these graves. They have been interpreted as human sacrifices or victims of capital punishment, as graves of outsiders and outcasts such as slaves or people who had offended social rules, as graves of people of influence, virtue or special descent from the community itself, or as graves of people who died untimely deaths, for example from specific diseases, murder, accidents or childbirth and who were feared because they might want to come back to haunt the living.⁶⁵

There are no indications that the people who were buried in Ezinge died of unnatural deaths, but that cannot be ruled out either. It was not possible to establish a cause of death for the two skeletons that were available for research, but one of these bodies showed traces of a

severe and painful bone condition. Such a condition does remind us of several bog bodies, which were probably human sacrifices and often show deformities as well, as was discussed in chapter 5.3.2. It is, however, not known whether the percentage of deformities in bog bodies is representative for the population as a whole, or considerably higher. The same applies to inhumations in the salt marsh area, including Ezinge. This one skeleton does not allow for any conclusions on the general health of the population or of the people who were selected to be buried. The bodies seem to have been placed with care, as far as our information goes. One of them (find no. 170) was reported to be placed on some grass. That may be taken as an indication that we are not dealing with the remains of outsiders whose bodies were carelessly disposed of. Careful placement of the body does not, however, exclude the possibility that the inhumations do represent human sacrifices. Many of the bog bodies were carefully placed as well.

The location of the burials is informative. The earliest inhumation burial, UV-1538, was buried not far from contemporary houses, but in the salt marsh; in that respect, it resembles the inhumation burial from the same period from Englum (Appendix A.3). Although it is not always certain to which house or house phase a burial belongs, all later inhumations seem to be associated with houses, usually within 5-10 metres. Two burials were even situated inside houses. Only the pair of graves from the middle Roman Iron Age, J-1343, seems to be somewhat further from a contemporary house, but still within 25 metres, and probably in a farmyard. In the large excavated area north of the settlement, human remains from the research period were not found.

⁶⁵ Human sacrifice: Jankuhn 1967; Merrifield 1987; Gerrets 2010, 114; outsider graves, special people; special causes of death: Beck 1970; Hessing 1993; Hill 1995, 12-13; Wait 1995, 495.

The association with houses makes it unlikely that these are burials of outsiders or offenders of specific social rules. They may be compared to the children who were, for instance, buried in houses on the Feddersen Wierde (see chapter 5.4.3); these children probably died of natural causes and were buried close to their families.⁶⁶ In the same line, adults buried in or near houses may well have been relatives who for some reason received an exceptional treatment after death. If they were human sacrifices, they may have been marked out by a religious specialist or by the local leader, perhaps after drawing lots. Although it cannot be excluded that they were the victims of human sacrifice, it is more likely that they were, for instance, special family members, family members who died of specific causes, or family members who died around the time that a new house was built. Whatever the reason for their special treatment, the result is that they were buried within the territory of the household to which they belonged during life. That way, a bond was created between households or families and the territory they claimed or that was assigned to them. The burial of a relative near the house made the land into ancestral land.

Excarnation and cremation

Inhumation was only one of the ways to dispose of the dead. There must have been other ways as well. It seems likely that excarnation was practiced in Ezing, as it was in Englum. It may even have been the common burial rite, while inhumation and possibly cremation were exceptional. Single human bones were found regularly, and we may suspect that many more bones were overlooked during the excavation. In Ezing, two bones (L-1108 and 1164) were gnawed by a dog, which supports the hypothesis offered in the previous chapter, that aboveground excarnation with the aid of dogs was one of the burial customs in the area. Remaining bones were collected at some point during the process of excarnation. The earliest inhumation in Ezing (UV-1538), which was possibly found without the skull, may be taken to indicate that body parts were sometimes removed from graves.

As in Englum, single human bones may have been considered inalienable objects.⁶⁷ All human bones may have been considered as such, but worked human bones must constitute a special class within this category. The modification and use of these objects added to their meaning. Every act, in which these objects were used, must have been connected to the ancestors and the continuation of the household or the family.

Deposits of inalienable objects can be expected within or close to the house, or in land belonging to a family, where they play a role in defining the family's status and identity. The single bones of Ezing can be interpreted as

the remains of relatives that were collected after excarnation. They were stored or worked and used in household rituals before they were finally deposited. Just like human burials, the deposition of single human bones inside or near houses strengthened the bond between families and their houses and territories.

The use of single bones in secondary rituals seems to be restricted to the pre-Roman Iron Age and the first half of the Roman Iron Age. The secondary use of human bones may have ended in the course of the Roman Iron Age. The single skulls that are probably from later periods demonstrate that human remains still played a role in ritual practice then. Whether these deposited skulls were part of a similar tradition as the earlier deposits of human bones, cannot be assessed without information on their context.

Apart from excarnation, cremation probably sometimes occurred. In Ezing, three fragments from one cremation were found (Q-923), dating from the late pre-Roman Iron Age. These fragments are part of a finds assemblage from what is described on the field drawing as a burnt layer, near one of the houses. It is not entirely certain that these remains belong to a cremation; they might also be single bones that were accidentally or deliberately burnt at some stage. Other finds from this context are dog teeth and a cattle metapodium, and two pots from the same period (Q-919), all unburnt. The burnt layer might consist of the remains of the pyre, which were spread next to the house after the cremation. Just like the inhumations discussed above, this cremation may have functioned in connecting a household to its territory. The deposit of the two pots may represent an offering to the ancestor that was cremated here, comparable to the offerings made after the deposition of human skulls in the dung platform in Englum. If that interpretation is correct, an ancestor cult was practiced in Ezing, just like possibly in Englum.

In the case study on Englum, it was argued that the evidence of perforated bases and an inverted pot, as well as the inclusion of human remains in the land or in the soil beneath houses, suggest that the ancestors were thought to reside in a world beneath the earth's surface. Perforated bases and one inverted pot, probably used to make offerings, were also found in Ezing, although a link between ancestor bones and such offerings is hard to establish. If farmhouses were claimed to be built on ancestral grounds, the offerings in and near houses, for instance in small pots, may always have been aimed at the ancestors.

The above interpretation of human remains implies that the available land on terps did not belong to the community, but to the households that were part of it. The role of the dead in linking families to their land must have changed in the course of time. In Ezing, single bones were not deposited after the early 2nd century

⁶⁶ Following Beilke-Voigt 2007, 180ff.

⁶⁷ Weiner 1992.

AD. Only when, from the 3rd century AD onwards, cemeteries were introduced, as was argued in chapter 5.5, the relation between the dead and a family's territory ceases to exist. The pair of graves from the middle Roman Iron Age (J-1343), which seem to forebode this new custom, are, however, still part of the old tradition.

In chapter 14, the finds of human remains in Ezinge and in Englum will be included in an analysis of all human remains known from the terp region, to test the validity of this interpretation.

11.2.3 Contexts

Besides deposited objects, the contexts of the finds are important to understand ritual practice. The contexts of deposits are summarized in table B.3 and in its derivative, table 11.9. In these tables, locations of finds assemblages are defined according to their relation with houses. Since it was especially the centre of the terp and the settlement on it that was excavated, the majority of finds assemblages is necessarily related to houses, although it is not always clear to what specific house. They are found inside or directly near houses, or outside, within 5 or 10 metres, or further away. The relation of deposits with houses and other contexts such as pits and ditches will be discussed below. Changes in these spatial patterns through time will be further discussed below, in section 11.4.

11.2.3.1 Inside or outside houses

Deposits can be distinguished according to their location inside or outside houses. As is shown in Appendix B.3, the relevance of this distinction is corroborated by statistical testing.

For the sake of the description, the houses, as far as they were identified, are numbered (Appendix B). Waterbolk already published numbered house plans, based on the work of Praamstra⁶⁸, but these numbers are not adopted here. There are two reasons for using alternative numbers. In the first place, Waterbolk did not publish all house plans in his short overview, and the insights of Praamstra still need to be reconsidered. In the second place, households rather than separate house phases are the focus of attention in this study.

In many cases, successive buildings were raised on approximately the same locations during several generations. It is not possible to link all finds to specific house phases. To overcome the uncertainties, houses that were rebuilt on the same location with a similar orientation are considered to be phases of one household here. Although it is not certain that such a series of house phases and its surroundings belonged to one family over the centuries, all consecutive phases of what seems to be the same house were given the same number. A total number of 31 households were thus identified.

The number of 31 households is probably too high since houses were not always rebuilt on the same location. For instance, the houses 1 to 5 and 8 from the middle pre-Roman Iron Age might well be consecutive phases of a house that started earlier on the first platform, or together, they constituted one household. This household may eventually have been followed by house 11 (see Appendix B.1, levels RS, T and UV). The number of houses in the eastern part of the excavated area may also be smaller than the house numbers suggest. Here, new houses were possibly built directly beside previous phases, with the same orientation. The houses numbered 23 and 28 (levels M and N) thus may actually be phases of the same house; that also is the case for house 12 and either house 11 or 29 (levels M and N). Moreover, house 30 may follow house 15 (levels L and O), houses 27 and 27a (levels G-I) might be one and the same (possibly including outbuildings), and house 26 may represent several phases or outbuildings of house 25 (level I).

About half of all deposits were found in or directly near houses (table 11.9). The number of deposits inside houses is, on average, slightly higher than the number of deposits outside houses (51 vs. 46%; table 11.9). This ratio, however, is not constant through the ages. If we examine the different periods, the majority of depositions was made inside houses during the pre-Roman Iron Age (63-59%); this percentage decreases to 41-44% in the Roman Iron Age, when outside deposits form the majority. A more extreme trend can be observed in the percentages of deposited objects (table 11.9 and fig. 11.56); 66% of the objects involved in depositional practice were deposited inside in the middle pre-Roman Iron Age. This percentage decreases to 57% in the late pre-Roman Iron Age. In the early Roman Iron Age, the percentage of objects that are deposited inside is considerably smaller than objects outside houses (35 vs. 59%). In the middle Roman Iron Age these percentages show a reverse trend, with a larger percentage of deposited objects inside houses than outside (50 vs. 45%). The deposits from the early and middle Roman Iron Age in the northern trench, outside the actual settlement, influence these changes, but their number is too small cause a significant bias.⁶⁹ In contrast to earlier and later periods, most ritual deposits from the early Roman Iron Age were found outside houses, whether the deposits from the northern trench are included or not.

These differences go hand in hand with changes in the average number of objects per deposit, although it should be noticed that most of these average numbers overlap with previous and following periods if standard deviations of the mean are taken into account (table 11.10). The high average number of objects in outside deposits

68 Waterbolk 1991; De Langen & Waterbolk 1989.

69 Deposits in the northern trench include 7 EROM deposits, containing 12 deposited objects, and 5 MROM deposits, containing 8 deposited objects.

Table 11.9 Summary of table B.3, showing the numbers and percentages of *deposits* and *deposited objects* per context and per period. For statistical probability, see Appendix B.3.

	Deposits										Objects									
	MPROM		LPROM		EROM		MROM		total		MPROM		LPROM		EROM		MROM		total	
	n	%	n	%	n	%	n	%	n	%	n	%	n	%	n	%	n	%	n	%
House in floor/platform	25	35	22	31	23	32	44	33	114	33	42	36	33	30	30	21	77	30	182	29
hearth	6	8		0		0	4	3	10	3	9	8		0		0	9	4	18	3
wall	4	6	3	4	2	3	8	6	17	5	9	8	6	5	3	2	17	7	35	6
threshold	4	6		0	2	3			6	2	7	6		0	6	4		0	13	2
byre	4	6	15	21	1	1			20	6	7	6	18	16	8	6		0	33	5
on floor/in pit	2	3	2	3	2	3	4	3	10	3	4	3	6	5	3	2	26	10	39	6
(total house)	45	63	42	59	30	41	60	44	177	51	78	66	63	57	50	35	129	50	320	51
Outside 0-10 m																				
pit	2	3	2	3	8	11	4	3	16	5	6	5	10	9	26	18	8	3	50	8
fence/enclosure	1	1	1	1		0	4	3	6	2	1	1	1	1		0	5	2	7	1
layer >10 m	14	20	25	35	23	32	53	39	115	33	18	15	35	32	42	29	87	34	182	29
creek/ditch	4	6		0	7	10	2	1	13	4	7	6		0	13	9	4	2	24	4
grave/pit		0		0		0	3	2	3	1		0		0	0	6	2	6	6	1.0
layer	3	4		0	1	1	3	2	7	2	4	3		0	3	2	5	2	12	2
(total outside)	24	34	28	39	39	53	69	51	160	46	36	31	46	42	84	59	115	45	281	45
location unclear	2	3	1	1	4	5	6	4	13	4	4	3	1	1	9	6	12	5	26	4
total	71	100	71	100	73	100	135	100	350	100	118	100	110	100	143	100	256	100	627	100

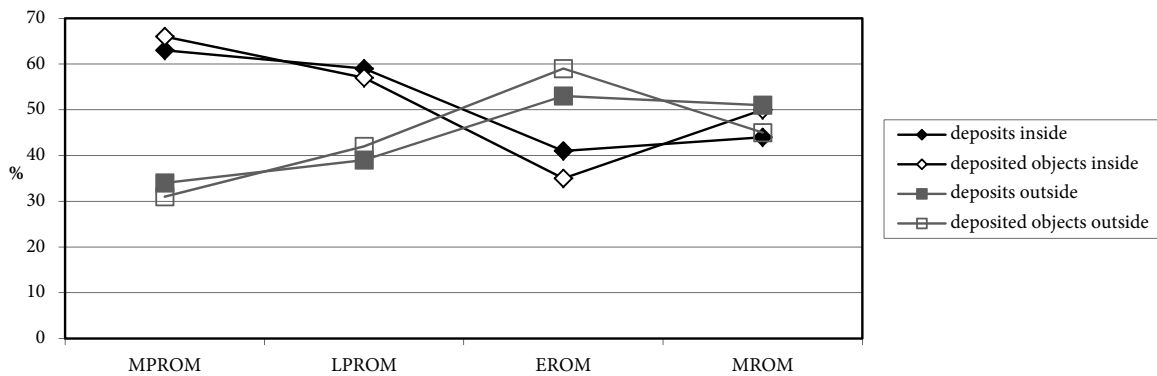


Fig. 11.56 Graphic representation of deposits and deposited objects inside and outside houses over time.

during the early Roman Iron Age compared to the previous and following periods, and the comparisons between inside and outside deposits per period, except for the late pre-Roman Iron Age, can be considered reliable. In the middle pre-Roman Iron Age, the average number of objects per deposits is 1.73 inside and 1.50 outside houses. A reverse trend sets in during the late pre-Roman Iron Age. This trend is intensified in the early Roman Iron Age, with an average number of 1.67 objects per deposit in houses and a high average number of 2.15 objects per

deposit outside houses. In the middle Roman Iron Age, the situation is reversed again (a high 2.15 inside vs. 1.67 outside).

The difference between deposits outside and inside houses in the early Roman Iron Age is even clearer if we concentrate on composite deposits, which consist of more than one object (fig. 11.57). During the pre-Roman Iron Age, more than half of the composite deposits are found inside houses. This percentage drops dramatically to only 24% in the early Roman Iron Age, with a high

Table 11.10 The average number of objects per deposit, apart from potsherds and unspecified animal bones, inside and outside houses. \pm : standard deviation of the mean. Bold: no overlap of the resulting range with previous and following periods.

	inside			outside			all locations (incl. unclear)		
	objects	deposits	average objects / deposit	objects	deposits	average objects / deposit	objects	deposits	average objects / deposit
MPROM (c. 450 - 200 BC)	78	45	1.73 \pm 0.15	36	24	1.50 \pm 0.16	118	71	1.66
LPROM (c. 200 BC - 0)	63	42	1.50 \pm 0.15	46	28	1.64 \pm 0.24	110	71	1.55
EROM (c. AD 0 - 100/150)	50	30	1.67 \pm 0.30	84	39	2.15** \pm 0.25	143	73	1.96**
MROM (c. AD 100 - 300)	129 (109)	60 (59)	2.15* (1.85) \pm 0.33	115	69	1.67** \pm 0.14	256 (236)	135 (134)	1.90* (1.76)
total	320 (300)	177 (176)	1.81* (1.70)	281	160	1.76	627 (607)	350 (349)	1.79* (1.74)

* The deposit of 20 loom weights (K-58.59) is a clear outlier. The average numbers without this deposit are presented within brackets.

** Without the finds in the northern trench, average number of objects per deposit in EROM increases to 2.25. The other average numbers remain unchanged in that case.

percentage of 74% of composite deposits outside. In the middle Roman Iron Age, the former ratio is almost restored, with a percentage of composite deposits inside that has increased to 52%.

The ratio between pots deposited inside and outside houses (fig. 11.58) shows that pottery is a major factor in the changes between inside and outside deposits. While the percentage of pots deposited inside is no less than 63% in the late pre-Roman Iron Age and 64% in the middle Roman Iron Age, it is only 24% in the early Roman Iron Age. These differences and changes are probably related to changes in the population size that resemble the changes established in Englum, as may be inferred from pottery research.⁷⁰ In Ezinge too, a peak in the number of pottery individuals occurs in the 1st century AD, after a gradual increase during the pre-Roman Iron Age. These changes and their influence on ritual practice are discussed below, in section 11.4.3.

11.2.3.2 Deposits in houses

Inside houses, objects or assemblages that can be identified as ritual deposits were found in or on the floor, in the byre, in the hearth, near or under the wall, near the threshold, in a pit or under the house in the platform. A few deposits in sod structures, which are interpreted as belonging to platforms, are considered to be buried inside houses. There are no records of finds from postholes, even though during fieldwork much attention was paid to the many remains of posts and their depths.

The field drawings do not always allow for much precision in the identification of locations within houses. In

many cases, it can only be established that an assemblage was found inside a house. This results in a large general group of deposits from floors or platforms (33%; table 11.9). Of the majority of finds in floors detailed descriptions of the way they were placed are not available. Most of these finds were probably buried in floors, sometimes quite deep, or in the platforms prior to house building. Some of these deposits may actually have been associated with walls or hearths or other inside features.

It was sometimes possible to establish that deposits were made in a byre, especially in houses from the late pre-Roman Iron Age (21% of all deposits, table 11.9). The byre apparently was considered an appropriate place to make depositions. Deposits in byres from the Roman Iron Age are virtually absent. This apparent change does not necessarily represent a real trend, since the byres in the Roman Iron Age houses of Ezinge are more difficult to identify than the byres in earlier farmhouses, possibly due to the poorer preservation of organic remains in higher terp layers. A number of deposits from floors in this period might well be located in byres.

The way in which finds are associated with walls is not always very clear. Most finds in this category were depicted close to a wall, or were described as being found against a wall in the finds register. Six deposits, from the middle pre-Roman Iron Age and the early Roman Iron Age, were associated with thresholds; the association is sometimes based on a description in the finds register, rather than on a field drawing. Objects deposited near thresholds are small and inconspicuous: playing counters, flint (pseudo) artefacts, a horse enterolith or small tools (table 11.11). They must have had some meaning that made them suitable objects to be depos-

70 Nieuwhof 2008b; 2014b.

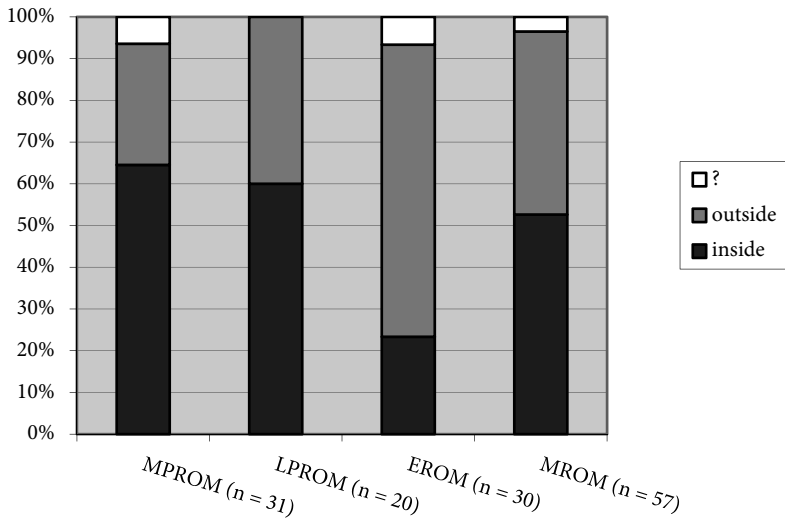


Fig. 11.57 Numbers and percentages of deposits with more than one object, inside and outside, per period.

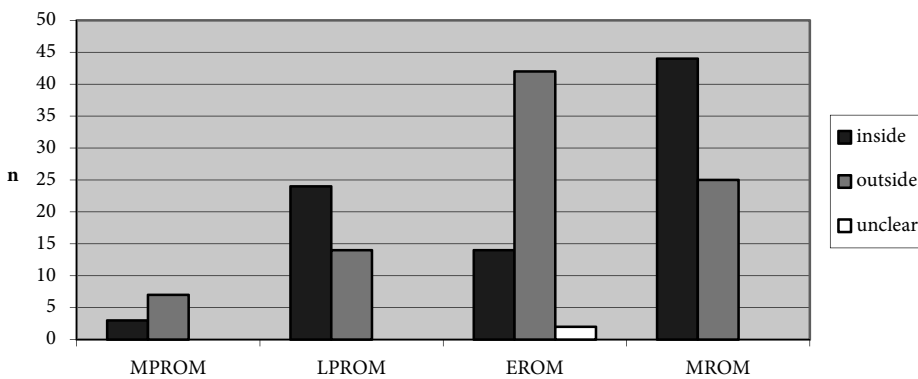


Fig. 11.58 The number of pots deposited inside and outside, per period.

ited on this location, for instance because they were considered instrument-special objects that were thought to give protection or to bring fortune (the playing counters, the piece of flint, the horse enterolith) or perhaps objects representing the inhabitants of the house. Objects near thresholds may be buried there as part of personal rites of separation; that interpretation might apply to a handle and two spindle whorls from the middle-pre-Roman Iron Age (RS-420 and T-1591). Dogs were not associated with thresholds in Ezinge, as they were in the Feddersen Wierde (see 5.2.1).

A number of deposits, only from the middle pre-Roman Iron Age and the middle Roman Iron Age, are associated with hearths (table 11.12). Most of these deposits were found in the hearth itself; some had been buried directly near them. Since the objects in hearths are not burnt, they must have been deposited when a house was abandoned, or when a new floor layer was applied. Only some of the objects from hearths, in particular spit rests and a baking sheet, are directly associated with the function of the hearth. Other objects are utensils with other functions (e.g. a spindle whorl, a loom weight) or symbolic objects (a TS sherd, a dog skull or a handle made of a human humerus). Four cubical stones come from

three different hearths in the earliest excavated house. There must have been some special meaning attached to these stones, which made them appropriate deposits in hearths. During the middle Roman Iron Age, large pots were the most numerous objects found in hearths. These pots are not typical wide-mouthed cooking pots, but narrow-mouthed jars of type Ge6 (H-25 and J-35, both in house 30), or V-pots with decorated rims (I-176 and L-1104). Both types are relatively rare in ritual deposits (see above), and were possibly selected for a specific reason.

Besides the deposits that were left in hearths, two other type of deposits are probably connected to the abandonment of houses: objects left on floors (Type 4-depositions), and large deposits of pottery and other household utensils in pits that were dug into or near houses (Type 2 or 3-depositions). Deposits on floors were already mentioned above: piles of wooden objects such as wheels in several houses, a set of loom weights and a rotary quern in house 30 (K-58/59 and 60), or a number of deposits in house 29 (fig. 11.22). Such deposits are Type 4-depositions: they were placed somewhere, to be covered with a new heightening layer (see chapter 10.3.2).

Table 11.11 Objects deposited near thresholds.

	MPROM	LPROM	EROM	MROM
number of deposits	4	-	2	-
horse enterolith	1			
bone handle	1			
spindle whorl (bone/ceramic)	2			
playing counter	3		1	
flint			2	
antler tool			1	
(corroded) iron tool			1	
rope			1	

Table 11.12 Objects deposited in or directly near hearths in houses.

	MPROM	LPROM	EROM	MROM
number of deposits	6	-	-	4
antler tool	1			
spindle whorl	1			
spit rest	1			1
wooden bowl	1			
cubical stone	4			
flint	1			
large pot				3
<i>terra sigillata</i> playing counter				1
fragment baking sheet				1*
bone handle				1
dog skull				1
cattle metapodium				1
worked human bone				1

*A fragment fitting L-1103 and 1105.

In and directly near some houses, pits filled with broken and whole household goods, especially pottery, were found.⁷¹ Such pits do not date later than the early Roman Iron Age. It is likely that many of the large deposits of sherds in houses, which were considered ritual deposits because they included, for instance, complete pots, traces of deliberate breakage, paint or perforated bases, also were abandonment deposits of Type 4: placed or left in houses to be covered by a new heightening layer. These are more common than deposits in pits, and are also known from the middle Roman Iron Age. For instance, J-773, found near a wall, consists of a complete small pot, 3 kg of sherds, part of a baking sheet, part of the clay lining of the hearth, and a burnt and broken anvil. H-973, found near a hearth, consist of over 8 kg of sherds, including painted sherds, a TS sherd, two burnt stones and a loom weight. Both deposits include burnt stones, just like P-1422, which was found in a pit inside a house. Several deposits also include burnt pottery. Burning ob-

jects probably had the same meaning as breaking and other destructive acts that were associated with abandoning and demolishing a house. The unnecessary destruction and the usable objects that were left behind indicate that abandoning a house was a ritualized event.⁷²

11.2.3.3 Deposits outside houses

Most deposits in the centre of the terp must belong to the yards of the farmhouses, although they are not always found right near a house. Outside deposits are in particular found in layers. These might include features such as pits and ditches that were not noticed during the excavation. A considerable number of deposits also come from pits, ditches and creeks. A small number of deposits were found near fences or small rectangular enclosures near houses. One deposit comes from a hearth that was possibly located outside a house and that was used for some pyrotechnic activity (O-862). When these activities ended, the hearth was filled and covered with slag and seeds in a quantity large enough to be mentioned on the drawing, and a variety of partly burnt objects: a granite boulder, wood, a small, decorated pot, a loom weight, a cattle mandible and rim sherds, which seem to have been carefully placed (fig. 11.59). Only one finds assemblage that can be considered a ritual deposit is

associated with a well: UV-1535/1536, with a cooking pot (not a water bucket) as main component. A small, burnt bronze ring with two beads (UV-1510) may have come with the fill of the well and is therefore not counted as ritual deposit.

Pits

A small number of deposits come from pits. The function of these pits or the meaning of the deposits in pits is uncertain. Some of these deposits might be abandonment deposits, similar to deposits in pits near or in houses. Whether they were Type 2 or Type 3 depositions (see chapter 10.3.2), is usually not clear. Pits may sometimes have been dug for the occasion of the ritual (Type 3-depositions), but most depositions were probably made during filling in (Type 2-depositions), especially in the early Roman Iron Age, when the number of pits with deposits

71 N-1335, N-1354, P-1422, O-1406/P-1418, T/UV-1518.

72 Similar practices were identified in the southern Netherlands (Gerritsen 2003) and in Hijken, province of Drenthe (Arnoldussen & De Vries, 2014).

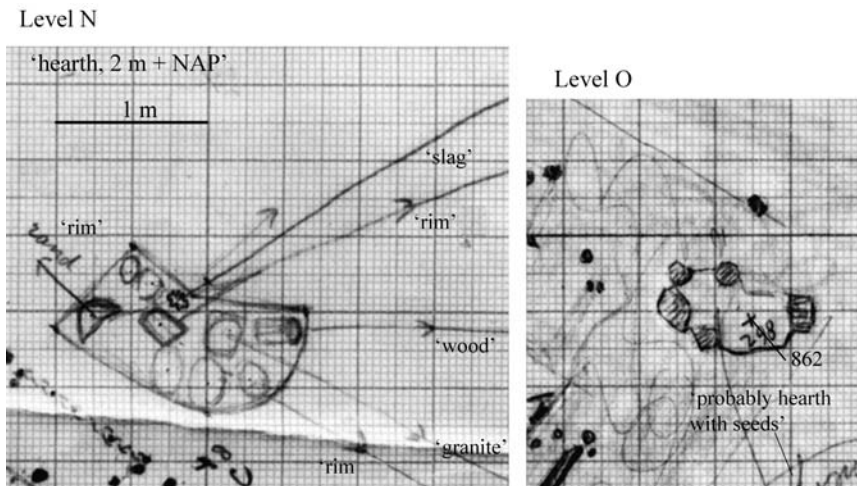


Fig. 11.59 Field drawings of two levels of a hearth (O-862 is at the bottom level), surrounded by large, burnt, granite boulders, and probably used for pyrotechnic activities. After its final use, the pit was filled with slag and partly burnt objects such as a loom weight, a decorated small pot, a cattle mandible, some sherds and seeds. The drawing of level N suggests the objects in the top layer were carefully placed. The find is dated to around AD 100.

is higher than in other periods ($n = 8$, that is 11% of all deposits from that period).

Four of the eight pits from the early Roman Iron Age are located near house 11. The deposits in these pits are variable. RS-418 contains no more than a cattle phalange. P/RS-400/415 (fig. 11.50) consists of a tightly flexed human skeleton, adapted to the size of the pit, with a spindle whorl and two cattle phalanges; the corpse was probably bound in this position and the head was bent back-

wards, apparently to make it fitting. Q-412/417 consists of two complete pots, one with a perforated base and paint (fig. 11.16 left), half of a third pot and a cattle phalange. RS-425/426/427 (fig. 11.60) was described as 'a small cellar' in the finds register, probably because it contained complete pots. However, it not only contained three complete pots, but also half of a large pot and a pierced horse phalange. If it was indeed a small cellar used for storing pots with food, some extra objects that are out of place in a cellar were apparently placed in the pit when it was filled in or when the associated phase of the house was abandoned. These contemporary pit deposits near house 11 have some characteristics in common: the pits are all rectangular, and they all contain one or two worked or unworked foot bones of cattle or horse. A cattle phalange was also found in a nearby ditch, with a pottery deposit, including a complete (probably deposited whole) pot from the same period (RS-416). The Type 2-depositions in filled-in pits are unique for this house, and it apparently belonged to its traditions to add a foot

Table 11.13 Deposits in ditches.

	location	description
MPROM		
UV-1526	probably drainage ditch surrounding platform of house 6	small pot
LPROM/EROM		
North-1262	probably surrounding field	2.6 kg of sherds, some with traces of deliberate breakage
EROM		
RS-416	possibly surrounding farmyard and adjacent field	complete and probably whole pot, 3 kg of sherds, including sherds with paint, and a cattle foot bone
North-1191	probably surrounding field	miniature pot, large part of a small pot and other sherds, one of Frisian origin
North-1272	probably surrounding field	two large pots, one of them with a perforated base, and a small pot, all with paint
North-1273	probably surrounding field	1.7 kg of sherds, including sherds from six pots made by the same potter, with traces of deliberate breakage
North-1275	probably surrounding field	miniature pot and (missing) sherds and bones
North-1285	probably surrounding field	two large pots and a cattle metatarsus
UV-1412	probably surrounding field	small pot (probably EROM)
MROM		
North-1261	probably surrounding field	large pot and sherds, some with paint and with traces of deliberate breakage, and a burnt stone
North-1298	probably surrounding field	Two fitting TS sherds, both worked or used after breaking, fitting sherds in two other deposits



Fig. 11.60 A rectangular pit, a 'small cellar' according to the finds book, with three and a half complete pots and a pierced horse phalange (RS-425/426/427). Photo RUG/GIA.

bone of cattle or horse to a deposit in features that were filled in. The deposits were possibly called for when features were filled in, or they were made on the occasion of abandoning the house, applying a new heightening layer and filling all associated features, and subsequently building a new house on the same spot. However, it is not clear whether all these features are from the same period, or belong to consecutive house phases. The original function of the pits is not clear. The pits with deposits 415 and 418 are deep; the latter was about 1.70 m deep, reaching to 1.51 -NAP, according to the field drawing. That would suggest a function as water pit, but the rectangular shape is unfamiliar. Such deep pits were too deep to function as storage pits in the wet environment of the terp.

Ditches

Most deposits in ditches come from the northern trench (table 11.13). In the settlement itself, fewer ditches occurred, or they were not always identified. Two deposits, UV-1412 and 1526, consist of small pots that were possibly deposited in ditches when these were still open. That implies that these deposits were possibly Type 1-deposits in liminal zones (see chapter 10.3.2). Almost all other deposits in ditches consist of pottery, one (North-1298) is a deposit of TS sherds. As was already argued in the previous chapter, deposits outside the ac-

tual settlement that include reconstructable or complete pots (such as North-1191, 1261, 1272, 1285) cannot be considered dumps of waste. Two large pottery deposits in ditches without pots, North-1262 and 1273, include sherds with traces of deliberate breakage, which makes them likely ritual deposits as well. Moreover, pots with slightly deviating rims, probably made by the same potter, indicate that the sherds of North-1273 come from the same household, and do not represent accidental waste in the fill of the ditch. All of these deposits are probably Type 2-deposits (see chapter 10.3.2), deposited in the ditches during filling in. That is rather certain for RS-416 (see the previous section). Most deposits in ditches surrounding fields date the 1st century AD. As the ditch deposits in Englum from this period, they may have been part of rituals that sealed agreements on new territorial boundaries in this period, when the population reached its largest size.

Some conspicuous sherds make it possible to link finds in the northern trench to specific houses. Two TS sherds in a ditch (North-1298) fit a sherd in a layer in the northern trench, North-1295; these fragments come from the same bowl as a sherd in house 25 (K-1091). Some characteristic sherds with atypical long rims in a deposit near house 26 (probably one of the phases of house 25) are probably from the same potter as a pot

in a ditch, North-1261 (see fig. 11.18), which links this ditch to house 26. The relation is the more likely since this part of the northern trench is directly to the north of this house.

Creeks

Deposits in creeks all date from the earliest occupation phase. Two deposits of dog skulls with potsherds, one with a loom weight, were deposited in two arms of a creek (UV-1746 and 1747). An assemblage including a human skull fragment was also deposited in this context (UV-1701). These assemblages must have been deposited near the end of the lifetime of the arms of the creek, perhaps when they were filled in; the arms were soon after covered with terp layers. They were probably Type 2-depositions, made during filling in, rather than Type 1-deposits, made in a liminal zone.

11.2.3.4 *Depositional practice in relation to the lay-out of the settlement*

As was argued above, most of the 31 numbered houses in Appendix B are actually sequences of farmhouse phases at the same location and with about the same orientation. It seems likely that consecutive house phases belonged to one household or family. Each house was probably surrounded by a farmyard. In the above it was argued that, at least in the Roman Iron Age, house 25/26 (probably phases and outbuildings of the same household) was connected to fields and ditches directly north of it in the northern trench. Such a combination of a house, a yard and adjacent fields may be the rule for all houses of this period. This has implications for the lay-out of the village. At least during the Roman Iron Age, the village had a radial lay-out, with farmhouses radiating from the centre of the terp. They were surrounded by farmyards that were adjacent to fields at the back, seen from the centre of the terp. Further from the village, there may well have been communal fields that were used as pasture and hay land.

In the middle pre-Roman Iron Age, the lay-out of the settlement was clearly different. Initially, there may have been two concurrent houses in this period, at least in the excavated area. One is the series of houses numbered 1 to 5 and 8. The other consists of the houses 6 and 7, of which only small parts were excavated. During the middle pre-Roman Iron Age, there was enough space for the small number of simultaneous houses. In the course of time, early platforms grew together as a result of non-intentional as well as deliberate heightening. The settlement developed into a terp. Each household needed a fair share of the high and safe terp, and of its surroundings. A radial structure was a natural way to deal with the problem of space. The farmhouses were all built safely on the highest part of the terp, fields were partly on and partly outside the terp.

The radial structure starts to emerge during the late pre-Roman Iron Age (compare level RS), owing to the increasing population. The division of the available land was a potential source of discord in the community from that period onwards. Ritual practices may have been associated to it in several ways. In the above and in the Englum case study (chapter 10), it was already argued that making depositions of broken pottery in ditches and of ancestral remains in and near houses played a role in territorial claims and in keeping the peace between households. Similar practices also seem to have occurred in Ezinge. Most of the deposits in the ditches in the northern trench are from the same period as the deposits in ditches in Englum. They may be related to the division of land, to territorial claims, and to the rituals that sealed agreements between neighbours in a situation of strong population growth, just like in Englum.

11.2.3.5 *Differences and similarities in ritual practice between households*

A comparison of depositional practice between households is hindered by the incompleteness of excavated remains of houses and deposits. Still, some houses stand out for their high number of deposits. Ten deposits were, for instance, identified in house 1, of which two or three phases were excavated if we go from the number of consecutive hearths. Thirteen deposits were identified in house 9, of which three or four phases were excavated.

A large number of 30 deposits were identified in house 11, which can be traced over a period of 500-600 years; it is probably the household with the longest history in the settlement, and may even go back further, to the houses 1-5 and 8. Deposits are not spread evenly over different phases of this house. As many as eleven deposits were found inside and right outside a middle-Roman Iron Age phase of house 11 (level H); these deposits include eight small pots and one large pot, a playing counter, two bone handles, four spindle whorls, a loom-weight, a whetstone, a cattle metatarsus, a wooden spindle and a *terra sigillata* fragment. Even though some of these finds (one of the small pots and a miniature pot) seem slightly younger and may have been dug in from a higher level, the number is striking, and higher than in any other house in the settlement.

Differences in depositional practice between households do not only concern the number of deposits, but also their character. Differences between contemporary households may be related to their social or political status or to family traditions, but also to post-depositional processes that are responsible for the disappearance of finds and contexts.

The earliest excavated house, house 1, stands out for the large building deposit of three partial animals, as well as for a number of deposits that can be interpreted as abandonment deposits: large wheel fragments, a spade,

and cubical stones in hearths. The deposits from the period of habitation itself are less conspicuous. The offering of three animals may be taken to indicate that this was a wealthy family with some prestige in the settlement and perhaps in a wider area. The communal meal that probably went with the deposition of the partial animals must at least have enhanced the family's prestige. The large number of wooden artefacts that were left in the building when it was abandoned shows that after a generation, this family still liked to make grand gestures. This abandonment deposit, however, may well have been a private kind of ritual that was not intended to be observed by the small community, and which had nothing to do with enhancing social prestige.

The long history of household 11 and the large number of deposits may be taken to indicate that this household had a prominent position in the community, even though the deposits themselves are very simple. Apart from the numerous deposits from the middle Roman Iron Age, the uncommon burials and the deposits in features near this house from the late-pre-Roman and Roman Iron Age stand out. Each of these deposits include a foot bone of cattle or horse, sometimes worked, which indicates that such objects had a symbolic or instrument-special meaning, especially for this household. The absence of similar deposits near other houses indicates that family traditions played a role in the diversity of depositional practice.

A single deposit of six foot bones of cattle and horse was found in the yard of house 30. It is one of several deposits of primarily symbolic or instrument-special objects in this yard; besides this deposit, nine TS sherds and a cuttlebone come from this yard, apart from less unusual deposits of pottery, loom weights and whetstones (levels H-J). Several abandonment deposits were found in this house, in particular a set of 20 loom weights, a broken rotary quern, and a deposit of a pot, a TS playing counter and a dog skull in a hearth. These deposits, which do not occur in other houses in the same way, again seem to belong to specific household customs.

Not only differences, but also similarities occur between specific households. On the same location as house 30, but probably not directly preceding it, is house 15, with a number of phases from the late pre-Roman Iron Age until the beginning of the 1st century AD (levels O-RS). This house stands out for the human burial in its platform, for the remains of a cremation near the house, and for the relatively large number of deposits that can be interpreted as the remains of rites of passage.⁷³ In the area between the houses 15 and 18, similar deposits were found, including human hair (P-79), horsehair (Q-90), and a double spiral brooch (Q-94; fig. 11.31). Two

horns, one of a cow and one of sheep (Q-88 and 97), which perhaps have a similar meaning, were also deposited here. These finds indicate a strong bond between the inhabitants of the house and their house and land, and a family tradition that treasures the deposition of personal possessions during rites of passage for humans as well as for animals.

The same combination of deposits of human remains and of personal possessions, though on a smaller scale, is found in and near house 22, also from the late pre-Roman Iron Age and the beginning of the early Roman Iron Age (level N). A human burial and a deposit of several textile fragments were both found in this house, just like in house 15. Half of a neck ring (N-1134) and a brooch of the same type as Q-94 were found near the house (N-1279; fig. 11.31). The similarities between the houses 15 and 22 indicate similar traditions and possibly family ties.

Two houses stand out because of the large number of TS sherds that were deposited near them during the middle Roman Iron Age. The many single sherds near house 30 were already mentioned above. Deposits of TS near house 27 consist of two deposits, one of four TS sherds of different vessels (H-957), the other of six playing counters, probably made of the same vessel (H-958). These deposits were found outside the west wall of the house, possibly near the corners. These finds may represent primary or secondary contacts with the Roman world that other households did not have to the same extent, or an interest in the symbolic aspects of TS that other households did not share.

Relations between households are also reflected in deposits of related objects. For instance, the baking sheet that was divided over three deposits in houses 25 and 27 (L-1103, 1104 and 1105), or the decorated miniature pots in houses 11 and 28 (H-737 and 738) demonstrate exchange relations between these households. Whether these relations played a role in these depositions cannot be assessed.

The above account of depositional practice in Ezinge, according to the contents and the locations of the deposits, leads to the conclusion that ritual practice in Ezinge was varied. Part of the diversity also can be attributed to household traditions. However, some patterns do occur. In the above, rituals including offerings, rites of passage, deposits associated with the foundation or building and the abandonment of houses, and the use of instrument-special objects could be identified. In the next section, it will be attempted to order these and other rituals in a way that helps to understand the role of ritual practice in the community of Ezinge.

⁷³ Q-1001 (a piece of fabric), RS-1006 (a glass bead and a piece of fabric), RS-1013 (a piece of fabric) and RS-1459 (two pieces of fabric).

11.3 Interpretation

When overseeing all ritual finds assemblages from Ezinge, we can distinguish a variety of rituals that left material traces in the archaeological record. Since the number of deposits is considerable, they cannot all be interpreted separately; it is necessary to bring some order and interpret them as different types of rituals. Several categories of rituals were discussed in Part 2, or were introduced in the case study of Englum. In the following, these categories, which provide very different perspectives on ritual practice, will be applied to the ritual deposits that were identified in Ezinge. In addition, a new set of categories will be introduced, that helps to order and interpret them.

11.3.1 Existing categories

11.3.1.1 *The doctrinal and the imagistic modes*

Although some patterns can be discerned in the large number of deposits that were identified in Ezinge, ritual practice does not seem to be standardized or repetitive at first sight. The relative uniqueness and irregular character of many rituals is suggestive of rituals in the imagistic mode (see chapter 7.4).⁷⁴ Rituals of this type are infrequently performed rituals with a low degree of uniformity. They occur in any society, but they are characteristic of small-scale societies with intense social cohesion on a local level, and a decentralized political structure. The opposite of rituals in the imagistic mode, rituals in the doctrinal mode, are characteristic for relatively large-scale societies with a centralized socio-political organization, although they are not entirely absent in small-scale societies. Rather than composed for specific occasions, as rituals in the imagistic mode are, rituals in the doctrinal mode are regularized and repetitive. This distinction in ritual practice is interesting because it may point to different types of social organization. The low degree of standardization that can be inferred from the high variability in ritual deposits in Ezinge suggests that the imagistic mode prevails here. Nevertheless, rituals in the doctrinal mode do not seem to be entirely absent. Part of ritual practice was traditional and more or less repetitive. The small pots that frequently served as containers for offerings in houses from the late pre-Roman Iron Age onwards may provide an example of rituals in the doctrinal mode, as are the very similar deposits of personal possessions that are associated with rites of passage during the pre-Roman Iron Age.

The prevalence of rituals in the imagistic mode may be taken as an indication that Ezinge was a community with a low degree of social organization throughout a large part of the research period. Possible changes in

ritual practice related to changes in the social structure will be discussed below, in section 11.4.

11.3.1.2 *Non-religious and religious rituals*

As in Englum, primarily non-religious and primarily religious ritual deposits can be distinguished. Primarily non-religious deposits, such as the small deposits of personal possessions that may belong to rites of passage, the deposits of household utensils that are associated with the abandonment of houses, or the deposits in ditches that are associated with boundaries, do not show features of supernatural involvement. Nevertheless, a religious component may be part of such rituals. Destruction may indicate fear of something sacred and therefore supernatural involvement, but deliberate destruction may also be part of non-religious rituals.

In primarily religious rituals, the supernatural may be involved in three different ways, as was discussed in chapter 7.3.2. Religious rituals can be agent-special, patient-special or instrument-special.⁷⁵ In agent-special rituals, the supernatural being or its human representative is the agent, for instance by sending someone a vision or by marrying two people, thus adding a religious component to a rite of passage. Agent-special rituals may be an important type of rituals in peoples' lives, but they will usually not leave traces in the archaeological record that enable their recognition. Perhaps the broken pottery in two deposits of jewellery from the Roman Iron Age (table 11.5), a new element in deposits associated with rites of passage, may be taken as an indication that a supernatural component was implied as an agent in some rites of passage in this period.

Patient-special rituals are meant to influence the supernatural, often by some kind of gift exchange, which means in this case: offering. Offerings may include many of the complete pots that served as containers, animal parts such as cattle skulls or the partial animals associated with house 1, and other, whole or broken objects. Offerings of animal parts or of food in containers may have been part of ritual meals.

In the third category of religious rituals, the supernatural is instrumental in achieving some goal, either by specific actions or by the use of special objects with an inherent meaning or power. Instrument-special objects, such as playing counters and pieces, *terra sigillata* sherds and a variety of curious objects (table 11.14), occur in many ritual deposits in Ezinge. Some of them were amulets, worn to avert evil or to bring luck, which had been deposited, perhaps during rites of passage. Others were deposited because they were probably thought to have a positive effect on the people who deposited them, or on the effectiveness of the ritual.

⁷⁴ Whitehouse 2004b, 74.

⁷⁵ Lawson & McCauley 1990.

Table 11.14 Objects that probably served as instrument-special objects.

	MPROM	LPRM	EROM	MROM
	n	n	n	n
playing counters, antler playing piece	15		5	2
foot bones of cattle and horse	3		6	6
terra sigillata sherds				50
others (buzzers, antler playing piece, fossils, flint, hammer axe, horse enterolith, fish bone pendant, bird bones, whelk, sepia, amber)	5	4	5	5
Total number	23	4	16	63
% of total number of <i>deposited objects</i>	19%	4%	11%	25%
number of deposits that include object of this type	16	4	12	42
% of total number of <i>deposits</i>	23%	6%	16%	31%

The imagistic and doctrinal modes as well as the distinction between religious and non-religious rituals both are comprehensive classifications that cover the entire range of ritual practice. Still, they do not provide a full view on ritual practice. The two modes only focus on diversity and repetitiveness itself, rather than on the actual rituals. The distinction between religious and non-religious is only concerned with the presence or absence of supernatural participants and the way these might be involved, while largely ignoring the people who performed these rituals. There are still other ways of looking at the rituals that can be identified in the archaeological record, for instance with the help of the categories that were defined in the Englum case study.

11.3.2 Categories from the Englum case study

Two different ways of classifying rituals were introduced in the Englum case study. The first of these a very practical one, based on the way objects are deposited: in open natural or manmade features (liminal places) without filling them in (Type 1), in natural or manmade features during filling in (Type 2), in pits dug for the occasion or by digging something in (Type 3), or by placing a deposit and then covering it with soil (Type 4). Type 1-depositions are rare in Ezinge. Only two small pots in ditches possibly belong to this type. Type 2-depositions were identified in a number of pits and ditches. Depositions of Type 3 and 4 were also identified, especially of deposits associated with rites of passage and deposits of human remains. In many cases, however, the quality of the information was not sufficient to distinguish between these types. The identification of these different types of deposition is useful when examining deposits and their contexts. For instance, the identification of the deviating burial RS-415 as a Type 2-deposition, which clearly distinguishes it from other inhumations which belong to Type 3 or 4, made it clear that this burial should be assessed in the light of a specific family tradition that attached more than average importance to the filling of features, and usually connected it with ritual depositions.

However, these types are not interpretative categories in themselves.

The second classification introduced in the case study of Englum provides different perspectives on ritual practice, according to the way different social categories are involved: the individual, the family or household, the community, and the supernatural. It often appears possible to describe the roles these different social categories play in rituals, which is an important part of their interpretation. For example, rites of passage can be connected with the individual, abandonment and foundation deposits with the household, establishing new boundaries with the community, and offerings with the supernatural.

The above categories all provide different angles from which we can look at ritual practice and which help us noticing different aspects. However, we can discern more details than these categories allow. Below, it is attempted to order the ritual deposits identified in Ezinge in a number of interpretative categories.

11.3.3 Interpretative categories

In the above discussion on the Ezinge deposits, the same themes kept recurring: rituals are associated with individual people, with houses and households, with the division of the available land, with filling in dug structures, and with social relations within the community and with the wider world. These themes are concerned with the role ritual practice plays in the lives of individual people, in families, or in a community. They can be ordered into eight categories, most of which apply to the occasions on which rituals were performed. The supernatural may be involved in all these categories, and is therefore not assigned a category of its own. Besides the supernatural, other elements are involved in the rituals from each of these categories in different ways (e.g. the objects involved, locations, actions such as breaking or burying).

Interpretative categories of ritual practice:

1. Rituals concerning individual persons.
2. Rituals accompanying the life cycle of houses.

3. Rituals aimed at the household.
4. Rituals associated with technological processes.
5. Rituals concerned with the community.
6. Rituals associated with social contacts outside the settlement.
7. Rituals associated with socio-political life.
8. Rituals associated with cosmology and with ordering the world.

These categories are not mutually exclusive and deposits may belong to more than one category. A ritual associated with the life cycle of a house is also meant to benefit the members of the household; an offering in a liminal place may be aimed at the well-being of the community.

These categories probably cover all ritual deposits identified in Ezinge, but it is, for lack of information, not always possible to class a specific finds assemblage under one of these headings. In the following, the finds from Ezinge are ordered according to these categories, as far as possible.

11.3.3.1 Category 1: rituals concerning individual persons

Two types of ritual practices can be distinguished in this group. The first is the use of instrument-special objects by individual people, for protection or luck. An amber bead and the vertebra of a fish in Ezinge, or a *terra sigillata* pendant in Englum, may have been worn as amulets; people may also have been wearing small bags containing such objects.

Secondly, rites of passage, concerned with the life stages of individual persons, belong to this category. They fall into three groups. The first of these consists of deposits made during, or as, rites of separation. Deposited objects include cut-off hair or personal possessions such as pieces of fabric (probably the remains of clothing), combs, beads and bronze jewellery. Such objects are associated with the physical and social appearance of the individual, which made them appropriate objects to be deposited when people moved from one life stage to another. There are many possible occasions for rites that involved the deposition of personal belongings. These include, for instance, reaching maturity, marriage, leaving on a journey, or entering a new social group. Objects of this type were usually found alone or combined, but, at least during the pre-Roman Iron Age, not with other objects (table 11.5). During the Roman Iron Age, jewellery was usually deposited with other artefacts such as pottery and *terra sigillata* sherds. This may represent a change in depositional practice associated with rites of passage. A group of artefacts that also may have played a role in deposits of this kind consist of small personal tools, for instance potter's tools (J-182, fig. 11.61), needles, spindle whorls or the bone handles that are left of iron knives and awls. Some of these (RS-420; T-1591) were deposited near thresholds, which might have sym-

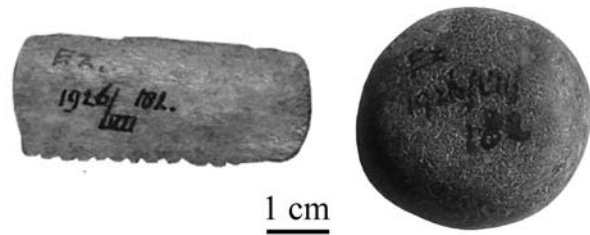


Fig. 11.61 A polishing stone and a worked cattle rib, together forming a set of potter's tools (J-182). The tools were found under or near one of the walls wall of a house from the middle Roman Iron Age. Photo rib fragment: S. Manuel.

bolized the transition of one life stage to another. Many of these objects were deposited with other objects, which makes it less obvious that they were deposits in this category. The location of two combs (T-1512) on and near a pile of wickerwork suggests that rites of separation for people sometimes coincided with rites of abandonment for houses.

The second, hypothetical, group consists of pits with pottery and other objects that have specific characteristic suggesting they were made by the same person (in this subsistence economy probably a woman); the deposits might be part of funerary rites or another rite of passage. Two deposits from Englum were interpreted as possible deposits of this type (Appendix A.5 and 16). In Englum, these deposits not only include household goods but also animal bones, especially of young animals. This information is not available for Ezinge, so we cannot assess whether similar deposits occur here.

The third within this category is concerned with human remains and funerary rites. Whether the single human burials found in the settlement can be categorized as rites of passage depends on their interpretation. If these people were deceased family members who were buried near their homes because they were special people, or who had died from specific causes or at specific moments, these burials are part of their funerary rites. If, however, they are to be considered human sacrifices, they are primarily concerned with the well-being of the household or the community. Still, even human sacrifice may have involved special rites of passage that were only performed at such occasions. Other funerary rites must have involved excarnation and later collection of remaining bones. Evidence for excarnation consists of collected and deposited single bones. As was argued in the Englum case study, deposition of human remains possibly functioned as rites of passage, during which deceased family members changed into supernatural ancestors.

It is conceivable that rites of passage were also performed for household animals, in particular horses, for instance when they reached maturity. Horsehair, sometimes braided, was found several times, twice in combination with a rope. A horse burial from the middle

Roman Iron Age may also belong to this category. That implies that horses, and perhaps other animals as well, were not only considered economic assets. People also had personal relations with them.

11.3.3.2 Category 2: rituals accompanying the life cycle of houses

Rituals in this category were performed during making a platform, or in association with building, repairing, changing, abandoning and demolishing a house. Several of the Ezinge finds assemblages belong to this category. During the construction of platforms, foundation rituals were performed that included making depositions. Whether this occurred often cannot be established. It is usually not possible to distinguish such depositions from depositions buried in the floor once the house had been built. The two human burials that were found under the late pre-Roman Iron Age houses 15 (level RS) and 22 (level N) were probably foundation depositions. As was argued in the above, the human burials created a bond between the household and its land.

During building the house, additional rituals were performed; remains of such rituals were identified near a wall (UV-1555), and under or near thresholds. Unlike in some German settlements, there were no depositions of objects, animals or people found under hearths. A finds assemblage in a large basket, which was found in a house platform, was recorded as a 'building sacrifice' in the finds register (UV-1743). It may be a foundation deposit in the platform, or a later deposit associated with the actual building of the house. The same applies to a dog that was buried in house 9 (T-1569). Just like several dog skulls, which regularly occur in houses, it may have been deposited there during construction of the platform, during building of the house or during the occupation of the house. Single human bones in houses probably have the same meaning as complete burials; most of them were deposited at a later stage, during habitation of the house. Single human bones and dogs were meant to connect families to their home and to protect the home by the forces of respectively ancestors and dogs.

Abandonment of houses was accompanied by rituals again. Piles of wood, wheel parts and other large wooden objects, and utensils such as loom weights or a rotary quern were placed on the floors of houses and covered by a heightening layer. Several depositions of objects in hearths were also made during the abandonment phase of the houses. Depositions made during demolition of the houses, for instance in postholes after removal of the posts, were not identified. Many depositions that were identified as abandonment depositions in the above consist of a large amount of broken pottery and other household objects, often partly burnt. A large part of the pottery was probably broken right before deposition; it often shows traces of deliberate breakage. Such depositions may also

include objects that accidentally broke earlier and were stored for a while. Large pottery depositions of this type can be found in pits in or close to abandoned houses, or on the floor. Some depositions include perforated base sherds, indicating that these pots were used to make offerings and thus implicate a supernatural being. The number of depositions of this type is large enough to represent a general custom during a large part of the research period. A house and its inventory were apparently considered to be closely connected. Demolition of the house went hand in hand with the ritual destruction of the household goods, or at least of part of them. The occupation of a new house apparently asked for new household goods.

Rituals from this category do not need to be religious. Although it is customary to call the depositions that were made during such rituals *offerings* or *sacrifices*, it is better to avoid these terms, unless there is evidence that these depositions really were offerings. That is, for instance, the case with the unparalleled deposit of the parts of three animals associated with the earliest house. These parts must have been offerings, while the remainder of the animals was eaten during a ritual meal. The people that were buried under houses were not necessarily human sacrifices that were killed for the occasion. It is possible that they just happened to die when the platform was made, that the death of a relative sometimes induced the construction of a new platform, or that such a custom belonged to a specific family tradition. All these options would explain why a human burial was not found in every house. The very similar depositions of personal possessions near the same houses where human burials were found (15 and 22, see above), points in the direction of family traditions.

Rituals associated with building and abandoning houses are actually rites of passage. Burying a deceased family member under a future house is clearly a rite of incorporation; leaving part of the household goods behind is a rite of separation, which can well be compared with similar rites for individual people. The house appears to constitute an entity by itself, with its own rituals. Rituals from this category are meant to promote the well-being of the residents of houses (people living in it benefit from a safe and solid house), but rituals associated with houses only work through the house.

11.3.3.3 Category 3: rituals aimed at the household

The third category consists of rituals that are related to the well-being and the identity of the family or the household. Rituals for the well-being of a household often are religious rituals meant to improve the health, welfare, fertility, safety or success of its members. Many of the depositions in and outside houses probably belong to this category. They can be agricultural implements and other tools, pots that were used as containers, spindle whorls and loom weights, knives and whetstones, dog



Fig. 11.62 Pottery from Ezinge with decorations with a possibly instrument-special meaning. Left: Late pre-Roman Iron Age pot with *streepband*-decoration, combined with fingertip impressions (N-191). Right: pot from the middle Roman Iron Age with three fingertip impressions; find location uncertain (find no. 1925/IV/100).

skulls or other animal parts. Depositions in this category are offerings to supernatural beings, or deposits that include instrument-special objects. The occasion for such rituals might be a crisis that concerns the household, for instance illness or giving birth, but they may also be regularly performed rituals for the general welfare and protection of the household, or seasonal rituals to promote fertility of the cattle or a good crop. It is not possible to identify specific deposits as belonging to crisis-oriented or seasonal rituals. The supernatural beings involved probably were the ancestors.

Part of ritual practice of a household was related to its identity and status. In some periods, families probably felt the need to distinguish themselves from others, to enhance their social status and to establish a specific identity. Rituals of this type involved the deposition of family heirlooms, such as (possibly) an ancient stone tool or exotic sherds and pots. That way, family histories were emphasized and families were linked to their real or mythical past. The deposition of inalienable possessions in and near houses, especially worked and unworked human bones, created a link between a family and their house and land and made it into ancestral land. Burials of deceased family members in the family territory had the same function. In essence rituals of this type do not have a religious character, but the burial of family members or of the bones of family members may have been considered a transitional act, which turned them into supernatural ancestors who could be asked for help and protection and who would occasionally need offerings.

It is likely that objects such as *terra sigillata* or playing counters were added to deposits in order to bring good fortune or to avert evil. Uncommon objects such as fossils, pieces of flint, an ancient hammer-axe (which may have been a pick-up from the Pleistocene inland but also family heirloom), a horse enterolith, amber, the bone(s) of a crane, a whelk, or a cuttlebone, may have been thought to work in the same way (table 11.14). These rare and curious objects may have been ascribed an inherent force that was meant to work out positively for the peo-

ple who owned and deposited them, or that was thought to enforce the effectiveness of the deposits to which they were added.

11.3.3.4 Category 4: rituals associated with technological processes

The production of artefacts such as pottery, metal, or textiles, must often have been associated with rituals. Such rituals might be connected to and induced by symbolical meanings of elements that are part of the process: raw materials, water or fire, or by the remarkable transformations that play a role in most technological processes. The strict order of actions in a technological process resembles ritualized actions, as discussed in chapter 6.5. Ritualization of such processes therefore is only natural.

Rituals associated with technological processes, however, were rarely identified in the above. Only O-862, a hearth with slag that was probably used for some pyrotechnic activity, was ritually filled and covered at the end of its lifetime. The production of artefacts does not often seem to be associated with rituals that leave traces in the soil, or we cannot identify them.

As other production processes, the production of food was probably associated with rituals. Raising crops, butchering animals, harvesting and cooking may all have been partly ritualized, but such rituals are hard to detect in the archaeological record. Some decorations on pottery may have been used in an instrument-special way, to influence the cooking process or the resulting food in a positive way. Examples of such decorations that may go beyond the decorative are the *streepband*-decoration of the late pre-Roman Iron Age, or the regularly occurring ornament of three fingertip impressions on pots throughout the research period (fig. 11.62).⁷⁶ The fingertip impressions on many loom weights (e.g. fig. 11.22) may have had the same purpose for weaving.

⁷⁶ Taayke 1996d, 169.

11.3.3.5 Category 5: rituals concerned with the community

Several households lived together in the settlement. It is likely that part of ritual practice was concerned with social relations and with the practicalities of living together in a limited area, and that rituals were often performed by more than one household. Within this category, several groups of ritual practice can be identified or postulated. In the first place, rituals were performed for the welfare and protection of the community. They are comparable to rituals in category 3, which were aimed at households or household members, but community rituals might be grander and more ceremonious than the often small offerings that are associated with households. Offerings of this kind, however, have not been found or identified in the excavated area; they are merely postulated. If offerings were indeed made on a community level, there may have been a specific place for that purpose. The centre of the village, a special cult building, or liminal places outside the settlement may have been proper locations for such rituals. However, the centre of the settlement was probably not excavated, special cult buildings are not known from the terp region (with the possible exception of the building in which the famous mask was found in Middelstum-Boerdamsterweg, see chapter 4.4.3), and we have no information on special places in the landscape outside the settlement. The possibility that one or several of the human burials were human sacrifices made by the community cannot be excluded, but their proximity to houses makes that interpretation less likely.

A second group of rituals on a community level consists of gift exchange between households. It must have been an important part of maintaining good social relations within the settlement. Exchanged objects, which can only be recognized if they come from places with a different material culture, appear in several ritual deposits, indicating that exchanged objects were considered meaningful. In how far gift exchange itself was ritualized cannot be assessed. Ritual meals, a special category of gift exchange, must also have played a role within the community, but its remains are hard to detect since animal bones were not collected systematically.

The third group of rituals is associated with the choice of new locations for houses and fields and with establishing new household territories, just like in Englum. Pottery deposits in ditches belong to this category. They are interpreted as the remains of communal meals that sealed negotiations on the division of the available land; the broken pottery was deposited when the redundant ditches were filled in. As was argued above, characteristics such as paint and perforated bases suggest that a supernatural being was often involved in the ceremony.

11.3.3.6 Category 6: rituals associated with social contacts outside the settlement.

Contacts and relations with other settlements can be inferred from finds of non-local artefacts. As was argued in section 11.2.2, locally made pottery in non-local shapes was probably made by potters from elsewhere who had come to the settlement when they married men from Ezinge. Not only spouses, but also objects were exchanged, for example attractive, small pots, fossils or glass beads. During events and meetings of people from different settlements, pottery may have been broken to divide the sherds among the participants as memorabilia.

Objects that were acquired as gifts, or sherds that served as mementos, were considered meaningful objects. Several deposits in Ezinge demonstrate that such objects were often kept for a long time before they were finally deposited, usually as part of larger deposits.

11.3.3.7 Category 7: rituals associated with socio-political life

A clear leader's residence or an assembly hall has not been identified in Ezinge. It is possible that it is still hidden in the remainder of the terp, to the south of the excavated area. Nevertheless, part of ritual practice in any society is concerned with leadership and the social hierarchy. Ezinge will not be an exception. There may have been rituals associated with the installation of a leader, and ceremonial meals during meetings with local and regional participants. Social status might also be reflected in the quality of deposited objects in different houses. The quality of deposited objects, however, is not exceptional in any of the Ezinge households. If rituals with a socio-political character were performed in the excavated area, which is not certain, they apparently involved mainly pottery, ceramic objects, stones and animal bones, just like other rituals. Rituals connected to leadership and high social status cannot be identified from the finds of luxury objects. Are there any other indications of elite or of a leader's residence in Ezinge?

Apart from the quality of deposited objects, evidence of rituals associated with high social status may be based on the use of specific material categories or on the quantity of deposits. Two material categories need some attention since they are often associated with elites: brooches and other bronze jewellery, and *terra sigillata*. In the above, it was argued that *terra sigillata* sherds from the middle Roman Iron Age primarily had a symbolical meaning. TS was probably not even imported as complete ware and if so, then only to be broken and reworked. That way, the sherds turned into instrument-special objects, which could be worn and deposited to promote well-being and fortune. Although the possession of TS sherds may have enhanced the prestige of their owners, that probably was not their primary meaning. A symbolic or intrinsic meaning of TS sherds seems to have

been more important. Therefore, TS cannot be considered an indicator of high social status. Brooches, hairpins and other bronze jewellery cannot be considered status symbols either; although some brooches may have been more special than others because of their quality or their origin, they were probably not only used by a small elite. Deposition of brooches and other bronze jewellery was not a status-enhancing ritual, but rather part of rites of passage for individual people.

The deposit of three animals under a wall (UV-1555) of the earliest excavated house is suggestive of an elite household because of the high value of three household animals. However, this may not have been the only household that could afford such a deposit. Moreover, the settlement consisted of no more than one to three houses at the time, which in itself makes the existence of a strong social hierarchy questionable.

For later periods, when the population had grown and the available land became relatively scarce, it can be assumed that households with a tradition of depositing human remains were especially concerned with establishing their identity and ancestry and possibly their claim on land. Human remains were found in or near several houses from the period between ca. 200 BC and AD 150. A leading family cannot be identified that way, but it is possible that this tradition was especially maintained by distinguished families within the settlement.

The quantitative differences between deposits associated with houses that were noted earlier in this chapter might reflect differences between households, but we do not know what these differences entail. They may have to do with social status, but also with the number of women and men or of age categories within a family, with personal taste, with family traditions, with a family's wealth, with certain roles in the community of family members, with personal preferences or with special circumstances.

A conspicuous house for the large number of deposits that were found in it, is a middle-Roman Iron Age phase of house 11 (level H). The deposits are not conspicuous in themselves, consisting mainly of small pots and other small objects. Nevertheless, this large number of deposits occurs in a household with a long history: this is the location of a series of houses, which may even descend from one of the first houses of the settlement. It is not unlikely that this house did belong to a leading family. Most of the deposited small pots in this house were beakers, suitable for drinking. It was argued in section 11.2.2., that the exceptional high percentage of beakers in the total settlement assemblage (25%) was related to the central political role that Ezinge may have played during the middle Roman Iron Age. If that is indeed the case, this house might well have been a leader's residence. However, if this interpretation of the large number of beakers is correct, this household played this role for no longer than one generation.

The difficulties in establishing the location of an elite or of the leader's residence may be explained by a research gap, but it may also have different causes. The poor recognizability of an elite might be taken as an indication that differences in social status between different households and people were relatively small and that leadership for a long time was not hereditary but based on merit, as was argued in chapter 4. A rather low degree of social organization is also indicated by the lack of standardization in ritual practice, as was discussed above. If there was an elite, its status may have been based on kinship and ancestry, but that does not necessarily go hand in hand with material wealth. Leaders may have been exceptional because of their merits, but not for the quality or quantity of their household goods, for the size of their houses, or for the depositions that were made by their households.

11.3.3.8 Category 8: rituals associated with cosmology and with ordering the world

The above categories are based on the remains of rituals in the archaeological record. Apart from these rituals, there may have been other types, which did not necessarily leave identifiable material evidence. They may be concerned with cosmology, or with understanding and ordering the world. Calendrical rituals, for example, "give socially meaningful definitions to the passage of time, creating an ever-renewing cycle of days, months and years."⁷⁷ Although evidence is lacking, we can assume that such rituals were part of ritual practice. Other rituals may be concerned with the creation of a meaningful landscape, in which specific places in the landscape and liminal zones may play a role. Offerings or other deposits in such places may be part of that process. There is clearly an overlap with offerings for the benefit of the community or its members, or possibly with other categories, but it would not be correct to reduce the meaning of such rituals to the function they may have had in social or political life. The primary concern of such rituals may be the cosmology, or the ordering of time and place. Whether such rituals in the surrounding landscape played a role in ritual practice of the people of Ezinge is unknown, since the area around the terp was not excavated.

Liminal places might play an important role in such rituals. Such places, which can be natural or manmade, often serve as contacts zones with the supernatural. Digging may also have been felt to be an invasive act, which disturbed powers in the earth and asked for ritual appeasement by making offerings. Features that were dug in the salt marsh often will have contained water, which must have strengthened the notion of liminality. Rituals associated with liminal places are religious by nature: they always involve the supernatural.

⁷⁷ Bell 1997, 102.

Only a small number of depositions in Ezinge were made in open features. Possible liminal places were creeks, ditches, pits and wells. Deposits in creeks were only made during the earliest occupation phase (level UV-1701; 1746; 1747); younger creeks do not occur in the excavated area. These deposits seem to be made when these ditches were filled in, but they may not have been offerings. Two of them include a dog skull, the third a human skull fragment. It is not certain that these deposits were offerings; still, they may have functioned in creating a relation between the human world and the natural or supernatural world.

Two small pots (UV-1412 and 1526), which probably served as containers for offerings, may have been deposited in ditches when these were still open. Other deposits in ditches (table 11.13) clearly have a ritual character; they include deliberately broken pots, painted sherds and perforated bases. Although such characteristics indicate that a supernatural being might be involved, these deposits do not seem to be offerings that were induced by the liminal character of these ditches. They are rather the remains of rituals that were performed elsewhere, which were deposited here. A deposit in a well occurs only once in Ezinge (UV-1535/1536); it consists of a cooking pot with residue, which may have served as a container for an offering, and a cattle metapodium. The deposits in rectangular pits and a ditch near house 11 might also be associated with the liminal character of these features. One of these pits contained a human skeleton. If this burial was induced by the liminal character of the feature, it might be argued that this was a human sacrifice, but that does not need to be the case. If the ancestors were thought to reside in a world beneath the earth's surface, this burial can be interpreted as a transitional rite in which a proper place for ancestor worship is created, similar to other human burials.

In the above, ritual practice was examined without paying much attention to changes through time. However, the large number of deposits does offer the opportunity to trace changes in ritual practice. These changes and their implications for other aspects of social life, in particular the degree of socio-political organization, will be discussed in the next section.

11.4 Changes through time

From the discussion above, it appears that there are quantitative and qualitative differences in deposits and deposited objects and in their locations in the settlement between different periods. These differences are probably not caused by preservation conditions or excavation method. Although finds were collected selectively, that seems to have been a consistent practice throughout the years the excavation lasted. Preservation conditions were good, especially in deeper layers.

The relatively high layers from the middle Roman Iron Age may have been slightly dehydrated, so that we cannot be sure that the absence of organic remains from this period, for example textiles and wood, is reliable (table B.2). Despite the possibly poorer preservation conditions, the number of deposits and of deposited objects is much larger in the middle Roman Iron Age. This increase is only partly caused by the new category of *terra sigillata*.

Although different preservation conditions should be kept in mind, the differences in depositional practice deposits between periods, which were inferred from the tables, diagrams and statistical tests in this chapter and in Appendix B, can be considered reliable. They probably do reflect changes in ritual practice over time. These changes will be examined below, following the subjects discussed in the previous sections.

11.4.1 Middle pre-Roman Iron Age

The first settlers came to Ezinge in the beginning of the 5th century BC. At first, there were only one or two houses, at least in the excavated area, at the end of this period perhaps three. The settlers brought traditions and notions on proper ritual practice with them from their homeland, but we do not know what these traditions involved and we cannot assess in how far the new living environment changed ritual practice. Several types of ritual practice can be discerned during this period.

11.4.1.1 Material categories

In the 71 ritual deposits that were identified for this period, 40 different material categories play a role. The most numerous are playing counters (13%), bone and ceramic spindle whorls (together 10%), cubical stones (8%) and deposits of over 1 kg of sherds (6%; table B.2). Partial or complete animals occur more often than in later periods. Except for pigs, all household animals are represented.

Complete pots are rare, compared to following periods. The ten pots in deposits from this period make out only 8% of the total number of deposited objects. Most deposits that involve pots (17% of the total number of deposits, table 11.3), inside houses as well as outside, do not include more than one pot. As in all later periods, small pots are overrepresented in ritual practice, compared to large pots (fig. 11.5). Half of the number of deposited pots was deposited intact. Miniature pots did not occur in this period.

Three deposits of human bones are known from this period. The earliest of these was part of a deposit in a creek. The other two were both associated with house 10 (level RS). These finds demonstrate that human bones were collected to be used in secondary rituals, after aboveground or underground exhumation. A partial human skeleton (UV-1538) suggests that one of the ways of collecting human bones was exhumation of bones from buried corpses.

11.4.1.2 Contexts

The majority of finds, 63% of all deposits, is directly associated with houses (table 11.9). Among these are several deposits in hearths and near thresholds. Outside houses, three deposits in a creek are noteworthy (UV-1701, 1746, 1747). These deposits were probably made in the fill of the creek, during filling or soon after, right before the area was covered with a heightening layer.

11.4.1.3 Diversity and the doctrinal and imagistic modes

The diversity of ritual practice in this period is indicated by the apparent high variability in ritual deposits (see table B.1) and by the low number of objects in associations (table B.4.a). Only playing counters are frequently found together or with other objects, and the small number of large pots are usually associated with large deposits of potsherds. This diversity is suggestive of ritual practice in the imagistic mode and of an associated low degree of social organization. Still, not every ritual was a one-off occasion; some ritual traditions seem to occur, especially in the rites of passage that include the deposition of personal possessions such as pieces of fabric, jewellery and horn combs.

11.4.1.4 Non-religious and religious rituals

Although it is not possible for every ritual to decide whether it is religious or non-religious, it is clear that they both occurred. The rites of passage or the abandonment deposits in houses were primarily non-religious, although they may have had a religious component. Patient-special and instrument-special rituals can be identified as religious rituals. Partial animals were probably the offered parts of animals. The few intact pots (only 5 in this period) also probably served to make offerings. The ancestors may have been the intended supernatural beings, although evidence of the kind that was found in Englum, is missing in Ezingen. There may be some ritual associated with liminal zones (see below), possibly aimed at other supernatural beings than ancestors.

Playing counters are part of 13% of all deposits in this period. They belong to a group of objects that may be considered instrument-special, which occur in as many as 23% of all deposits (table 11.14). Such objects were perhaps added to deposits to enforce their effectiveness, or to promote the well-being of the people who made the deposition. Ceramic and bone spindle whorls occur in 15% of all deposits (table B.4.a). The high percentage suggests that spindle whorls in deposits had a meaning that went beyond their function. They may have been considered instrument-special objects, just like playing counters.

11.4.1.5 Interpretative categories

Type 1: Rites of passage. Deposits that were interpreted as belonging to rites of passage consist of pieces of fab-

ric, horn combs, an amber bead and bronze jewellery, representing personal possessions related to the physical and social appearance of people, which were possibly deposited as part of rites of separation. Two deposits of horsehair and rope may be related to similar rites for horses. Such deposits were found inside as well as outside houses.

Type 2: The life cycle of houses. Part of the deposits in houses belongs to the rituals accompanying the life cycle of houses. The first of these is a foundation deposit, consisting of large parts of a horse, a cow and a sheep; these partial animals were probably the offered parts of sacrificed animals that were eaten during a ritual meal. A number of deposits near thresholds are from the building phase of houses as well. They consist of small objects, including a number of possibly instrument-special objects (playing counters, a horse enterolith, a flint artefact), which may have been meant to protect the household or to bring luck to it. Both a dog and a (partial) sheep were buried in a platform under a house, possibly as foundation deposits. Clear abandonment deposits of this period were found on floors and in hearths. The former consist of wheel parts and other wooden objects, the latter in particular of cubical stones, at least in the first excavated house (house 1). Several of the pottery deposits of this period might be abandonment deposits. Deposits of over 1 kg of potsherds constitute as much as 57% of the pottery deposits (table 11.3).

Type 3: The household. The deposits of human bones in house 10 probably played a role in creating a link between the residents of the house and their ancestors. The same applies to the partial burial, which was found about 10 metres from a house. The high percentage of deposits inside house indicates that most of ritual practice was directly related to the household.

Type 4-5: not identified or not clear.

Type 6: Social contacts outside the settlement. A large pottery deposit, RS-469, includes a sherd of Frisian origin; that indicates that contacts between settlements in different regions, which involved the exchange of pottery or of potters, occurred in this period.

Type 7: not identified or not clear.

Type 8: Liminal places? UV-1526, a small, intact pot in a ditch, might be deposited as an offering in a liminal zone. Three deposits were found in the fill of a creek that was still open when the first colonists arrived. Two of these deposits consist of a dog skull with sherds, one of them with a loom weight. A third includes a human skull fragment, sherds, an unused and a used and burnt whetstone, and some shells and animal bones. This creek is the only natural water course in the excavated area. The similarity between these deposits, which include skulls of dogs and a human skull fragment, may come from a similarity in the meaning of bones of dogs and humans (see chapter 12). Whether these deposits were induced

by the liminal character of the creek when it was filled, or rather by the application of the heightening layers that covered them, is not clear.

11.4.2 Late pre-Roman Iron Age

During the late pre-Roman Iron Age, the population and the size of the terp further increased. The number of contemporary houses in the excavated area increased from three to about five. The division of the available land on and outside the terp had implications for the lay-out of the settlement; a radial structure gradually emerged.

11.4.2.1 Material categories

71 ritual deposits were identified, just like in the previous period; as many as 42 different material categories play a role in these deposits. Large and small pots are now the most common objects (16 and 14%), followed by pieces of fabric (7%; table B.2). Several deposits of large wooden objects were identified.

This period has a higher percentage of small deposits, consisting of only one object, than any other period (72%; table 11.15, fig. 11.63 and Appendix B.3.2). Nevertheless, the average number of objects in composite deposits has increased compared to the previous period, from 2.5 to 3.0 (table 11.15). The increase is caused by a slightly larger number of sizable composite deposits (containing five or six objects) compared to the previous period.

Pottery has gained considerably in importance in depositional practice; pottery deposits now make out 42% of all deposits, but the number of deposits of over 1 kg of sherds decreased to only 4% of all deposits. Pottery deposits mainly consist of large and small pots. Most of these (79%) were deposited intact. Miniature pots form a new category of deposited objects.

Complete or partial animals do not occur in deposits from this period. Five human burials (three from the excavated area) are dated to this period. Two burials were found inside houses; these burials were probably placed in the house platforms during construction. The number of single bones remained the same; one of these was a worked skull fragment (O-1687); it probably dates from the end of this period. Some cremated bones might belong to a full cremation, or are burnt single bones.

11.4.2.2 Contexts

As in the previous period, most depositions were made in houses, but the percentage has slightly decreased to 59% (table 11.9 and Appendix B.3.3). Deposits in hearths or near thresholds were not identified for this period. A large percentage of 21% of the deposits of this period were found in byres. This is probably partly caused by the well recognizable byres of this period, but it does illustrate the importance of livestock.

11.4.2.3 Diversity and the doctrinal and imagistic modes

The number of material categories in this period is even larger than in the previous period, which shows that ritual practice was highly variable. However, the proportion of one-off rituals may have decreased. As was mentioned above, a high percentage of 72% of the deposits consist of only one object. These small deposits consist of pots, pieces of fabric, bronze jewellery, and many other of the 42 material categories that play a role during this period. Many of these single deposits are either small offerings or deposits associated with rites of passage. That indicates that a considerable part of ritual practice was traditional. A shift away from the imagistic mode can thus be established.

11.4.2.4 Non-religious and religious rituals

During this period, instrument-special objects occur in only 6% of all deposits, a striking decline compared to the 23% of the previous period (table 11.14). In that respect it is notable that the number of pots in deposits strongly increased in this period, to 35% of all deposits (table 11.1). Most of these pots (79% of large and small pots, 100% of the miniatures that were introduced in this period) were deposited whole. Complete pots were most often deposited in houses (63%; fig. 11.58). This suggests an increase or a change in the practice of offering. Apparently, during this period instrument-special rituals gave way to patient-special rituals. The locations of the offerings in pots may indicate that the supernatural beings involved were the ancestors. Ancestor worship may not have been a new cult; the large number of whole pots, however, suggests that during this period, it changed and became more or less standardized, a practice in the doctrinal mode. The ancestors were probably called upon for protection and whenever help was needed, on behalf of individual people, families and their livestock.

11.4.2.5 Interpretative categories

Type 1: Rites of passage. This category mainly includes pieces of fabric (11% of all deposits; table B.4.b), besides jewellery. Deposits that can be identified as belonging to rites of passage make out 17% of all deposits from this period, more than in any other period. Several deposits of personal possessions in byres show that the lives of people and their animals were interrelated. A special deposit from this period is RS-1010, a small board decorated with woodcarving, which was deposited in the byre of house 15. This house had a tradition of deposits that relate the individual to their ancestral house. The deposit of the wooden board, a clear sample of individual skill, may have functioned in the same way as depositions of personal jewellery and clothes.

Type 2: The life cycle of houses. Two human burials were found inside houses; they were probably deposited when the house platforms were constructed and can be

Table 11.15 Overview of deposits and deposited objects per period (single deposits include deposits of >1 kg of sherds and deposits of wood). See also fig. 11.63.

Overview	MPROM			LPROM			EROM			MROM		
	n	%	%	n	%	%	n	%	%	n	%	%
Total objects	118	100		110	100		143	100		256	100	
Total deposits	71		100	71		100	73		100	135		100
Deposits of single objects	40	34	56	51	46	72	43	30	59	78	30	58
Deposits of more than one object	31		44	20		28	30		41	57		42
Number of objects in associations	78	66		59	54		100	70		178	70	
Average number of objects in composite deposits	2.5 ± 0.1*			3.0 ± 0.3			3.3 ± 0.3			3.1 ± 0.3**		

* ±: standard deviation of the mean. LPROM, EROM and MROM overlap.

** The deposit of 20 loom weights (K-58/59) is a clear outlier. Without it, this average number is 2.8 ± 0.14, and there is no overlap with EROM.

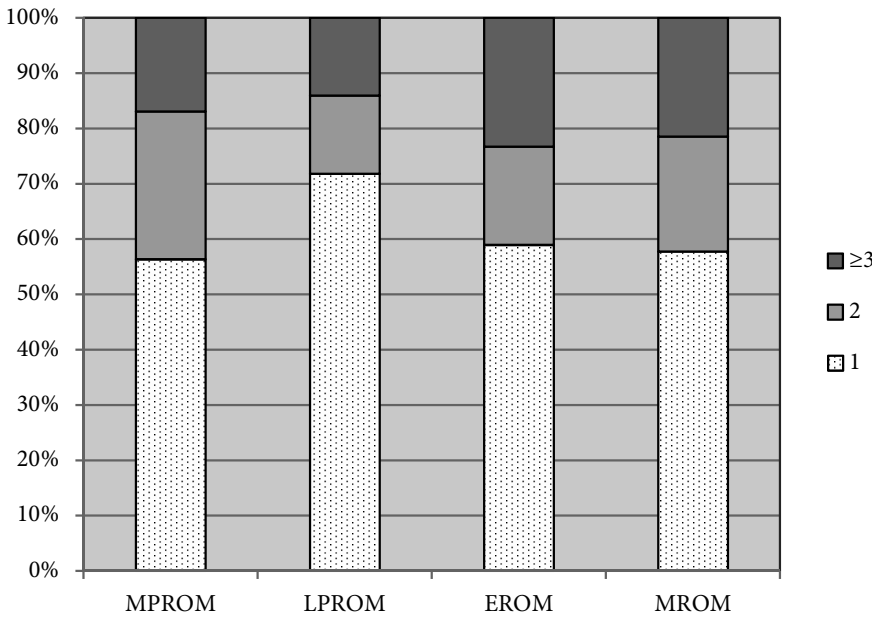


Fig. 11.63 Single and composite objects. Composite deposits are divided in deposits of two objects and of three or more objects, but the difference is not statistically significant. The large number of single objects in the late pre-Roman Iron Age compared to other periods is statistically significant (see Appendix B.3).

considered foundation deposits. Apart from deposits of human remains, only a small number of deposits can be related to the life cycle of houses. Abandonment deposits consisting of large wooden objects continue to be made in this period, in particular the wheels and posts of Q-1178, the spoked wheel Q-905, a yoke (Q-414) and a pile of planks and stakes (Q-433). Some large pottery deposits in pits may also be abandonment deposits.

Type 3: The household. The increasing number of offerings in pots that was established above goes hand in hand with an increasing importance of depositions with human remains to establish identities and territories. It also concurs with the growth of the population and of the settlement in this period. Several human burials are found in and near houses; the deposition of human bones continued. The human burials inside some of the new houses of this period suggest that the use of human remains to create ancestral homes became increasingly important.

Type 4: Technology. Rituals associated with technological processes are not identified, apart from the *streepband*-decoration that belongs to this period, and that may have an intrinsic meaning.

Type 5: The community. Changes in the lay-out of the settlement influenced ritual practice, but in this period, these changes occur on a household level. Ritual practice is introvert; the increase in the importance of the ancestors, their remains and their cult is concentrated within the house.

Type 6-9: not identified or not clear.

11.4.3 Early Roman Iron Age

The introduction of the Wierum-style at the end of the late pre-Roman Iron Age coincided with an even stronger population growth than before. The total number of pottery individuals from this period is more than twice as high as it was in the late pre-Roman Iron Age (table 11.2). The number of houses in the excavated area did not increase to the same degree. There may have been

six houses at most. There is no need to explain the growing population of this period by immigration, as has been suggested by Taayke⁷⁸, although immigration may have occurred in other parts of the Groningen terp region. In Ezinge, the 1st century AD peak in the size of the population can be considered the natural culmination of a trend that set in long before, in the pre-Roman Iron Age (see also 3.2.2).⁷⁹ Nevertheless, the increase in pottery surpasses the growth of the settlement itself considerably; the peak therefore still needs to be explained. The amount of pottery from the 1st century AD is considerably higher than it was in the late pre Roman Iron Age, even if we ignore all pottery from the northern trench and all the pottery that was part of ritual deposits, which both might bias the representativeness of the pottery assemblage (table 11.16). It is quite possible that the number of pots per household increased during this period, for instance because the number of people per household grew.

The growing population must have put pressure on social relationships. Ritual practice adapted to these circumstances in several ways. There may have been an increase in the number of ceremonial meals that ended in the destruction of pottery. It is quite possible that this broken pottery was not always identified as related to ritual, and that the categories b. and c. in table 11.16 are actually much larger.

11.4.3.1 *Material categories*

The number of material categories slightly decreased in this period, to 38. The largest category by far consists of large pots (24%), small pots make out 12%, deposits of over 1 kg of sherds 7% of all deposited objects (table B.2). Pottery deposits constitute 58% of all deposits. The percentage of pots that are deposited intact is much smaller than in any other period, only 45% of all complete pots (table 11.1). While the percentage of small pots remained stable compared to the previous period, the percentage of large pots increased to 24% of all deposited objects (fig. 11.4). The majority of these were deposited broken (fig. 11.3). Large and small pots and a large number of sherds are often associated (table B.4.c). The percentage of small pots in the total number of pots is relatively small, in the total pottery assemblage as well as in ritual deposits (tables 11.2 and 3, and fig. 11.5). Sherds with traces of deliberate breakage, paint and perforated bases occur in a higher percentage of deposits than in any other period (table 11.3).

Deposits of wooden objects decreased in this period; only two partial wheels were found. The meaning of a relatively large number of cattle metapodia cannot be assessed.

Human remains occur in the form of two inhumation burials and five single bones; two of these bones are worked, one, a mandible, shows traces of gnawing by a dog, supporting the evidence of excarnation with the aid of scavengers.

11.4.3.2 *Contexts*

There is a clear change in the ratio of deposits inside and outside houses, compared to the previous periods. Earlier, the majority of ritual depositions was made in houses (table 11.9 and fig. 11.56). In this period, the percentage of deposits outside increased to 53%, from 39% in the previous period. The number of deposited objects outside increased even more, from 42 to 59% (Appendix B.3.3). That implies that the number of composite deposits outside is much larger than inside, which is unusual compared to other periods (fig. 11.57). The average number of objects in deposits inside (table 11.10) is low (1.67), compared to the average number of objects in outside deposits (2.15). The number of pots deposited outside is also much larger than in houses (fig. 11.58). Pots constitute a major part of many large deposits outside houses.

Human remains, either inhumation burials or worked and unworked human bones, were all deposited outside houses during this period; despite the small number of human bones, this may represent a real change in depositional practice. An exemplary deposit of this period is L-1108, which was found some metres east of house 27. It consists of large parts of three large pots, two of which were burnt, two loom weights, one of them also burnt, and a shiny, worked, perforated human skull fragment that was probably used as an amulet. The deposit, which may have been an abandonment deposit associated with one of the phases of this house, included an inalienable object, a worked human bone, which made it into a perfect territorial marker.

A relatively large number of deposits were associated with filling ditches, in particular in the northern trench. They are reminiscent of the deposits in ditches in Englum, and may be interpreted in the same way, as deposits associate with establishing new territorial boundaries. Deposits during filling were also made in several rectangular pits and in a ditch near house 11. The earliest of these deposits, a flexed human burial, is from the end of the late pre-Roman Iron Age. All deposits near this house resemble each other in that they all include one or two worked or unworked foot bones of cattle or horse. These deposits are unique for this house, and may represent a family tradition.

11.4.3.3 *Diversity and the doctrinal and imagistic modes*

The number of material categories slightly decreased to 38. That number, together with the higher number of deposited objects of this period, might be taken to indi-

⁷⁸ Taayke 1996d, 191.

⁷⁹ Nieuwhof 2014b.

Table 11.16 The representativity of the settlement pottery assemblage. Subtraction of pottery that might cause a bias (b, c, d) from the total number of pottery individuals (a) still leaves a considerable peak in the early Roman Iron Age.

	MPROM	LPROM	EROM	MROM
a. total number of pottery in Ezinge (MNI)	610	443	1003	534
b. pots in the northern trench (MNI)	2	11	50	9
c. pots in deposits	10	38	58	69
d. pottery in large deposits of sherds (MNI)	95	81	164	181
a - (b+c+d)	503	313	731	275

cate a slightly lower degree of ritual variability. Despite the small percentage of pots that were deposited intact in this period, the actual number of whole pots remains about the same, compared to the previous period (table 11.1; fig. 11.3). Offering practice, which had developed into a rather standardized practice in the previous period, apparently did not change, but the importance and frequency of rituals that ended in the destruction and deposition of pottery, especially large pots, increased. It is likely that a competitive element was part of such rituals, and that they played a role in establishing social status. Such competitive rituals, performed to impress, must have been in the imagistic mode. It can be concluded that rituals in the doctrinal as well as in the imagistic mode played a role in this period.

11.4.3.4 Non-religious and religious rituals

There is a considerable increase in the number of instrument-special objects in this period; these are part of 16% of all deposits (table 11.14). They, for instance, occur near a threshold (Q-411), or near the wall of a house (O-876). The increase may indicate a change in the importance of the ancestors. Although offerings to the ancestors were still made, as may be indicated by the stable number of intact pots that must have served as containers, the ancestors may not have been considered the sole providers of protection and well-being anymore. People apparently relied on instrument-special objects more than in the late pre-Roman Iron Age.

The large deposits outside houses, which mainly consist of pottery, are probably of a primarily non-religious character. That is also the case for the human bones deposited outside houses. The location of these deposits underlines that they functioned in establishing family identity and social status.

11.4.3.5 Interpretative categories

Type 1: Rites of passage. Deposits of personal possessions that are connected to rites of passage still occur, but their number is reduced to only five (7% of all deposits), a considerable decline compared to the 17% of the previous period (table 11.5). A new element is the addition of a large pot to one of these deposits (M-1162).

Type 2: The life cycle of houses. Ritual practice associated with the life cycle of houses, continued, but in a slightly changed form. Foundation and building deposits were not identified, apart from two deposits near thresholds. Several deposits with sherds and household goods might be abandonment deposits. Abandonment deposits consisting of wheels still occurred, but they were less conspicuous than before; for instance, N-189a consists of only one segment of a disc wheel.

Type 3: The household. Many rituals are directly related to the household. The practice of burying offerings in pots, a continuation of the previous period, was meant to benefit the household or its members, for instance in times of crises. The deposition of human remains in association with the house gets a more extravert character: all deposits of human remains are found outside houses. Such rituals are not only concerned with the relationship with the ancestors, but also, rather explicitly, with the identity of families in the eyes of the community.

Type 4: Technology. The only evidence in Ezinge of a production place that ends its lifetime with a ritual, dates from the end of this period (O-862).

Type 5: The community. The changes of this period are probably partly related to the growth of the population and of the settlement. Just like in Englum, deposits of pottery in ditches may have sealed agreements on the location of new ditches, possibly as a conclusion of communal meals. The deposition of ancestral bones outside houses made it clear to anyone what belonged to a family's territory. The general shift to outside rituals must have played the same role. Outside rituals are part of the public space; they can be seen by everyone. The composite deposits outside houses of this period, in which a relatively large number of objects, especially pottery, were deposited (a relatively high average number of 3.3 objects per composite deposit, table 11.15), are far more ostentatious than the small inside rituals of the previous period. They must have functioned in an arena, in which family identities were established and maintained, and in which the available land was divided.

Type 6: Social contacts outside the settlement. Small pots and sherds dated to this period from elsewhere can be identified in several deposits from this and the following period (e.g. J-1176 in one of the later graves J-1343,

fig. 11.20). That shows that exchanged pots and possibly sherds were cherished possessions and heirlooms for quite a long time before they were finally deposited.

Type 7: Socio-political life. The extravert rituals on a household level contradict a centralized political organization and strong leadership during this period. They suggest that all households potentially had a say in matters that involved the community, and that these rituals were meant to strengthen the position of these different households in relation to each other.

Type 8: Liminal places? Only one deposit from this period, UV-1412, a small pot in a ditch, might be an offering in a possibly liminal place. All other deposits in ditches of this period are of a different character.

11.4.4 Middle Roman Iron Age

The number of houses and the amount of pottery indicate that the population diminished during the middle Roman Iron Age. The radial lay-out of the settlement remained intact.

Despite the diminishing population, the number of deposits increased to a striking number of 135 deposits, which include as many as 256 objects. The high number is not only caused by a new material category in depositional practice, *terra sigillata* sherds. Without TS sherds, the number of deposits is still 112, involving 206 objects, much more than in previous periods (table B.2). The frequency of depositional practice and the number of deposits per household clearly increased during this period.

11.4.4.1 Material categories

The number of material categories increased in this period to 45, which is not surprising considering the large number of deposits and deposited objects. TS is the largest material category with 20% of deposited objects. This high percentage is undoubtedly biased by the attention paid to this ware during the excavation. From the materials in the archaeological record, more TS sherds must have been identified and collected than other, less conspicuous materials. Yet, TS certainly played a role in ritual practice. Loom weights also occur in a high percentage (14%), partly because of one large deposit of 20 loom weights (K-58/59). Small pots (12%) and large pots (10%) take 3rd and 4th place as the most frequently occurring objects in deposits (table B.2). If we ignore the entire category of TS, and count the large loom weight deposit as one, small and large pots and loom weights are still the largest categories.

The deposition of human bones seems to have come to an end in the 2nd century AD. The last deposit concerns of a handle made of human bone (L-1104). Inhumation was still not common use in this period so excarnation may still have been practiced, but perhaps the bones no longer functioned as inalienable possessions or in the creation of supernatural ancestors.

11.4.4.2 Contexts

In this period, the outside space was no longer an arena where rivalling households contested with each other as in the previous periods. Depositional practice was again facing inwards, just like in the pre-Roman Iron Age. Although the number of outside deposits is still larger than the number of inside deposits, the number of deposited objects outside is smaller (table 11.9; fig. 11.56; Appendix B.3.3). The average numbers of objects per deposit inside and outside is exactly the reverse of the previous period: 2.15 inside vs 1.67 outside (table 11.10). The number of composite deposits outside decreased after the early Roman Iron Age to 44% (fig. 11.57). Most pots (64%) were deposited inside, just like during the late pre-Roman Iron Age (fig. 11.58).

11.4.4.3 Diversity and the doctrinal and imagistic modes

The long list of ritual deposits from this period (table B.1) makes a rather homogeneous impression, despite the large number of different material categories that play a role. Similar deposits frequently occur. Many of them include small, large or miniature pots, ceramic artefacts or one or several instrument-special objects. Although ritual practice was still diverse in this period, as can be inferred from the variability in associated objects (table B.4.d), it is clearly far less diverse than in the middle pre-Roman Iron Age, when habitation started in Ezinge. In the middle Roman Iron Age, rituals were clearly no longer one-off events, built from scratch; they were rather composed of elements with crystallized meanings. That suggests that a large part of ritual practice was in the doctrinal mode during this period.

Some form of standardization may also have occurred in burial practice. Four inhumations belong to this period. They were all located outside houses. Two of them were found side by side, in supine position and with similar orientation. Two others were both located some metres west of contemporary houses. In contrast to earlier inhumation burials, which are found in different locations and positions, the similarities between these burials suggest that burial practice became more uniform. They may forebode the practice of burial in cemeteries, which sets in at the end of the Roman Iron Age.

11.4.4.4 Non-religious and religious rituals

The largest material category in depositional practice of this period is *terra sigillata*. TS sherds occur in 26% of all deposits (table B.4.d). TS probably was a category of objects with a symbolical meaning. The pendants and playing counters that were made of TS indicate that this ware had a special meaning related to protection and luck. TS sherds are therefore interpreted as instrument-special objects. Deposits that include instrument-special objects are more numerous than in any other period, due to the high percentage of TS sherds; they make out 31%

of all deposits (table 11.14). Such deposits are most often found near houses. A household with a preference for instrument-special objects is house 30. Deposits of this type near this house include many single TS sherds, a cuttlebone and a set of animal foot bones.

Offering was also an important ritual practice during this period. An example is house 11, in which eleven deposits were found, including at least seven pots that were deposited complete and that were probably used to make offerings. Although instrument-special objects also occur, patient-special rituals were apparently more important to this household. This practice is not restricted to house 11. The many intact pots of this period (55% of all pots; table 11.1) demonstrate that the practice of offering was a general practice. Especially small pots and miniatures were used for that purpose.

It is not certain that the ancestors were still important supernatural beings in this period and the intended receivers of the offerings. Ancestral bones ceased to be used in ritual deposition. The ancestors may have gradually changed into house deities or supernatural beings with a more general protective character. These gradual Roman Iron Age changes might be influenced by contacts with the Roman Empire.

The large number of deposits with either intact pots or instrument-special objects suggests that the supernatural became increasingly important in this period. Even deposits that belonged to rites of passage, which in earlier period consisted of no more than pieces of fabric, combs or jewellery, changed in this period; they now included instrument-special objects (TS sherds and flint; table 11.5).

Abandonment deposits may still be non-religious rituals during this period. Examples are the loom weights and rotary quern that were left in house 30 (level K), or the loom weights, potsherds and spit rest that were left near the hearth of house 29 (level H). Still, a miniature pot here suggests that a small offering was part of it.

11.4.4.5 Interpretative categories

Type 1: Rites of passage. As was mentioned above, the character of rites of passage has changed (table 11.5). Some deposits are part of composite deposits that also include pottery and ceramic artefacts (L-1096; K-1091). Five of the seven deposits of this type include TS sherds or a piece of flint. Instrument-special objects were possibly added to these deposits to bring luck to the initiate in his or her new life stage, which implies that rites of separation and of incorporation were mingled. Pieces of fabric are no longer found, possibly due to preservation conditions.

Type 2: The life cycle of houses. Rituals associated with the life cycle of houses in this period are in particular associated with the abandonment of houses. Besides the deposits in the houses 29 (level H) and 30 (level K)

mentioned above, part of the large deposits of pottery and other household goods probably belong to this category. Several deposits in hearths of this period can also be interpreted as abandonment deposits. Three of them include a large pot.

Type 3: The household. As in the previous periods, many of the small deposits in and near houses were probably offerings for the benefit of the household or its members.

Type 4: not identified.

Type 5: The community. Deposits in ditches, which are probably associated with establishing new boundaries, still occur in this period, but less frequently than in the early Roman Iron Age. Rituals associated with territorial claims and with establishing family identity apparently became less urgent. The absence of human bones underlines that depositional practice was less concerned with establishing identity than before.

Type 6: Social contacts outside the settlement. Several ritual deposits of this period contain small pots and sherds from elsewhere (G-943, M-1166, M-1168, J-1176). These deposits underline the value that was ascribed to such artefacts, as memorabilia and as heirlooms.

A process of Romanization does not seem to have taken place. The TS sherds did come from the Roman world, but they were used in a way that was not related to their original function; they had acquired an entirely different meaning.

Type 7: Ritual practice associated with leadership. It was argued above that a larger part of ritual practice in this period was in the doctrinal mode. A higher degree of socio-political organization than before may have accompanied these changes in ritual practice.

Ezinge is one of a few settlements that were not abandoned at the end of the Roman Iron Age. This in itself might be an indication that it was a settlement with a central function. A leader's residence cannot be identified but the changes in ritual practice of this period, compared to the early Roman Iron Age, might be taken to indicate that a leading family had emerged at the end of that period. In the middle Roman Iron Age, the outside area was no longer an arena, in which family identity and status were contested. The dust had apparently settled, and ritual practice was no longer a public affair.

A tangible indication of the central function of the terp in the middle Roman Iron Age might be the large percentage of small pots in the pottery assemblage, which outreaches the percentage of small pots in other settlements considerably. The small pots of this period were used as beakers; they may have played a role in communal meals with a socio-political character. Such meals were probably more common in a central place than in ordinary settlements. However, that constitutes the only material evidence that Ezinge was a terp with a supra-local status.

11.5 Conclusions

Ritual practice in Ezinge was clearly not an isolated phenomenon, but functioned in a socio-cultural network, in which similar practices were performed. Similar ritual practices can be expected on nearby terps, such as Englum. Since both settlements were only 2 km apart, the inhabitants of both terps must have shared not only the same natural environment, but also the same socio-cultural environment. People living there must have known each other. They married amongst each other, visited each other, took part in each other's feasts and ceremonies, and had similar lifestyles. It is therefore justified to take the results of both case studies as complementary. The deposit of human skulls in Englum helped to understand the single bone deposits in Ezinge, while the ditch deposits from Ezinge supported the interpretation of deposits in ditches in Englum. The skull deposits also has some possibly analogous finds in burials of humans and a dog in house platforms of the pre-Roman Iron Age in Ezinge. It would not be wise, however, to take the conclusions made in these two case-studies as the final word on ritual practice in the entire terp region. The variability of ritual practice, even within these two settlements, is too large to allow for easy generalizations.

Overseeing all finds and contexts from Ezinge, it is possible to identify as many as 350 finds assemblages as the remains of rituals. These deposits include 627 objects. Remains of rituals were located in the centre of the terp, inside and near houses, or further from the centre of the terp, especially in ditches. The vast majority of finds assemblages must have belonged to specific households. Just like in Englum, finds that were identified as the remains of rituals were usually assemblages or single finds of rather inconspicuous objects, especially pottery and ceramic, bone, stone or wooden artefacts. Complete or partial animals and human remains were used in depositional practice in both Englum and Ezinge. However, in Ezinge human and animal remains were not collected systematically during the excavation; the proportion of human and animal remains in ritual practice in Ezinge is therefore biased.

While the small number of well documented finds from Englum allows a qualitative approach, the large number of deposits and deposited objects in Ezinge enables a quantitative comparison. In both cases, it appeared possible to interpret these ritual deposits on the basis of the deposited objects and their contexts. The finds can be classified in different ways: according to the ways they were deposited, according to the involvement of different social participants, as religious or non-religious rituals, as rituals in the imagistic or doctrinal modes, or, finally, according to interpretative categories: rituals primarily concerning individual household members, houses, households, production processes, community life, contacts outside the settlement, socio-political life, and cos-

mological views. These classifications all reveal different aspects of ritual practice.

In general, too much detail in the analysis was avoided, especially in the case of Ezinge, because that would stress the reliability of the data too much. Nevertheless, the data sometimes allow of rather far-reaching interpretations of specific deposits and deposited objects. It is possible to assess the use of pottery in relation to offerings and the supernatural beings they were intended for, and the use of instrument-special ('magical') objects. Depositions that were made as part of rites of passage of people, possibly animals, and houses, or rituals that were associated with household territories and family identity, can also be identified.

Other types of ritual are more elusive or had to remain in the dark. That is, for example, the case for seasonal rituals or for rituals that were related to leadership. A leader's residence or an assembly hall was not identified in Ezinge or in Englum. The evidence indicates that ceremonial meals did occur, but whether these meals were organized by specific households or provided by a leader, cannot be assessed. In Englum, the 1st century AD deposits near an older grave suggest that leadership or status were contested at the time. The rituals and the deposits of human bones outside houses in Ezinge also indicate competition in this period.

Some aspects of ritual practice are highlighted below.

11.5.1 Human remains

In Ezinge, eleven burials, ten deposits of single bones, and a possible cremation date from the pre-Roman and Roman Iron Age. In Englum, two inhumation burial and four deposits of single bones are from this period. Almost all burials were single, in line with the general image of burial ritual in the coastal area. As far as can be established, bodies were in supine or crouched position, in one case tightly flexed. There does not seem to be a pattern in orientation of the burials. Possible grave goods were only found in three cases. The tightly flexed skeleton, dated to the late pre-Roman Iron Age, was found with various objects in a rectangular pit; a body in supine position from the same period was found with a forked branch. A small, decorated pot, which was already antique at the time and can be interpreted as a family heirloom (J-1176), was found in a grave from the middle Roman Iron Age.

The earliest inhumation burials, dated to the middle pre-Roman Iron Age, were not found in a terp layer, but in the salt marsh. In Englum, the early burial A.3 was found about 60 m south of contemporary habitation platforms; in Ezinge, the earliest burial (UV-1538) was found closer to the early settlement, ca. 10 metres from the nearest house.

All later burials were probably associated with houses. Two of them, both from the late pre-Roman Iron

Age, were even buried in houses. The number of single burials is too small to represent the entire population of these terp settlements. Inhumation was clearly not the only type of burial ritual. It cannot be established why the people whose skeletons were found, were chosen to be interred. The location of the burials suggests that they were group members rather than outsiders. In that case, these burials probably functioned in linking families to their grounds.

In Ezinge, the location of inhumations from the middle Roman Iron Age seems to show a new regularity, but the number of burials is small. Two of them were found close to the west wall of contemporary houses; two others, both with the same supine position and orientation, were found next to each other. This pair of graves anticipates a new trend that started in the 3rd century AD; mixed cemeteries appear in this period in the coastal area of the northern Netherlands and Lower-Saxony (see 5.5).

The majority of single human bones were skulls and parts of skulls, but other bones also occur. As far as sex can be established, it is clear that human remains belonged to men as well as women. Apparently, men and women were equal in death. Single bones must have been collected after a process of excarnation was completed. They may be considered inalienable possessions, used in secondary rituals that functioned in establishing and maintaining family identities, just like the inhumations in and near houses. Some bones, including a humerus, were worked; all worked bones are dated to a short period, from the end of the 1st century BC to the early 2nd century AD. They probably constitute a special category of inalienable possessions.

A partial inhumation from the middle pre-Roman Iron Age and a small number of human bones from both Englum and Ezinge with marks of dog teeth indicate that bones could be collected from inhumed or from exposed corpses. There are, however, no partial skeletons later than the middle pre-Roman Iron Age. While inhumation was exceptional and there is possible evidence of only one cremation (or of burning single bones), excarnation may well have been the common burial rite, until inhumation and cremation burial in cemeteries replaced older rites. However, the find of younger skulls in Ezinge suggests that the use of single bones was not entirely abandoned.

In the next chapter, these conclusions will be tested against the results of an inventory of human remains from the entire terp region.

11.5.2 The supernatural

Many rituals are not necessarily religious, although the supernatural may somehow be involved. That is, for example, the case for rites of passage, and for rituals associated with family identity, with the life cycle of houses, or with establishing territorial boundaries. Rituals that are foremost religious since they are aimed at or use su-

pernatural powers occur in two identifiable forms, in Englum as well as in Ezinge: patient-special and instrument-special rituals. Patient-special rituals that are identifiable in the archaeological record are offerings, meant to influence the supernatural. Articulated animal parts, cattle skulls, complete pots or pots with perforated bases and many of the deposited small artefacts may have been offerings.

Instrument-special rituals are formally religious, although they do not involve a supernatural being but rather a powerful object that was expected to do some good when deposited. Objects that were, hypothetically, identified as instrument-special objects usually do not have a practical function. They may be luck-bringing objects such as amulets, playing pieces and *terra sigillata* sherds, or strange objects, which were considered powerful for their shape, colour or origin. Examples are a horse enterolith, fossils or pieces of flint and amber.

There are differences in the emphasis on either patient-special or instrument-special rituals over time, as is shown by fluctuations in the finds from Ezinge. Instrument-special objects are an important category in the middle pre-Roman Iron Age. In the late pre-Roman Iron Age, however, patient-special rituals become numerous, apparently at the cost of instrument-special rituals. The finds of this period, especially the many small, whole pots, suggest that people were putting their faith in supernatural beings in this period, rather than forcing their fortune by using instrument-special objects. The many small offerings associated with houses go hand in hand with the increasing use of human remains in houses. That suggests that the supernatural beings that were most important during this period, were the ancestors. The act of burying and the frequency of the deposits may be taken to indicate that these offerings were not meant to commemorate the deceased, but were part of a true ancestor cult.

During the early Roman Iron Age, small offerings in houses remain important, but the percentage of instrument-special objects increased, and during the middle Roman Iron Age, both instrument-special and patient-special deposits frequently occur. This coincides with the end of the tradition of depositing human bones in and near houses in the 2nd century AD, and it may indicate a change in the perception of the supernatural. The ancestors of previous periods may have gradually depersonalized and turned into house deities of a more general kind.

It is conspicuous that pots used in ritual are often damaged or old pots, or sloppy pots that possibly had been made quickly for the occasion. Apparently, any old pot could do as a container for offerings. Moreover, pots used in offerings are often small or miniature pots. The use of small pots indicates that the offerings themselves were small. The supernatural beings that were to be influenced by these offerings apparently did not expect large

offerings and did not care about the containers. That may be taken as an indication that they were supposed to be able to read people's minds and knew their intentions: the type of supernatural beings that are most important to people. Such supernatural beings need frequent ritual attention and proper behaviour, as was discussed in chapter 8.4.1.

It is likely that the ancestors were of this type. Offerings in pots were usually buried in or near houses, in the same layer where the remains of the dead, either inhumations or single bones, were deposited. These layers constituted ancestral grounds. The use of pots with perforated bases and sometimes inverted pots indicates that the ancestors were thought to reside beneath the earth's surface.

The ancestors (and later possibly more general house deities) were probably not the only supernatural beings in the cosmology of the terp inhabitants. Offerings to a deity can be inferred from a small number of offerings in liminal places: a creek in Englum (a partial horse, A.6) and ditches in Englum and Ezinge (small containers, A.11a; UV-1412 and 1526). Their location in drainage ditches and a creek open to the tides might indicate that this deity was occupied with the ambiguous tidal zone, which was of crucial importance in the terp region.

11.5.3 Meaningful objects and identity

Deliberate fragmentation of pottery, which may be part of different kinds of rituals, can sometimes be demonstrated, in Englum as well as in Ezinge. Fragmentation as part of enchainment rituals (see chapter 8.3.2) is apparent from several foreign sherds that were part of ritual deposits. These sherds may have been acquired during visits to settlements in other regions, or were exchanged with visitors. They served as memorabilia of events or people, and must have been part of collections of meaningful objects before they were deposited. It is likely that not only foreign sherds, which can easily be identified, but also sherds from nearby settlements that cannot so easily be distinguished from local wares, could serve as meaningful memorabilia. Apart from meaningful sherds, other objects must have been part of family collections, such as decorated small pots that were acquired by gift exchange, a Bronze Age hammer axe and other curious objects, and worked and unworked bones of deceased family members. The latter must have been inalienable possessions, which were directly connected to a family's ancestry, and to the values and traditions it represented. All or part of these objects finally ended up in ritual deposits.

The collection and deposition of such meaningful objects can be understood in the light of the identity of families and households. Rituals aimed at establishing and maintaining family identities, negotiations on family territories, the use of human bones and burials in and near houses, the rituals aimed at ancestors, and the use of heir-

looms and other meaningful objects in deposits indicates that the household or the family played a central role in social organization. In Englum as well as Ezinge, such rituals were of major importance in the 1st century AD, when the population had reached a peak and the available land had become scarce. Lives of individual people in the first place revolved around the prosperity and continuation of the household. By marriages, family ties were created with places faraway and nearby. Membership of a family and family ties perhaps determined the identity of the individual more than other identities such as being a resident of a specific settlement, region or tribe. Ethnic identity may only have played a minor role in this period.

11.5.4 Ritual practitioners

In archaeological literature, rituals often seem to be restricted to weapon deposits, fertility offerings or building sacrifices, but ritual practice in an ordinary settlement appears to be much more varied. Rituals occurred on the levels of the individual, the household and the community. Some of these rituals may have been performed by ritual specialists or specific family members. However, it is highly unlikely that ritual practice in communities such as Englum and Ezinge was entirely in the hands of ritual specialists, community leaders, or heads of families. Ordinary men and women probably took an active part in ritual practice, not only in individual rites of passage, but also in other types of ritual.

The role of women is often ignored when ritual practice is concerned⁸⁰, but many of the rituals of which the remains were identified were probably performed by women, at least if we take a traditional view on role patterns for granted. If we accept that textile and pottery production and the preparation of food were women's work, it might be argued that many depositions of spindle whorls, loom weights and pottery were connected to the lives of women. It seems likely that a considerable part of other ritual depositions was also made by women, including the many food offerings and other rituals that undoubtedly concerned the entire household. In contacts with other communities, women also played an important role. They made the pottery that was used in gift exchange, and that was broken and divided as part of social and perhaps socio-political events. They also were marriage partners, who took their skills, their cultural baggage, and their ritual traditions with them when they came to live with their new husbands when they married. Thus, they may have had a considerable influence on social and cultural life.

80 The passive role that is often ascribed to women in historical and archaeological research, has earlier been challenged by Conkey & Spector (1984) and by Effros (2004).

11.5.5 Tradition and change

Ritual practice was not constant over time. During the research period, ritual practice changed considerably, starting in the middle pre-Roman Iron Age with infrequently performed, one-off rituals that seem to have been assembled from scratch, and ending in the middle Roman Iron Age, with frequently performed rituals that consisted of elements with crystallized meanings.

The variability of ritual deposits in all periods, even the middle Roman Iron Age, may be taken as an indication that rules were not very important in ritual practice, and that many rituals were often more or less improvised, albeit based on elements that occur in more than one ritual. Some types of ritual, however, were often repeated in more or less the same way and can be considered traditional rituals. Abandonment deposits consisting of piles of wood in the pre-Roman Iron Age, or of destroyed household goods in all periods, were such traditional rituals. That also applies to the depositions of personal possessions that were part of rites of passage, and to the use of small pots to make offerings. At the end of the late pre-Roman Iron Age, when the population increase made it necessary to establish and reconsider household territories, rituals that included the deposition of pottery in ditches were introduced. Such depositions may have concluded communal meals, in which new boundaries were established. At the end of the early Roman Iron Age, deposits in ditches had become customary. In Englum as well as Ezinge, they still occur in the middle Roman Iron Age, when the population had already diminished and land was no longer scarce. At the end of the Roman Iron Age, human burial became more uniform. That shows that rituals in the imagistic and the doctrinal modes co-existed in all periods, although the ratio between these two types probably shifted towards a larger share of rituals in the doctrinal mode during the middle Roman Iron Age.

Changes in ritual practice may come from internal discussions and decisions on the effectiveness of certain rituals and ritual elements, from circumstances such as population growth or changes in the landscape, or from external influences. Population growth certainly plays a role in Englum and Ezinge. External influences may come from contacts with other communities nearby and faraway, of which we have evidence in the form of exchanged pottery. Not only the material culture, but also ritual practice must have been influenced by practices elsewhere. An important external factor was the influence of the Roman Empire, which not only caused a rather limited influx of exotic objects, but possibly also influenced ritual practice. This influence possibly led to a transformation of the traditional ancestors into household deities. It may also have been one of the causes that the practice of depositing human bones in and near houses came to an end.

The change in the majority of ritual practice from the imagistic to the doctrinal mode probably went hand in hand with a change in social organization. Englum and Ezinge started as small-scale communities with a low degree of social organization. In the course of time, leading families probably arose from the concurrent households. The primary cause undoubtedly was the strongly increasing population already in the late pre-Roman Iron Age. The influence of the Roman Empire can only have increased the differences in status, since the Romans aimed their foreign policy at leading families and favoured them.

11.5.6 Comparisons

A superficial comparison with other settlements, as described in chapter 5, shows that some types of ritual, for instance animal burials or pottery deposits in pits, also occurred elsewhere, and that the same types of objects and animals were used everywhere in the Netherlands and in northwestern Germany. However, if we look closer, these areas seem to resemble each other especially in the diversity of ritual practice. From the case-study of Ezinge, it is clear that differences in ritual practice not only occur between settlements or regions, but even between neighbouring households.

There are important differences in the meaning of rituals, which cannot be traced if only types of objects or contexts are examined. Careful and detailed comparison is necessary to establish similarities and differences. For instance, in northern Germany and Denmark the number of deposits inside houses increased during the research period, as was mentioned in chapter 5.2.1; it is thought to reflect the increasing importance of ritual practice aimed at the household over time.⁸¹ In Ezinge, a different trend can be observed, from inside to outside and back again, with a conspicuous peak in depositional practice outside houses during the early Roman Iron Age. In that period, identities and territories were contested in the public space. These differences are related to differences in habitation history. It is clear that ritual practice cannot be examined in isolation, ignoring other aspects of life.

The case studies of Englum and Ezinge are concerned with identifying and interpreting the evidence of ritual practice in two terp settlements. The next chapter has an entirely different approach. It will examine the evidence on burial customs and the use of human remains in the entire terp region of the northern Netherlands, and test whether the interpretations made in the two case studies of Englum and Ezinge are generally applicable in this region.

⁸¹ Beilke-Voigt 2007, 91ff.

12

Burials and bones: remains of humans (and of dogs) in the terp region

The previous two chapters were case studies concerned with the finds from two different terp settlements: Englum and Ezinge. The human remains found there were interpreted as part of ritual and depositional practice. Burial customs were investigated, but they were not compared systematically to other finds in other settlements. The present chapter provides a different perspective. It is not a case study on ritual practice in a settlement; this chapter is specifically aimed at examining burial customs in the terp region during the research period in general. At its basis is an inventory of all finds of human remains from the entire terp region, including the finds of Englum and Ezinge. The purpose is twofold: to test the general applicability of the conclusions on burial customs and the use of human remains made in the case study, and to investigate burial customs in the terp region in general.

This chapter will start with some important aspects of the finds in the catalogue, which need to be discussed before the results can be presented: the way human remains were collected in the past, which influence the representativeness of the dataset, and the uncertainties concerning dating.

In the main part of this chapter (12.5), the finds recorded in the inventory will be discussed. Dogs play a prominent role in some of these sections. An overview of burials customs and of uses of human remains in the terp region during the research period will be presented in a concluding section (12.6).

“There are no universal interpretations of how the corpse is used in different societies by different people – each investigation must work contextually at recovering past attitudes and understandings.” (Mike Parker Pearson 2003, 71)

12.1 Introduction

One of the initial research questions of this study concerns the ways the dead were dealt with in the terp region during the research period. Because of the scarcity of the evidence, burial customs during the research period were not really known. That was one of the reasons that it was difficult to interpret the skull deposit of Englum.

An important question to be answered when human remains are concerned is: did people in the past really care about their dead, or did they consider corpses as just an ordinary kind of waste, which did not need further attention? Were the majority of the dead just left to rot or to be scavenged somewhere out of indifference? Or, were these people so rational that immediately after someone's death, they would be able to dispose of a corpse as rubbish, because they could instantly accept the idea that this body was no longer the person they knew? These or similar arguments are sometimes heard in informal discussions to explain loose skeletal parts, but such indifference or rationalism would be highly unlikely from an anthropological and psychological point of view. Ethnographic evidence indicates that all human groups have and have

had some kind of funerary rite.¹ Funerary rites are necessary for the living; apart from practical considerations concerning the potentially contagious dead body, they enable those who are staying behind to accept that someone they knew or loved is no longer with them, and to continue with their lives. Deceased members of one's own group will be ritually disposed of, and not be treated as garbage. Only non-group members or enemies may be excluded from customary funerary practices.

As was discussed in chapter 4.4.1, inhumations in the terp region from the research period are always single graves, and their number is so small that it is unlikely that inhumation was the most common burial customs. Although the number of cremations in the terp region is still smaller, many researchers assume that cremation was the most common burial custom here. Cremated bones without container would be nearly impossible to find in the salt marsh, so this argument cannot be refuted. However, there is still another type of evidence, which has not received much attention yet: the single human bones that have been found in many terp excavations. As was discussed in chapter 7.3.1, mortuary rites may take

¹ Boyer 2001, 207.

many forms, from very simple to complex. Not only are there other ways of dealing with the dead besides inhumation and cremation, but they can also be combined, which may result in many different types of human remains (see fig. 7.2). That is why not only inhumations and cremations, but also single bones should be included in a study on burial customs. Closer examination of the single bones from the terp region might lead to unexpected discoveries in this field.

The case studies on the excavations in Englum and Ezinge resulted in some important insights in the ways people dealt with dead. The buried human remains and the worked skeletal parts showed that dead people were not considered waste here. Indifference or extreme rationalism is clearly not the solution to the problem of the missing graves in the terp region.

The eight skulls found in Englum showed characteristics such as missing mandibles and missing teeth, which indicate that they were collected after a process of excarnation. They had probably been part of a collection of meaningful objects for some time, before they were deposited in a new house platform. This deposit also showed that single bones do not exclusively consist of skulls or skull parts. Postcranial single bones regularly occur, also in the deposit of the eight skulls. That underlines that the skulls did not come from headhunting, but rather from a specific excarnation process that left skulls as well as a small, accidental selection of other bones. It was argued that an excarnation process in which scavengers, especially dogs, participated, is the most likely form of excarnation that was practiced. In Englum and Ezinge, a small number of bones with traces of dog gnawing occurred.

Inhumation graves, usually without grave goods, and single bones were found in both terps. Cremated bones occurred once, in a burnt layer between houses in Ezinge. These human remains not only represent burial customs, as a way of disposing of the dead. They also had acquired other meanings and were used in secondary rituals. Human remains must have played an important role in ritual practice, not only in mortuary rituals. The majority of human remains were certainly or probably associated with houses or land. They were interpreted as functioning in the realm of household and family identity. Burial of family members or of single bones probably made houses, yards and land into ancestral grounds.

The different types of transformation of the body after death, either unseen by decomposition after inhumation, quickly and clean by cremation, or strikingly visible by excarnation, may be linked to different beliefs about the body, the soul or the afterlife², but such beliefs are difficult to assess from the archaeological record. The different ages and sex of the skulls in the large deposit

of Englum suggests that characteristics of the individual such as sex, age, or status, did not play a role in the world of the dead. The dead were rather thought to become part of an ancestor collective, which was passively and actively connected to the living. Offerings near the buried bones indicate that the dead were not just dead relatives, but supernatural ancestors, which were supposed to provide help and protection. There does not seem to be a difference between inhumations and single bones in that respect. The differences between various mortuary practices in the terp region is possibly not so much related to beliefs, as to occasion (e.g., someone died around the time a new house was built and was buried in the house platform rather than excarnated) and possibly to origin and personal preference, for instance in case of cremations, as will be argued below.

The Englum and Ezinge data are consistent with the proposed interpretation, but both terps are practically neighbours and the data might represent customs that were practiced in a small region only. To test the applicability of this interpretation and to better understand burial customs in the terp region in general, the scope of the study of human remains is extended to the wider terp region in this chapter. At its basis is an inventory of all recorded human remains that were found in and near terps in the provinces of Friesland and Groningen, either during commercial levelling or during archaeological research.

In the catalogue that is the result of this inventory (Appendix C), all known finds of human remains were recorded that certainly or probably date from the research period of this study. Finds from unpublished excavations were included in the inventory when information was available (e.g., Winsum-Bruggeburen, Tritsum). The information comes from many different sources and is diverse, ranging from records of single bones of which only the name of the find location is more or less known, to fully published, extensive finds assemblages and contexts. Context information is often lacking. A small number of Migration Period and early-medieval finds were included in the inventory for comparative reasons. Also included were finds that have been dated incorrectly in earlier publications (e.g., Dokkum-Drie Terpen, cat. 22).

Before the results of the inventory can be presented and discussed, in section 12.5, some of the problems with the data should be addressed. Firstly, the data cannot be valued without knowing and understanding how human remains were collected in the past. Secondly, the dates of the finds need to be accounted for.

12.2 The collection of human remains in the past

The finds recorded in the catalogue of human remains come from a long period of collecting, under various cir-

² Rebay-Salisbury 2010.

cumstances. In order to assess the representativeness of the recorded finds, some notes on the collection of human remains in the past need to be made, in addition to what has already been described in chapter 2.2.

During the phase of commercial quarrying, in the 19th and first half of the 20th century, human remains just hindered digging. Human remains were usually treated with little care. Bones were thrown away, or discarded by burying them in pits; such pits were later excavated in Wommels-Westerlittens and in Lutjelollum.³

At best, the skulls were collected, with a vague description of the location of the find. These skulls were the material of early anthropological research, which was aimed at identifying racial differences. Postcranial human bones were usually discarded; racial characteristics were deduced from skull proportions. At the end of the 19th century, dr. Arend Folmer, a physician from the Groningen village of Eenrum and member of the 'Committee for the Ethnology of the Netherlands,' examined and measured many skulls that were found during quarrying terps, to identify different ethnic groups and their origins.⁴ The validity of this approach was generally acknowledged at the time. Although the pioneer of terp research Van Giffen did not take a real interest in skull measurements, he sometimes noted the shape of skulls from terps; the only published burial from Ezinge, for example, was described as 'not surprisingly ... a typical dolichocephalic representative' of the early terp inhabitants.⁵ Skull proportions were taken as an indication for race and ethnic identity, and these came to be related to specific habitation periods of the salt marsh region.⁶

In general, the dates that were attributed to these skulls were too young. The alleged date of skulls was often based on their context in terp layers that supposedly originated from specific periods; they were, for example, reported to be found 'under the black' or 'in the yellow clay'.⁷ It has since become clear that the colour and structure of layers in a terp does not provide any evidence of their date. Moreover, for a long time, it was not acknowledged that habitation of the terp region had already started in the beginning of the middle pre-Roman Iron Age. As from the early 20th century, pottery with geometric decoration served as a guide for an early date, since this kind of decoration was thought to be influenced by the Hallstatt culture.⁸

The racial characteristics that were ascribed to the human skulls found in terps were thus based on measurements of incorrectly dated skulls. These characteristics

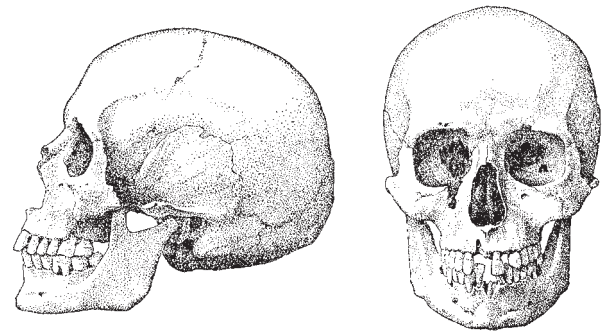


Fig. 12.1 Skull from Midlum (App. C, cat. 72a), the prototype of type Midlum as defined by Huizinga, which he considered typical for the population of the western part of Friesland before the Migration Period. From Huizinga 1954, figs. 5 and 6.

were based on ideas about human races that have since been abandoned for political reasons; they were part of an ideology on race that was responsible for many black pages in the book of 20th century history. From a scientific point of view, skull measurements and their results are also highly questionable. It has become clear that the variety in skull proportions within human populations is much larger than was assumed by the early anthropologists, and that the concept of race is questionable in itself.⁹ Moreover, ethnic identity is not rooted in the bones.

Despite these major flaws, skull types were still thought of interest in the 1950's; then, the anthropologist Huizinga identified the *type Midlum* (fig. 12.1), a skull type that was thought to be characteristic of the early terp inhabitants.¹⁰ Huizinga was aware of the problems with dating. To overcome this problem, he selected a small number of skulls from a specific area, the western part of the province of Friesland, that he thought dated from before the early Middle Ages (skulls from Midlum, Engelum-village, Wommels-Westerlittens and later Wijaldum¹¹, see Appendix C). All these skulls shared some characteristics, which led to the identification of type Midlum. The human bones found in Wommels-Westerlittens, however, came from pits that probably had been dug to dispose of them during commercial quarrying, so their date is actually uncertain.¹² The skulls of the Midlum-type were compared to the skulls in the collection of the Frisian Museum¹³, and in particular to another skull from the same area, found in Lutjelollum, which in 1954 was considered to be of 5th century date (it is actually younger, see below). Skulls of type Midlum differed considerably from the skull of Lutjelollum and other skulls in the Frisian Museum, which were in general assumed to be dated to the Migration Period or early

3 Wommels-Westerlittens: Halbertsma 1954; Lutjelollum (early-medieval remains): Gerrets & Prangma 2003, 12.

4 Folmer 1881; 1883; 1885; 1887; 1890. Cf. Knol 1986a; Jensma 2003.

5 Fig. 11.50, cat. 111d, 1926/VII-170; Van Giffen 1928a, 44.

6 Jensma 2003.

7 Cf. Knol 1991, 75.

8 Cf. Taayke 1996d, 189.

9 Livingstone 1962.

10 Huizinga 1954.

11 Huizinga 1955.

12 Halbertsma 1954, 45-46.

13 Cf. Knol & Uytterschaut 2010.

Middle Ages. Radiocarbon dates of several skulls of the collection of the Frisian Museum, however, have shown that a part of these skulls is older (see Appendix C).

Huizinga concluded that the earlier terp inhabitants did not belong to the same ethnic group as the later Frisians, and saw this result in the perspective of the invasion of new inhabitants in the 5th century AD that was presumed by archaeologists (see also chapter 3.2.5). It must be admitted that, although Huizinga's conclusions are highly questionable since they are based on very little evidence and on false assumptions, the potential of anthropological research to reveal the origin and relations of the early inhabitants of the salt marsh area and of the newcomers of the 5th century is attractive. Perhaps one day, the study of skull and other skeletal proportions and characteristics will be combined with DNA- and isotope-analysis as well as more precise dates, and thus reveal not the ethnic identity, but the origins and genetic relations of the inhabitants of the terp region.

Attention to human remains was not encouraged by professional archaeologists. In the early 20th century, workers in quarrying campaigns were promised entrance tickets to the Frisian Museum if they would report important finds, such as skeletons with grave goods.¹⁴ The implicit message clearly is that skeletons without grave goods were not interesting and could be ignored. In 1909, a circular was sent to owners of terps and the managers of quarrying campaigns. The authors, Van Giffen, Boeles and the curator of the Groningen Museum Feith, encouraged the addressees to collect manmade objects, plant remains, shells, animal bones and even soil samples, but human remains were not mentioned.¹⁵

This neglect of human remains continued long after commercial quarrying had ended. Not only from commercial quarrying but also from archaeological excavations in the 20th century, surprisingly little tangible evidence of human burials remains. During official excavations, burials were usually recorded on excavation drawings or in the finds register. During a large part of the 20th century, however, human remains were not collected as a rule, as the case-study of Ezinge already showed. It was apparently thought that the study of skeletal remains would lead up to nowhere and that they might as well be left behind. Only bones that were deviating, either because of pathological defects or because they were worked, stood a fair chance of being collected. The lack of tangible evidence, of course, seriously hinders the study of burial customs in the terp region.

12.3 Representativeness

From the history of the collection of human remains, it is clear that only a small percentage of the human remains

in terps was collected or recorded. The catalogue that is the result of the inventory of human remains (Appendix C) is certainly not complete. An important question therefore is, what these finds are representative of.

When we look at the number of finds in the catalogue, compared to the number of terps, it is clear that only a small percentage of terps is represented. Human remains from 132 locations in the terp region were recorded, but these records are not all reliable or from the research period. As was mentioned above, a number of unreliable finds and finds from other periods were included for various reasons: they have traditionally but incorrectly been dated to the research period, they were added for comparative reasons but must be dated to earlier or later periods, or, in the case of Opwierde (cat. 124) or the cremation area of Techum (cat. 83a), probably never existed at all, but are sometimes referred to in archaeological literature.

That brings the number of terps with human remains from the research period down to 125.¹⁶ Although this may still seem a large number when we compare it to older inventories, it is only a small number if we compare it to the estimated number of terps.¹⁷ In chapter 2, it was concluded that there may have been over 2000 terps in Friesland and Groningen, but these are partly younger. Human remains from the research period are known from 99 terp settlements in Friesland, and from 26 terp settlements in Groningen. If we start from about 1000 terps in Friesland and 500 terps in Groningen from the research period, the recorded finds represent no more than 5-10% of terp settlements.

From this small number of terp settlements, an average number of 2.5 finds assemblages with human remains from the research period have been recorded, with a minimum of one, and a maximum of 31 (Ezinge). The large number of finds from partly excavated terps such as Ezinge, Englum, Tritsum or Winsum-Bruggeburen in comparison to levelled terps indicates that similar or larger numbers can be expected from any terp. It will be clear that the catalogue only represents a small selection of finds of human remains from a small percentage of the terps that were quarried or partly excavated.

It can be concluded that the catalogue is far from complete, even for the levelled or excavated terps from which finds of human remains are known, and that the recorded finds probably do not provide a complete picture of burial practices in the terp region during the research period. These finds in the first place represent scientific interest over a long period, starting in the 19th century. In the second place, they represent the influ-

¹⁴ Boeles 1901, 71.

¹⁵ Appendix in Knol 1991.

¹⁶ Bornwird, Dokkum-Drie Terpen, the surroundings of Hallum, Kimsward-Minnema-de With, Kubaard-village, Opwierde and Rasquert-village are excluded.

¹⁷ In the inventory by Hessing (1993) 29 terps in Friesland and Groningen with human remains were recorded.

Table 12.1. Activities that led to the find of human remains from the research period recorded in the catalogue, Appendix C.

Activity	Number of finds assemblages	%	Finds assemblages of single bones	%
Quarrying	172	54	18	22
Excavation (20th and 21st century)	112	35	59	70
Groundwork, including excavation after groundwork	25	8	5	6
Survey, metal detection and accidental finds	7	2	2	2
Excavation (19th century)	3	1		
Total	319	100	84	100

ence of commercial quarrying on collections (54% of the recorded finds were found in terps during commercial quarrying, see table 12.1). In the third place, they reflect a general lack of interest and respect for human remains, which may well be compared to the treatment that bog bodies received in other areas.¹⁸ And in the fourth place, they reveal something of the problems that occur during storage. The catalogue can be read as a list of the causes that have prevented human remains from terps to end up completely and well-documented in an archaeological collection:

1. During quarrying, finds disappeared unnoticed.
2. Quarrying activities disturbed graves, resulting in stray finds in the topsoil.
3. During quarrying, human remains were reburied in pits in the levelled area.
4. Inhumations were described, but the bones were not collected.
5. Only skulls were collected from complete skeletons.
6. Only a small selection of bones was collected from a complete skeleton.
7. Bones with interesting deformities were collected from complete skeletons.
8. Burials were partly destroyed during digging or excavating before they were discovered.
9. Infant burials were often missed, or were only partly collected.
10. Single bones were not recognized.
11. During quarrying or later ploughing and digging, single human bones were found and recognized, but thrown away.
12. Body parts were used for playing before being collected or discarded.
13. Archaeologists were only called when burials had already been destroyed, partially or completely.
14. The police was called first because a criminal offence was suspected.
15. Skeletons were sold or given to interested parties other than archaeologists.
16. Cremation urns were collected but cremation remains were thrown away.
17. Only beads or other jewellery were collected from a burial.
18. The location of the find was not or insufficiently recorded.
19. Information on the context was not or insufficiently recorded.
20. During excavations, human remains were depicted on field drawings, but not collected or described.
21. Crania were collected complete, but lost their mandible and other parts while in storage.
22. Skeletons were collected complete, but (parts of it) disappeared later.
23. Sieving residues from cores were not kept (Techum).
24. Human remains were not recognized among animal bones.
25. Skeletal parts were misplaced or numbered incorrectly and are therefore untraceable.
26. Labels with descriptions and find numbers were separated from objects and bones.
27. Bones were taken to be studied by a specialist who then forgot all about them.
28. The amount of finds from an excavation is so enormous that no one has as yet found the courage to even sort them (Tritsum).
29. Worked human bones have been forged (the skull cup from Aalsum in Friesland), or finds have been made up (Opwierde).

Similar problems with the collection and accessibility of finds are familiar for archaeologists in other parts of the country as well, and they are probably not unique for the Netherlands. The accessibility of finds and documentation from unpublished excavations is a problem almost anywhere. A special obstacle for terp archaeology is, however, commercial quarrying. Many finds were made during this destructive phase, which implies that the collected finds cannot be considered representative and that the information on contexts is only rarely sufficient.

Despite these problems, the catalogue of human remains is not useless. It provides valuable information on various aspects of burial ritual in the terp region during the pre-Roman and Roman Iron Age. Considering the nature of the evidence, however, the conclusions that may be drawn from them, can only be preliminary.

¹⁸ Cf. Van der Sanden 1996.

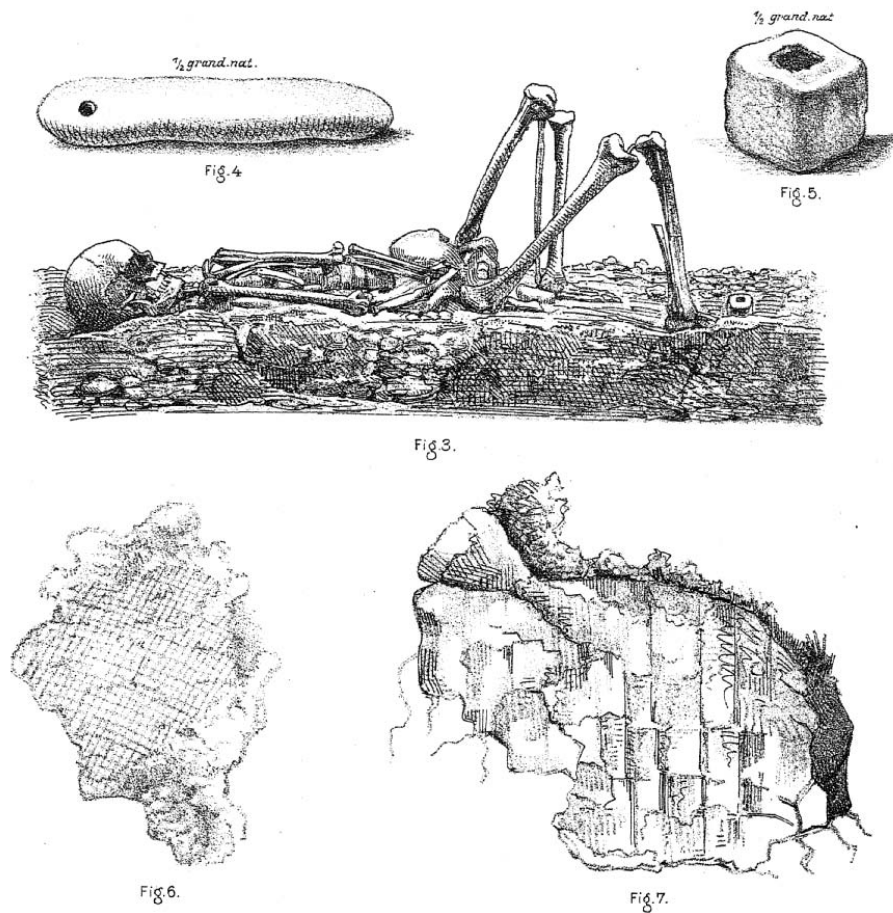


Fig. 12.2 Early medieval burial from Lutjelollum in Friesland. The body was buried in a tree trunk coffin. The legs were placed in this position after the excavation. From Schoor 1885, 259.

12.4 Dating

12.4.1 Archaeological dates

The inventory of human remains was aimed at finds from the research period, the pre-Roman and Roman Iron Age. In many cases, however, dates are unknown, or rather: they cover an extremely long period, from the start of habitation until the introduction of Christianity in the 8th century, when burial in cemeteries became the rule. We usually do not have information on the context of quarrying finds, which could help to date them. If some information on the location in the terp is available, for example the depth, this information is only useful if we know how high the terp originally was, when habitation started, and whether the find was made in the centre or in the outer edges of the terp. The small map that was made during quarrying of the finds of human remains in the terp of Ferwerd-Burmania I (cat. 31), for example, provided just that kind of information; that made it possible to narrow down the estimated dates of some of the finds.

Without datable finds, information on the location or absolute dating, the lower limit of the dates of single human graves and bones is the start of the habitation of a

terp. This date can roughly be assessed from the location in the landscape and from datable finds in archaeological collections.¹⁹ Some of the finds of human remains from the eastern part of Friesland, where Pleistocene layers come to the surface, might belong to a pre-salt marsh occupation phase in the late Bronze Age.²⁰ The finds concerned are a small number of possible cremations, from Bornwird (cat. 16) and the surroundings of Hallum (cat. 37), and the three bog bodies from Westergeest (cat. 92).

The upper limit of the research period of this study is the 4th century AD, the period in which the terp area was virtually uninhabited, with the exception of a small number of terps such as Ezinge. After this hiatus, cemeteries occur, with cremations and inhumations. From this period on, grave goods regularly occur in graves.²¹ The 4th century AD as upper limit is, however, less clear than it may seem, for various reasons. Firstly, the terp region was not entirely abandoned in the 4th century, but we often do not know whether a terp was abandoned

19 Miedema 1983, 1990, 2000; Taayke 1996a; Vos 1999; Vos & Knol 2005; the national archaeological information system Archis2.

20 Cf. Arnoldussen & Visser 2014.

21 See the short description of early-medieval burial customs in 4.4.1.

or still inhabited by a reduced population. Some of the finds might therefore belong to this period, but still have characteristics of the burial customs of the previous period. Secondly, as was already noted in chapter 3.2.4, the population of the terps participated in socio-cultural networks that went far beyond the terp region itself. Burial customs did not only change in the terp region after the 5th century, but in a much wider area that was not abandoned in the 4th century. The start of these changes probably preceded the 4th century hiatus (see 5.5). That implies that some of the new elements might already occur before the 4th century. Thirdly, single graves and graves without grave goods are not unique for the research period; they still occur after the 4th century.

The burials and bones that can only be dated to this very wide timespan, from the start of habitation to the early Middle Ages, are not entirely useless in the analysis of burial customs. Their large number indicates that single graves probably occur in every terp, although our information is limited to the small number of terps that were excavated and to only a small percentage of the terps that were quarried.

12.4.2 Radiocarbon dates

For the purpose of this study, a small radiocarbon dating programme was started to clarify some of the problems with dating.²² The number of samples to be dated was not only limited by the available financial resources, but also by the availability of bones; 15 samples were dated for this study, besides the radiocarbon dates of Englum and Ezinge samples.

12.4.2.1 Early medieval burials

The first outcome of this radiocarbon dating programme concerns the character of early-medieval burials. Burials with grave goods or in wooden containers are commonly dated to the early Middle Ages, even if the dates of the artefacts themselves are uncertain. Circular reasoning is difficult to avoid; the possibility that such graves are older is usually ignored.

In 1885, a single grave was found while grubbing up some trees on the terp of Lutjelollum in the province of Friesland. It attracted attention and was carefully excavated, to be exhibited in the Frisian Museum.²³ The find was immediately published.²⁴ The body was in supine position, with the knees pulled up (at least that is shown in the drawing, fig. 12.2; according to the description they had fallen to one side) and the hands on the pelvis. The



Fig. 12.3 Finds from a grave in Blija-Sytsma (cat. 13d). Left: beads from the late pre-Roman Iron Age and right: an annular brooch, dated ca. AD 450-late 7th century. Photo: W. van Bommel-van der Sluijs; drawing: H.J.M. Burgers, from Knol 1993, fig. 60.

grave was oriented to the west. It was first identified as male by Schoor, then as an elderly female²⁵, and much later as a male again, aged 45-50 years.²⁶ Some animal bones (first identified as bird bones, later as the bones of a cat's paw²⁷) were found in the hands. A perforated whetstone, identified as an amulet, was found on the chest; near the feet stood a small, cubic pot of unknown type. Some cloth was lying under the head. Although the body was found in a tree-trunk coffin (a newspaper offered as an explanation that the man somehow appeared to have fallen into a hollow tree²⁸), the date remained uncertain because the grave goods were unfamiliar or of uncertain date. A radiocarbon date, carried out for this study, demonstrated that it was indeed an early-medieval grave, dated to the 7th or 8th century.²⁹ Because of this date, the grave of Lutjelollum was not included in the catalogue.

Graves with beads present a similar problem. They are usually dated to the early Middle Ages, but beads were in use long before this period and some of the graves with beads that were dated to the early Middle Ages, might actually be older. One such grave, found in the terp Blija-Sijtsma (cat. 13d), contained a Migration-Period/early-medieval annular brooch but also, confusingly, beads from the late pre-Roman Iron Age (fig. 12.3).³⁰ Radiocarbon dating resulted in a less straightforward result than in the case of Lutjelollum (see table 12.2 and fig. 12.4). The most likely outcome, if we ignore the date of the artefacts, is the 4th or early 5th century AD. Because of the annular brooch, this burial is certainly not earlier than the second half of the 5th century AD.

It may be carefully concluded that it is justified to date graves with characteristics such as coffins and a variety of grave goods (see 4.4.1) to the early Middle Ages. However, as was already noted above, it cannot be ex-

22 This programme was partly financed by the *Stichting Nederlands Museum voor Anthropologie en Praehistorie* (SNMAP).

23 The skeleton is now in the archaeological depot of the northern provinces in Nuis; find numbers: FM 66A-78 (skeleton); FM 66A-80 1/3-3/3 (animal bones); FM 66A-81 (whetstone); FM 66A-79 (cubic pot).

24 Schoor 1885.

25 Folmer 1887, 420-422.

26 Huizinga 1954, 50; Knol & Uytterschaut 2010.

27 Knol & Uytterschaut 2010.

28 Leeuwarder Courant, 19th May 1885; cited in Knol & Uytterschaut 2010.

29 GrA-43723: 1315 ± 30 BP, cal AD 655-724 or 739-765 (2 σ).

30 Date of the beads: Van Bommel-van der Sluijs 2011. Compare the late pre-Roman Iron Age beads in Roman Iron Age contexts in Ezinge (see 11.2.2).

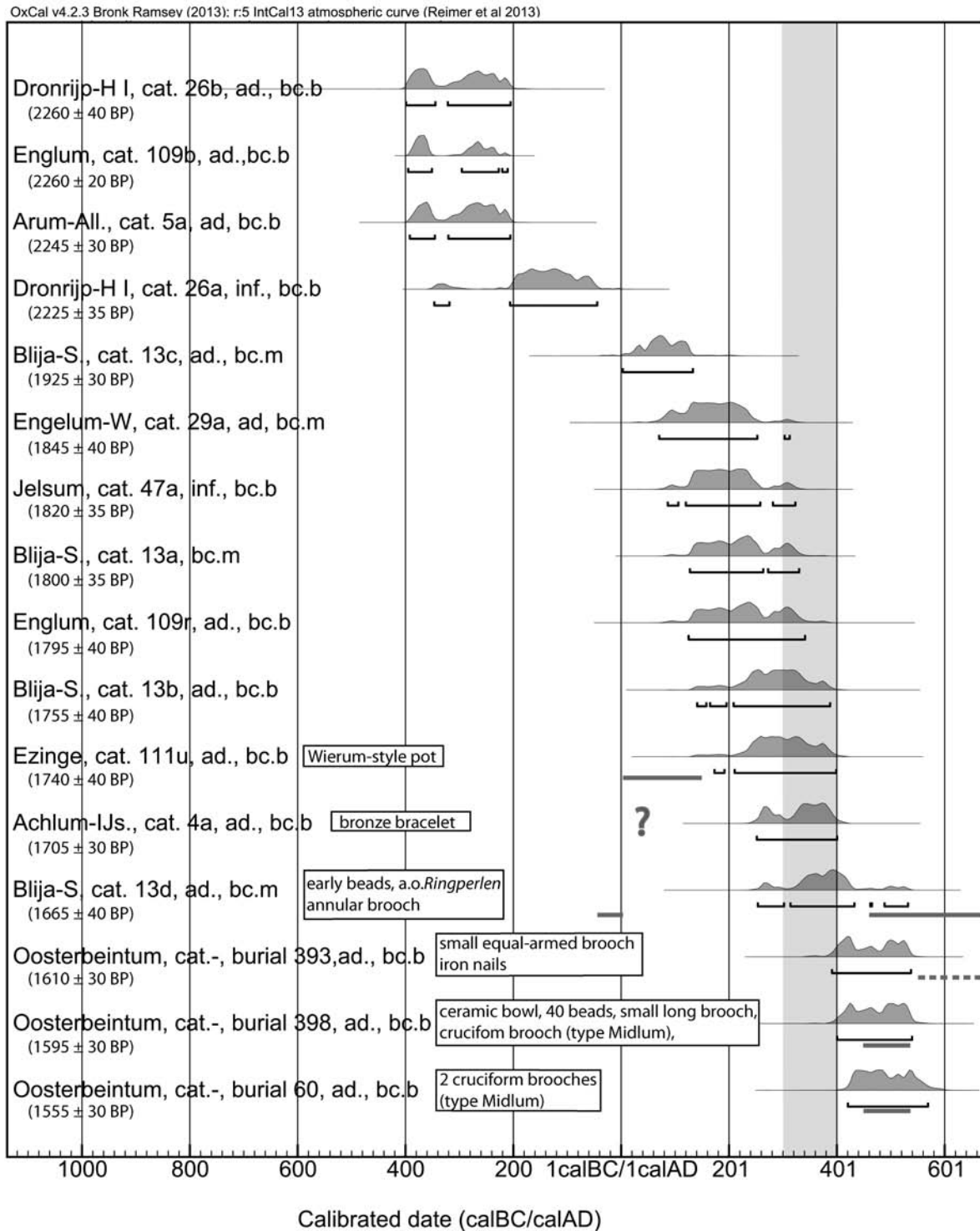


Fig. 12.4 Inhumations from the terp region in the catalogue of human remains (Appendix C) with calibrated radiocarbon dates (calibrated with OxCal v4.2.3); horizontal brackets: 95.4%. The grey column represents the 4th century AD. In text box: associated finds; grey line: date of associated artefacts; cat.: catalogue number (Appendix C); ad. or inf.: adult or infant; bc.b and bc.m: bone collagen from bone c.q. molar.

cluded that 'typical' early medieval characteristics already occurred at the end of the Roman Iron Age.

12.4.2.2 The use of radiocarbon dates

In the cases of Lutjelollum and Blija-Sytsma, the radiocarbon dates confirm, or do not contradict, the expect-

ed, early-medieval date. The example of Blija-Sytsma, however, shows that radiocarbon dates are not always unequivocal. All available radiocarbon dates of inhumations and cremations in the catalogue are presented in figs. 12.4 and 12.5. There are several problems with these dates. Firstly, if we blindly follow the calibrated radio-

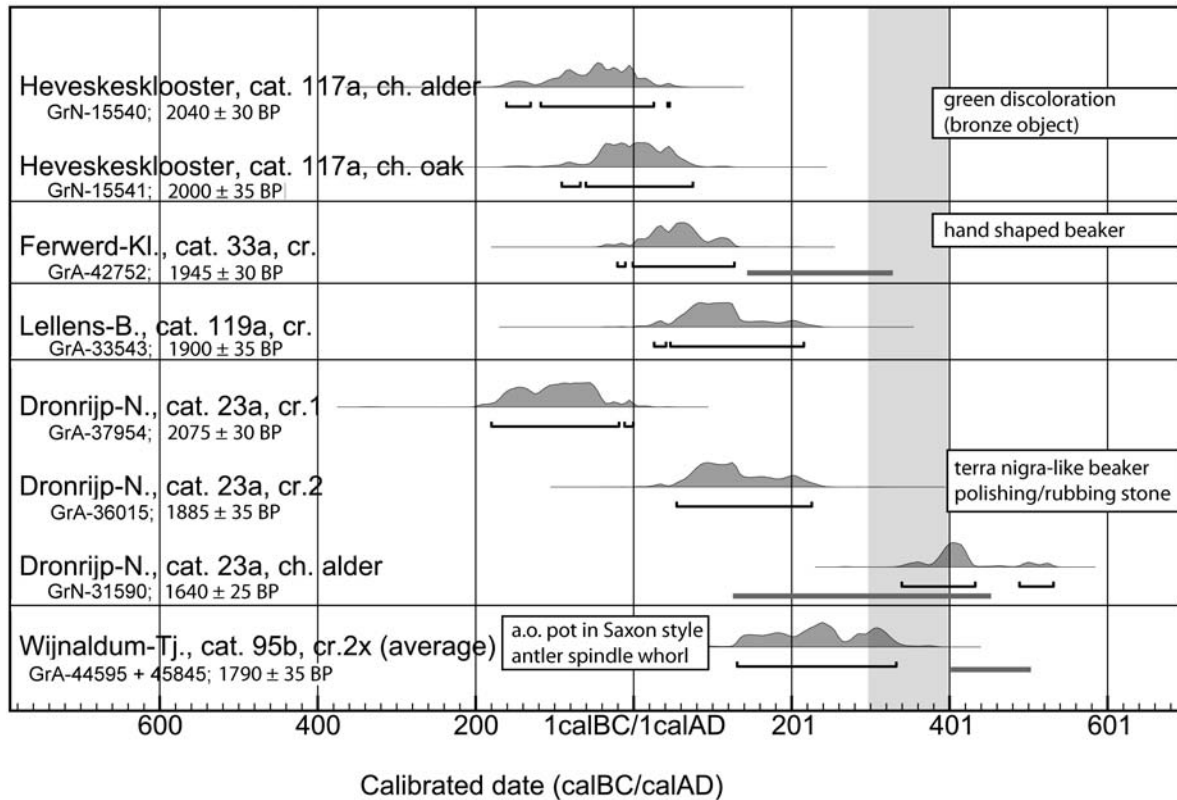


Fig. 12.5 Cremations from the terp region in the catalogue of human remains (Appendix C) with calibrated radiocarbon dates (calibrated with OxCal v4.2.3); horizontal brackets: 95.4%. The grey column represents the 4th century AD. In text box: associated finds; grey line: date of associated artefacts; cat.: catalogue number; cr.: dated cremation; ch.: dated charcoal.

carbon dates in the multiple plots, the hiatus in the occupation of the terp region of the 4th century seems to disappear, due to the long ranges of the calibrated dates. Of course, it should be realized that we are dealing with probability, not with actual habitation periods, and that actual dates may fall anywhere within the possible, calibrated periods. Secondly, and this problem is more serious, the dates of cremations, either from charcoal or cremated bone samples, are often contradictory. Even among the only five, dated cremations in the catalogue, three dates (Ferwerd-Kloosterterp, Dronrijp-Noord and Wijnaldum-Tjitsma) are inconsistent.

Inhumations

Fig. 12.4 presents 13 inhumations from the catalogue (including three from Englum and Ezinge), dated for this study. Three early, radiocarbon dated inhumations from the cemetery of Oosterbeintum have been added for comparison.³¹ All dated samples were either bone fragments or molars.

The first three dates in fig. 12.4 belong to the middle pre-Roman Iron Age, the fourth to the late pre-Roman Iron Age. This latter date, of an infant burial from Dronrijp-Hatsum I (cat. 26a), is corroborated by pot-

tery from about the same period found near the burial. The older burial from Dronrijp-Hatsum I (cat. 26b) was found at a deeper level; it probably dates from the end of the middle pre-Roman Iron Age. These early dates are all unproblematic, as are the next three, one of the burials of Blija-Sytsma (cat. 13c), Englum-West and Jelsum. The calibrated date of the latter burial (an infant) in the middle Roman Iron Age is confirmed by the stratigraphy and pottery dates. The calibrated dates of Blija-Sytsma 13a and Englum 109r range from the middle Roman Iron Age into the 4th century AD, but are most likely from before the 4th century. The calibrated dates of the burials from Blija-Sytsma 13b and Ezinge 111u range from the 3rd to the 4th century. Both burials are associated with pottery that is certainly (Ezinge) or probably (Blija-Sytsma) older than the burial itself and both burials are probably from the 3rd century. The pot in the Ezinge burial was interpreted as an older heirloom in the previous chapter; the same interpretation might apply to the TS plate in the Blija-Sytsma burial. The calibrated date of the burial from Achlum-IJslumburen falls largely into the 4th century, although a date at the end of the 3rd century is quite possible. The date of the bronze bracelet it was found with is unknown. Achlum is located in the west of the province of Friesland, an area that was almost certainly abandoned completely in the 4th century. Therefore, a 3rd century date is most likely (but see below).

31 Knol *et al.* 1996; dates: Lanting & Van der Plicht 2012.

All other burials in fig. 12.4 are from the 5th century or later. These graves all contain jewellery and other artefacts. The calibrated date of the burial from Blija-Sytsma 13d, which was found with an annular brooch, largely falls before annular brooches came into use,³² but a calendar date around AD 500 is not impossible. The dates of Oosterbeintum 60 and 398 are unproblematic. The iron nails in Oosterbeintum 393 probably come from ship wood, and remind us of the ship burials that occur in other areas in this period.³³ This burial is associated with a small equal-armed brooch, which is dated from (the middle of) the 6th century onwards.³⁴ There is hardly an overlap between the radiocarbon date and the date of the brooch. This date might indicate that equal-armed brooches occur already in the first half of the 6th century AD (but again, see below).

On archaeological grounds, it is rather certain that the inhumations in fig. 12.4 are from either before or after the 4th century. Only the burial from Achlum-IJslumburen might be from the 4th century itself, but that date is unlikely considering what is known about the habitation history of the area. In general, the dates of inhumations are consistent with archaeological dates. Only the date of burial 393 from Oosterbeintum is earlier than expected.

Cremations

The dates of cremations are rather more problematic. Despite the initially successful results of radiocarbon dating of bone apatite in cremated bone³⁵, unexpected or even impossible dates occasionally occur. When several samples of one cremation are dated, the radiocarbon dates are sometimes so far apart that they cannot be considered reliable. That is the case for several cremations from the inventory (fig. 12.5), as well as for a number of younger cremations from early-medieval cemeteries, which were added for comparison (fig. 12.6), and also, for instance, for a cremation in the inland settlement of Midlaren-De Bloemert in an undoubtedly late Roman Iron Age pot. This latter cremation was radiocarbon dated four times, but only one of the dates is in accordance with the date of the pot and with the other burials in the small cemetery to which it belonged; the calibrated dates of the three remaining samples range from the middle pre-Roman Iron Age until the 2nd century AD.³⁶

The earliest dated cremation comes from the Groningen terp of Heveskesklooster (cat. 117a). Two samples of charcoal, one of alder, the other of oak, were

dated. The dates overlap, resulting in a reliable, calibrated date around the beginning of the 1st century AD. One of the bone fragments from this cremation shows a green discoloration, indicative of a bronze object as a grave gift, which makes this cremation even more unusual for this period than it is by itself.

Only slightly younger, at least according to the radiocarbon date of the cremated bones, is a cremation from Ferwerd-Kloosterterp (cat. 33a). The calibrated date falls in the 1st or early 2nd century AD. The cremated bones were, however, found in a hand-built beaker of a type that does not occur before ca. AD 150.³⁷ It is possible that older bones were cremated in a secondary mortuary ritual³⁸, but the presence of fragments of different body parts (cranium, vertebrae, and long bones) rather suggests cremation of a complete corpse. The radiocarbon and archaeological dates of this burial are clearly not consistent.

The cremation pit of Lellens-Borgweg was dated to the 1st or 2nd century AD, but, since this pit was found in a small, early-medieval cemetery, the result was not considered reliable by the excavating archaeologist.³⁹ This radiocarbon date is still to be repeated.

The fourth radiocarbon dated cremation in fig. 12.5 was found in Dronrijp-Noord.⁴⁰ In this case, the result of at least two of the three dated samples must be false. The first of the cremated bone samples resulted in a calibrated pre-Roman Iron Age date, which is far too old, as is indicated by a wheel-thrown, *terra nigra*-like beaker that had been burnt with the corpse on the pyre (fig. 12.25). A second sample of cremated bones resulted in a calibrated date around the 2nd century AD, which is possible, though still rather early. A third sample, of carefully selected, burnt alder twigs, resulted in a later date, around cal AD 400. *Terra nigra*-like ware is difficult to date on typological grounds; it was in use during a long period, from the 2nd until the early 5th century AD.⁴¹ Characteristics of this particular beaker brought some researchers to the conclusion that the third date, around cal AD 400, must be too young; the beaker is rather from the 2nd or 3rd century AD, the date of the second sample.⁴² However, that earlier date is possible only if the alder charcoal was contaminated. Since the charcoal and cremated bones were caked together, it is certain that the charcoal belonged to the cremation. Moreover, the beaker of Dronrijp resembles a *terra nigra*-like beaker found in Ezinge, from a 4th or 5th-century AD context.⁴³ A late

32 Knol 1993, 67-68.

33 Knol 2009, 119.

34 Bos 2006, 458.

35 Lanting *et al.* 2001.

36 Nieuwhof 2008e, 284; Lanting & Van der Plicht 2012, 312-313 (their conclusion that the cremation must be dated to the 2nd century AD is not justified).

37 Taayke 1996c, 111, Abb. 27.7. The date of this type is based on numerous finds in a well-established typology.

38 Meyer-Orlac 1982, 129; 173ff.

39 Groenendijk & Knol 2007.

40 Nieuwhof 2008f.

41 Galestin 2008b, 332-333; Lanting & Van der Plicht 2010, 99-100.

42 E. Taayke, NAD/Nuis (pers. comm.), opts for a 3rd or 4th-century AD date. Lanting & Van der Plicht (2010, 99) prefer an early, 2nd century date.

43 Thasing & Nieuwhof 2014, 131-132 (no. 4-9).

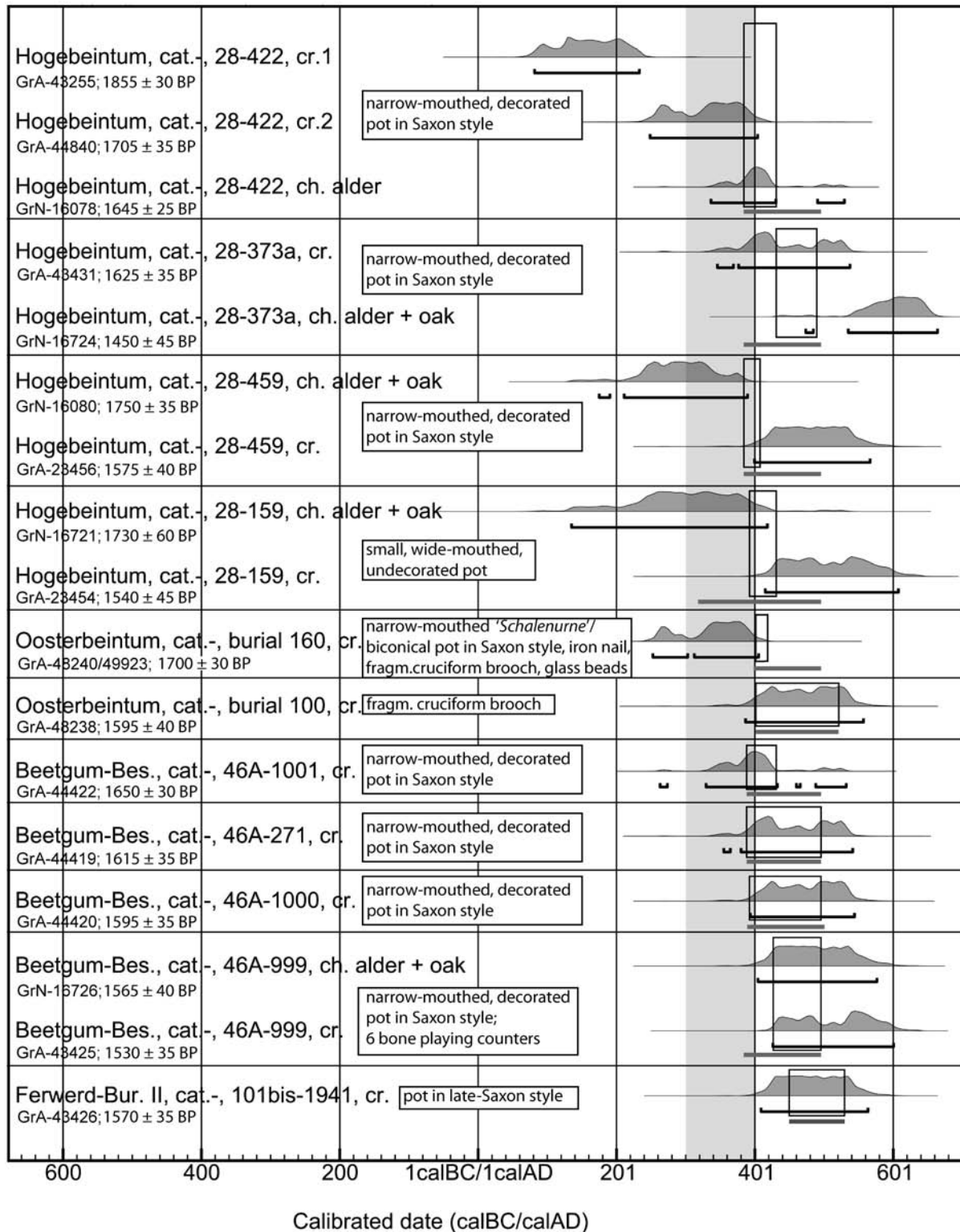


Fig. 12.6 Cremations from early medieval cemeteries in the terp region, with radiocarbon dates between the research period and 1550 BP, calibrated with OxCal v4.2.3. Horizontal brackets: 95.4%. Grey column: 4th century; in text box: associated finds; grey line: date of associated artefacts; cr.: dated cremation; ch.: dated charcoal; rectangles: most likely date, combining radiocarbon and archaeological dates.

date of the cremation from Dronrijp-Noord, at the end of the 4th or the beginning of the 5th century AD, is therefore the most likely, but the possibility of an earlier date should be kept in mind.

A radiocarbon date that is clearly too old also comes from a combined cremation of an adult and a child in Wijnaldum-Tjitsma (cat. 95b). Two samples of cremated bone were radiocarbon dated, both resulting in a

very similar date of 1780 resp. 1795 ± 35 BP, an average of 1790 ± 35 BP, in calendar years the 2nd to early 4th century AD. The similarity of the dates indicates they are reliable, but the cremated bones come from an urn in Saxon style that cannot be older than the end of the 4th century, while the stratigraphy suggests a date in the second quarter of the 5th century AD.⁴⁴

Similar problems occur with younger cremations from early-medieval cemeteries from the terp region (fig. 12.6).⁴⁵ Diverging dates were, for example, established for four different cremations from Hogebeintum. Three samples from cremation 28-422 were dated; the first, of cremated bone, is clearly far too old, a second sample of cremated bone and one of charcoal of alder are consistent, calibrated around AD 400. This date does not contradict the well-established typological date of the urn in Saxon style, although it is quite early. From a second cremation from Hogebeintum, 28-373a, two samples were dated, one of cremated bone and one of charcoal of two species, alder and oak. In this case, the cremated bone sample gave the best result, in accordance with the pot in Saxon style, while the charcoal sample was far too young. In cremations 28-459 and 159, however, the charcoal sample (both alder and oak) was clearly too old. Of the two cremation burials from Oosterbeintum, one radiocarbon date of cremated bone from burial 160 is rather old, although not impossible if we accept an early date in the first decade of the 5th century AD, the short period during which the radiocarbon date overlaps with the 5th century pot in Saxon style. Lanting and Van der Plicht suspect that old timber on the pyre of this burial influenced the result.⁴⁶ All other dates in fig. 12.6 are in accordance with the dates of associated artefacts.

Deviating radiocarbon dates of cremated bones are not confined to the northern Netherlands or to only one laboratory. Experimental research indicates that deviations have different causes. One of them is the exchange of carbon between bone apatite and fuel during cremation.⁴⁷ This effect is highly variable. The exchange is influenced by factors such as the position of the body on the pyre or the wind.⁴⁸ Samples from one cremation may therefore result in quite different dates. Also later contamination and leaching in the soil may be influential, if the bio-apatite bone matrix was not fully recrystallized during cremation. That type of contamination depends on soil conditions. In particular burnt bones that did not reach a temperature above 600 °C are vulnerable to contamination and cannot be expected to give reliable

results when radiocarbon dated. Only fully cremated, white bone fragments should be used for that purpose.⁴⁹

Because of the exchange of carbon between bone apatite and fuels during the cremation, the use of old wood or peat may result in considerably older dates. As far as the charcoal in cremation burials in the terp region has been identified, it is always of oak (*Quercus* sp.) or alder (*Alnus* sp.). These species were generally used as firewood for cremations in the Netherlands and Belgium during the pre-Roman and Roman Iron Age.⁵⁰ Alder wood will usually have the same date as the cremated body, but oak might be considerably older, especially if old construction timber or driftwood is used. Besides firewood, it is possible that peat was used as fuel in the terp region, at least in areas neighbouring the peat zone south of the salt marsh area. However, evidence for that use is lacking. The use of older wood or later contamination in the soil might well explain the radiocarbon dates of cremated bone that are clearly too old: Ferwerd-Kloosterterp, Wijnaldum, Dronrijp-Noord and Hogebeintum (28-422). That supports the younger dates of these cremations, based on pottery or on charcoal of alder.

The exchange of carbon between bone apatite and fuels during the cremation or later contamination cannot explain the strange outcome of the charcoal sample from Hogebeintum, 28-373. The cremated bone is in accordance with archaeological expectation, but the dated charcoal is clearly too young. In this particular case, it is possible that the charcoal and cremated bones belong to different burials and were confused during the long period of storage since they were unearthed in the early 20th century.

It can be concluded that the dates of cremations, not only of cremated bone but also of charcoal of alder and oak, are not necessarily reliable and should be used with caution. They not only frequently contradict dates of archaeological phases and of pottery, but they are also often inconsistent when several samples from one burial are dated. Dates of cremated bone are never too young, but they are evidently too old in a number of cases. The best results can be expected from fully cremated, white bone samples and from carefully selected wood of species that do not reach a great age, such as alder. Archaeological dates should be used to verify the radiocarbon dates of cremations, rather than the other way around.

12.4.3 Radiocarbon dates and stable isotopes

Stable isotope research has been widely used to study palaeodiet and to detect reservoir effects.⁵¹ From the samples of human remains that were radiocarbon dated for this study, stable isotopes of carbon (¹³C) and nitrogen

44 Cuijpers *et al.* 1999, 309.

45 Information on burials: Knol *et al.* 1996; Knol 2009; 2011. Radiocarbon dates from Lanting & Van der Plicht 2010; 2012. Dates of pottery in Saxon style: Schmid 2006; Nieuwhof 2013a.

46 Lanting & Van der Plicht 2010, 291.

47 Van Strydonck *et al.* 2010; Olsen *et al.* 2013; Snoeck *et al.* 2014.

48 Snoeck *et al.* 2014.

49 Olsen *et al.* 2008; Van Strydonck *et al.* 2009.

50 Van Strydonck *et al.* 2010; Deforce & Haneca 2011.

51 For overviews, see Van der Plicht 2001; 2005; Mays 2000.

Table 12.2. Radiocarbon dates of samples from one of the case studies or the catalogue of human remains (apart from cremations), with stable isotope measurements. NA: not analysed or does not apply. All radiocarbon dates were performed by the Centre for Isotope Research (CIO) of the University of Groningen. Abbreviations periods: see table 1.1.

Cat. no. (App. C)	Place	laboratory no.	Sample	$\delta^{13}\text{C}$ (‰)	$\delta^{15}\text{N}$ (‰)	Years BP	Calibrated with OxCal v4.2.3 (usually 95.4%) cal BC-cal AD	Archaeological date or expected date
4a	Achlum-Ijslumburen	GrA-43721	human bone	-20.26	+11.97	1705 ± 30	AD 252-401	PROM-EMA (not 4th century AD)
5a	Arum-Allingastate	GrA-43722	human bone	-19.79	+13.85	2245 ± 30	393-346 or 321-206 BC	PROM-EMA
13a	Blija-Sytsma	GrA-43173	human molar	-19.30	NA	1800 ± 35	AD 128-264 or 273-331	PROM-ROM
13b	Blija-Sytsma	GrA-43133	human bone	-19.67	+11.49	1755 ± 40	AD 166-196 or 209-388 (93.2%)	2nd-3rd cent. AD
13c	Blija-Sytsma	GrA-43223	human molar	-19.36	NA	1925 ± 30	AD 4-134	PROM-ROM
13d	Blija-Sytsma	GrA-45617	human molar	-18.07	NA	1665 ± 40	AD 254-303 or 315-433 (78.2%) or 489-533	MP-EMA
26a	Dronrijp-Hatsum I	GrA-42194	human bone (infant)	-19.88	+13.57	2115 ± 35	207-45 BC (90.5%)	PROM-ROM
26b	Dronrijp-Hatsum I	GrA-43144	human bone	-20.19	+14.11	2260 ± 40	400-345 or 322-206 BC	PROM-ROM
Ch. 12 text	Dronrijp-Hatsum I	GrA-42196	dog bone	-20.56	+11.68	2080 ± 35	195-20 BC (93.4%)	PROM-ROM
29a	Engelum-West	GrA-43138	human molar	-18.72	NA	1845 ± 40	AD 71-253 (94.4%)	PROM-ROM
47a	Jelsum-Village	GrA-36120	human bone (infant)	-20.19	+12.32	1820 ± 35	AD 121-259 (85.7%)	2nd-3rd cent. AD
60a	Leeuwarden-Oldehoofsterkerkhof	GrA-36124	human bone	-19.55	+12.18	1850 ± 35	AD 78-241	3rd cent. AD
Ch. 12 text	Lutjelollum	GrA-43723	human bone	-19.99	+10.82	1315 ± 30	AD 655-724 or 739-765	EMA
109b	Englum	GrN-25933	human bone	-19.43	+12.01	2260 ± 20	496-352 or 296-228 BC	MPROM-EMA
109c	Englum	GrA-44645	human bone (skull 1)	-20.2	+12.69	2255 ± 35	498-346 or 321-206 BC	3rd cent. BC
109d	Englum	GrA-44390	human bone (skull 2)	-20.16	+12.64	2190 ± 30	361-178 BC	3rd cent. BC
109e	Englum	GrA-44394	human bone (skull 3)	-18.91	+13.38	2185 ± 35	370-164 BC	3rd cent. BC
109f	Englum	GrA-44397	human bone (skull 4)	-20.18	+13.1	2235 ± 30	388-342 or 326-204 BC	3rd cent. BC
109g	Englum	GrA-44399	human bone (skull 5)	-20.43	+13.27	2240 ± 30	390-345 or 323-205 BC	3rd cent. BC
109h	Englum	GrA-44400	human bone (skull 6)	-20.23	+11.52	2200 ± 30	366-192 BC	3rd cent. BC
109i	Englum	GrA-44402	human bone (skull 7)	-20.36	+13.68	2185 ± 30	361-172 BC	3rd cent. BC
109j	Englum	GrA-44403	human bone (skull 8)	-20.49	+13.16	2220 ± 30	375-203 BC	3rd cent. BC
109c-l	Englum	GrA-27787	cattle bone	-20.70	+8.0	2230 ± 35	385-203 BC	3rd cent. BC
109c-1	Englum	GrN-25848	dung	-29.04	NA	2280 ± 50	410-202 BC	3rd cent. BC
109c-l	Englum	GrA-30879	residue	-25.52	NA	2190 ± 40	380-163 BC	3rd cent. BC
App. A.8	Englum	GrA-27804	dog bone	-20.35	+11.6	2085 ± 35	199-36 BC (92.4%)	1st cent. BC/AD
App. A.9	Englum	GrA-27784	fish bone	-12.65	+16.56	**1975 ± 35	49 BC- AD 87	1st cent. AD
109r	Englum	GrA-34492	human bone	-19.40	+9.1	1795 ± 40	AD 126-342	ROM
111u	Ezinge	GrA-47563	human bone	-20.47	+10.93	1740 ± 40	AD 211-400 (93.9%)	3rd cent. AD
* OOS393	Oosterbeintum	GrA-48834	human bone	-19.7	+13.0	1610 ± 30	AD 392-538	late 6th-7th cent. AD
* OOS398	Oosterbeintum	GrA-48836	human bone	-20.4	+13.3	1595 ± 30	AD 401-540	AD 475-550
* OOS060	Oosterbeintum	GrA-48828	human bone	-20.2	+14.2	1555 ± 30	AD 421-570	AD 475-550

* Radiocarbon dates: Lanting & Van der Plicht 2012; stable isotopes values: McManus 2012. ** Marine reservoir effect included.

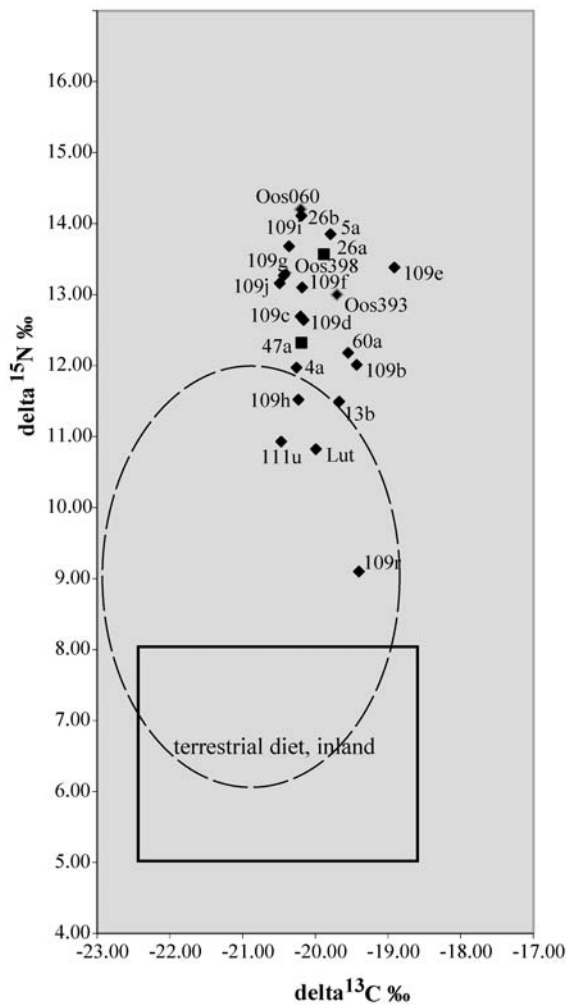


Fig. 12.7 Distribution of stable isotope ratios $\delta^{15}\text{N}$ and $\delta^{13}\text{C}$ for human bone collagen from the salt marsh area. Numbers and abbreviations refer to table 12.2. Diamonds represent adults, squares infants.

The square represents the range of stable isotopes in human bone collagen with a terrestrial diet in non-coastal areas, following Lanting and Van der Plicht 1996, 496. The dashed oval also represents the 'normal' range of stable isotopes in human bone collagen, but based on 200 samples from all regions and periods in the Netherlands, following Smits and Van der Plicht 2009, fig. 11.

in palaeodiet of humans or animals in the terp region.⁵⁵ That also is the case for the consumption of freshwater fish or shellfish. Deviating stable isotopes in this area are most likely related to the marine environment of the salt marshes.

$\Delta^{15}\text{N}$ values range from +5 to +8‰ in bone collagen from humans with a purely terrestrial diet, from +4 to +6‰ in herbivores and from +7 to +9‰ in carnivores. The normal range of $\delta^{13}\text{C}$ is -21 ± 1 to 18 ± 1 ‰.⁵⁶ Omnivores such as dogs are comparable to humans. Humans with a 100% marine diet have very different values: a $\delta^{13}\text{C}$ of around -13 ‰, and a $\delta^{15}\text{N}$ of 18 ± 2 ‰.⁵⁷ $\Delta^{15}\text{N}$ value in bone collagen is approximately 3–5‰ higher than the protein in diet, the $\delta^{13}\text{C}$ value 1‰.⁵⁸ These numbers are no more than a starting point, since there are considerable differences between animal species and between biotopes.

Values of $\delta^{15}\text{N}$ in radiocarbon dated salt marsh samples (table 12.2; fig. 12.7) exceed the normal range considerably. Only one sample is nearly normal (a burial from the middle Roman Iron Age, cat. 109r (Englum), with $\delta^{15}\text{N}$: +9.1‰). All other 18 $\delta^{15}\text{N}$ values are high, ranging from +10.93 (Ezinge, cat. 111u) to +14.11‰ (an adult burial from Dronrijp-Hatsum I, cat. 26b). Two of these measurements consider bones of infants (cat. 26a and 47a). Children who are breastfed usually have an increased $\delta^{15}\text{N}$ since they can be considered to be higher in the food chain, but these values are still high even if we subtract 2–3‰, the increase in $\delta^{15}\text{N}$ that can be attributed to breast feeding.⁵⁹

High $\delta^{15}\text{N}$ values were not only measured in human bones but also in a cattle bone from Englum (cat. 109c-l):

(^{15}N) were measured, the former as a rule in view of the correction of ^{14}C dates, the latter on request, in collagen from bone (table 12.2). Deviating, high $\delta^{15}\text{N}$ ratios have been found in nearly all dated samples of human bone, as well as in samples of dog and cattle bone.⁵² That is relevant here, since it may be a factor in the interpretation of radiocarbon dates. Moreover, stable isotopes in bone collagen are informative on the origin of protein in the diet during the last part of someone's life.⁵³ That implies that deviating values within a population can be used to trace people with a different diet, or, with caution, people who are native to an area with a different natural environment (marine/terrestrial, marine/freshwater, aquatic/terrestrial, C3/C4 plants).⁵⁴ C4 plants do not play a role

52 These results were already partly published in Nieuwhof 2008d.

53 Bone collagen has a turnover that is related to age and sex: 5–15%/year in adolescents, 4–3%/year for adult females, 3–1.5%/year for adult males. Stable isotopes from bone collagen therefore may reflect diet over the last ca. 10 years in adolescents, much longer in adults, depending on age and sex (Hedges *et al.* 2007).

54 Smits & Van der Plicht 2009. The study of isotopes of strontium, oxygen, sulphur or lead in the terp region only just started (McManus *et al.* 2013).

55 Millet was not grown here. The wild C4 plants that are nowadays part of the salt marsh vegetation, *Spartina sp.*, *Salsola kali* and *Atriplex laciniata*, do not occur in archaeobotanical samples from the research period (Dutch archaeobotanical database RADAR). *Spartina* was introduced later (Weeda *et al.* 1994, 213ff).

56 Lanting & Van der Plicht 1996, 496. Smits & Van der Plicht 2009, fig. 11 show a larger range of values for $\delta^{15}\text{N}$, but this range is based on samples from all regions in the Netherlands and all periods, possibly without distinguishing marine and terrestrial environments or different diets.

57 Lanting & Van der Plicht 1996, 498–499.

58 Bocherens & Drucker 2003.

59 Fuller *et al.* 2006.

8.0‰ rather than 4–6‰.⁶⁰ This shows that deviating values cannot be attributed to the consumption of marine protein, since cattle do not eat fish or shellfish. Moreover, $\delta^{13}\text{C}$ of human and animal species is within the normal range of a terrestrial diet.

As was already shortly discussed in chapter 10, deviating stable isotope values in the entire food chain of the salt marshes must cause these high $\delta^{15}\text{N}$ values in herbivores and omnivores, starting with the salt marsh vegetation that is consumed by herbivores.⁶¹ The consumption of cattle with high $\delta^{15}\text{N}$ may cause a significant increase in $\delta^{15}\text{N}$ ratios in human bone collagen. Cereals and leguminous plants that were cultivated on the salt marshes (see chapter 3), might be enriched in ^{15}N and form another source of protein with high $\delta^{15}\text{N}$ values, but it is not known whether that is indeed the case.

In how far these deviating $\delta^{15}\text{N}$ values have implications for dating, is yet unknown. Higher $\delta^{15}\text{N}$ values in salt marsh plants were accompanied by higher $\delta^{13}\text{C}$ values in a study of isotope composition of plants of the San Francisco Bay estuarine system.⁶² Similar values were, however, found in only a small percentage of a series of salt marsh plants from the island of Schiermonnikoog.⁶³ Nevertheless, if the carbon in salt marsh vegetation is partly of marine origin, a reservoir effect has to be reckoned with. That would have implications for the dates of the human remains in the salt marsh area. At present, however, there are too many uncertainties to quantify a possible reservoir effect.⁶⁴

The archaeological dates that are available for some of the radiocarbon dated bones with deviating isotopic values in this study offer the opportunity to test the reliability of the dates. More or less precise archaeological dates, based on stratigraphy or dated finds, are available for 20 radiocarbon dated samples (table 12.2). Most of these radiocarbon dates are entirely acceptable without a reservoir effect included. In four cases (cat. 4a; 13d; Appendix A.8; OOS393), the radiocarbon date is older than expected. A reservoir effect would explain these older radiocarbon dates, but they may have other causes. If a reservoir effect is to be taken into account, it will probably not be large.

Stable isotope values are not only relevant for the interpretation of radiocarbon dates in this context. They can also be used to identify native people and immigrants. As was noted above, stable isotopes in bone collagen say something about the last decade or so of someone's life. Since stable isotopes, especially $\delta^{15}\text{N}$, in human bones

from the coastal salt marsh region differ from inland samples, human bones with deviating values that agree with inland values, probably represent people who grew up outside the coastal region. All $\delta^{13}\text{C}$ and $\delta^{15}\text{N}$ values of radiocarbon dated human bone collagen from table 12.2 are plotted in fig. 12.7. This graph shows that these samples form a rather homogeneous group. There is only one real outlier, 109r, a burial from the Roman Iron Age in Englum. Its $\delta^{15}\text{N}$ value is just outside the normal range of inland populations with a terrestrial diet. This suggests that this individual, identified as probably a woman, did not grow up in the terp region, but came from an inland settlement some years earlier, perhaps when this woman married a man from Englum. That would support the idea that women moved in with their husbands when they married, as was argued in chapter 4.2.

12.5 Results and discussion

From the inventory of human remains it is clear that mortuary ritual in the terp region during the pre-Roman and Roman Iron Age was diverse. In the above, it was established that human remains from the pre-Roman and Roman Iron Age, inhumations as well as single bones, can be expected in any terp. Cemeteries are lacking, but there are single inhumations, partial burials, a small number of cremations, and single human bones in various contexts. They will be discussed in that order below. Bog bodies were also recorded; they will be included in a section on human sacrifice, which follows the discussion on inhumations and partial skeletons.

12.5.1 Inhumations

Evidence of inhumations consists of collected remains, excavation archives, unpublished reports and various publications. Of the recorded inhumations, 97 are certain inhumations, complete or disturbed (table 12.3; fig. 12.8). An additional, large number of 102 records in the catalogue consist of bones, especially skulls, which were probably collected from complete skeletons. Most of these finds come from the phase of commercial quarrying and can only be dated to a long period, from the first phase of habitation until the Middle Ages. Inhumations occur in Groningen in 73% of all terp sites with recorded finds, in Friesland in 80% (table 12.4).

Although the information on the 97 reliable inhumations is often incomplete, it is still possible to learn more about various aspects of inhumation from these finds. These aspects include sex and age of the deceased, body posture, orientation, grave goods and location. The shape of the graves is usually not recorded. The middle pre-Roman Iron Age burial of Englum (cat. 109b/Appendix A.3) was probably placed on some organic material, indicated by a thin black line. Three burials (Jislum, cat. 49a-b; Dorkwerd cat. 107a; Ezinge cat. 111d) were reported to be placed on some grass. In one grave (Zürich-

60 Even higher $\delta^{15}\text{N}$ was measured in bone collagen of cattle and sheep from the excavation in Achlum, a terp in western Friesland (Prummel & Hullege, in press).

61 Britton *et al.* 2008.

62 Cloern *et al.* 2002.

63 Pers. comm. W. Prummel (University of Groningen, GIA).

64 Pers. comm. J. van der Plicht (University of Groningen, CIO).

Table 12.3 Summary of the data in the catalogue of human remains from the terp region, Appendix C.

131 reliable locations, 1 dubious (Opwierde)

331 finds assemblages with human remains, including:

- 308 possibly or certainly from the research period
- 19 earlier or later
- 4 forgeries (cat. 1d; 124) or incorrect interpretations (cat. 31a; 83a).

Reliable finds assemblages possibly or certainly from the research period include:

199 inhumations (records mentioning 'several' are counted as one), including:

- 97 probable or certain inhumations
- 102 possible inhumations, of which only a cranium or other bones were recorded or collected

1 x 3 bog bodies

11 possible or certain cremations

84 finds assemblages with single bones

13 single bones or collections of bones without information.

Table 12.4 Cremations (possible), inhumations and find assemblages with single bones from the terp region of Friesland and Groningen, as percentages of the total number of locations with finds from the research period (the total percentage amounts to more than 100% because different types of human remains may occur in one location), and of the total number of finds assemblages in Appendix C from the research period.

	Friesland						Groningen							
	Total n (100%)	cremations		inhumations		single bones		Total n (100%)	cremations		inhumations		single bones	
		n	%	n	%	n	%		n	%	n	%	n	%
locations	99	5	5	79	80	28	28	26	6	23	19	73	13	50
finds assemblages	222	5	2	150	68	54	24	97	6	6	50	52	31	32

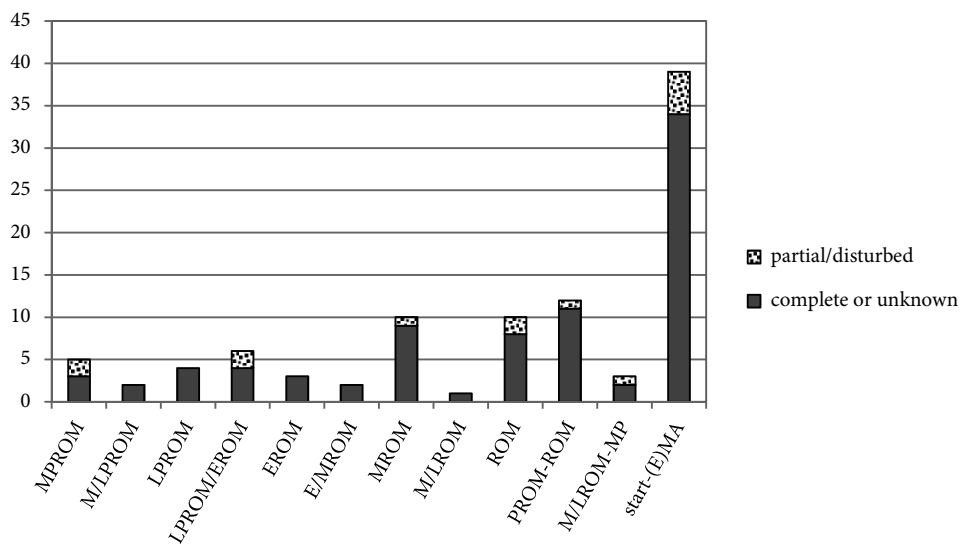


Fig. 12.8 Inhumations per period. Total: n = 97; possibly disturbed or partial: n = 15.

Kop Afsluitdijk, cat. 103a), textile fragments were found, which may have lined the grave, or covered the body.

12.5.1.1 Sex, age and health

Although physical anthropological information on the human remains in the catalogue is far from complete, and perhaps not always reliable, it does give an impres-

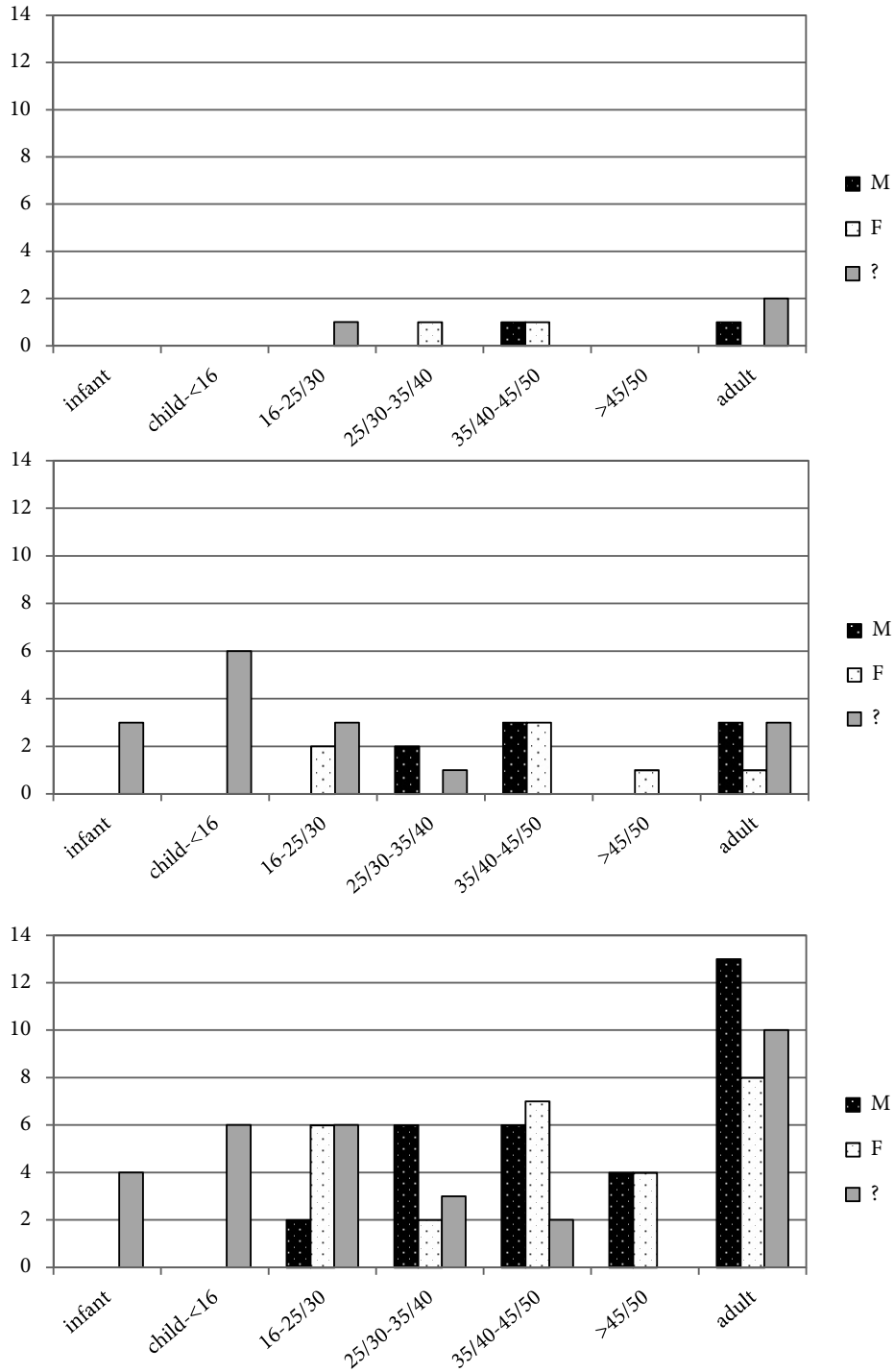


Fig. 12.9 Ages at death and sex of inhumations. Top: inhumations from the pre-Roman Iron Age. Middle: inhumations from the Roman Iron Age. Bottom: all inhumations of the research period, including inhumations of uncertain date.

sion of the sex and age of the people who were interred. In figure 12.9, all known data on sex and age of inhumations are combined. Considering the sparse data, not only the certain inhumations, but also possible inhumations, of which only a skull or other bone was recorded or collected, are included, a total of 89 burials. Of these burials, only 38 can reliably be dated to either the pre-

Roman Iron Age or the Roman Iron Age. Some of the remaining 51 burials might be of later date.

The diagrams of figure 12.9 provide some insights into the sex and age of people whose corpses were buried. All ages are represented up to the age of around 50 years.⁶⁵ Eight people were reported to be 'old', or older

⁶⁵ Above this age, subcategories cannot be identified.

Table 12.5 Burials, complete or partial, of infants and children in the terp region.

period	cat.no.	terp/site	age	description	posture and orientation	location
LPROM- EROM	26a	Dronrijp- Hatsum I	2 infants	inhumation (partial burial or collected incomplete), with incomplete skeletal parts of two individuals, possibly twins	?	probably in/ near house
	103a	Zürich-Kop Afsluitdijk	young child	inhumation, associated with textile fragments and six ceramic playing counters	?	in dung layer in terp
	84f	Tritsum	ca.10	inhumation	extended, supine, oriented northeast	in ditch
EROM	78a	Slappeterp	7-8	inhumation	prone (or fallen face down later), legs slightly flexed, with arms crossed and hands touching the shoulders	in terp
MROM	47a	Jelsum	infant	inhumation	crouched, on side, oriented to the west	in house
	108b	Eenum	ca. 15	inhumation		in terp
MPROM- ROM	96r	Winsum- Bruggeburen	<16	skeletal parts of one individual, some probably deposited articulated		in ditch
ROM- EMA	17d	Bozum	child	inhumation	crouched, on side, oriented west	in terp

than 45 or than 50. The number of people of this age category is relatively high if we consider the low life expectancy in this period (see also chapter 4.2). Most people probably died before the age of 40. The total number of women and men in inhumations, as far as identifiable, is approximately the same: 31 men vs. 27 women. The graphs also indicate that women had a higher chance of dying young than men. A similar peak occurs, for instance, in the 1st century AD native Roman cemetery of Valkenburg-Marktvelde (Zuid-Holland).⁶⁶ It probably has a general cause, such as a high risk of dying in childbirth, or malnutrition during breastfeeding. Most men died between the ages of 35/40 and 45/50. These conclusions are only provisional, since the age of a large group of adult individuals is not known precisely. Among the finds are three infants (two of them are buried together) and six children under 16 (table 12.5).

Fig. 12.9 indicates that this group of individuals, which were chosen to be interred, is not exceptional in sex or age. Inhumation in the terp region, when it occurs, does not seem to be reserved for specific age groups or for either males or females. These numbers may very well represent the normal distribution of the age at death for both sexes.

The cause of death could not be established for any of the dead that are represented by skeletons or single bones. That is even the case for the 'hanged' man from Dronrijp-Hatsum I (cat. 26b), who was allegedly found with fragments of a rope around his neck (fig. 12.10). Rope fragments, however, are not visible in the excava-

tion pictures, and the vertebrae do not show any damage. It is not certain that this man died by hanging. *Cribra orbitalia*, indicative of anaemia caused by malaria (see also chapter 4.2) or other diseases⁶⁷, occur in two cases; apart from one of the skulls from Englum, mentioned in chapter 10, they were identified on a skull fragment from Achlum (cat. 3e). Another lethal disease is *multiple myeloma*, from which a woman from a terp near Englum (cat. 29a) possibly suffered. The projectile that probably caused the hole in a skull fragment from Winsum-Bruggeburen (fig. 12.11; cat. 96b) must have been lethal, but we have no information on the context or date of this fragment. It might be medieval or younger.

There are a few other indications of diseases, none of them lethal. Striking finds are two records of inhumations with trepanned skulls, one, of unknown date, from Achlum-Gouden Kroon (cat. 2a), the other, dated to the Roman Iron Age, from Ferwerd-Burmania I (fig. 12.12; cat. 31f). The first was possibly not collected and could not be examined; the latter was examined by Brongers.⁶⁸ The rims of the wound of this trepanation were healed, so the trepanation was not the cause of death. We do not know why trepanation was performed. It might be a cure for headaches, but a non-medical reason is also possible. Petrasch interprets them as a medical treatment in case of fractures of the skull, especially in the Neolithic⁶⁹, but the trepanation from Ferwerd-Burmania I (cat. 31f) is small and there are no signs of fracture or other damage around it. The worked roundels, possibly amulets, from

67 Smits 2006, 28.

68 Brongers 1966.

69 Petrasch 2008.

66 Smits 2006, fig. 2-35.

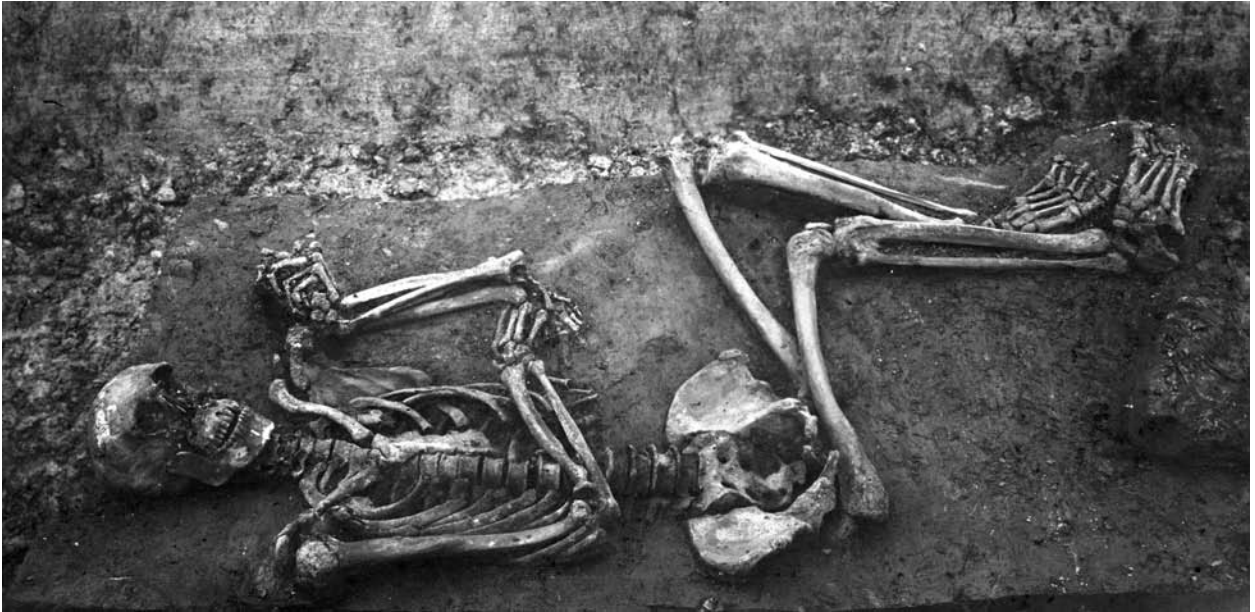


Fig. 12.10 Skeleton of an adult male from Dronrijp-Hatsum I, which was buried high in the fill of a ditch (cat. 26b), dated to the middle or the beginning of the late pre-Roman Iron Age. Rope fragments, which were allegedly found around his neck, are not on the photo. Photo RUG/GIA.

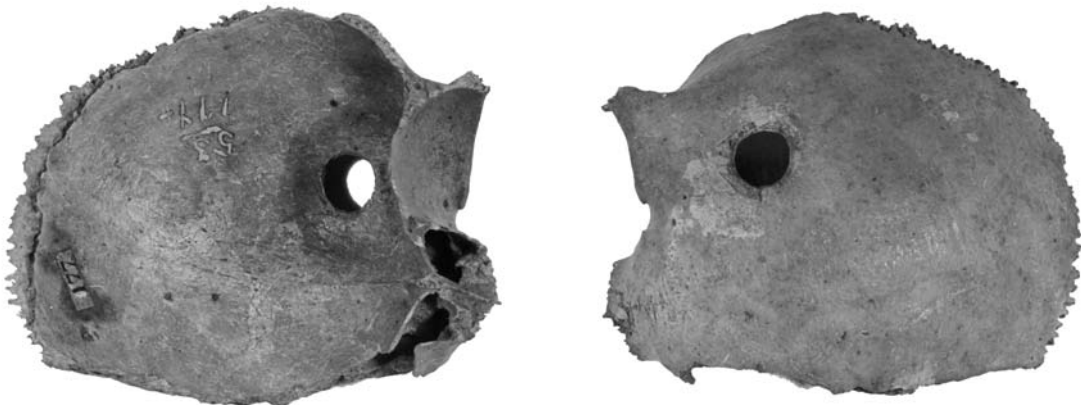


Fig. 12.11 A skull fragment from Winsum-Bruggeburen (cat. 96b) with a hole, probably made by a bullet or arrow from the inside, so through the back of the head. Undated.

the terp region (see below) are too large for the hole; it is highly unlikely that the purpose of trepanation was to obtain amulets.⁷⁰

Femurs from two inhumations were collected because they were broken and healed wrongly, one at an angle, the other shortened (cat. 59a en 64e). One of the inhumations from Ezinge (Appendix B.1, J-1343/cat. 111u) suffered from degenerative osteoarthritis of the right hip and the left shoulder, probably a painful condition. A last anomaly is a skull with a fused first vertebra (cat. 81b).

It can be concluded that only a few skeletal remains show signs of physical defects or bad health. That is remarkable, since the early diggers were especially focused on anomalies. However, subtle defects such as *cribra*



Fig. 12.12 A skull with a trepanation with signs of healing from Ferwerd-Bumania I, from a burial dated to the Roman Iron Age (cat. 31f). The hole at the front of the head was made during the excavation.

⁷⁰ Petrasch 2008, 70.

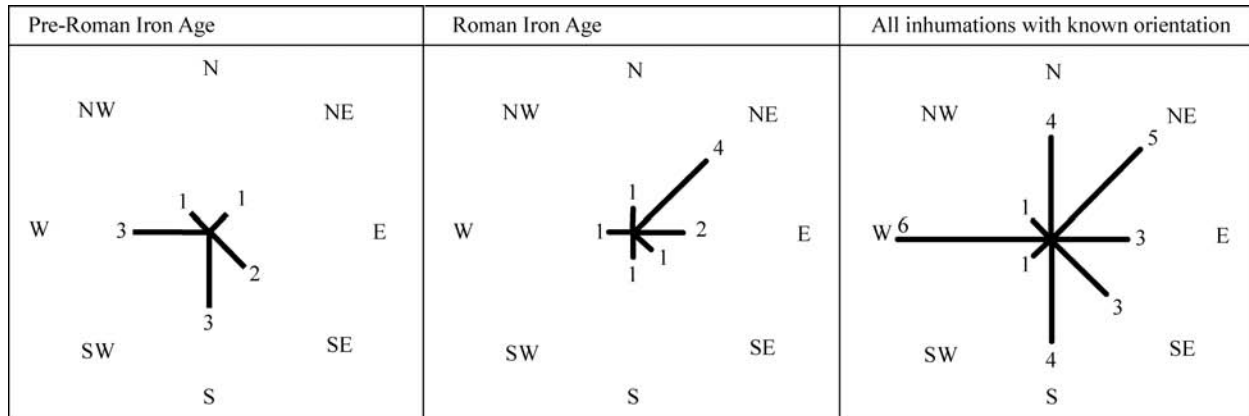


Fig. 12.13 Orientation of inhumations from the research period, as far as known. The right diagram includes all inhumations from the pre-Roman and Roman Iron Age, as well as four inhumations that are possibly younger.

orbitalia will often have been missed. Most of the dead had died relatively young, from causes that did not leave traces in the bones. Childbirth and infectious diseases probably were the main causes of death.

12.5.1.2 Orientation

The orientation of inhumations (that is of the head in the grave), is recorded for only 27 inhumations in the catalogue (fig. 12.13). Although the information is limited, it does reveal that none of the possible orientations was avoided.

12.5.1.3 Body posture

Body posture of 61 inhumations has been recorded (fig. 12.14). Body posture often differs from the extended and supine posture that is often, from a modern, western perspective, considered 'normal'. In fact, extended, supine burials are relatively rare in the terp region. Most bodies, 80%, were more or less crouched, tightly flexed, and two were recorded as prone.⁷¹ Crouched skeletons were not only buried on their sides, but also supine, in particular in the pre-Roman Iron Age. Some of the tightly flexed skeletons may have been bound to keep this posture. Burials that were reported to be in 'sitting' position may actually be skeletons that were buried crouched and on their sides. The pre-Roman Iron Age sitting burial from Lollum-Hizzard (cat. 62a) was possibly sitting upright. A skeleton from Tritsum (cat. 84g), with skeletal parts in several levels of a pit was described 'as if this person was buried head down'. It may have been tightly flexed. The arms of tightly flexed bodies (e.g., Ezinge cat. 111h, fig. 11.50) are not always flexed and close to the body; if these bodies were bound, the arms were left free.

Extended burials are most common in the pre-Roman Iron Age. Most extended burials were in supine position, but a burial in Winsum-Bruggeburen (fig. 12.15;

cat. 96t) and a child burial in Slappeterp (fig. 12.16; cat. 78a) were prone. Many supine skeletons have flexed or even tightly flexed legs; the flexed legs have always fallen to one side. It is unlikely that these corpses were buried with the knees pulled up, as the drawing of the early-medieval burial from Lutjelollum suggests (fig. 12.2).

It has often been suggested in the past that tightly flexed or prone bodies were buried without care, or that they were not burials in the proper sense.⁷² Van Giffen, for instance, doubted that a strongly crouched skeleton he described and photographed (fig. 12.17; cat. 85a) was deliberately buried that way; he implicitly suggested that it had been dumped in a pit.⁷³

Differences in body posture may be accidental or deliberate, based on the meaning of different body postures or because of specific characteristics of the deceased. In some cases, especially when bodies are tightly flexed, posture might be adapted to the size of the pit. An example is the Ezinge burial cat. 111h (fig. 11.50), which was found in a pit that probably was not dug as a burial pit but had been used for another purpose earlier. Accidental body posture does not necessarily imply that a cadaver was dumped without care. It is possible that corpses were wrapped in textile, and were sometimes buried prone without meaning attached. In many cases, however, the position of arms and legs seems to be carefully arranged, which indicates that body posture was not accidental.

It is important to take into account that there may be differences between the original body posture at the time of burial and the position of the body after decomposition.⁷⁴ During this process, the position of skeletal parts often changes, especially if the burial pit was not thoroughly filled-in and there is some empty space under arched body parts. An allegedly prone body such as the child burial from Slappeterp (fig. 12.16; cat. 78a),

⁷¹ Crouched burial as used here refers to posture with more or less flexed legs, as in German *Hockerbestattung* or Dutch *hurkbegraving*.

⁷² Cf. Hill 1995, 11.

⁷³ Van Giffen 1928b, 50-51.

⁷⁴ Duda 2006.

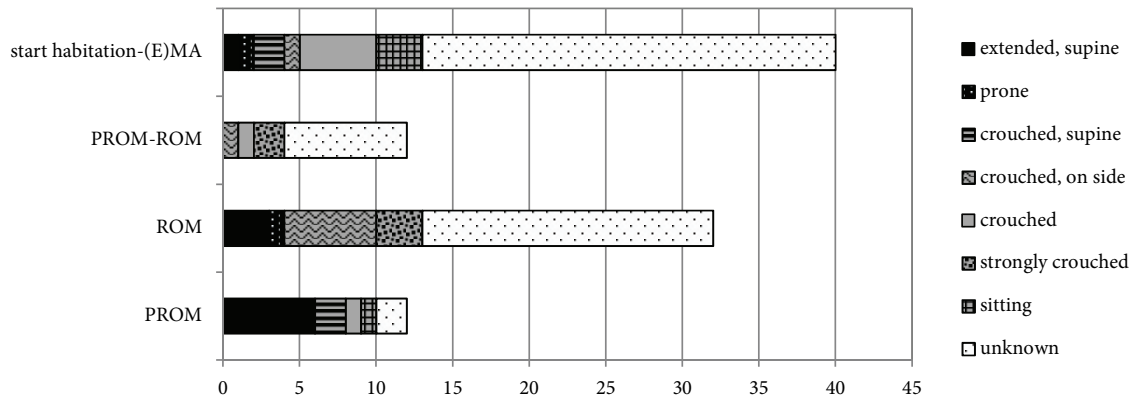


Fig. 12.14 Posture in inhumations from the research period. Abbreviations periods: see table 1.1.



Fig. 12.15 An extended, prone skeleton, excavated in Winsum-Bruggeburen (cat. 96t), dated Roman Iron Age - early Middle Ages. Photo RUG/GIA.

with legs and arms slightly flexed to one side, may actually have been buried on its left side with the legs slightly flexed and leaning forward, to fall face down only after decomposition. That would result in a seemingly prone position of the body. Something similar may also be the case for some of the supine, crouched burials. The aligned legs to one side of the body, suggesting careful placement (e.g., cat. 26b from Dronrijp-Hatsum), might be the result of a burial on the side with flexed legs, but leaning slightly backwards; in that case, the trunk would fall over backwards during the process of decomposition.



Fig.12.16 Vague excavation picture of the grave of a child facing down, found during groundwork in Slappeterp (cat. 78a). Its original position may have been on its side. Photo RCE.

The decomposition process is also an important factor in the interpretation of tightly flexed skeletons. Binding of the legs to the body or wrapping it in a cloth or a hide seems to be the only way to keep a corpse in that position. Tightly flexed bodies resemble the mummy bundles known from South America and elsewhere. In the case of Bronze Age Cladh Hallan on the Outer Hebrides of Scotland, such tightly flexed corpses proved to be mummified.⁷⁵ These mummies had been kept for a long time before they were buried in houses, sometimes as skeletons that were composed of the articulated parts of several individuals. However, strongly flexed skeletons do not need to be mummified. Contraction of the legs may be an unintended effect, caused by pressure of the sediment when a body is slightly crouched; in that case, the angles between limb segments may close when the

⁷⁵ Parker Pearson *et al.* 2005.



Fig. 12.17 A crouched burial from Tzum-Klaverbloem (cat. 85a), found during levelling. Van Giffen assumed the body was dumped in a pit. Photo RUG/GIA.

muscles decompose.⁷⁶ That phenomenon might explain some of the tightly flexed skeletons with unbent arms, such as the one from Ezinge. A mummy bundle would not leave the arms free. Still, some form of binding may have occurred.

If we take such processes into account, the majority of the burials of the terp consist of extended supine and normally crouched burials, on the side and possibly on the back. These are common postures worldwide. Neither of these postures is indicative of a specific period; in the terp region, they occur during the entire research period and also later, in the early Middle Ages. Postures may be related to beliefs about the soul or the afterworld. Supine and crouched on the side are postures of the body in rest or sleeping. The notion of rest refers back, to the unrest of human life. If sleep is associated with death, it may be associated with a notion of temporariness: the soul only has a time-out; it will awake as an ancestor or in an afterworld. Crouched posture is also similar to the foetal position, with possible connotations of the earth as a womb or a mother, and of rebirth. However, such meanings are highly speculative. We have no way of knowing whether they did play a role in the terp region.

Although the majority of the skeletons are either supine and extended or crouched, and can be considered normal, some inhumation burials are deviating. A prone



Fig. 12.18 Inhumation burial of a child in the fill of a ditch, excavated in Tritsum (cat. 84f). The feet were found at some distance from the body (in the right corner). The burial is dated to the late pre-Roman or early Roman Iron Age. Photo RUG/GIA.

(but undated) burial was found in Winsum-Bruggeburen (cat. 96t). Several burials were missing parts of the limbs (cat. 121a, 128a and 132b, or the children from the Feddersen Wierde, see 5.4.3), possibly because these parts were removed before or during burial. The articulated feet of a supine, extended burial from Tritsum were found about one metre from the body (fig. 12.18; cat. 84f). One of the skeletons on the Feddersen Wierde had upwards bent lower legs, to which severing the tendons in the knees was required (see also chapter 5.4.3). In a burial from Tzum-Holprijp (cat. 86a), both wrists were held together by a jet bracelet. These anomalous burials have one thing in common: they seem to be designed to hinder the dead.

Some dead may have been feared, especially if they had magical powers during life, or if they were thought to be vindictive because their lives were unfulfilled. Examples suggested in archaeological literature are, a.o., magicians, witches or druids, criminals, lunatics, people who were murdered, executed or killed in an accident, children, unmarried or childless women, or women who had died during childbirth. To prevent them from harming the living, or to help them find the way to the afterworld, special precautions were taken, such as burying them facedown, or taking away or moving body parts.⁷⁷ This explanation might also apply to the anomalous buri-

⁷⁶ Duday 2006, 43; 47, fig. 3.11

⁷⁷ Merrifield 1987, 71-76; Birkhan 1997, 858-859.

als from the terp region. Here too, inhumation of specific people, either with magical powers or unfulfilled lives, may have required that precautions were taken to keep the buried dead from returning to the world of the living or from hindering the living.

Beilke-Voigt considers all inhumations in settlements *Sonderbestattungen*. Her arguments are that adults are normally cremated and buried in cemeteries (as we have seen, that is only the case from the 3th century onwards), and that bodies often have unnatural positions or seem to be placed without care; her examples are the man with bent legs from the Feddersen Wierde mentioned above, or prone or strongly flexed skeletons.⁷⁸ However, posture is not what makes these inhumations deviating from other forms of mortuary ritual. Inhumation is rare anyway. Differences in posture between inhumations actually do not support the idea that these inhumations are *Sonderbestattungen*, induced by the death of outsiders or victims of execution or human sacrifice. As was noted above, sex and age of the inhumation burials indicate that the inhumations in the terp region represent a cross section of the population; a specific selection was not made. Their different body postures actually support the idea that they do not represent a selected group. Rather, they are random community members with individual characteristics, who died of a variety of causes. That sometimes had consequences for body posture when they were buried.

12.5.1.4 Grave goods

Grave goods are not common in the inhumations in the terp region; some of them are associated with artefacts, but these associations are not always certain (table 12.6). Associated artefacts can roughly be divided in three categories: jewellery, pottery and other objects.

Most jewellery (jet bracelets and jet beads, brooches) is of uncertain date, ranging from the middle Roman Iron Age to the Migration Period or the early Middle Age. Jewellery is common in female graves from the Migration period onwards⁷⁹, but, as was noted above (section 12.4.1), the change towards new mortuary practices probably was not sudden. There must have been a transition period, already starting in the 3rd century AD, during which burials with jewellery might already have occurred. The sex of the deceased in two burials associated with jewellery could be established (cat. 4a and 96t). They were both female. Only one inhumation possibly associated with bronze jewellery is earlier than this transition period: a grave from Hogebeintum (cat. 44a), which was reported to be found with two bronze neck rings, probably from the pre-Roman Iron Age. It is



Fig. 12.19 Burial in a large pit in the terp of Wierhuizen found with two pots, probably dated to the Roman Iron Age (cat. 132b). The lower left leg and parts of the arms are missing. Photo RUG/GIA.

not clear whether the neck rings really belonged to this burial, or were just found nearby.

Potsherds were found with several inhumations, but they may often have been part of the fill of burial pits. Two tightly flexed burials in Ezinge (fig. 11.50; cat. 111h) and Tritsum (cat. 84g), both from rectangular pits, were reported to be found with potsherds and animal bones. These finds are partly missing now (Ezinge) or have not been studied yet (Tritsum), so the information on these possible grave goods is insufficient; they might be the remainders of ritual meals on the occasion of the deposition of these corpses.

Complete pottery in graves from this period is exceptional. Pots are recorded on four occasions: Midlum-Gratingastate (allegedly a *streepband* pot, missing now, cat. 72a), one of the burials from Ezinge (a small pot that was already antique at the time of deposition, cat. 111u, as discussed in the previous chapter), one of the burials from Blija-Sytsma (a *terra sigillata* plate, cat. 13b), and a burial from Wierhuizen (two pots, cat. 132b). From the absence of grave goods in the majority of burials, it can be inferred that it was not customary to provide the dead with food for the afterlife. These pots may not have been deposited as containers for food, but for their own sake. That was already suggested for the small pot in the burial from Ezinge (see chapter 11), which was probably acquired as a gift and must have been an heirloom of several generations. The *terra sigillata* plate, one of the very few complete *terra sigillata* vessels from the terp region, may have come to Blija-Sytsma as a gift as well. Both vessels probably had a meaning that was associated with the biography of these objects and their role in personal or family histories. The *streepband* pot from the burial in Midlum was less exotic, but may still have been consid-

⁷⁸ Beilke-Voigt 2007, 184.

⁷⁹ This was, for instance, demonstrated by anthropological research of the human remains in the cemetery of Oosterbeintum (Knol *et al.* 1996).

Table 12.6 Certain and possible grave goods from inhumations in the terp region. Not included: sherds that probably belong to the fills of burial pits.

period	cat. no.	terp/site	description	sex/age	association with burial
MPROM	5a	Arum-Allingastate	base of hand shaped pot	F, 35-50	in fill?
M/LPROM	62a	Lollum-Hizzard	potsherds (one broken pot almost complete) and part of a cattle skull	adult	yes or nearby
	44a	Hogebeintum	two bronze neck rings	F, 30-40	possible
LPROM	111dd	Ezinge	forked branch	adult	probably
LPROM/EROM	111h	Ezinge	spindle whorl, possibly sherds and two cattle phalanges	adult, tightly flexed	yes or in fill of pit
LROM/ROM	84g	Tritsum	animal bones and potsherds	probably tightly flexed	in fill of pit?
	103a	Zürich-Kop Afsluitdijk	textiles, 6 ceramic playing counters	young child	yes
EROM	72a	Midlum-Gratingastate	pot	M, ca 45	yes
ROM	132b	Wierhuizen	o.a. 2 pots	F	yes
MROM	108a	Eenum	horn comb and 20 Roman coins (?)	F?	nearby?
	108b	Eenum	4 Roman coins (?)	M, ca 15?	nearby?
	111u	Ezinge	antique small pot	M, ≥ 25-35	yes
	13b	Blija-Sytsma	terra sigillata plate	M. adult	yes
MPROM-EMA	112a	Frytum	small, perforated bone disk (spindle whorl?)	male, young adult	yes or nearby
	96c	Winsum-Bruggeburen	green discolouration (bronze jewellery?)	F, adult	yes
	20a	Cornjum	horse skull	?	?
LPROM-MP	68a	Menaldum-Graldastate	jet bracelet, on the skeleton	?	yes
	86a	Tzum-Holprijp	jet bracelet, on both arms of the skeleton	young person	yes
M/LROM-MP	91c	Welsrijp	39 jet beads on skeleton	?, 30-40	yes
	4a	Achlum-IJslumburen	bronze bracelet on skeleton	F, 30-40	yes
ROM-EMA	96t	Winsum-Bruggeburen	bronze object near left thigh	F, 36-48	yes
LPROM-EMA	132c	Wierhuizen	sheep bones		unclear

ered special because of the way it was acquired. The burial from Wierhuizen (fig. 12.19; cat. 132b) is exceptional. This body was buried on the slope of a large pit, the pots, sherds and other finds were found in the pit. The objects were collected but not numbered, so that their date and their relation with the burial are not clear.

Besides jewellery and pottery, there is a third, variable category; the association of these objects with a burial is not always certain. The textile fragments from the burial of a young child in Zürich-Kop Afsluitdijk (cat. 103a) may belong to clothing or a cover, which are only conspicuous for the fact that they were preserved, but this grave also contained six playing counters. The forked branch from a burial in Ezinge (cat. 111dd) was found near the body. Less certain are the association of a cattle skull with a burial from Lollum-Hizzard (cat. 62a), and a horse skull with a burial in Cornjum (cat. 20a). The small perforated bone found with a burial from Frytum (cat. 112a) might be a spindle whorl. Just as the spindle whorl near one of the burials from Ezinge (cat. 111h), it is unknown whether it was a grave gift, or was accidentally part of the fill of the pit. Apart from the spindle whorls, which, as personal possessions, might be considered or-

dinary grave gifts (although such a category clearly does not exist in the terp region during the research period), all these objects are uncommon in a mortuary context. Playing counters, animal skulls, cattle phalanges or a forked branch rather functioned in different ritual contexts; such objects indicate that these burials may have played a role in rituals that were not primarily mortuary rituals, but had other meanings.

Two burials from Eenum were allegedly associated with Roman coins, one of them also with a comb (see cat. 108a-b). These burials were found during one of the first excavations in the terp area, probably in 1878. The finds were not collected or they have disappeared since, and there is some confusion on the association of the finds with the burials. The coins seem to have been found not far from the burials, but not necessarily in the hands of the deceased, as a newspaper wrote at the time. The comb would be a unique grave gift in the research period; combs become regular grave gifts only later. It is quite possible that these graves were actually from the Migration Period or the early Middle Ages, but were dug into a part of the terp where Roman coins had been deposited earlier.

It may be clear that grave goods are uncommon during the research period. Personal possessions such as jewellery probably occur only in the 3rd or 4th century AD, and later in areas that were not inhabited during the 4th century AD. Earlier objects associated with graves are of a different character. They seem to be related to rituals that are not primarily mortuary rituals for specific persons, but have other or additional meanings.

12.5.1.5 Location

Detailed information on the location of burials is usually not available. A precise location is known of only 20 burials. They were found in or near houses or ditches, or in pits other than burial pits. Another 14 burials were situated in the salt marsh or at the foot or base of the terp. These latter two categories largely overlap. Of 41 graves, it could be established that they were found in anthropogenic terp layers, but other information on the contexts of these finds is lacking (fig. 12.20).

Most inhumation burials of which the location is known are from the Roman Iron Age (n = 32), only eleven are from the pre-Roman Iron Age. This ratio is biased by their location in or outside a terp. During the pre-Roman Iron Age, most terps were small and accommodated no more than one or a few houses. Most of the graves found in the salt marsh subsoil are dated to this period. Commercial quarrying did not extend to the salt marsh subsoil, so that burials in the subsoil will often have been missed. During the Roman Iron Age, many terps had grown considerably and could not only accommodate the houses themselves, but also many other features that were part of the settlement. That is one of the reasons that most burials from the Roman Iron Age were found

in terps. Another reason was established in the Ezinge case study: when the population grew and the terp platforms became part of a larger terp, the available space on the terp became scarce. In the same period, the location of inhumations changed, from the salt marsh surrounding the terps to the house platforms, where they probably played a role in establishing family identity and in the contest for the available space. Apparently, the salt marsh surrounding the terp was no longer felt to be ancestral land. The available space was divided. Family identity was associated with confined territories on and probably outside terps from that time on.

Most burials in or near ditches, most of them situated in the salt marsh around the terps, are also from the pre-Roman Iron Age. Burials from that period *in* terps are all associated with houses. It should be noted that the information on the relation between features and structures such as houses, ditches and pits, is only rarely available. Most of the burials known to be associated with houses are from Ezinge. Among the general category of burials in terps will be many more that were associated with houses or other structures.

12.5.2 Partial skeletons

From a small number of inhumations, skeletal parts are missing, and there are some records of partial skeletons (table 12.7). Only some of these cases are reliable as partial skeletons. In many cases, parts of skeletons were dug away unnoticed, not only during levelling but also during excavating. That undoubtedly happened in Ezinge (cat. 111h and t-u), where an arm and protruding hands and feet were dug away unseen, and in Englum, where a large number of skeletal parts of one individual were discov-

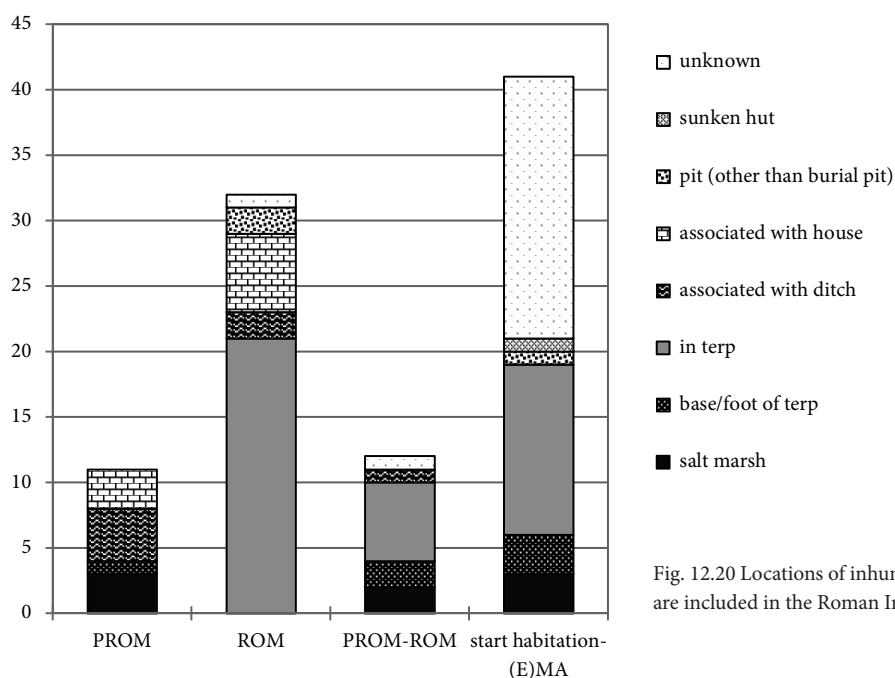


Fig. 12.20 Locations of inhumations per period. LPROM/EROM finds are included in the Roman Iron Age.

Table 12.7 Partial and possibly disturbed inhumations from the research period found in the terp region. Grey: not disturbed or incompletely collected during levelling or excavating.

period	cat. no.	terp/site	description	location	disturbed or partial?
MPROM	111y	Ezinge	Partial skeleton in burial pit, probably missing skull and unknown other parts.	In the salt marsh	Partial burial or parts were taken out shortly after burial.
	120b	Middelstum-Boerdamsterweg	Inhumation, from which the central and right parts of the upper body are missing.	In the fill of a ditch	Unintentionally disturbed.
LROM-EROM	26a	Dronrijp-Hatsum I	Postcranial and cranial skeletal parts of two infants, possibly twins. The second individual is only represented by some cranial parts; there are no marks on these bones. There are some post mortem marks, possibly from the excavation.	In a dung layer, in or near a house	Probably collected incomplete.
	46a	Itens	Crouched skeleton recorded, only lower half on excavation drawing. The right foot is missing.	In a ditch	Missing parts were perhaps dug away during earlier groundwork, or the upper part was not accessible.
	84f	Tritsum	Extended, supine skeleton of a child. Some bones of both feet were found ca 1 m from the lower legs.	In the fill of a ditch	Probably accidentally removed during the excavation.
ROM	128a	Usquert-Kloosterwiltwerd	Skeleton without arms and legs.	Near a house	Partial burial or disturbed later?
	132b	Wierhuizen	Crouched skeleton on the slope of a large pit; the left lower leg and parts of the arms are missing.	In a large pit	Partial burial?
MROM	13b	Blija-Sytsma	Extended inhumation with terra sigillata plate, lower part in situ, upper part partly disappeared by burning, some bones and plate affected by fire.	In the terp	Probably disturbed from higher layer.
MPROM-ROM	96r	Winsum-Bruggeburen	Articulated parts of a child <16.	In a ditch	Deposited as such or disturbed shortly after burial.
	96u	Winsum-Bruggeburen	A pair of forearms in the fill of a ditch, right under the topsoil.	In a ditch	Probably deposited as arms or a pair of bones.
ROM/MP	96t	Winsum-Bruggeburen	Extended, prone burial of a woman, 36-48, right under topsoil. The cranium is incomplete, the shoulder blades, the left part of the pelvis, some vertebrae and ribs and some hand and foot bones are missing.	In a burial pit in the terp	Probably complete, disturbed by levelling or ploughing.
ROM-EMA	121a	Middelstum-village	Skeleton without hands.	In the terp	Deposited as such?
	123b	Usquert-Kloosterwiltwerd	Tibia and fibula, deposited as single bones or as articulated lower leg?	In the terp	Probably deposited as such.
	96s	Winsum-Bruggeburen	Articulated body parts in a pit, under the topsoil. The bones are partly burnt; most of the remaining bones are damaged. The body parts, including two articulated parts of the spinal column, must have been buried here before decomposition was complete.	In a pit in the terp	Probably buried as such, after fire or incomplete cremation?
MPROM-EMA	96f-g	Winsum-Bruggeburen	Human bones in the fill of a quadrangular pit: the skull, trunk and incomplete right femur of one individual, a second left pelvis and os sacra of a second individual.	In a large pit in the terp	Deposited as such?

ered in the excavated soil (cat. 109r). It is quite certain that some of the missing parts from skeletons listed in table 12.7 also disappeared unintentionally during later digging, either during levelling or excavating, or earlier, during digging in the terp when it was still inhabited. An example is the incomplete burial of two infants, possibly twins, from Dronrijp-Hatsum I (cat. 26a). They are represented by incomplete postcranial skeletal that might be of one individual, and of cranial parts that belong to two

individuals. There are no indications that the bodies were cut in pieces. That would also be highly unlikely for the skulls. Considering the fragility of the bones of infants, it is most likely that the bones of these two infants were only noticed when part of them was already dug away, and that they were not collected completely.

Nine of the uncommon finds of human remains can be ascribed to intentional actions at the time of deposi-

tion (marked grey in table 12.7). These finds can be subdivided into two categories:

- Inhumations from which parts were deliberately taken, either before or after burial.
- Burials of articulated parts of corpses.

Four records belong to the first category. These possibly include a partial skeleton from Ezinge (cat. 111y), from which at least the skull is probably missing and perhaps other parts as well. From three other burials (cat. 121a, 128a, 132b), hands or (parts of) legs or arms are missing. The remaining five uncommon finds belong to the latter category; they are parts of skeletons, or skeletons that were buried in parts, some with traces of burning.

There is a striking correlation between the finds from these two categories and their location. Four partial burials of the second category come from the Frisian terp of Winsum-Bruggeburen, the fifth is a possible burial of a lower leg in Usquert-Kloosterwijtwerd, but it is not certain whether these bones were deposited as a complete lower leg or as single bones. All inhumations of the first category come from the Groningen part of the terp region (Ezinge, Middelstum, Usquert-Kloosterwijtwerd and Wierhuizen). There are no finds of that type from the Frisian terp region.

There is no evidence of the burial of articulated body parts anywhere in the Frisian or Groningen terp region, except in Winsum-Bruggeburen and perhaps in Usquert-Kloosterwijtwerd. This exceptional practice might somehow be related to the special position of Winsum-Bruggeburen as a Roman outpost during the early Roman Iron Age, either of a military or a socio-political character, as was discussed in chapter 2.3.2. In Winsum-Bruggeburen, native traditions may have changed due to the presence of Roman soldiers, or by Roman customs that were adopted by the local elite. If excarnation was indeed a common burial custom in the entire terp region, as was suggested in the previous chapters, it may have changed under the influence of the Romans and their regulations. Excarnation with the aid of scavengers may have fallen into disuse because it was deemed offensive. The partial skeletons were perhaps buried halfway the excarnation process, because it took too long without scavengers. The excarnation process will be further discussed below.

The partial burials of Winsum-Bruggeburen do not need to be burials of naturally deceased people. They remind us of the burials found in the Iron Age hillfort of Danebury in Hampshire (England).⁸⁰ The dead in many of the so-called pit burials there were shown to have weapon-related injuries. They were killed, mutilated, or exhibited after death. Danebury was not an ordinary rural settlement, but a central place with a military function. That might be a similarity with Winsum-Bruggeburen,

which perhaps was the temporary domicile of Romans in the early Roman Iron Age and a regional elite residence with close contacts with the Romans. The partial burials might be accounted for by an increase in violence in this situation, also towards women and children. There are no reports of cut marks or other signs of violence, apart from the undated skull fragment cat. 96b, but the human remains have not been fully examined yet. Additional physical-anthropological research and pottery and radiocarbon dates are necessary to better understand these unusual burials.

12.5.3 Human sacrifice

There are two records of bog bodies in the terp region, one from the vicinity of Opwierde in Groningen (cat. 124a), the other found near Westergeest in Friesland (cat. 92a). The find in Opwierde is almost certainly a product of phantasy, but the assemblage of three bog bodies, found while dredging the river Zwemmer near Westergeest, is reliable.⁸¹ Unfortunately, the find cannot be dated since the bodies were not kept. It may belong to the pre-salt marsh habitation of the area in the late Bronze Age or early Iron Age, or to later terp habitation, which started in this area during the late pre-Roman Iron Age. Male and female bodies were identified at the time, but it is unknown on what grounds this identification was based. Two of the bodies, allegedly a man and a woman, were tied together by a rope. That indicates that this was not an accidentally disturbed cemetery in a wet area and that the bodies were no accidental deaths. The finds are comparable to the bog bodies inland. The use of violence can be inferred from the binding of the bodies. Whether these three people were sacrificed or executed cannot be assessed. As was argued in chapter 5.3.2, these two categories are not mutually exclusive. The possibility that human sacrifice, capital punishment or a combination of the two was practiced in the terp region during the research period is indicated by this find.

In the above, the finds of human remains in terp settlements are explained as being part of rituals that are related to family or household identity, and that the dead died of natural causes. However, even if the first part of this interpretation is correct, it is possible that the second part is not. Even if these people were family or household members, they may have been killed or sacrificed for the benefit of their families. Several authors have stated that single inhumations, in and outside the terp region, prob-

80 Craig *et al.* 2005.

81 Van der Sanden 1990, 54-56.



Fig. 12.21 An undated burial from Techum (cat. 83c). The grave was situated in the salt marsh near a creek, which silted up during the pre-Roman Iron Age. Photo ARCBv.

ably represent human sacrifices.⁸² It is worthwhile to examine the arguments in some detail.

12.5.3.1 Argument 1: Bog bodies

The interpretation of single burials as human sacrifices is often partly based on comparison with bog bodies. However, although they have in common that they both concern single bodies, these two types of human remains are not similar in other respects. Firstly, while it can often be established that the bog bodies were killed, sometimes in more than one way, the cause of death of inhumations in the terp region is usually unknown. In the one case in which the cause of death is suggested by the alleged presence of rope fragments, the ‘hanged man’ from Dronrijp-Hatsum I (cat. 26b), the evidence is lacking and might be false. It might be argued that a violent death is difficult to establish when only bones are available, so this argument is not decisive.

Secondly, bogs and moors are typical liminal zones, ambiguous wet/dry locations that may have been considered places where contacts with the world of the supernatural were easily made. The bog bodies were deposited outside settlements and fields. Some inhumations in the

terp region were found in ditches, which might be considered liminal zones, but these inhumations were only buried there when the ditches had already been filled in; the burials were found high in their fills (e.g., Middelstum-Boerdamsterweg cat. 120b; Dronrijp-Hatsum I, 26b). The graves that were found near creeks (e.g., Techum cat. 83c (fig. 12.21); a cremation from Heveskesklooster, cat. 117a) might have been buried when these watercourses were still open, but they are so much like ordinary burials that human sacrifice is not the explanation that first comes to mind. Other locations with human remains in settlements in the terp region cannot be considered liminal zones.

The single inhumations from the terp region, situated in or at a short distance from settlements, in or near houses, or in or near ditches surrounding fields, apparently do not represent people who were removed from the human world by being sacrificed to the gods. The location of their graves rather indicates that they were kept within the human world; they may belong to a different type of supernatural environment, that of the ancestors.

12.5.3.2 Argument 2: Child burials

Another argument for the interpretation of single burials as human sacrifices according to its adherents, is that children, especially very young children, are often buried in ways or at locations that differ from the burials of adults or older children. Whether or not these infants were sacrificed, has been debated by several authors.

⁸² Many authors mention human sacrifice as one of several possible explanations of deviant or single burials in or outside the terp region (e.g. Merrifield 1987; Wait 1985; Hessing 1993. The most recent and explicit on inhumations in the terp region is Gerrets (2010, 114). On the same page, Gerrets explains the worked skull cups and roundels from the terp region as a result of cannibalism.

In the Netherlands, Halbertsma has described the special treatment of children in the early Middle Ages, on the basis of historical sources.⁸³ Halbertsma considered the practice of the occasional killing of children as part of a long Germanic tradition that, as he claimed, was already hinted at by Tacitus⁸⁴ and that became a theme in many later Germanic fairy tales. According to Halbertsma, the bog bodies, often children with some deformity, belong to the same tradition. However, as was already noted in chapter 5, children are actually rare among the bog bodies.

There has been a shift in the interpretation of child burials during the last decades. In 1987, Merrifield interpreted infants found in buildings from the Roman period in England as a continuation of Iron Age foundation sacrifices.⁸⁵ According to Roman law, the dead were to be buried outside town, but that did not apply to infants; "... there is little doubt that human foundation sacrifice continued in Roman Britain in the less conspicuous form of infanticide, ...", according to Merrifield.⁸⁶ Children in temples and shrines in Roman Britain were thought to be ritually killed by Green.⁸⁷ In Iron Age southern Britain, infants are usually found in the interior rather than in the periphery of sites, and more often in non-hillfort settlements than inside hillforts.⁸⁸ That is not suggestive of human sacrifice, as Wait already argued in 1985, "... because such rites are unlikely to occur in small settlements where infant burials are so common."⁸⁹ Gowland and Chamberlain concluded that the distribution of ages at death in infants from houses in the Roman Period "is similar to a natural mortality profile".⁹⁰ Infant burials therefore are common burials of naturally deceased children, rather than victims of infanticide.

In the salt marsh area of Germany, several burials of infants and young children have been found in houses, in the settlements of Tofting, Hessens and the Feddersen Wierde; they were described in chapter 5. These children were initially thought to have been killed and were interpreted as child sacrifices.⁹¹ It has recently been established that there are no indications that these children were killed, and that most of them were clearly buried with care.⁹² They are no longer considered child sacrifices. Burials of infants or young children in or near houses

rather represent common burial practice for this age group.⁹³

The common opinion nowadays, also in this study, is that infants and young children found in and near houses are not victims of infanticide or human sacrifice, but died of natural causes. Small children were not treated in the same way as adults, because they were not yet full members of their community. Beilke-Voigt uses African parallels to illustrate that infant burials need not be child sacrifices, and that there may be other reasons to bury infants and young children in houses.⁹⁴ These African examples provide a variety of reasons: love for the dead child; to have the beneficial spirit of the child nearby to help the living; to enable it to be reborn in the same family soon; to keep the child close to the family; to prevent infertility; or because the mother will never be happy again and will not get pregnant if she is separated from her dead children. Similar reasons may well be behind the infant burials in northwestern Europe.

Only a small number of burials of infants or young children are known from the terp region of the northern Netherlands. Only three cases, including four individuals, are known: possible twins in Dronrijp-Hatsum I (cat. 26a), a young child, found with pieces of fabric and ceramic playing counters in Zürich-Kop Afsluitdijk (cat. 103a), and an infant in Jelsum (fig. 12.22; cat. 47a). The context of 103a is unknown, but the pieces of fabric it was found with suggest careful burial; the children of Dronrijp-Hatsum I were probably buried in or near a house, the child of Jelsum was certainly buried in a house. There is no doubt that these children died of natural causes, and were buried in or near their family's home.

12.5.3.3 Conclusion

If children buried in and near houses died by natural causes and were buried near their family's home because they belonged with their family, also when dead, it is highly unlikely that older children and adults buried in similar places are human sacrifices. Single graves, also if they are buried further from the houses, are therefore interpreted here as belonging to people who died of natural causes, and who were buried in or near their family's homes or land.

Despite this general interpretation that can be applied to the majority of inhumations in the terp region, there might be exceptions. Graves with bodies that seem to have been dumped or mistreated attract attention when human sacrifice is concerned. An example is a body that was reported to be buried with the head down from Tritsum (cat. 84g). Unfortunately, this burial was not excavated in a way that makes the posture of the body and its position in the burial pit clear. Skeletal parts were

83 Halbertsma 1982, 586-590.

84 Halbertsma refers to Tacitus' *Germania* 19, in which Tacitus, possibly in response to Roman practices, actually says that the Germanic people consider it shameful to kill a child.

85 Merrifield 1987, 51-52.

86 Merrifield 1987, 52.

87 Green 1998, 185.

88 Cf. Hill 1995, 12.

89 Wait 1985, 255.

90 Gowland & Chamberlain 2002, 677.

91 Bantelmann 1955, 47; Haarnagel 1979, 231.

92 Cf. Beilke-Voigt 2001, 180; Siegmüller 2009.

93 Beilke-Voigt 2001.

94 Beilke-Voigt 2001, 186.



Fig. 12.22 Infant burial from the middle Roman Iron Age found in Jelsum (cat. 47a). Photo: E. Kramer, Fries Museum.

just collected when digging down, without attention to posture and position in the pit. This burial might well be tightly flexed and supine.

Nevertheless, from the probable practice of human sacrifice during the research period, which is reflected in the bog bodies in Drenthe and in other areas with bogs and moors, and in the, possibly contemporary, bog bodies from Westergeest, we can suspect that human sacrifice was occasionally practiced in the terp region. However, the inhumations found in and near the settlements of the terp region are similar to the bog bodies of Drenthe only in one respect: they are both found outside cemeteries. There are no reliable indications that the people that were interred in and near houses and ditches were killed, and there is a significant difference in the locations of bog bodies and single inhumations.

If human sacrifice of the bog body type occurred in the terp region during the research period, the human victims were probably deposited in liminal places that were accessible from the salt marsh area, for example in creeks that were silting up, in the peat area that bordered the salt marsh area, or even in the sea. But with the exception of three bog bodies near Westergeest, human remains that might be interpreted as the remains of human sacrifices in the terp region have not been located yet.

12.5.4 Cremations

There are far fewer cremations than inhumations in the terp region (table 12.8). If we take all recorded cremations to be reliable and from the research period, the total number of cremations in the inventory from the research period is eleven. Five of these are from the province of Friesland, six from Groningen (fig. 12.23). Percentages indicate that cremations were considerably less rare in Groningen than in Friesland (table 12.3). In Groningen, they occur in 23% of all locations in the catalogue with finds from the research period, in Friesland only in 5% of all locations. The difference is less remarkable if we compare the numbers of finds assemblages from both provinces (6.2 vs 2.3%), due to the large number of recorded

finds from the two Groningen terps that served as case studies, Ezinge and Englum. It is, however, by no means certain that the cremations in table 12.8 are all human. It cannot be taken for granted that all reported cremations are human, as is indicated by a find from Dronrijp. This find, dated to the middle Roman Iron Age, consists of a large pot, which contained a small pot with two pieces of cremated bone. These were identified as cattle bones (see description in cat. 23a). Only two cremations from Friesland and three from Groningen are certainly human, but it is not certain that these are all from the research period. The other cremations could not be examined.

The date of a confirmed human cremation from Dronrijp-Noord (fig. 12.25; cat. 23a) was already discussed in section 12.4.2; it might be younger than the research period. This cremation was situated about 100 metres from the animal cremation mentioned above, in the same area right outside the Roman Iron Age terp. Another cremation (cat. 25a) was reported from Dronrijp-Fûgellân, a location not far from Dronrijp-Noord (see fig. 12.24); the finder collected two pots and a whetstone, which were found in the centre of what he thought were scattered cremated bones (fig. 12.26). Whether the cremation from Dronrijp-Fûgellân was human or animal cannot be examined, since the bones were not collected. The whetstone that was part of this finds assemblage is reminiscent of the polishing stone that was found with the cremation from Dronrijp-Noord. These finds assemblages suggest that some sort of cremation ritual was practiced in the area surrounding the present village of Dronrijp. However, these cremations may all have different dates. Moreover, the cremated cattle bones in one of these assemblages indicate that this was not a common cremation ritual for humans.

Of the other cremations in Friesland, only the one from Ferwerd-Kloosterterp was examined and confirmed. The cremations from Tzum-Groot Barrum and Spannum are both suspect, for different reasons. The cremation from Tzum-Groot Barrum is based on hearsay and the present location of the urn in which the cremation was supposedly found is unknown, so its date cannot be confirmed; it might be younger than the research period. The scattered, burnt artefacts of central-European origin from Spannum (see cat. 79a) were interpreted by Erdrich as the luxury grave gifts belonging to an elite cremation, possibly of an immigrant from central Europe who settled in the terp region after the Marcomannic wars had ended, or of a member of the local elite with contacts in central Europe.⁹⁵ This possible cremation grave is comparable to the elite cremations mentioned in section 5.4: Texel-Sommeltjesberg (Noord-Holland), Diever-Schoeberg, Anloo (Drenthe), or Bentumersiel (Lower-Saxony).

⁹⁵ Erdrich 2004, 795-6.

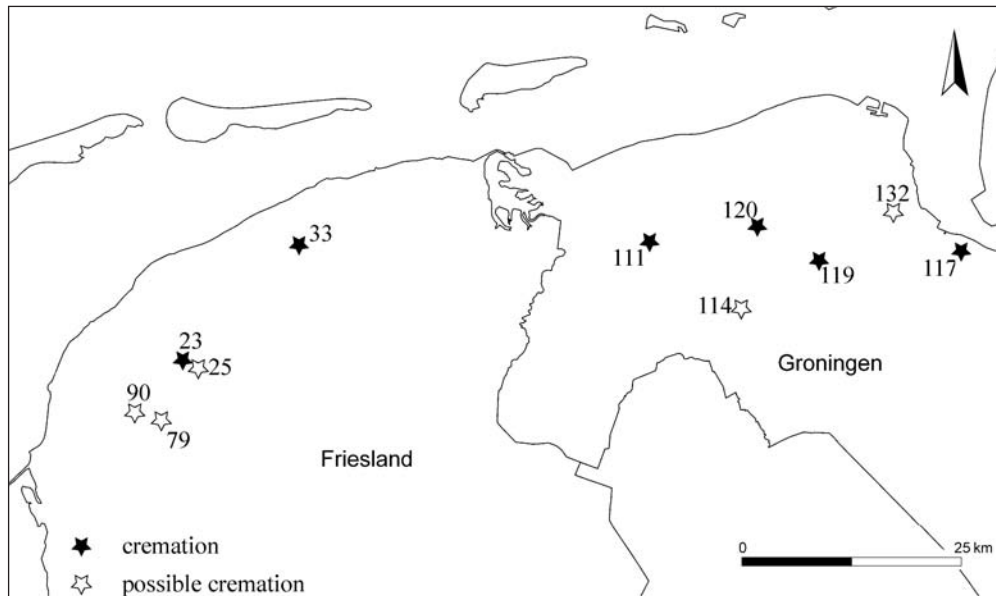


Fig. 12.23 Geographical distribution of cremations in the terp region of Friesland and Groningen.

Of the three cremations found in the province of Groningen, three were examined and confirmed, while a fourth, from Middelstum-Boerdamsterweg, seems reliable. The cremation from Ezinge, however, consists of no more than three cremated human bone fragments in a burnt layer, while the date of the cremation pit from Lellens-Borgweg still needs to be confirmed. Two recorded cremations, from Groningen-Beijum and from Wierhuizen, are uncertain.

If we ignore all uncertain cremations or cremations of a possibly later date, only the cremations of Ferwerd-Kloosterterp and Hevesklooster remain. They represent two different forms of cremation burial: urn burials and *Brandgruben*, cremation pits. Several of the uncertain cremations are of these two types as well; they consist of small pots with a small amount of cremated bone, just like in areas where cremation was common.⁹⁶ The cremations from Ferwerd-Kloosterterp, Middelstum-Boerdamsterweg, Wierhuizen, Groningen-Beijum and Tzum-Groot Barrum, if reliable, are all of this type. Cremation pits contain the burnt remains of the pyre, mixed with cremated bone fragments and burnt grave gifts. Apart from the cremation pit of Heveskesklooster, the cremations of Dronrijp-Noord, Lellens-Borgweg and possibly Spannum are of this type. The cremation of Ezinge, if it is interpreted correctly as the remains of a cremation that were spread over an area between two houses, is atypical; it is reminiscent of pre-Roman Iron

Age cinerary barrows, remains of the pyre and cremated bone fragments covered by a barrow.⁹⁷ A barrow is not present in Ezinge, but perhaps this cremation (if indeed it was a cremation), occurred prior to the heightening of this part of the terp in the process of rebuilding a house. The character of the possible cremation of Dronrijp-Fûgellân is unknown.

Cremation pits were a common form of cremation burial outside the terp region in the late pre-Roman Iron Age and the Roman Iron Age, but the use of urns as containers for the cremated bones stopped at the end of the urnfield period, in the middle pre-Roman Iron Age in areas neighbouring the terp region. They reappeared only in the 3rd or 4th century AD.⁹⁸ The cremation burial from Middelstum-Boerdamsterweg might still be associated with the older urnfield tradition, but the younger ones are uncommon. That might be an indication that these urned cremations are actually no cremations, or are of later date than their pottery or radiocarbon dates suggest; that is not impossible, considering the problems with radiocarbon dating of cremations, which were discussed above.

The locations of these certain and possible cremations are comparable to the locations of inhumations. The cremations from Heveskesklooster, Dronrijp, Groningen-Beijum and Lellens-Borgweg were found in the salt marsh subsoil. One, from Middelstum-Boerdamsterweg, was found in a ditch. The cremation from Ezinge was associated with a house. The others are levelling finds, found in terp layers.

⁹⁶ The cremation of a human body leaves ca 1600-1800 g of cremated bone, but cremations in cemeteries from the past, e.g. along the Roman limes, rarely contain more than 500 g, often less (Smits 2006, 135-137). Incomplete or careless collection of the cremated bones from the pyre after cremation may be an important cause of the incompleteness of the cremated bones (McKinley 2006, 85).

⁹⁷ Hessing & Kooi 2005, 632.

⁹⁸ The earliest dates of urned cremations provided by Lanting & Van der Plicht 2012.

Table 12.8 Possible cremations from the research period found in the terp region.

period	cat.no.	terp/site	collected	description	location	human?
MPROM	120a	Middelstum-Bw	cup, bones are missing	Cup filled with fragile cremation remains (infant?).	High in fill of ditch	probably
LPROM	111l	Ezinge	3 cremated bone fragments	3 cremated bone fragments, found in burnt layer.	Between two houses	yes
LPROM-EROM	117a	Heveskesklooster	charcoal and burnt bone fragments	Large cremation pit in wet area, filled with charcoal and cremated bone fragments (adult, aged 20-40); green discolouration on some bones: bronze jewellery?	In wet area near creek, ca. 70 m from first platform	yes
EROM	114a	Groningen-Beijum	sherds	Sherds, some (from this period?) with cremated bone fragments sticking to them.	Outside terp	?
	132f	Wierhuizen	pot (corroded iron?)	Small pot containing corroded iron, with some cremated bone fragments sticking to it.	?	?
	25a	Dronrijp-Függellân	two pots, whetstone	Two pots and a whetstone, surrounded by bluish cremated bone fragments. The pots are atypical, most likely EROM.	Outside the contemporary terp	?
MROM	33a	Ferwerd-Kloosterterp	pot and cremated bone fragments	Small pot containing cremated boned fragments (adult).	?	yes
	79a	Spannum	burnt artefacts	Burnt, damaged metal artefacts, which possibly belong to an elite cremation.	?	?
	90a	Tzum-Groot-Barrum	pot?	Pot that was allegedly filled with cremated bones fragments.	?	?
	119a	Lellens-Borgweg	charcoal and burnt bone fragments	Cremation pit filled with charcoal and cremated bone fragments (adult, 34-47, and possibly infant).	Salt marsh elevation	yes (date?)
MROM-MP	23a	Dronrijp-Noord	sherds, charcoal, burnt bone fragments, stone object	Cremated bone fragments (adult) found with burnt beaker fragments, charcoal and rubbing/polishing stone.	Outside the contemporary terp	yes (date?)

Grave gifts are much more common in these cremations than in the inhumations from the terp region. The cremation from Heveskesklooster contains bone fragments with a green discoloration, which suggests that bronze jewellery was part of the cremation. Pots and stone tools were burnt or deposited with both cremations of Dronrijp. Corroded iron, onto which cremated bone fragments were caked, was found in the small pot from Wierhuizen. The most conspicuous grave gifts are the burnt luxury objects found in Spannum.

Most of these finds are uncertain as a cremation, or of uncertain date. Nevertheless, they do indicate that cremation sometimes occurred in the terp region, especially in the Groningen part.

Cremation is traditionally thought to be the common burial ritual of this period, not only inland, where cremation burials are more or less common, but also in the terp region. The argument for this assumption is that cremation remains buried without container in the salt marsh outside terps have a very small chance of retrieval.

The inventory of human remains shows that cremations are not entirely lacking in the terp region. Eleven possible cremations from the research period were re-

corded. Six of these, two from Friesland and four from Groningen, are certain human cremations, possibly or likely from the research period. Whether these cremations are only the 'tip of the iceberg', a small percentage of a large number of cremations that disappeared unnoticed or are still hidden in salt marsh layers outside terps, is unknown. The eleven cremations that were recorded were not so difficult to detect. They were associated with pottery, or with charcoal and ashes, sometimes in cremation pits. Most of them are chance finds, but that is also the case for the inhumations and single bones, of which we have much more evidence and which were neither collected as a rule in the past. The evidence does not suggest that cremation was common as a burial custom; it seems to be the exception rather than the rule.

An argument that has not played a role in the discussion on mortuary ritual in the salt marsh area so far is the availability of fuel. The scarcity of wood in the terp region might be an important, limiting factor. A cremation pyre requires a large amount of wood.⁹⁹ Wood species identified in the charcoal from the known cremations in the

⁹⁹ E.g., an amount of 200-300 kg is required to cremate a body in Nepal nowadays (Balla *et al.* 1991, 54).

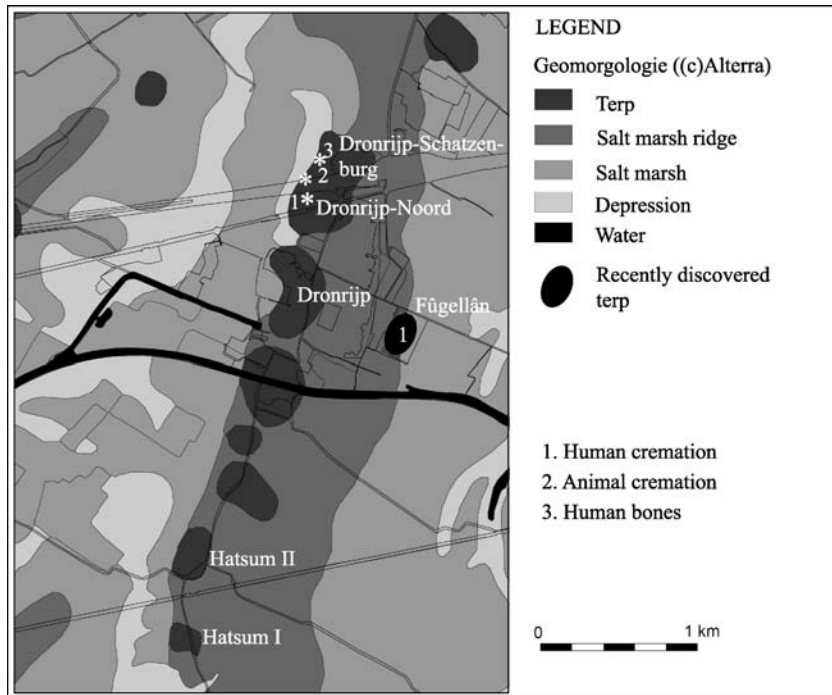


Fig. 12.24 Geomorphological map of the location of Dronrijp and other terps mentioned in the catalogue of human remains, on a salt marsh ridge. Three cremations were found near Dronrijp, one of them human, one of cattle and one unknown. Morphological map layer: from Archis 2 (Cultural Heritage Agency).



Fig. 12.25 Cremation remains from Dronrijp-Noord (cat. 23a), consisting of cemented charcoal and ashes (a small part is shown), a rubbing/polishing stone and some of the sherds of a terra nigra-like pot in different shades, burnt on the pyre. The date is uncertain.

terp region are *Quercus* (oak) and *Alnus* (alder).¹⁰⁰ Alder probably grew inland but not far from the coast, along freshwater streams, but oak was more difficult to acquire. If cremation were customary, each death would require an expedition far inland, to areas that were inhabited by other people. Although this possibility cannot be ruled out, it is hardly conceivable that enough firewood could be collected to enable cremation of all the deceased in all terp settlements. Peat may also be used as fuel; it was, in theory, available to the inhabitants of the terp region, at least in areas neighbouring the peat zone to the south of the salt marsh area. The common fuel in the terp area for cooking and for firing pottery probably was dried dung. However, it is not certain that peat or dung are suitable types of fuel to cremate a body, and we have no evidence of fuel for pyres other than wood of alder and oak.



Fig. 12.26 An atypical, small pot, a bowl and a whetstone, dated to the 1st century AD, found in Dronrijp-Fûgellân (cat. 25a). The bowl was made of a larger pot. According to the finder (who arranged the objects on the photo as he remembered to have found them), the small (broken) pot had been placed on the bowl. White and bluish burnt bone fragments were spread around the artefacts.

¹⁰⁰ These were also common species used for cremations elsewhere, for example in northern Gaul during the Roman Age (Deforce & Haneca 2011; see Van Strydonck 2010, 583).

The different regions in the terp regions were not all at the same distance of areas where trees grew or where peat was found. The terps in the western part of the present province of Friesland were considerably further from wooded areas than terps in the eastern part of Friesland and in Groningen. Most cremations that are more or less certain occur in Groningen, where trees were available at a shorter distance than in Friesland. The two in Friesland, Ferwerd and Dronrijp-Noord (cat. 33a and 23a), were relatively close to the higher parts in the eastern part of the province, where wooded areas may have occurred in a predominantly non-marine, marshy landscape. It is also possible that in this area peat was extracted. The palaeo-geographical landscape of this inland area, however, is not well known yet.

If cremation was indeed exceptional, the question is why some people were cremated. It is conceivable that individual people had a choice. People (e.g., spouses), who came from areas where cremation was customary, perhaps chose to be cremated against prevailing customs. Inhumations in cemeteries from the early and middle pre-Roman Iron Age with predominantly cremation graves in the southern and central Netherlands have been explained in the same way. Because of the non-local grave goods, it was argued that inhumation graves found in Lent belonged to immigrants from the Middle Rhine region, and that the inhumations in Geldermalsen originated in northern France.¹⁰¹ This suggestion was recently corroborated by stable isotope analysis, specifically of strontium.¹⁰²

There is evidence of uncommon artefacts, at least compared to inhumations in the terp region, in three of the certain or possible cremations: in cat. 117a, bronze jewellery is indicated by a green discoloration; corroded iron was part of cat. 132f; the cremation of cat. 79a was inferred from a large number of burnt, exotic luxury goods, not of Roman origin but coming from central Europe. Such finds might be indicative of people from elsewhere, who wished to be cremated when they died in their final domicile. The latter find (cat. 79a from Spannum) was speculatively interpreted by Erdrich as the burial of a warrior from central Europe, who ended up in the terp region after the Marcomannic wars in the second half of the 2nd century AD.¹⁰³ This explanation does not seem farfetched in the light of the above. If people indeed had a say in what happened to their body after they died, not only the choice for cremation, but also for inhumation or excarnation was perhaps determined, at least partly, by personal preference.

It is quite possible that cremation became more popular under the influence of the Roman culture, and

that experiments were made with dung and peat or with less than required amounts of wood. That might result in incomplete cremation or in skeletal parts with traces of burning. Partly cremated corpses are regular finds in British cremation cemeteries from the Roman Period. They are thought to be burials of poor people who could not afford a sufficient amount of fuel for the pyre.¹⁰⁴ The catalogue lists two clear cases of such traces. One is a skeleton from Winsum-Bruggeburen (cat. 96s), that was buried in separate, articulated parts, on which traces of burning were found. This find is not dated, but it might be from the period that this settlement served as a Roman outpost in the early Roman Iron Age. The other is a partial skeleton from the middle Roman Iron Age, which was found with a complete TS vessel in Blija-Sytsma (cat. 13b). This find was interpreted as accidentally burnt after burial, but that need not be the case. A Roman influence is likely in both cases. In the previous section, it was already suggested that the partial skeletons in Winsum-Bruggeburen may come from interrupted excarnation. This specific burial may, alternatively, be an attempted cremation, which did not succeed for lack of proper fuel. The same explanation might apply to the partial skeleton of Blija-Sytsma.

12.5.5 Single bones and excarnation

12.5.5.1 The finds

In the period of commercial quarrying, single human bones were usually not noticed or collected unless they were clearly modified. While the majority of finds assemblages in Appendix C consists of quarrying finds (54%, most finds of single bones come from excavations (70%; table 12.1). There are 54 finds assemblages with single bones from Friesland, coming from 28 locations, and 31 finds assemblages with single bones from 13 locations in Groningen (table 12.4). These numbers refer to single bones that were found alone or with other finds (including other single bones).¹⁰⁵ Skulls and other bones that were probably not found alone, but were taken from complete skeletons, and the finds that were described as partial burials in the previous section, are ignored here.

Single bones, worked as well as unworked, occur in the entire terp region. The even geographical spread (fig. 12.27) and the relatively high percentage of single bones from excavations indicate that single bones are underrepresented in the catalogue. Many deposited single bones undoubtedly disappeared without being noticed during quarrying. The case studies of Englum and Ezinge show what excavations have to offer when it comes to the identification of finds assemblages with single human bones. In the Englum case study, the large number of

101 Van den Broeke & Hessing 2005.

102 Van den Broeke 2014, 176,

103 Erdrich 2004.

104 McKinley 2006, 84.

105 The large deposits from Englum are counted as only two finds assemblages in the tables, cat. 109c-l and m-o.

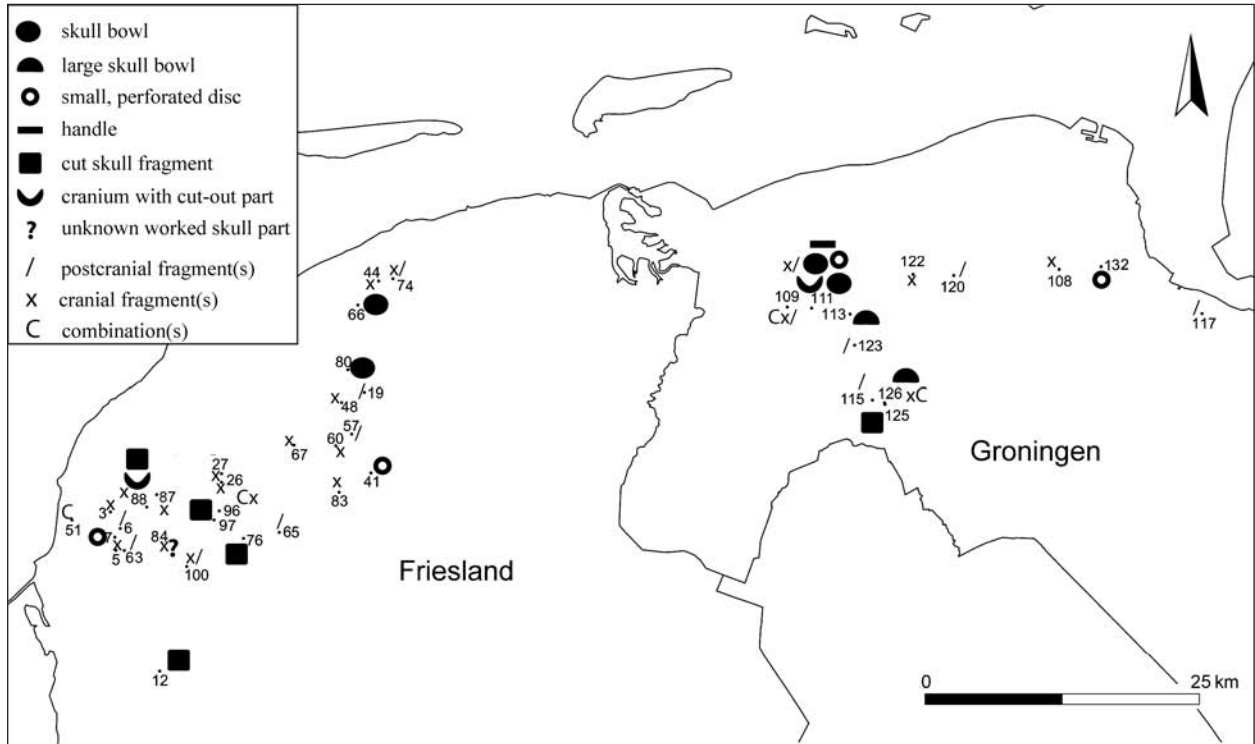


Fig. 12.27 Geographical distribution of single bones, worked and unworked.

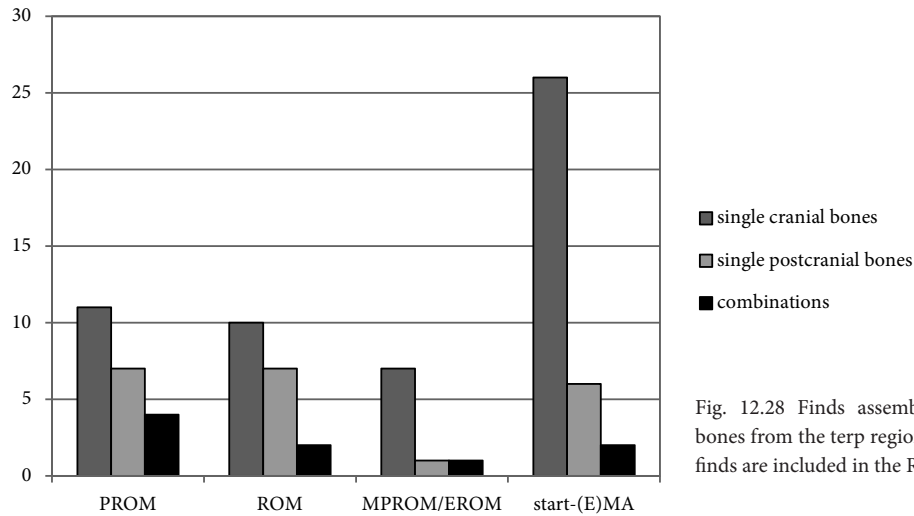


Fig. 12.28 Finds assemblages with single bones from the terp region. LPROM/EROM finds are included in the Roman Iron Age.

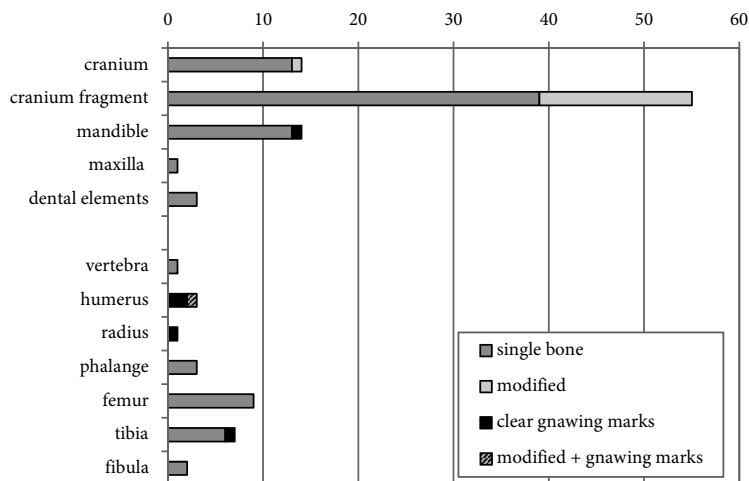


Fig. 12.29 Cranial and postcranial skeletal parts and fragments from finds assemblages with single bones from the terp region.

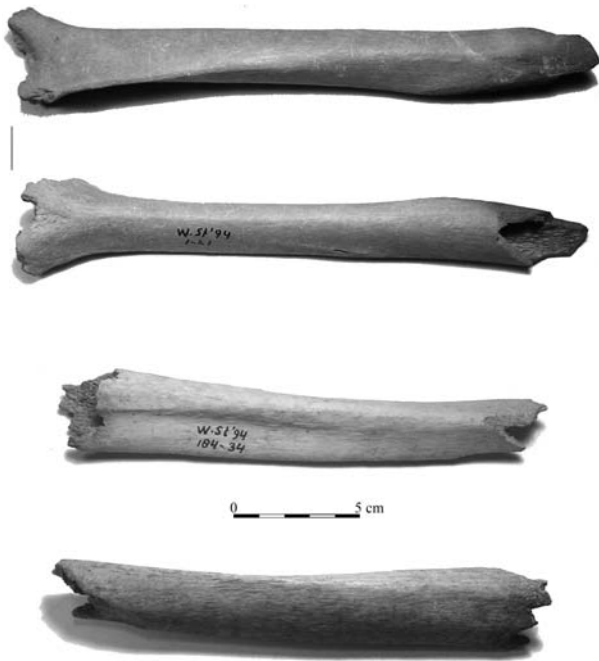


Fig. 12.31 Mandible with gnawing marks (arrows) found near of a house in Ezinge, dated to the early Roman Iron Age (cat. 111q; App. B. M-1164).

Fig. 12.30 (left) Two human bones from Wommels-Stapert with traces of dog gnawing. Top: central part of right humerus with gnawing marks (cat. 100a), found in a pit with other objects dated to the early/middle pre-Roman Iron Age. Bottom: central part of left tibia with gnawing marks from a pit, dated to the middle pre-Roman Iron Age (cat. 100d).

Table 12.9 Worked skeletal parts from the terp region.

Worked part	number	cat. no. (App. C)
Skull fragment, deliberately cut, slightly modified	5	12a; 76a; 88e; 97a; 125a
Shallow bowl made of skull fragment	4(5)	66a; 80a; 111aa; 111cc (84d)
Large bowl, made of skull	2	113f; 126b
Small, shiny disk with perforation	4	7a; 41a; 111p; 132e
Handle of long bone	1	111o
Remaining skull after cutting	2	88d; 111ee
Total	18(19)	

single bones found together was striking. In the Ezinge case study, the association between human remains and houses was noticeable, and the large number of worked human bones attracted attention. The preliminary conclusion from these case studies, that the deposition of single bones stopped in the 2nd century AD, is not entirely supported by the evidence from the catalogue. Three finds of single bones in Frisian terps are either from the 2nd or the 3rd century AD (cat. 3b and 3c; 88d); one is certainly from the 3rd century AD (a human skull from Leeuwarden-Oldehoofsterkerkhof, cat. 60a). This practice is thus attested for the entire middle Roman Iron Age. While it may have come to an end in the Groningen Reitdiep area, it continued elsewhere, due to different circumstances or to changes in the meaning of this practice.

Most single bones are cranial, either more or less complete crania, cranial fragments or mandibles (figs. 12.28 and 29). Cranial fragments are usually from the upper part of the skull. Many of these fragments are broken

along natural sutures. Mandibles are also quite common. One separate maxilla is known (Dronrijp-Hatsum I, cat. 26c). Teeth are recorded as far as known, but they are certainly underrepresented. Since they may have been lost already during life, they will be ignored in this account of mortuary customs. A smaller number of bones are postcranial, especially long bones or fragments, with femurs and tibiae as most numerous skeletal parts. Apart from bones from legs and arms, one vertebra occurs among the postcranial bones, a find from Englum (cat. 109p).

Osteological evidence of decapitation such as damage to the upper cervical vertebrae, the mastoid processes, occipital regions, the posterior parts of mandibles and the first ribs do not occur on any of the human skeletal parts in the inventory. In case of headhunting as a common practice, such damage would occur on at least some of the bones.¹⁰⁶

¹⁰⁶ Okumura & Siew 2013; about 50% from their sample of trophy heads from Borneo show such damage.

Table 12.10 Finds assemblages with single human bones and other objects.

period	cat. no.	terp/site	description	associated finds	location
EMPROM	63a	Lollum-Gr.Saksenoord	tibia part	potsherds and animal bones	ditch
	100a	Wommels-Stapert	humerus part	potsherds and animal bones	pit
	100c	Wommels-Stapert	femur infant	potsherds and animal bones	pit
	111bb	Ezinge	skull fragment	potsherds and animal bones	high in fill of creek
MPROM	100d	Wommels-Stapert	tibia part	potsherds and animal bones	pit
	83b	Techum-Oude Diep	mandible	complete and partial pot	pit
	109c-l	Englum	8 skulls/parts, 2 hand bones, 2 molars	3 broken pots, articulated cattle bones and animal bone fragments	house platform
	109m-o	Englum	fibula shaft, mandible child, cranial fragment	pottery	in ditch near house platform
M/LPROM	100b	Wommels-Stapert	fibula part	potsherds and animal bones	pit
LPROM	126b	Paddepoel III	large skull bowl and skull fragment	fragments of large ceramic clay slabs	near ditch
PROM	88c	Tzum-Greate Vlearen	cranium	potsherds and animal bones	ditch
LPROM/EROM	96d	Winsum-Bruggeburen	mandible part	pot	?
	126a	Paddepoel III	mandible	pot	ditch or pit
EROM	125a	Paddepoel II	skull fragment	miniature pot, lapstone, half a pot	ditch
	109p	Englum	vertebra	potsherds and animal bones	pit
	111cc	Ezinge	Worked skull fragment	ceramic playing counter with traces of deliberate breakage.	large pit
	111p	Ezinge	worked skull fragment	2-3 pots and 2 loom weights, all burnt	near house
MROM	111o	Ezinge	worked humerus	pot, handle of sheep bone, cattle metatarsus	in hearth
	3b	Achlum	skull fragment	animal bones	ditch
	60a	Leeuwarden-OHK	skull or part	dog skull or skull part	pit near house
	88d	Tzum-Greate Vlearen	skull remainder after cutting	Bronze Roman statuette, bronze brooch, bronze sheet, sherds	ditch

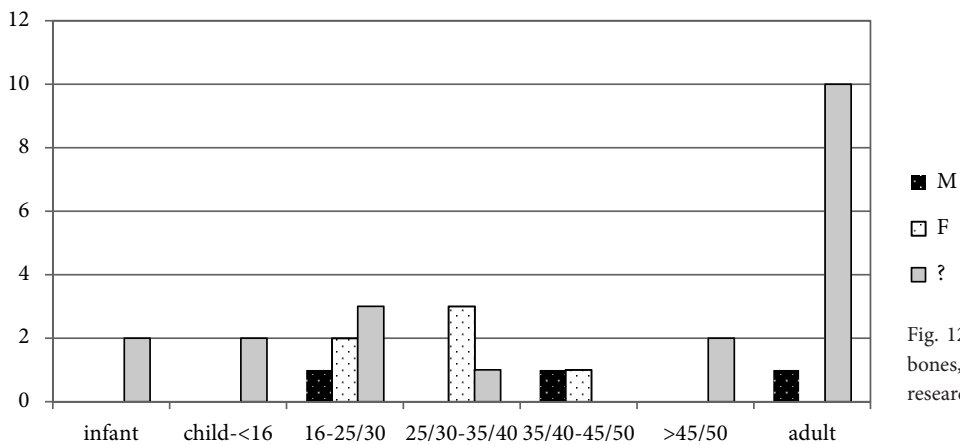


Fig. 12.32 Sex and age of single human bones, as far as known, from the entire research period.



Fig. 12.33 A skull cup, allegedly from the Frisian terp of Aalsum, which turned out to be a forgery. Collection Fries Museum.

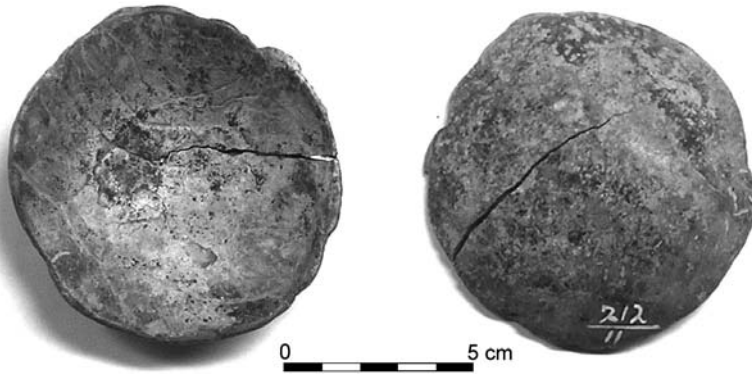


Fig. 12.34 Undated skull bowl from Marrum-De Beer (cat. 66a).

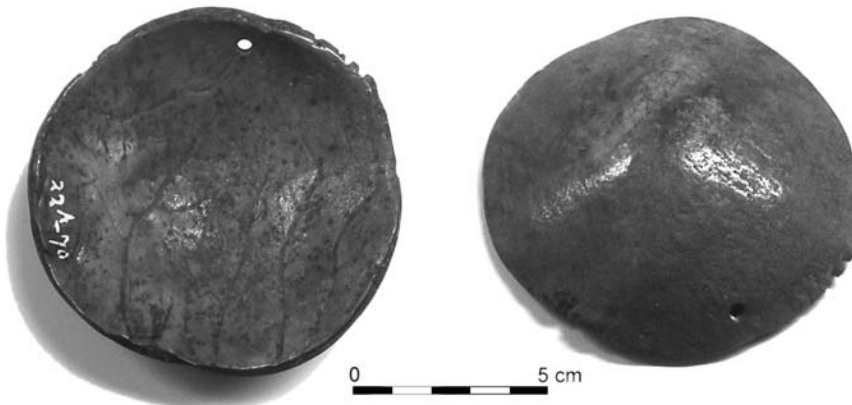


Fig. 12.35 Undated skull bowl from Stiens-Kramer (cat. 80a).

Of the ca. 100 single bones, only 45 could be examined, including the single bones from Englum and Ezinge. Six of these bones were gnawed, probably by a dog (cat. 74b; 100a and 100d: fig. 12.30; 109a: fig. App. A.2; 111o: fig. 11.55; 111q: fig. 12.31). Some bones show parallel scores, others are chewed at the ends. Five of these bones are long bones, including the worked humerus from Ezinge with traces of gnawing under the patina that formed during its use as a handle (cat. 111o), one is a

mandible. Apart from these clear traces, there are several long bones with spiral fractures, which might be bitten through by dogs; however, spiral fractures may also have other causes. Other bones also have damage that might be caused by dog chewing (e.g., the vertebra found in a pit in Englum, cat. 109p).

Sex and age could be established for only 29 of about 100 single bones from 84 finds assemblages (fig. 12.32). Eight of these are the skulls found in Englum, to which the small peaks in the two age categories between 15 and 40 can be attributed. Although the bones, of which age and sex could be established, cannot be trusted to be representative, it is clear that all age categories are represented. More women than men were identified, but the numbers are so small that this ratio cannot be considered significant. As was the case with inhumations, a selection does not seem to have been made.

Most single bones are unworked, but 18 or 19 of them are modified (table 12.9; fig. 12.39). The number of artefact types is limited; human bones, usually parts of crania, have been used to make shallow and large bowls, and small perforated disks (figs. 12.34-38; see also figs. 11.52-54). Shallow bowls are most common. A shallow bowl, allegedly from the Frisian terp of Aalsum, which was provided with a handle, has turned out to be a forgery (fig. 12.33).¹⁰⁷ The

handle was possibly inspired by the hole near the rim of one of the skull bowls from Ezinge (cat. 111c; fig. 11.53) and a bowl from Stiens-Kramer (cat. 80a; fig. 12.35), but it is not certain that these holes served as a handle. One of the worked skull parts, found in Paddepoel III (cat. 126b; fig. 12.37), consists of the entire upper part of a skull; it has partly rounded and burnt rims, as if it had been placed in smouldering ashes. A similar rim part,

probably also coming from a large skull bowl, was found in another terp in the Reitdiep area, Garnwerd (cat. 113f, fig. 12.36). Small worked skull fragments with a central hole (fig. 12.38) come from the entire terp region, from Arum in the west (cat. 7a) to Wierhuizen in the east (cat. 132e). They have the size and shape of spindle whorls, but whether they were used as spindle whorl is not cer-

¹⁰⁷ Elzinga 1975.

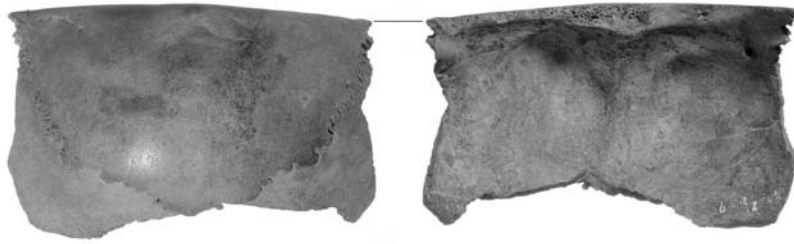


Fig. 12.36 Worked part of a skull, probably part of a larger bowl, of unknown date, from Garnwerd (cat. 113f). Photo: copyright Rijksmuseum van Oudheden, Leiden.



Fig. 12.37 Upper part of a skull from Paddepoel III (cat. 126b), with worked and partly burnt rim, dated to the late pre-Roman Iron Age. Photo: CFD/RUG.

Fig. 12.38 Three perforated roundels made of human skull fragments from three locations, of unknown date. Top: Arum-Baarderburen (cat. 7a); middle: Hempens-Glins (cat. 41a); bottom: Wierhuizen (cat. 132e).

tain; they may have been amulets. Only one object from a postcranial bone is known, a handle of a human humerus from Ezinge (cat. 111o, fig. 11.55).

Some cranial fragments have clearly been cut and, considering the shiny edges, handled, but were not made into clear objects (e.g., fig. 12.40). Among the finds are two crania from which parts were cut. One of them is a fragmented, partial skull from Tzum-Greate Vlearen, from which a rectangular part was taken (cat. 88d; fig. 12.41). The skull broke during cutting or prior to deposition in a ditch or later, due to the pressure of terp layers. The other is a complete skull from Ezinge, from which an oval part was cut (cat. 111ee; fig. 12.42). This skull was not found in situ; its date is unknown.

As far as the worked human bones can be dated, they are from the late pre-Roman Iron Age and the early and middle Roman Iron Age (fig. 12.39). Half of the worked bones are quarrying and ex situ finds, which cannot be dated. Since none of the dated worked bones is younger than the 3rd century, it is likely that the undated finds are also from the late pre-Roman Iron Age and the Roman Iron Age.

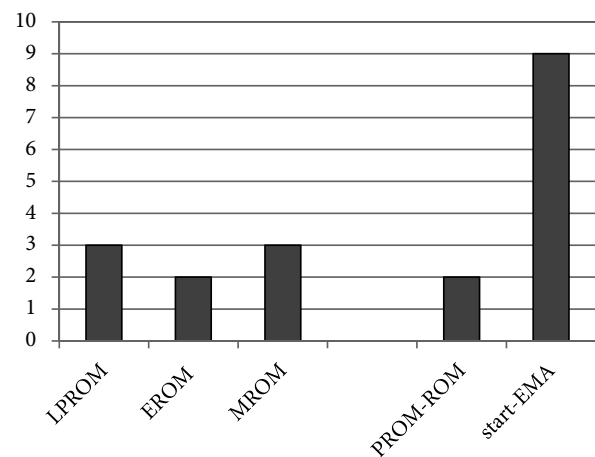


Fig. 12.39 Numbers of worked human bones per period.

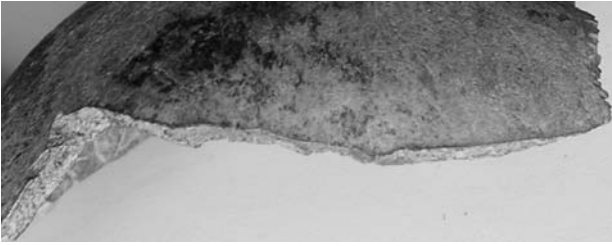


Fig. 12.40 Worked skull part, from a ditch in Tzum-Greate Vlearen (cat. 88e); dated to the late pre-Roman Iron Age. The edges of the fragment are rounded, probably by handling (photo detail).

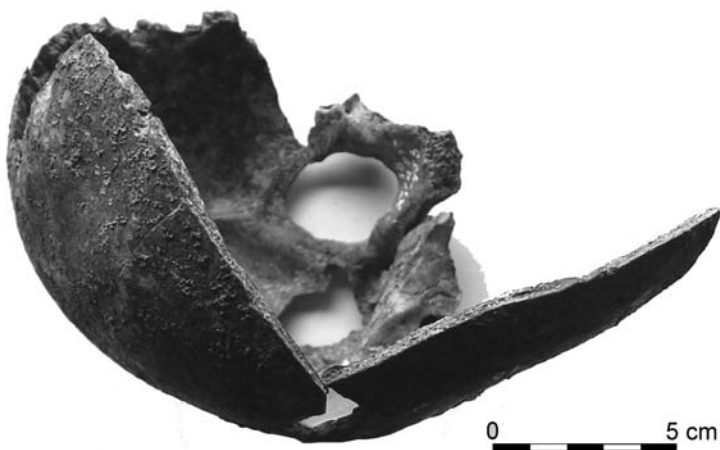
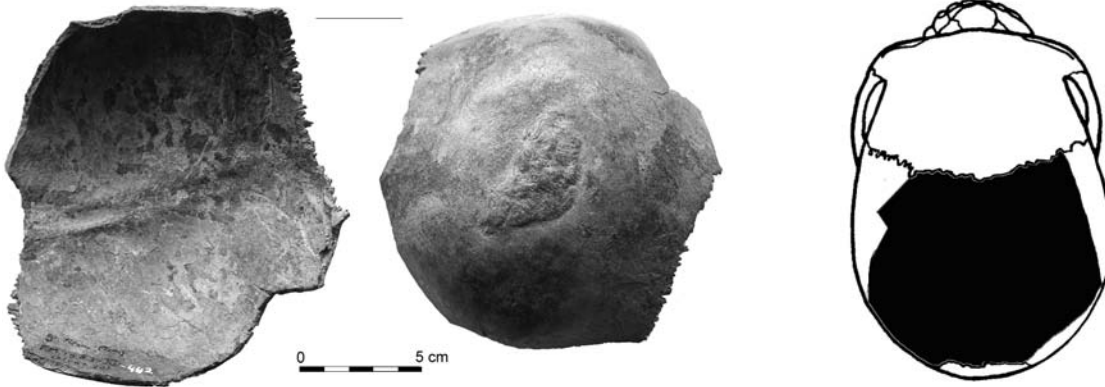


Fig. 12.41 Assembled skull fragments from a ditch in Tzum-Greate Vlearen, of a skull from which a rectangular part was cut (cat. 88d); found with a Roman bronze Mercurius statuette and other bronze objects, and dated to the middle Roman Iron Age.



Fig. 12.42 Different sides of an undated skull from Ezinge (cat. 111ee), from which the upper part was cut.

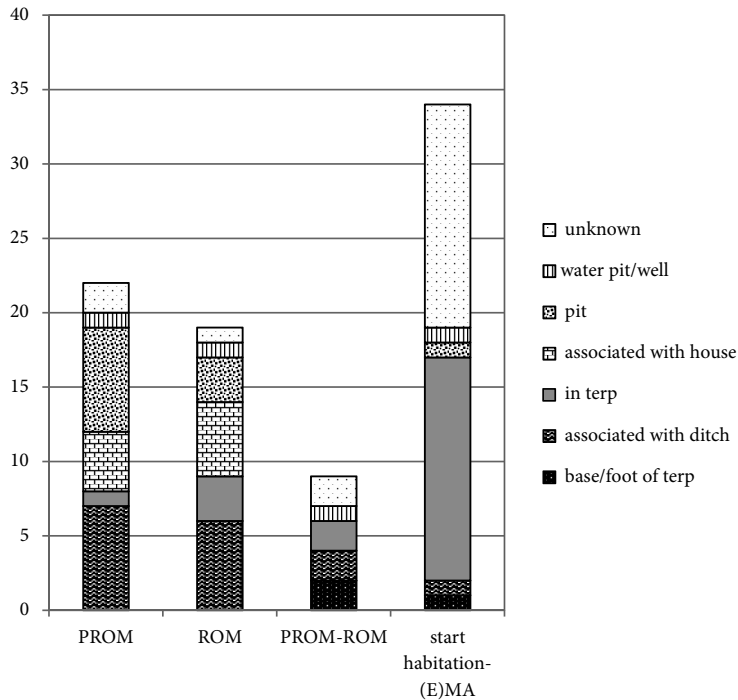


Fig. 12.43 The location of finds assemblages with single human bones. LPROM/EROM finds are included in the Roman Iron Age group.

Many single bones were found during excavations, so the location of a relatively high percentage is known, compared to inhumations (fig. 12.43). Most of the finds assemblages with single bones were associated with ditches, houses and pits. Single bones clearly associated with houses (including house platforms) were identified in Ezinge and Englum. This association is probably not unique for these terps, but it cannot be established elsewhere owing to the lack of excavated houses. A small number of finds comes from water pits and wells.

Unlike inhumations, single bones are often found with other objects. Table 12.10 lists 21 assemblages (25% of all assemblages with single human bones). Several single human bones are associated with potsherds and animal bones, especially in pits and ditches from the pre-Roman Iron Age. The finds associated with houses seem more elaborate than most of the finds from pits or ditches. They consist of complete pots, sometimes articulated animal bones which suggest offerings, loom weights and other objects. The most conspicuous finds assemblage from a ditch is also the youngest, dated to the middle Roman Iron Age (Tzum-Greate Vlearen, cat. 88d). It is an exceptional finds assemblage in any context in the terp region, which includes the only bronze statuette from the terp region of which the context is known and other bronze objects, besides a partial skull from which a rectangular piece was cut (fig. 12.41).

12.5.5.2 Headhunting and skull cult?

In the case studies of Englum and Ezinge, worked and unworked human remains were interpreted on the basis of the available archaeological evidence. All human remains, not only skulls and skull parts, were included in the analysis. The idea that the skulls came from headhunting was refuted, because it cannot explain the occurrence of postcranial bones, and because none of the skulls showed any damage that can be related to headhunting. Rather than headhunting and a head or skull cult, practices involving excarnation, the collection of all remaining bones, and the secondary use and deposition of these bones, were offered as an alternative explanation of the human remains in these two terps. A similar view on single human bones was advanced by Rieckhoff.¹⁰⁸ Against the view that skulls were war trophies or had been seized during headhunting raids, she argued that in many cases, skulls, formerly interpreted as war trophies, were actually the remains of a death ritual in which the

dead were mummified or exposed to decompose, before being used in other practices. Since headhunting and war trophies are common explanations of skulls in archaeological literature, the main arguments from that side need to be examined.

The frequent occurrence of skulls and skull parts, as well as some historical sources, has led many researchers to the idea that an important feature of prehistoric religion in Iron Age Europe, especially in the Celtic world, was a head or skull cult, often in relation to practices of headhunting.¹⁰⁹ This idea traditionally refers to quotations of the work of the Greek writer Posidonius (135-51 BC) in the work of later authors. According to Posidonius, the Celts took the heads of their adversaries as war trophies.¹¹⁰ It must be noted that Posidonius described the practice of Celtic headhunting for a specific situation, that of warfare. The Celts were not the only ones that took the heads of their adversaries during battle; German and Roman soldiers occasionally did the same, without a skull cult being involved.¹¹¹ Moreover, although headhunting may have occurred in parts of Iron Age Europe, it is by no means certain that it occurred everywhere. In his study on headhunting in prehistoric Europe, Armit denies that violent headhunting was a

¹⁰⁸ Rieckhoff 2002, 24.

¹⁰⁹ Ross 1967; Aldhouse-Green 2001.

¹¹⁰ Birkhan 1997, 822-823.

¹¹¹ De Libero 2009, 282; Redfern & Bonney 2014, 223.

pan-European practice over a long time, but he does not abandon the idea that the head had a special meaning.¹¹²

The idea of a skull cult is partly based on the frequent occurrence of worked skull parts, such as bowls and amulets, in the Celtic world.¹¹³ These worked parts resemble the finds from the terp region. In archaeological literature on single bones, however, the focus is usually on skulls. Whether or not postcranial bones were found is not always made clear, or they are simply ignored if they occur. That focus certainly makes interpretations less reliable. As we have seen, one of the worked human bones from the terp region is a worked from Ezinge (cat. 111o). If we would want to interpret the worked single bones of the terp region as belonging to a skull cult, we would need to ignore this handle. Although this bone represents only 6% of the worked bones from the terp region, its existence cannot be denied. Among the unworked bones of the terp region, a considerable percentage 35% is postcranial. That does not suggest that the skull was treated differently from other human body parts.

It may be concluded that the evidence does not support the hypothetical possibilities of headhunting or of a skull cult.

12.5.5.3 *The excarnation process*

In the above, it was argued that excarnation was practiced as one of the ways of dealing with the dead, followed by secondary use and deposition of collected bones. As long as there is no evidence that most terp residents were buried outside the terps (either cremated or not), the possibility that excarnation even was the common way to deal with the dead in the terp region should be taken seriously.

Excarnation and secondary use or burial of the bones seems to be an exotic practice, linked to faraway cultures such as Bali, where it is still customary to exhume the bones of the deceased and then to cremate them.¹¹⁴ However, it does not seem to be so far-fetched when we realize that excarnation by means of inhumation, followed by exhumation and secondary burial, is still practiced in modern rural Greece.¹¹⁵

Excarnation has sometimes been suggested as an explanation for the finds of single human bones and articulated human body parts in the Netherlands and is a common explanation for uncommon human remains nowadays in Britain.¹¹⁶ Excarnation and secondary use of body parts and bones were, for example, accepted as the most likely interpretation for a variety of human remains

found in domestic contexts in Iron Age Atlantic Scotland. There, single human bones occur frequently (mainly skulls and skull parts but also other bones) but the common way to deal with the dead is unknown.¹¹⁷ This situation is not unlike that of the northern Netherlands salt marsh area.

Since the way excarnation was practiced is a decisive factor in the composition of the human bones assemblage in the archaeological record, the process of decomposition and excarnation needs to be examined more closely. In the case of deliberate excarnation, there are several possibilities:

- Excarnation by means of inhumation, followed by exhumation.
- Excarnation by exposure of the body, out of animal reach (covered on a scaffold).
- Excarnation by exposure of the body, within reach of scavenging animals.
- Excarnation by eating the body by the bereaved (endocannibalism).¹¹⁸
- Excarnation by boiling the corpse, leaving the bones clean.¹¹⁹

To start with the latter two: there are no indications of boiling or of cannibalism in the terp region. Bones that result from cannibalism show extensive cut marks and specific fractures.¹²⁰ None of the human bones from the terp region show such features, nor cut marks that may result from dismemberment of bodies. A middle pre-Roman Iron Age inhumation in Ezinge, from which at least the skull was probably missing, demonstrates that skeletal parts may sometimes have been collected from inhumation burials, but that is an exception rather than the rule. Aboveground excarnation is inferred from the presence of not only human crania, which could have been intentionally selected from buried remains or result from headhunting, but of some other bones as well (figs. 12.28 and 29). The presence of these bones would not make sense if the human remains had been exhumed after excarnation underground; what selection could these bones possibly represent? Excarnation underground is not impossible, but requires complicated explanations for the selection of these parts. Rather, all remaining bones and fragments were collected after excarnation. Several aspects of the excarnation process will be discussed below.

Decomposition

The first thing to examine when considering the excarnation process is how a body that is exposed will decompose

112 Armit 2006, 11.

113 Birkhan 1997, 801-2; 818.

114 Meyer-Orlac 1982.

115 Danforth & Tsiaras 1982.

116 For the Netherlands e.g. Van der Sanden 1997b, 177; Ter Schegget 1999; Baetsen 2006, 177-179; for Britain e.g. Wait 1985; Carr & Knüsel 1997; Fitzpatrick 1997; cf. Craig *et al.* 2005.

117 Armit & Ginn 2007.

118 Parker Pearson 2003, 52-53.

119 This practice is known from the Middle Ages; it was applied to members of the nobility who had died far from home (Finucane 1981).

120 Boulestin 1999; Boulestin *et al.* 2009; Knüsel & Outram 2006.

when animals are kept away from it. Decomposition of bodies of humans and other mammals has been the subject of extensive forensic and experimental research.¹²¹ Experiments have shown that exposed corpses will be completely skeletonized within a short period, depending on factors such as temperature and humidity, due to the activity of microbes and insects. For instance, the soft tissues of pig carcasses completely disappeared within only 12 days in Virginia (USA).¹²²

The following disarticulation of the skeletal parts of mammals depends on the ligaments, the type of joints and the amount of soft tissue that separates the skin from the bone. When there is little soft tissue, decomposition will be slow. Complicated joints and strong ligaments postpone disarticulation. The first part to be separated will be the skull, including the atlas. After that, the limbs become disarticulated (first the forelegs/arms and much later the (hind) legs); ribs become detached and the thorax collapses; limbs fall apart; the mandible comes off. The last part to be disarticulated is the spinal column. Teeth become dissociated when the surrounding soft tissue and the periodontal ligament have disappeared, early in the decomposition process. They may fall out when the skull or mandible is moved, first the single-rooted teeth, then the multi-rooted molars. Skulls, especially facial bones, are thin, vulnerable bone structures that easily break, for example when rolling around in water.¹²³

In an arid climate, the bones will begin to weather, splinter and disintegrate well before disarticulation is complete, but just like other stages in decomposition, weathering is climate dependent. In a temperate climate, it may be deferred for years. When bones are left on the surface, they will completely disappear eventually.

Scavengers

If scavenging animals are involved, disarticulation is accelerated, and skeletal parts will be moved or disappear altogether. In the terp region, the animals that must have been most important, if indeed animal assisted excarnation was practiced, are dogs and probably birds. Dogs were common on terps; the frequent finds of dog's coprolite show that they were allowed to roam freely around the settlement.¹²⁴ Animal bone assemblages show that there were domesticated pigs, also potential scavengers, but only in small numbers.¹²⁵ Both dogs and pigs may have been allowed to find their food outside.

Potential scavengers such as wolves, foxes, wild boars or bears were more or less common animals inland dur-

ing the research period, but there is little evidence that they were common in the relatively densely populated salt marsh area. The small number of bones of these animals found in terps¹²⁶ may come from occasional wandering animals that were killed when they came near inhabited areas, or from animals that were hunted inland. Rodents may have had access to corpses also when scavenging was not intended; their gnaw marks are not difficult to recognize.¹²⁷ Carrion birds involved could be *Corvidae* (ravens, crows, rooks), white-tailed eagles (*Haliaeetus albicilla*; a bone of this species was found in Englum¹²⁸) and other carrion eating birds of prey, and perhaps seagulls. Most of them cannot penetrate fresh skin so they would have to wait until decomposition was well on its way or the body was opened by other causes or by other scavengers first.

Birds may eat soft tissue and take away bones; they do not seem to leave marks on the bones.¹²⁹ That means that animal assisted excarnation can only be demonstrated from tooth marks of mammalian scavengers, although birds may well have participated. Frequent presence of tooth marks of dogs (or possibly pigs) would demonstrate these were allowed or meant to scavenge the corpses. To be able to assess such marks and the presence and absence of bones, it is important to understand how this process comes about.

Dogs

A large number of human corpses (many of them murder victims; n = 30), which were found over several years in the Pacific Northwest of the United States, enabled the study of the excarnation of human corpses by animals.¹³⁰ These corpses had been scavenged by dogs and coyotes. Haglund was able to demonstrate that canines eat and disarticulate the bodies of humans in a predictable sequence (table 12.11).

In the first stage of the sequence, the soft tissues are consumed, either by canines, birds or invertebrates. This does not necessarily damage the bones; dogs first just eat the meat without damaging the bones.¹³¹ After this first stage, the remaining bones are still interesting to dogs; they will take them away to chew on them and to take the marrow out. Disarticulation and removal always take place in about the same order (stages 2-4): first the thorax, shoulders and arms and then the legs; the last part that is disarticulated and removed is the spinal column. Finally only the skull is more or less undamaged and in situ, together with some bones and fragments that were accidentally left behind or were chewed on the spot. Bones

121 The following is based on Toots 1965; Andrews & Cook 1985; Haglund *et al.* 1989, 588; Haglund 1997b, 383.

122 Cf. Smith 2006, 681.

123 Andrews & Cook 1985, 679.

124 Dog coprolites from Englum were examined, but human bone fragments did not occur in this small sample (Zeiler 2009).

125 Prummel 2008.

126 Cappers & Prummel 2005.

127 Haglund *et al.* 1988, 992-993.

128 Prummel 2008, table 8.3.

129 Carr & Knüsel 1997, 170.

130 Haglund *et al.* 1988; 1989; Haglund 1997a.

131 Kent 1981; Carr & Knüsel 1997, 169.

Table 12.11. Stages of decomposition and disarticulation of corpses aided by canines (after Haglund *et al.* 1989, 589; Haglund 1997a, 368).

Remains	Within
1. Soft tissue eaten by invertebrates, birds and canines; bones still in articulation	4 hours – 14 days
2. Destruction of the thorax; removal of one or both arms, including shoulder blades and collarbones	22 days – 2.5 months
3. Full or partial removal of the legs	2 – 4.5 months
4. All bones disarticulated except for parts of the vertebral column	2 – 11 months
5. Skeleton completely disarticulated, including skull; only cranium and some chance bones or bone fragments remain	5 – 52 months

may be completely fragmented after chewing, or remain partly intact. Tooth marks do not need to be present; a long bone may just snap by the pressure of a dog's jaws (thus often creating a spiral fracture), leaving marks on only one of the halves. Clean bones are no longer interesting to dogs. That implies that all gnawing marks were made relatively soon after death, before decomposition was completed.

Most bones will disappear from the original location of the corpse. All bones, including the skull, may be moved. The skull, which is not easy to handle by a dog, will normally not show many tooth marks (occasionally some on protruding parts), unless it was damaged by falling or by a blow; a skull will not be moved far from the original location. Parts that are easy to grab may be moved for hundreds of metres.¹³² Apart from being moved, bones may disappear because they are eaten completely, or because only unrecognizable and irretrievable pieces are left of them. Dogs tend to bury parts of their food, especially when there are many dogs around. This will account for another part of the missing bones. Other causes of the disappearance of skeletal parts may be sedimentation or removal by water. The single bones from the terp region cannot be explained as accidentally relocated bones or as bones buried by dogs, since too many of them are part of finds assemblages with complete pottery and other objects, or were found on locations that are indicative of ritual deposits.

Pigs

The scavenging activities of pigs leave quite different marks. It has been established that wild boars dig up corpses when they get a chance¹³³, so domesticated pigs would certainly be interested in exposed corpses. Butchery waste often is part of their diet. During an experiment in which the destruction of such waste was monitored, it was shown that pigs tend to destroy and consume bones completely; only large and dense cattle

bones were left in a recognizable state.¹³⁴ The teeth of pigs leave marks that differ from those resulting from canine teeth. The anterior pig teeth produce broad, often multiple, parallel scores, but puncture marks are absent since pigs do not have pointed molars or canine teeth. However, pigs do not gnaw on bones as dogs do, they finish them off completely. In the experiment with buried carrion mentioned above, nothing but some hair was left of the buried parts of a calf; even the head had been devoured.¹³⁵ Skulls would not be left if pigs were involved in excarnation.

The terp region

To establish whether animal assisted excarnation occurred in the terp region, the available human bones were searched for tooth and gnaw marks such as furrows, pits, crenulated edges, scores and pitting that are typical of omnivores and carnivores.¹³⁶ As was mentioned above, only six bones, one mandible and five long bones, show clear gnawing marks. These bones come from two Frisian and two Groningen terps (Wommels-Stapert, Oosterbeintum, Englum and Ezinge). Three of these are from the middle pre-Roman Iron Age, two are from the early Roman Iron Age, and one, from Oosterbeintum is undated. Crania with tooth marks do not occur. All tooth marks that were identified are probably from dogs. Gnawing or tooth marks by other animals, such as rodents or pigs, do not occur. Spiral fractures of long bones are common, but are inconclusive as evidence of dog gnawing.

The single bones from the terp region fit the scheme of table 12.11 well. Since dogs may eat the meat of bones without damaging them, and we probably only have the bones that remained on the spot after excarnation was completed, the small number of bones with gnawing marks is not surprising. If excarnation by dogs was indeed practiced, the collection of the bones must have

¹³² Haglund *et al.* 1989.

¹³³ Rausing 1991.

¹³⁴ Greenfield 1988.

¹³⁵ Rausing 1991.

¹³⁶ Binford 1981.

taken place somewhere during the final stage, when only the crania and some accidental bones were left.¹³⁷ The presence of tiny bones and bone fragments suggests that the remaining bones were collected with care.

Scavenging is influenced by several factors. Thick clothing and a complete or partial cover will hinder scavenging. Other factors are temperature, the landscape (wooded or open), the number of animals that live in the area, and the availability of other food.¹³⁸ In the terp region, dogs may have been encouraged to eat the bodies, to shorten the process. It may have been considerably shorter than Haglund's minimum of five months, which depends on the number of wild animals in an area (table 12.11). The rather good condition of most of the crania may be taken to show that it was indeed short, for long exposure to light, water, wind and salt would probably have accelerated weathering. Slight weathering traces were only locally found on some of the crania.

The location of excarnation

The remaining bones and traces of weathering and gnawing on the bones are connected to the location of the exposed body. There are several options:

1. The corpse was left exposed inside a house. There are ethnographic examples of dead relatives exposed in the houses where their families continued to live; the terrible smell had to be endured.¹³⁹ In that case, however, it is unlikely that only a small number of bones would be left after excarnation.

2. The corpse was left exposed on the terp platform in the immediate vicinity of the house. The smell would be almost as penetrating as in the case of exposure inside. Excarnation by animals and the disappearance of body parts would be less unlikely. Flooding water would not reach the corpse.

3. The corpse was placed on a scaffold, beyond the reach of water or dogs. Birds were involved in eating away the soft tissue, or the corpses were covered and decomposition was left to itself. When the scaffold collapsed, dogs would get access to the bones. Such scaffolds might have been seasonal, for example only to be used in winter when flooding was frequent. Excarnation scaffolds used by the American Plains Indians collapsed rather quickly¹⁴⁰; this may be an intended effect. The use of scaffolds for excarnation was suggested by Ellison and Drewett.¹⁴¹ They suspect that many of the postholes usually ascribed to granaries, actually belonged to excarnation scaffolds. There are no indications for such structures in the terp

region, but they may have been situated outside excavated settlement areas.

4. The corpse was exposed outside the terp settlement on the salt marsh. Flooding water had access to the corpse and disarticulated bones may have been washed away. Dogs and birds were involved from the beginning. This would probably result in a very short excarnation process, after which only a few bones remained.

5. The corpse was placed on a small terp platform outside the settlement, outside the reach of flooding water, but accessible to birds as well as dogs. Such platforms have not been identified, but they may have been further away and disappeared since long, or the sods they consisted of were used later to fill in pits and ditches on the terp.

These options are all hypothetical. If corpses were exposed somewhere, it would certainly have been possible to cover the corpses to keep the dogs and other animals away, so scavenging, if it occurred, was an intended part of the process. Since scavengers, especially dogs and possibly birds, appear to have been involved in the excarnation process, options 4 and 5 are the most likely.

Modern parallels

The idea of having the dead devoured by scavenging animals seems horrible and highly unlikely to most of us westerners. Nevertheless, it may not only have been practiced in the past, it certainly is still practiced in our time. At least two cultural groups expose the dead to scavengers nowadays: Zoroastrian Parsis in India, and Buddhist Tibetans. I will discuss these modern practices shortly, not because they are identical to the mortuary practices of the terp region, but to create an understanding of the practice and to make it less strange and horrifying.

The Parsis in India believe that decomposing bodies are highly contagious objects, which would pollute earth or fire when they were buried or burnt. To minimize this danger, corpses nowadays are exposed on stone towers, the so-called Towers of Silence (*dakhma*), where vultures and crows come to eat the soft tissue and the sun desiccates the bones.¹⁴² After a year, when the bones are completely bare and dry and it is safe to touch them, they are collected and placed in an ossuary. In bygone days, not only birds but also dogs played a role in the excarnation process in Zoroastrianism.¹⁴³

In Tibet, exposure to vultures is one of several possible funerary rites; other rites that are practiced are interment (for people who died of certain epidemic diseases), water burial (for special categories of people or for people living near a particular lake), desiccation in salt (for infants and Dalai Lamas) and cremation.¹⁴⁴ Cremation and

137 Smith 2006.

138 Haglund *et al.* 1988; 1989.

139 Hertz 1960, 29ff and 41.

140 Carr & Knüsel 1997, 168.

141 Ellison & Drewett 1971.

142 Palsetia 2001.

143 Hertz 1960, 45; Bendezu-Sarmiento *et al.* 2008.

144 Wylie 1965.

vulture-disposal are the usual mortuary rites for ordinary people in Tibet. Cremation is restricted to areas where firewood is available. In most areas, wood is rare and only people with high status may be cremated. Most corpses are fed to the vultures; there is no difference in the beliefs associated with these two practices concerning the soul or the afterlife.¹⁴⁵ This practice was not driven by ecological reasons alone; in a mountainous, woodless area, corpses might as well be buried under piles of stones, so a deliberate choice for vulture-disposal was made.

The dead body is not considered contagious in Tibet, as it is for the Parsis. From the Buddhist principle that the body is impermanent while the soul will continue its existence in *samsara*, the cycle of birth and rebirth, the dead body is just a remainder that needs to be disposed of.¹⁴⁶ Vulture-disposal was forbidden by the Chinese in the 1960s, but allowed again in the 1980s; many eyewitness accounts and photo reports of these so-called *sky burials* can be found on the internet. After a period of ritual preparation at home, the family brings the body to a monastery and is present at the ceremony that is performed on its special charnel grounds. There are two stages: first, the corpse is cut into pieces by monks and fed to the vultures; then, the remainders are assembled by the monks and smashed with a sledgehammer or a rock. The pulverized pieces are then mixed with flour and water and fed to the birds again, until nothing remains. If the vultures are not very hungry, smaller birds such as crows may come in at this stage, and so may dogs. The whole procedure does not take longer than one hour. It could be argued that this is not excarnation, since there are no bones left to be buried or used later. It certainly is scavenging.

The examples show that excarnation by scavengers does not need to be a gruesome and incomprehensible event. Ideological concerns will be at the basis of it, although ecological reasons may help in choosing such a mortuary ritual. There are some similarities between Tibet and the salt marsh area of the northern Netherlands during the research period: firewood is scarce, and several different mortuary rites are coexistent. A tradition of working and using human bones also exists in both areas, in Tibet especially in cultic contexts.¹⁴⁷ If indeed excarnation by scavengers was practiced in the salt marsh area, the scarcity of firewood will not have been the only reason for it; inhumation could have been practiced instead, as it was in some cases.

Continuing practices

The secondary use of human remains diminished in the Roman Iron Age, but it does not disappear completely,

as some later finds, for instance in Ezinge¹⁴⁸, indicate. It may be argued that the secondary use of human remains survives the introduction of Christianity and continues into the Middle Ages. The relics of medieval Christianity might well represent the continuation of older practices, adapted and integrated by the church. In Britain, Woodward compared the finds of single bones in Neolithic and Iron Age contexts with the finds of relics in the shrines of Anglo-Saxon saints.¹⁴⁹ Her conclusion is that the use of relics is very similar to the use of human remains in earlier contexts; it was not introduced in the Christian early Middle Ages, but has a long history, dating back to the Neolithic.

Alleged cases of economically motivated grave robbery in Merovingian cemeteries in the southern Netherlands and beyond were examined by Van Haperen.¹⁵⁰ From the apparent knowledge of the layout of the graves by the robbers, the selective and partial disappearance of goods, the removal of bones, and other features that are incomprehensible if the motive of opening the grave was economic, she concludes that these cases do not represent grave robbery, but rather ritual reopening of the grave by the descendants of the deceased. Relics from the graves, bones as well as artefacts, were deposited in various contexts. This secondary use is, according to Van Haperen, "... part of a general tendency to deposit the bodies of dead community members in various types of burial grounds, such as the family churchyard, community cemetery, newly founded churchyard, ... The decision to bring the remains of the dead to a particular place may have served to define the community's identity, form relations with groups living elsewhere, substantiate claims on land and property, or negotiate relations with persons and institutions, such as manorial lords, kings and, of course, the Church."¹⁵¹

Van Haperen's conclusion indicates that practices and ideas not unlike the primary and secondary use of human remains in the terp region were alive during the Merovingian period in the southern part of the country. That not only suggests that these early-medieval practices have their origin in older practices and ideas, but also that these older practices and ideas were not limited to the terp region. Due to unfavourable preservation conditions for bone, the use and deposition of human bones in a large part of the Netherlands remains cannot be traced. In areas where bone is preserved, for instance in the central river area or in the western Netherlands, comparable finds of human remains have been described.¹⁵²

145 Wylie 1965, 232.

146 McGowan 2006, 90.

147 Beer 1999, 263ff on skull cups.

148 See Appendix C, cat.111; also 47b, 74b.

149 Woodward 1993.

150 Van Haperen 2010.

151 Van Haperen 2010, 29.

152 Hessing 1993; Baetsen 2006; Cuijpers & Robb 1999, 158. See also section 12.6.6.



Fig. 12.44 Dog burial in Dronrijp-Hatsum I, dated to the late pre-Roman Iron Age. Photo RUG/GIA.

Conclusion

Aboveground excarnation, especially when involving dogs and possibly other scavengers, provides us with an explanation for the presence of additional skeletal elements besides crania, and the absence of others. The single bones found in Englum, Ezinge and other settlements in the terp region indicate that a selection was not made, although skulls and skull parts are most common. Postcranial bones were not ignored. The human head does not seem to be a major cosmological theme, as Armit has argued.¹⁵³

The choice of excarnation as a common mortuary practice may be induced by the possibility to collect bones at the end of the process. These bones became part of family collections of mementos and inalienable objects, as was established in the case studies of Englum and Ezinge. At specific occasions, some of the collected bones were deposited in family ground or household territory; family or household identity was emphasized and ancestral grounds were created that way.

The role of dogs in the excarnation process must have coloured the relationship between people and dogs. This relationship will be examined below.

12.5.6 The role and meaning of dogs

In the myths of many Indo-European peoples (Greek, Celts, Germans, Persians or Indians), dogs are usually as-

sociated with death in several ways. On that ground, and on the ground of specific customs still practiced in historic times, Schlerath concluded already in 1958 that the oldest funerary rite of the Indo-Europeans probably was exposure to scavengers, in particular to dogs and birds.¹⁵⁴ Exposure to scavengers would set the soul free and enable it to reach the hereafter quickly. Thus, dogs were guardians of the soul. On the basis of these insights, Schlerath suggested that in situations where archaeological traces of burial were absent, the possibility that the dead were exposed and scavenged should be considered seriously. If excarnation with the aid of scavengers, especially dogs, was indeed a common way of dealing with the dead, as is indicated by the finds from the terp region, the relationship between people and dogs must have been influenced by it. Can we say something about this relationship on the basis of the finds?¹⁵⁵

12.5.6.1 Dogs in the archaeological record

Dog skeletons and dog bones are regular finds in terps. Complete dogs are known from, for instance, Dronrijp-Hatsum I and from Ezinge. The dog of Dronrijp-Hatsum I was found in 1922 during an excavation by Van Giffen.¹⁵⁶ It was very well preserved, even the long hair and the toenails, due to the favourable preservation con-

153 Armit 2006, 11.

154 Schlerath 1958.

155 The following is an updated version of a longer article (Nieuwhof 2012b).

156 Find no. 84; Van Giffen 1924.



Fig. 12.45 A finds assemblage in a section in Leeuwarden-Oldehoofsterkerkhof, damaged by the excavator (cat. 60a). It consists of a human skull and part of a dog maxilla against each other in a small pit, dated to the 3rd century AD. Left: excavation photo, ADC-ArcheoProjecten; right: clean and partly restored bones, photo J. Thilderkvist.

ditions in the dung layer it was buried in (fig. 12.44). The dog seems to have been placed with care on its left side, its hairy tail stretched out. It was probably laid down on a dung layer and was then covered with more dung; the dung layer probably served as a new house platform afterwards.¹⁵⁷ Van Giffen dated the find to the 3rd or 4th century AD¹⁵⁸, but a radiocarbon date of the dog showed it was considerably older, from the late pre-Roman Iron Age.¹⁵⁹ In Ezinge, a complete dog (Appendix B, T-1569) was buried in a house from the middle pre-Roman Iron Age, “the toes somewhat deeper than the head” as was noted in the finds register. Because of their location and the way they were placed, probably during the application of a dung layer, both finds remind us of the skull deposit in Englum.

There are many more intriguing finds of dogs in terps. During the excavation of Leeuwarden-Oldehoofsterkerkhof, a damaged human cranium was found in a pit (fig. 12.45; cat. 60a).¹⁶⁰ It was discovered while making a section in one of the trenches with an excavator; the finds are undoubtedly disturbed, but it is not certain to what extent. The tongue bone was found, so we may assume that the skull was complete. Against the skull, part of the maxilla of a full-grown, medium-sized dog was found. The dog skull may have been complete as well. The pit was situated some metres from the northwestern wall of

a farmhouse.¹⁶¹ The stratigraphy and a radiocarbon date indicate a 3rd century AD date for the pit with skulls or skull remains.

The consumption of a dog is indicated by a find in the Groningen terp of Wierum.¹⁶² There, thirteen successive vertebrae and some other bones of an adult dog were found in a ditch from the late pre-Roman Iron Age (fig. 10.24). The lateral processes of the lumbar vertebrae had been cut off and there were cut marks on the dorsal processes and the bodies of the thoracic vertebrae, indicating that the meat of the dog had been eaten.¹⁶³ The bones must have been deposited together after the meal, when the ditch was filled-in. From the very few finds that indicate dog meat consumption, we may infer that dogs were not kept for their meat in the terp region. The consumed dog of Wierum was either eaten in a situation of famine, or as part of a ritual.

If we compare this find to the dog skin found in Englum (see 10.3; Appendix A.8), the latter explanation, that dog meat was eaten as part of a sacrificial meal, seems to fit the data best. In Englum, a complete dog skin, with head, feet and tail attached and three ceramic playing counters were found in an inverted pot, which was dated to the early 1st century AD. Because of the clearly ritual character of the find, the inverted pot, and the fact that dogs were not common food, this finds assemblage is interpreted as a deposition associated with a ritual meal, during which a sacrificed dog was eaten; the skin was the part that was offered, probably to an ancestor whose grave was found nearby. There are no known parallels for this find elsewhere. Similar remains of horses, though not buried in pots, have been found in

157 Two small human foot bones that were kept with the dog do not belong to it (see Nieuwhof 2012b, 112), but appeared to be misplaced; they belong to the skeleton of the adult ‘hanged’ man from Hatsum I (cat. 26b).

158 Van Giffen 1924, 38.

159 GrA-42196: 2080 ± 35 BP, that is 195 cal BC – AD (2 σ). The dog had high stable isotope values (δ¹⁵N 11.68; δ¹³C -20.56; see earlier in this chapter), which implies the dog might be slightly younger.

160 Thilderkvist 2013, 129.

161 Building no. 2/3; Nicolay 2008a.

162 Prummel 2006.

163 Prummel 2006, 35.

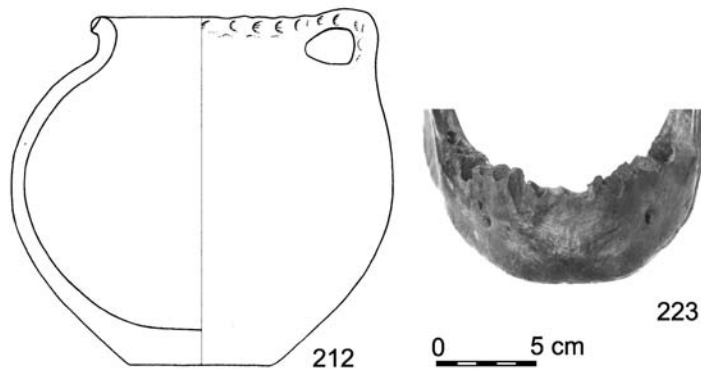


Fig. 12.46 An abraded mandible without teeth and a pot, found near each other in a ditch or a pit from the late pre-Roman or early Roman Iron Age in Paddepoel III (cat. 126a). The mandible is complete, apart from the teeth; the photo only shows the lower part. Drawing: from Van Es 1970; photo CFD/RUG, from Knol 1983.

Northern Germany and Denmark, and have been interpreted in the same way, as the offered parts of consumed animals.¹⁶⁴ In Englum, dogs also played a role in the deposition of eight human skulls in the dung platform. It seems that dogs had a chance to remove some crania from the circle of human crania; these were not put back. This might indicate that there might have been a special relationship between dogs and the dead.

In the small terps of Paddepoel, several dog skulls, some of them with smashed in foreheads, were found, all in the fills of ditches.¹⁶⁵ Two finds in particular stand out; one is a dog mandible with a shiny surface. The find is dated to the late pre-Roman Iron Age. Its shiny surface seems to indicate it has been handled often, and was therefore interpreted by Knol as 'a memento or an amulet'.¹⁶⁶ The find has a parallel in a human mandible, which was found in the fill of another ditch, with a pot (cat. 126a; fig. 12.46). This mandible also has a shiny surface and rounded edges, indicative of frequent handling.¹⁶⁷

In Ezinge, eight dog skulls from known contexts and several more from uncertain contexts were found, apart from the complete dog mentioned above (see also chapter 11). Two dog skulls from the first habitation phase in the 5th century BC had been deposited in the fills of two arms of the same creek (Appendix B, UV-1746 and 1747), not far from a finds assemblage with a human bone in the same creek (UV-1701). Most skulls were part of ritual deposits in houses. One dog skull was reported to be found together with a fox skull in a house from the 1st century AD (M-1177). The remains of foxes are very rare in the terp region; it is noteworthy that foxes are also scavengers, and may occasionally have participated in excarnation. Deposits of animals and animal skulls in Ezinge are not limited to dogs. However, only a dog was buried complete inside a house in Ezinge.

These finds say something about the relationship between dogs and man, not only about the practical reasons for keeping dogs, but also about the symbolic meaning of dogs. As we have seen in the case studies of Englum and Ezinge, special deposits from the same period, in which not dogs but other domesticated animals play a role, frequently occur. We may assume that humans had a specific kind of relationship with every one of these species, and that every species had specific symbolic meanings besides their economic value. However, dog deposits are not entirely similar to deposits in which other animal species are involved. Moreover: there are similarities with deposits of human bones. People as well as dogs were found buried inside houses or in the platforms underneath (Dronrijp-Hatsum I, Ezinge, the skulls of Englum); mandibles of humans and of dogs were possibly used as meaningful objects, e.g. as amulets (Paddepoel); a human skull and (part of) a dog skull were buried together in a pit (Leeuwarden-Oldehoofsterkerkhof). There are differences as well. In Englum and in Wierum, dogs were sometimes sacrificed and eaten. Although it is not impossible that human sacrifice was practiced in the area at the time, there are no indications that sacrificed humans were consumed.

12.5.6.2 The symbolical meaning of dogs

If dogs were involved in excarnation, as the evidence might be interpreted, the symbolic meaning dogs had would be coloured by this practice. The settlement dogs, 'man's best friends' of old, would not only be associated with hunting, herding, guarding, playing or even cuddling, but also with the dead, since they partook in the consumption of the deceased: children, spouses, parents, or neighbours. Speculating on this added symbolic meaning, we can imagine two opposite views:

1. Dogs are seen as contaminated, associated with death, to be avoided, and living on the margins of human society.

2. Dogs are seen as intermediaries between the living and the dead. The dead are still somehow alive in them. This gives them a special status, comparable to members of the family.

164 Zimmermann 1970, 75.

165 Knol 1983.

166 Knol 1983, 167.

167 Knol 1983, 174.

If we look at the evidence, the latter possibility seems the more likely for our research area. Dog remains resemble human remains in several ways, especially if associated with houses. Just like dead people, dead dogs seem to be related to the realm of the ancestors. They are somehow involved in the relations between the living and the dead and in the history and identity of the family. Burying a dog in the house connects a family to the house in almost the same way as a dead relative would. That does not mean that dogs and humans are on equal footing. Dogs can have their skulls smashed in, and they can be sacrificed and eaten. The consumption of dogs closes the circle and brings the dead back to the living.

The role of dogs as intermediaries between the living and the dead or between the world of the living and the world of the ancestors, is, at least in a literal sense, hard to deny if excarnation by dogs was practiced. It is possible that dogs were also considered guardians of the soul, as has been suggested by Schlerath on the basis of Indo-European mythology.¹⁶⁸ However, such beliefs cannot be inferred from the archaeological record.

12.5.7 Location

In the previous sections, the locations of inhumations, cremations and finds assemblages with single bones were established, as far as these are known. From the case studies of Englum and Ezinge, it is clear that locations play a role in the interpretation of human remains. To test the conclusions made in the previous chapters, the available information on the locations of the finds in the catalogue (inhumations, cremations and single bones) is combined per period, for the pre-Roman and the Roman Iron Age (figs. 12.47 and 48). Only finds that can be dated to either one of these periods and only locations that are certain were included. It is tempting to interpret the differences between the two resulting graphs as real changes in practices between these periods. However, many differences between the two periods have other causes than changing practices. They are, for instance, related to terp size. Moreover, the numbers of remains from both periods are small, which makes a comparison rather dubious. To overcome this objection, finds from both periods were combined, also including finds that could be dated no more precisely than pre-Roman/Roman Iron Age (fig. 12.49). This graph demonstrates that human remains in both periods were most often associated with ditches and with houses.

In the above, it was argued that during the pre-Roman and Roman Iron Age, the location of single burials was related to houses or to family territories. This location may be the key to understanding the selection of people who were interred, rather than excarnated or cremated. It is quite possible that they were selected, not because they

were special people or died of special causes, but because their death coincided with a specific stage in the lifecycle of a house or with changes in the family territory. This idea is not new. Hiddink observed that burials near the most conspicuous structures in cemeteries in the southern Netherlands are often among the first graves in these cemeteries.¹⁶⁹ He argued that these graves may not be the graves of people with high social status, but of people who were the first to die in a new community. A special burial rite and grave structure made them into symbolic ancestors of the whole community, thus legitimizing the use of the cemetery and thereby of the new territory.

Hessing noted that single inhumations in the Dutch central river area, an area where cremation was undoubtedly the primary mortuary ritual, were often found in or near houses, in or near ditches surrounding houses and in or near ditches surrounding fields.¹⁷⁰ Hessing recognized that these inhumations were often associated with the first phase of a house or a settlement; he argued they should not be regarded as human sacrifices, but rather as naturally deceased family members, who were buried near their family homes to bring it prosperity¹⁷¹, or to serve as a link with the afterworld.¹⁷²

Baetsen observed that pits with human skeletal parts in Tiel-Passewaaij, also in the central river area, were often found near ditches around plots in the settlement. He interpreted them in the light of rites of passage: the proximity to a real boundary in his view underlines the transition from a living into a deceased member of the community.¹⁷³

The explanation forwarded in this study is largely in line with these earlier interpretations, although it emphasizes slightly different aspects. Inhumations are rites of passage for the deceased, but that is only one of their meanings. At least in the terp region, but possibly also in the central river area, the choice of location, for instance in or near a ditch, is not, or not primarily, inspired by the possible symbolical meaning of ditches as underlining the transition between the world of the living and the world. The ditches in and near which human remains are found, are boundaries in a literal sense; that is sufficient reason for inhumations as well as for the burial of human bones. The meaning of inhumation as a rite of passage in this case is second to its meaning for the living. Inhumations as well as the deposition of human bones are primarily related to family identity, which includes the dead and the living. This practice creates ancestral grounds and a strong feeling of belonging, and is part of the practices that are related to establishing and maintaining family territories.

169 Hiddink 1999, 58-59.

170 Hessing 1993, 28.

171 Hessing 1993, 29.

172 Hessing 1994, 132.

173 Baetsen 2006, 178.

168 Schlerath 1958.

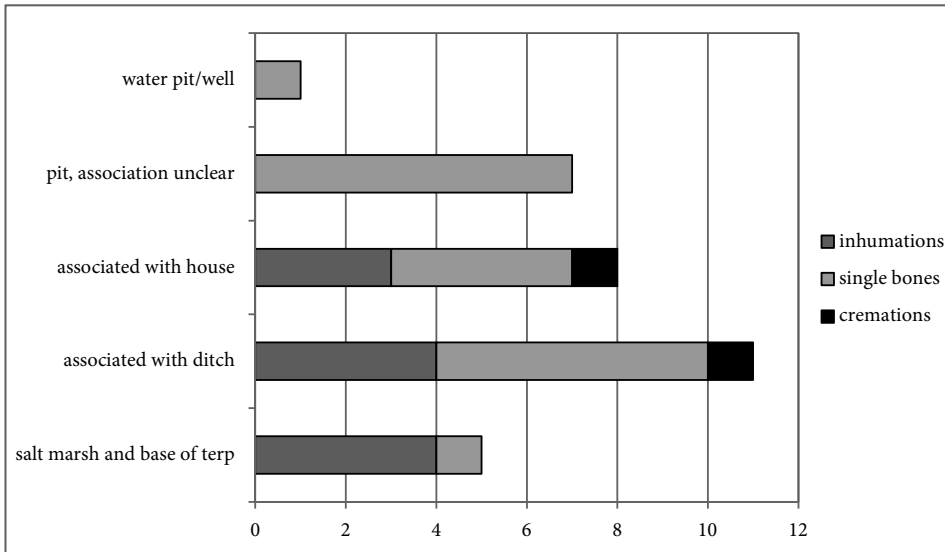


Fig. 12.47 Locations of human remains during the pre-Roman Iron Age; n = 32.

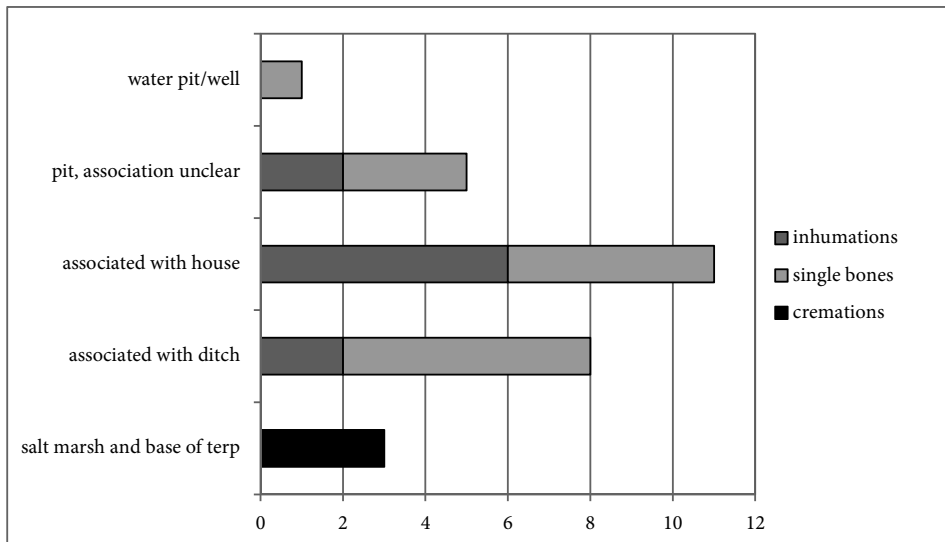


Fig. 12.48 Locations of human remains during the Roman Iron Age; n = 28. This number includes LPROM/EROM finds. The cremations from Lellens-Borgweg (cat. 119a) and Dronrijp-Noord (cat. 23a) might date from after the Roman Iron Age.

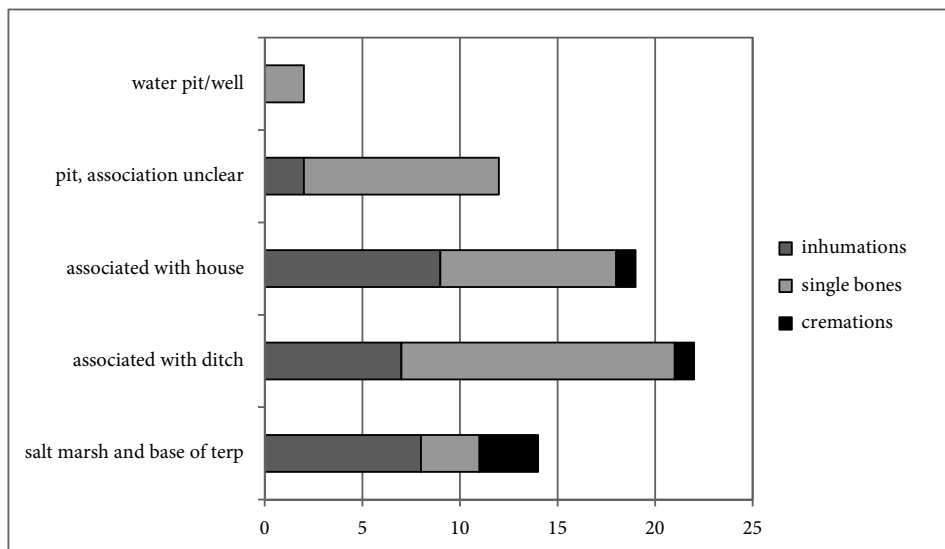


Fig. 12.49 Locations of human remains during the pre-Roman and Roman Iron Age; n = 69.

These practices also have a supernatural component, since the ancestors, or rather deceased family members, become part of a supernatural collective with the ability to protect and help the living. The ancestors can be approached through the remains of deceased family members, as the example of the eight human skulls and the offerings made to them in the house platform in Englum has shown. The act of burial of a corpse or of bones of the deceased might somehow have been part of the creation of ancestors as supernatural beings, and in that sense can be considered rites of passage, more precisely rites of incorporation.

Human remains are not only found in and near houses and ditches, some are also found further from the settlement. That especially is the case for the burials from the first phase of habitation of a terp settlement, for instance the burials from the middle pre-Roman Iron Age from Englum (cat. 109b, Appendix A.3) or Ezing (cat. 111y). One of the first burials from the Feddersen Wierde, dated to 1st century BC or AD, was found in a frequently flooded area outside the terp. Haarnagel, who was puzzled by it, mentioned the explanation offered by the early-medieval *Lex Frisionem*, according to which the punishment for stealing from a sanctuary is castrating, cutting off ears, and finally burying in a frequently flooded area.¹⁷⁴ However, Haarnagel thought the careful treatment of this body, which had been placed on hay and had a wooden implement as grave gift, did not support that explanation.

A constantly dry area was hard to find during early salt marsh occupation, and was probably not considered a prerequisite for burial during the research period of this study. During the early years of terp habitation, terps were no more than terp platforms, large enough for a house but hardly for anything else. One or several platforms with houses were clustered, thus forming an early terp settlement. The available space initially was sufficient for all the houses of the community; there was no need to divide the land and to lay claims on property. It is quite possible that the first inhabitants of a newly colonized part of the salt marsh were all related. The land probably was communal property at this stage. That implies that the early burials in the wet salt marsh soil outside the inhabited area itself, such as the ones mentioned above, were meant to create a sense of belonging and to establish identity, but of the community rather than of households or families within the community. The dung platform in Englum, in which eight human skulls were deposited (chapter 10), may still belong to that phase; in that case, the extended platform was community property, and the skulls came from several households within the settlement.

Only when the separate platforms grew together, when the number of houses and the population increased, and households were no longer part of the same family (or did no longer consider themselves as such), it became important to establish and maintain separate territories. From then on, the remains of family members started to play a role in mutual rivalry, and they were buried closer to home, directly in and near houses and ditches. This process was already described in the case study of Ezing; it appears to be connected to the start of a radial lay-out of the terp (see 11.2.3). The reason that inhumations in the early phases of terp habitation during the pre-Roman Iron Age are more often found in the salt marsh further from settlements (fig. 12.20) is not only related to excavation practices, which usually concentrate on the terps themselves rather than on the periphery. This typical development of settlements, and the accompanying change in the relations between the different households that are part of it, probably are another important factor determining these differences.

12.6 Conclusion: burial customs and the use of human remains in the terp region

An inventory of human remains from the terp region resulted in a catalogue of finds, which made it possible to examine burial customs and the use of human remains in this area during the research period, the pre-Roman and Roman Iron Age. The dataset in the first place represents scientific interest in human remains over a long period, and probably does not provide a complete picture of burial ritual in the entire terp region. Moreover, dates are often uncertain, also when radiocarbon dates are available. Yet, when these shortcomings are taken into account, it proves to be possible to compile a coherent overview on burial customs and the use of human remains in the terp region on the basis of these data.

In the interpretation of the data, the insights derived from the two case-studies of the terps of Englum and Ezing in the Reitdiep area play a major role. These are based on the available evidence from these terps, not only consisting of finds but also of information on their contexts. The finds in the catalogue often miss the necessary context information. Without the case-studies, it would have been hard to come to any conclusions at all. Because of the similarities between the finds recorded in the catalogue and the finds analysed in the case studies, it was possible to interpret them as evidence of the same kind of practices. The composition of the total assemblage of human remains from the terp region, the occurrence of unworked and worked single bones, the even representation of sexes and ages, the distribution of different kinds of human remains over the terp region, and the locations in and near terps, in ditches and near houses, indicate that the interpretations forwarded for Englum and Ezing, is also applicable to the wider terp region.

¹⁷⁴ Haarnagel (1979, 234), referring to Beck 1970, 246ff.

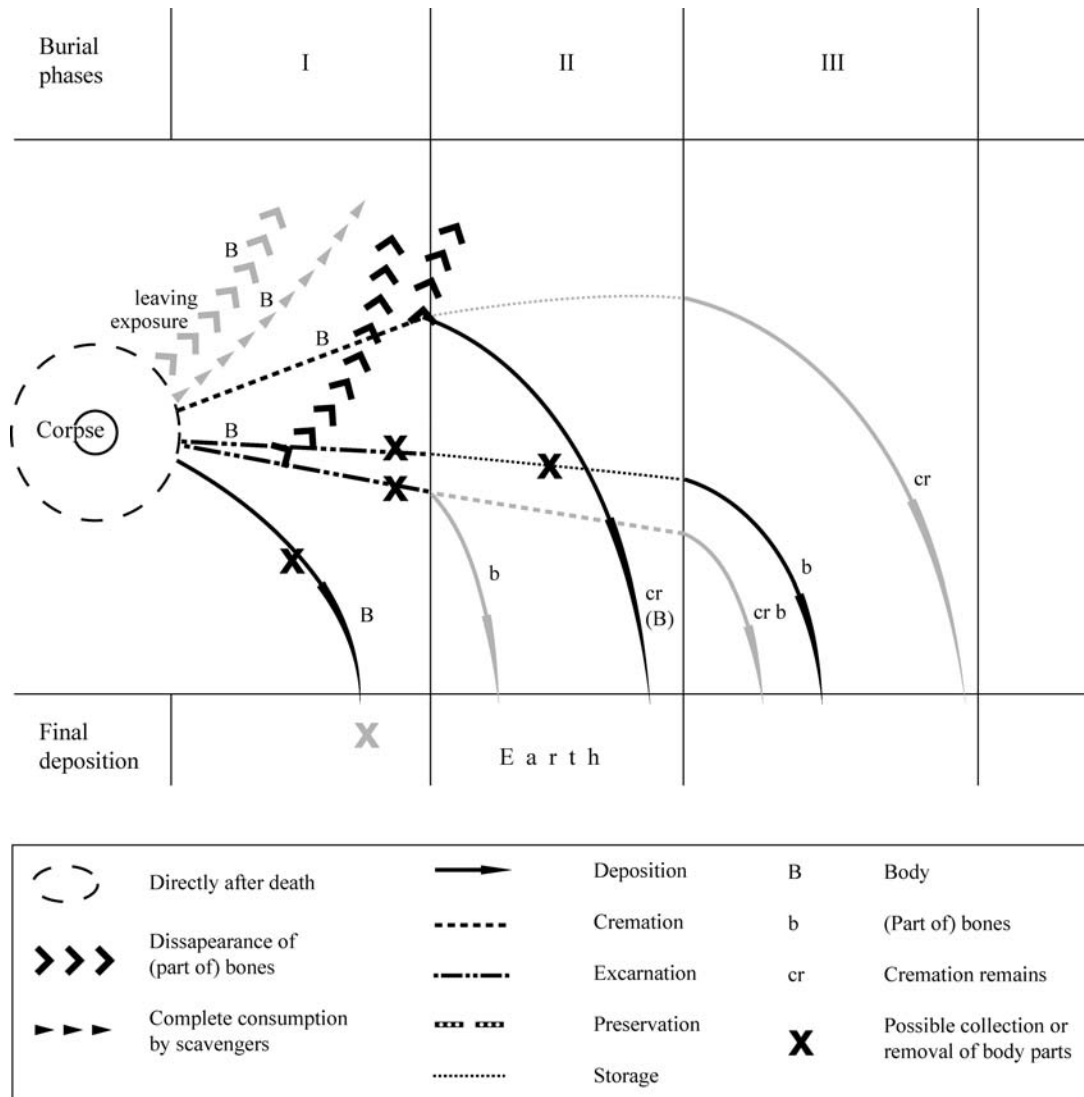


Fig. 12.50 Different ways of dealing with the dead in the terp region (compare fig. 7.2). There is no evidence of intentional preservation. Black: certain or highly likely; grey: possible. Based on Meyer-Orlac 1982, 139.

A single, common burial ritual cannot be identified. There were several coexisting customs. We have little information on the surroundings of terps so the evidence is incomplete as; therefore it cannot be established what type of funerary practice was the most common. Nevertheless, this study provides a fuller picture of mortuary ritual in the terp region than was possible earlier. In chapter 7, a general overview of possible mortuary rituals and combinations of rituals on the basis of ethnographic evidence resulted in a graphic representation (fig. 7.2). This representation can now be customized for this particular research area, the terp region (fig. 12.50), resulting in a graphic overview of more or less certain practices and of some possible practices concerning human remains that are indicated by the evidence.

It is clear that inhumation and cremation were practiced, although evidence of the latter is rare. Excarnation by exposure to scavengers, followed by collecting the re-

maining bones must have been a common practice. There is no evidence of any kind of preservation of corpses, such as mummification. The different practices allowed for the collection of skeletal parts at various points: after inhumation, at some point during excarnation, and during storage of bones. The evidence indicates that most of the single bones were collected after excarnation, rather than after inhumation. Two combinations of practices are presented in fig. 12.50 as possibilities. The first is that bones that were collected after excarnation were cremated and buried at a later stage. The cremated bones from Ezinge may be an example of such a practice. The second is that cremation remains were kept for some time before they were buried. Such practices would explain part of the unreliable outcomes of radiocarbon dates of cremated bone samples, which were discussed in section 12.4.2. In both cases, radiocarbon dates would be older than the date that is expected from pottery and context dates.

Many skeletal parts did not end up in the archaeological record, for different reasons. Exposure may sometimes have resulted in the complete disappearance of all skeletal parts, either by weathering, because of flooding, or because of the activities of scavengers. Body parts may occasionally have been removed prior to inhumation, possibly to prevent the dead from hindering the living. Cremation remains are often incomplete, not only in the terp region. Cremated bones were almost never collected completely from the pyre; the remaining bones have disappeared.

In the interpretation of finds, especially of human remains, not only the actual archaeological facts play a role (these are usually open to various and even opposite interpretations), but also preconceptions of which the researcher may not be aware. Explanations can roughly be divided in two main groups, in which, as was argued in chapter 9.6.3, the two sides of the *human nature bias* can be recognized. On the one hand, deviating human remains are often interpreted as coming from practices such as human sacrifice, head hunting, raiding or cannibalism. A general lack of care and respect for the dead in the past is often implied in explanations of uncommon remains, especially if they are found among waste. This view comes from a negative view on the nature of human kind, which is determined historically. Such interpretations are not only based on the finds themselves, but also on the idea that humans are selfish and violent by nature and need religion and the restrictions imposed by society to make living together possible. On the other hand, deviating human remains have been explained as coming from practices such as excarnation and ancestor cult, often as a reaction to the interpretations from a negative view on human nature. These interpretations have widened the scope of possible explanations considerably. Nevertheless, they may be equally predetermined by a view on human nature, which is less negative in this case.

At this point, where the final conclusions on the finds of human burials and bones in the terp region are made, as a researcher I need to make clear where I stand in this debate, and what my preconceptions are. The reader may already have noticed that my interpretations are in the line of ancestor cult and excarnation, rather than of warfare, headhunting and human sacrifice. I cannot deny that I sympathize with the positive side of the human nature bias, since I think that humans are fully equipped with capacities that enable a rather harmonious social life. Still, I am fully aware that societies can adopt practices such as headhunting or human sacrifice; these do not need to interfere with the general wellbeing of communities and community members. Moreover, history has shown that warfare, violence and severe oppression are recurring elements, within and between different social groups and societies. Such practices and circum-

stances may be reflected in the remains of humans in the archaeological record.

In order to prevent my preconceptions from playing a decisive role in the interpretation of the human remains from the terp region, I started with an analysis of the finds and their contexts, as thoroughly as possible within the context of this study. On the basis of the analysis in this chapter and in both case studies, complemented by the information on life in the salt marsh area that was provided in Part 1 of this study, it is possible to describe burial customs and the secondary use of human remains in the terp region.

This description starts with the natural environment. The prehistoric salt marsh region of the northern Netherlands can be considered an extreme natural environment. Living in this area made high demands on social organization, cooperation and inventiveness. As was argued in chapter 4, it is not likely that the inhabitants of this area were raiding and fighting each other on a regular basis. Not only is any evidence of martiality in the form of weaponry lacking, but continuous warfare would certainly not have allowed the considerable population increase and expansion that occurred everywhere in this region until well into the middle Roman Iron Age. In this society, not only the living but also the dead had a role to play in its continued existence.

In the areas of origin of the first colonists of the salt marshes, during the early and middle pre-Roman Iron Age, cremation was the common burial custom. The urnfields of that period housed the population of entire communities, allowing of calculations on population size and density.¹⁷⁵ The colonists of the salt marsh region were confronted with quite different circumstances, to which they had to adapt. Their choice of burial ritual was probably influenced by scarcity of firewood in this region, which made regular cremation difficult to realize, but that may not have been the only reason. They could have chosen inhumation as common burial ritual instead of cremation; the small number of inhumations, however, does not point in that direction. A small number of early finds of single human bones, often with gnawing marks (Englum, Appendix A.1; Wommels-Stapert, cat. 100a and d), suggests that exposure to scavengers, in particular dogs, occurred from the start. It is possible that this type of excarnation was also practiced occasionally in the areas of origin of the early colonists, but due to unfavourable preservation conditions for bone in Pleistocene areas, that possibility must remain hypothetical. Excarnation had an important advantage: it allowed of the collection of bones afterwards and of the secondary use of these bones. In exceptional cases, for instance in Ezinge (cat. 109y), inhumation graves were perhaps

175 Kooi 1979, 167ff.

reopened to take out one or more bones, but that never became customary.

The new living areas had to be appropriated; from potentially hostile and unfamiliar land, the new environment needed to be transferred into familiar, even ancestral land. Nothing was more suited to achieve that goal than the burial of the remains of the deceased. The deposition of the remains of the dead in the earth went hand in hand with the symbolic transformation of the land into ancestral land, thus creating a sense of belonging in the living. Their identity, or their family's identity, became rooted that way. At the same time, the ancestors in their capacity as supernatural beings were given a domicile, where they could be venerated, and asked and thanked for help through offerings.

Sometimes, perhaps only once during a generation, a dead relative was interred directly after death. More often, the bones of the dead were collected after excarnation, kept for some time, and deposited in pits, ditches or layers at an appropriate occasion. The remains of dogs, the intermediaries between the world of the living and the dead as they played an important role in excarnation, seem to have been used in similar ways.

In the course of time, the population and the number of households increased, and the separate *terp* platforms grew together into one *terp*. The available space on the *terp* had to be distributed among all the households. This process induced a radial settlement at least in Ezinge, and probably on many other *terps* as well; the process was also accompanied by a gradual change in the use of human remains, as was concluded in the case study of Ezinge. Inhumations and bones were no longer buried in community grounds, but became associated with the house itself and with the ditches surrounding a household's territory, the house on the *terp* as well as the farmyard and fields. The deceased apparently became associated with the identity of specific households. The eight human skulls in the extended platform of Englum may still have been contributed by different households, but the inhumations in house platforms in Ezinge must have been family members from the household itself. There are indications that offerings to the ancestors followed the changing locations of human remains. The number of complete pots, probably containers for offerings, in and near houses in Ezinge increased considerably during the late pre-Roman Iron Age. It may well be related to the deposition of the remains of the ancestors closer to houses.

In the course of the late pre-Roman Iron Age, possibly only in the 1st century BC, the use of ordinary human bones did not always seem sufficient anymore to achieve the goal of maintaining family identity. Some of the human bones were worked. The shining surface of many of these artefacts indicates that they were frequently handled and used, before they were deposited. How these ob-

jects were used is unknown; they may have played a role in some form of non-depositional ancestor cult. Using them must have been a constant reminder of the identity of the individual and of the family as part of a collective that included the living and the dead.

The population reached a peak during the 1st century AD, at least in the Groningen part of the *terp* region. The use of human remains played a role in the ritual practices that are related to this situation. In Englum, an older inhumation burial became the locus of ancestor rituals. In Ezinge, rivalling households compete with each other in public through depositional practice. Human remains are among the deposited objects outside houses. As from the 2nd century AD, the use of human remains gradually seems to have lost its significance, although, as finds from Tzum-Greate Vlearen (cat. 88d) or Leeuwarden-Oldehoofsterkerkhof (cat. 60a) show, unworked and worked human remains were still deposited occasionally. In Ezinge, the outside space was no longer an arena in which identity and territorial claims were contested, and inhumations seem more orderly; they forebode the changes that occurred in the 3rd century, when small cemeteries appeared in the northern Netherlands, in Noord-Holland and in northwestern Lower Saxony.

Inhumation and excarnation occurred during the entire research period, but excarnation may have gradually come to an end in the course of the middle Roman Iron Age. Whether this change was influenced by contacts with the Roman culture is uncertain; it may rather belong to independent changes in burial practices that resulted in the mixed cemeteries of the 3rd century and later. In settlements with contacts with the Roman Empire, especially in Winsum-Bruggeburen, uncommon, partial and partly burnt burials might indicate that excarnation was not always completed, and that there were some attempts to cremate people. This interpretation of the partial skeletons of Winsum-Bruggeburen is not certain; these burials might also result from violence used by Roman soldiers against the local population, or from violence induced by the presence of Roman soldiers or by increased social inequality.

Cremation was never common, but a very small number of cremations indicate that it was sometimes practiced. There does not seem to be a major difference between the locations of inhumations and cremations or single bones. Uncommon grave gifts in cremation burials suggest that they belonged to people who came from areas where cremation was common, and who chose to be cremated. That would imply that people had a say in what happened to their body after they died, and that the choice for either inhumation or excarnation was perhaps also determined, at least partly, by personal preference.

Headhunting as an explanation of the single human bones can be refuted. Not only is the practice of headhunting not in line with the image of life in the salt marsh

area as sketched above; more importantly (because based on direct evidence), the presence of postcranial bones cannot be explained by headhunting.

Human sacrifice may well have occurred in the terp region, as is indicated by the (undated) bog bodies from Westergeest. However, if it occurred, the victims were probably not buried within settlements, but further away, in liminal places that are comparable to the bogs and moors inland. The 'hanged man' from Hatsum-Dronrijp I may have been sacrificed or executed, but it is by no means certain that this man was indeed killed; the evidence, allegedly rope fragments, is not on an excavation picture and has not been kept. There are no sound reasons to interpret the inhumations in the terp settlements in general as human sacrifices. The argument that they are exceptional because they are not found in cemeteries does not apply. Cemeteries probably do not occur for a major part of the research period.

Mortuary rituals and the use of human remains in the terp region cannot be reduced to one single meaning. They rather are associated with a complex of interrelated, personal, emotional, social, symbolical and supernatural meanings, as discussed in the chapters on the theory of ritual in Part 2. Mortuary rituals were personal rites of passage, but that was not their only or primary meaning. They were related to the life cycles of individuals but also of houses and households. The bones of the deceased were mementos of people, but also the carriers of identity of the family and their status, and as such they were inal-

ienable objects that were kept in family collections. The deposition of these objects created ancestral grounds and territories, but also a feeling of belonging. The remains of the deceased referred to the ancestors, who were part of a collective that was passively and actively connected to the living. They not only were biological ancestors, but also supernatural beings who could be trusted to give protection and help when needed and requested; one of the ways to invoke their support was to deposit offerings in the layers in which their remains were buried. All these practices and related meanings played a role in the fortune and misfortune of families, households and communities.

The interpretations of the remains of ritual and of human remains forwarded in this chapter are undoubtedly coloured by my presuppositions. Although these interpretations do fit the evidence well, it must be admitted that the evidence has its limitations and another view is perhaps possible. The conclusions based on the evidence are not meant to be the final words on this subject, but rather a model, which still needs to be tested. That requires a larger dataset, more information on contexts, more reliable dates and more information from physical anthropological research. This information must come from future excavations and from careful examination of single human bone and burials that are excavated. That way, it may be possible to come to a better understanding of the way human remains were dealt with in the past, and to compensate for the earlier neglect of human remains.

Part 4

Conclusions

Part 4 presents the conclusions from this study. It will start with an overview of ritual practice in this region during the research period, summarizing the conclusions of the different chapters in the previous parts. A short chapter with practical recommendations for future archaeological research concludes this part.

13

Ritual practice in the terp region

13.1 Introduction

The incentive of this study was a peculiar deposit in the terp of Englum in the province of Groningen. As a case study, it became an important component of this book (chapter 10). This deposit consists of eight, incomplete, human skulls, piled-up cattle legs, three broken pots with perforated bases and bone fragments, which were found together in a massive dung layer. The assemblage dates to the middle pre-Roman Iron Age. Scrutinizing the assemblage in all its details made it possible to interpret it. The deposition must have been made during the construction of an extension to a habitation platform. The deposit of human skulls made this platform into a part of the ancestral grounds of a family or a household. It also became a proper place to worship the ancestors. The supernatural nature of the ancestors was deduced from the finds of a complete pot and a complete grinding stone, which had been deposited in the dung platform at a later stage, probably as offerings. The piled-up cattle legs and a liquid substance in three perforated pots are also interpreted as offerings, most likely to the same ancestors. The main part of the cows was eaten during a ritual meal, which accompanied the event.

Several more finds assemblages from Englum, a total number of 17, were interpreted as the remains of rituals (Ch. 10). Some were associated with an older inhumation grave, several were associated with ditches, two large deposits of pottery and animal bones were found in pits, and a partial horse skeleton was found in a creek. From the entire habitation period of 800 years, between 500 BC and AD 300, only two single inhumation graves remain, besides a small number of human bones and bone fragments. Inhumation was probably not the common burial ritual here, but the single bones, especially the skulls from the dung layer that missed all loose parts, revealed that another way of dealing with the dead was probably practiced in Englum: excarnation, followed by the collection of the remaining bones and secondary deposition of human bones.

It appeared possible to explain the deposits of Englum within the context of the settlement and the habitation history. For instance, the deposits near an older grave and many of the deposits in ditches are dated to the period when the population was at its peak, in the 1st century AD. It is likely that these finds are related to the changes that came with a growing population. However, the number of deposits from Englum alone is too small

to make any reliable generalizations. As a case study it needs to be compared with finds from other settlements, and to be tested against the background of larger datasets.

The opportunity to include such a dataset arose from a research project on the material culture of the terp of Ezinge (Ch. 11). This terp is located only 2 km from Englum; it has a similar habitation history and size, but a much larger part of it was excavated. As many as 350 finds assemblages were identified as the remains of rituals in Ezinge; to make sense of this large dataset, a quantitative approach was required. It resulted in an overview of ritual practice in a terp settlement during the pre-Roman and Roman Iron Age, at least of the kinds of rituals that leave traces in the archaeological record.

Burial customs and the use of human remains are an explicit area of attention in this study, since burial customs in the terp region were still largely unknown. To address this knowledge gap, an inventory of human remains found in this region was made and analysed (Ch. 12 and Appendix C). The results of this analysis and the new insights in ritual practice that are based on the case studies of Englum and Ezinge will be summarized in the following. First, however, we need to turn to the archaeological and theoretical backgrounds of these new insights. Knowledge of the social, political, cultural and natural environment is necessary if we want to understand the meaning of ritual practice in any area. And without a basic understanding of the nature of ritual, only platitudes can be the result of any study of ritual practice.

13.2 The social, political, cultural and natural environment of the terp region during the pre-Roman and Roman Iron Age

Although today's salt marshes are attractive from a tourist's point of view, this extreme, marine landscape cannot be considered ideal for permanent inhabitation. Nevertheless, the salt marsh region of the northern Netherlands was colonized as early as the early pre-Roman Iron Age, and the early colonists learned to make the most of their environment. Of clay and dung they made artificial mounds, so-called terps, on which they lived out of the reach of floods. They grazed their livestock on the extensive salt marsh, and they practiced arable farming in areas that were expected to remain dry during the growing season (Ch. 3).

This lifestyle was successful. The population gradually increased and reached a peak in the beginning of the Roman Iron Age. It has been suggested that *Chauci* immigrants came to the Groningen area around the beginning of the 1st century AD, but the peak is not confined to Groningen and it may rather be the result of natural population growth (Ch. 3.2.2). Even without immigrants, the growing population must have put pressure on mutual relations, since the available land and the limited surface of the terps had to accommodate and nourish a larger number of people.

Despite the successful lifestyle, people did not get old. Childbirth and infectious diseases must have been the main causes of death. Yet, skills and knowledge were passed on from generation to generation, as can be inferred from continuity in pottery styles and techniques or from similarities in the structure of house platforms throughout the terp region. That implies that there was a considerable degree of exchange of people, ideas and objects between settlements, otherwise skills would easily have disappeared. Pottery research shows that inhabitants of the terp region participated in socio-cultural exchange networks that extended as far as Noord-Holland in the west, Drenthe and beyond in the south, and Lower-Saxony in the east (Ch. 3.2.4 and 11.2.2).

Leadership enabled and guaranteed this way of life and counteracted threats that came from natural disasters, from feuds and from quarrels between villagers or with other settlements, although there are no indications of regular raiding and warfare. During a major part of the research period, leadership was probably chosen rather than hereditary (Ch. 4.3.3). Differences between social strata as they are normally conceived of, as including slaves or labourers, commoners and religious and social elites, probably did not play a role. Social differences did not follow such social strata, but rather applied to families or households. *Family*, as used here, refers to the extended family: all people that feel related and live in one or several houses, including the dead. The identity and prestige of a family determined its leading or subordinate position within a community, but differences may not have been that large. Each household member must have shared in the identity and prestige of the household or family.

It is likely that during the Roman Iron Age, dependency relations (a patronage system) were created between leaders and community members, social inequality increased, martial values became more important and hereditary leadership and an aristocracy developed. These changes in the social organization occurred, at least partly, as a result of contacts with the Romans and their foreign policy (Ch. 4.3.3).

After 800 or 900 years of habitation, the area was virtually abandoned around AD 300, with the exception of a small number of settlements, including Ezinge.

Stagnating inland water may have caused a severe deterioration of the natural environment in the middle Roman Iron Age, which went hand in hand with a breakdown of the social environment (Ch. 3.2.4). The abandonment of the terp region marks the end of the research period of this study. In the 5th century AD, newcomers, probably Anglo-Saxons from the east, brought a new material culture and new customs.

13.3 Theory of ritual

Besides an archaeological background of ritual practice in the past, we need a theoretical background (Ch. 6). What do we actually mean when we talk about ritual? Ritual is defined here as a kind of performance, which may emphasize personal, social, economic, religious or political aspects of human life, and which may consist of elements such as ritualized, symbolic, magical and technical actions, objects, language in various forms, music, meals, and natural and supernatural participants. This encompassing definition is meant to include all kinds of ritual, ranging from inconspicuous personal gestures to large public ceremonies that consist of many different components.

Although ritual is often felt to belong to the domain of religion by researchers, ritual is a separate practice that does not need to have religious connotations. Nevertheless, religion is associated with ritual practice, more than any other domain of human life; therefore, religion is a secondary area of interest in this book. It is important to note that religion is not necessarily institutionalized. The term *religion* as used here refers to that part of human thinking and acting that is concerned with supernatural beings and with relationships with them; besides rituals it may, but does not need to, involve phenomena such as mythological stories, doctrine, religious specialists, institutions, and other phenomena.

Both ritual and religion are cultural concepts that come from our minds in a very natural and predictable way, as by-products of evolutionary advantageous capacities.¹ These capacities include the ability to classify objects and creatures, the ability to detect agents from clues in the environment, a hazard-precaution system, and moral and other capacities that enable social life. Through these capacities, we can react and adapt to changes in our natural and social environment, but they have side-effects. We are inclined to detect invisible agents in our environment; we intuitively classify these agents as persons who think and react like us, although they have some counterintuitive traits. These are our religious concepts. We know how to maintain good, reciprocal relations with these supernatural beings, since the supernatural world is an extension of the social world. We also feel the need to perform rituals in specific situations, to safeguard our

¹ Boyer 2001.

existence in a potentially threatening world and to be accepted and feel at home in our social environment. Both religious concepts and ritual practice come with a feeling of urgency, which make them into cultural concepts that are not easily dismissed.

Ritual practice comes in a variety of forms (Ch. 7). Rituals are not confined to the small number of standard rituals that are often encountered in archaeological literature, such as offerings in liminal places, sacrifices to promote fertility, foundation offerings and mortuary customs. The range of possibilities is much wider. Rituals can be associated with all kinds of situations and events, in many different ways. Not only is ritual practice more variable, it is also less standardized than is often assumed. In spite of many definitions of ritual that stress repetitiveness, rituals are not necessarily always repeated in the same way. Most types of ritual are dynamic and can be adapted to new circumstances and ideas.

An important role in ritual practice is reserved for gift exchange (Ch. 8). It is an effective way of maintaining good social relations with other people, as well as with supernatural beings. Gift exchange plays a role in religious offering, in ceremonial meals, and in the practice of fragmentation and enchainment.² Nearly all kinds of goods, fragments of meaningful objects, food, people, honours, services, and even proper behaviour can serve as gifts to maintain good relations. Excepted from gift exchange are so-called inalienable objects.³ Such objects do not need to be valuable in an economic sense, but they are cherished because they are related to the identity of people or groups. Inalienable objects play an important role in this study.

The meaning of ritual cannot be subsumed under a single heading. Rituals have symbolic meaning, they may be meaningful in a social and religious way, they induce emotions or leave strong impressions in individuals as well as groups, and they often have practical and functional meanings as well. It is important to note that meaning originates in the human mind. Rituals and symbols do not have an inherent meaning, but their meaning comes from inferences in the minds of the participants of rituals and the users of specific symbols. That implies that standard explanations of rituals and symbols are to be mistrusted. Meaning depends on contexts and situations (Ch. 9).

13.4 The identification and interpretation of the remains of rituals in the archaeological record

Ritual behaviour is a natural component of human existence in any society, in the past as well as in the present, but only a small part of rituals leave traces in the archaeological record, and only a small part of these traces can be

identified. Moreover, these traces only consist of materials that did not perish in the course of time. That implies that the remains of rituals that we can identify, cannot be considered representative of ritual practice in the past society that is investigated, and that archaeology can never present a complete picture of ritual practice in the past.

Most of the remains of rituals in the archaeological record will not be recognized by archaeologists for what they are, unless all human behaviour in the past is considered to be more or less ritualized and a distinction between ritual and non-ritual is not made (Ch. 9.2.1). That is, however, not the position taken in this study. Not every human action is ritualized, neither today nor in the past. Ritual practice may leave identifiable traces in the soil, which reveal aspects of life in the past that we cannot detect if we are reluctant to single out special deposits and call them ritual deposits. But we do need to understand and explicate what ritual is, and we need to take into account that we only find the remains of a tiny part of ritual practice in the past.

The remains of rituals in archaeology often are identified on the basis of negative criteria, as a last resort when all functional interpretations have failed. Since most finds are easily explained in terms of function, if only as rubbish or accidental loss, only a small number of 'odd' deposits are usually identified as the remains of ritual practices. This approach does not do justice to the role that ritual practice played in daily life, and it stands in the way of a better understanding of ritual practice and of human existence in general in the past. In this study, it has been attempted to formulate and apply positive criteria (chapter 9). Although there is not just one criterion that enables the identification of the remains of rituals in the archaeological record, it is possible to assemble a toolkit, a set of criteria and approaches, which helps to identify them.

At the basis of these criteria is the principle that human activities are usually not random and that people now and in the past act quite purposefully and rationally within their worldview. They may occasionally lose or forget things, but that should not be the point of departure for the interpretation of finds assemblages that are conspicuous. These usually are the remainders of intentional actions, rather than objects that were lost, overlooked or forgotten.

The toolkit of criteria is necessarily adapted to the local and regional archaeological circumstances. The type of excavation, the excavated period, the stratigraphy, preservation conditions, and the landscape form the background to the identification and interpretation of the remains of rituals. The identification of the remains of rituals starts, as a first tool, with a description of what the non-ritual (such as rubbish disposal), the non-intentional, or the accidental may look like in the archaeology of the region and research period.

² Chapman 2000; Chapman & Gaydarska 2007.

³ Weiner 1985; 1992.

The second major tool is a contextual approach⁴, which requires that we try to understand and describe the actions and processes that caused and influenced the finds and their context as we have found it. In addition, various criteria are available that highlight aspects of ritual deposition, such as selection, association and avoidance, structure, location, completeness or modification of the objects or the deposition of edible food. Ritual theory provides important, additional arguments for the identification of ritual. These include signs that belong to the domain of ritualized behaviour, such as the use of specific numbers or colours or symmetry. Finally, the finds can be compared to the remains of rituals that have been identified earlier by other researchers elsewhere, in particular in neighbouring areas.

These combined criteria and approaches result in larger numbers of ritual deposits than is usual in archaeology. Large numbers require a quantitative analysis to bring some order, but a quantitative analysis is subordinate to a narrative, in which qualitative arguments and descriptions play an important role. The purpose of the quantitative and qualitative analysis of the finds that are identified as the remains of rituals is an interpretation of these finds and an understanding of ritual practice in the past. However, interpretation does not automatically follow from the results, and it is very likely that different researchers will reach different conclusions.

Three major preconceptions may influence the interpretation of the remains of rituals (Ch. 8.6). The first of these is the *homo economicus bias*, which has its roots in the false assumption that people in the first place behave economically rationally. This bias blinds the researcher for other motivations that play a role in human decision-making in any society, including ours. The second is the *contagion bias*, which is based on the aversion to polluting materials of the researcher. It needs to be realized that materials that are polluting in the eyes of the researcher may well play a role in rituals, either because they are not thought to be polluting by the participants of the ritual, or because the contrast between pollution and associated cleansing plays a role in the ritual. The third bias is the *human nature bias*, which is based on unconscious assumptions about human nature. These may be either positive or negative, but both colour the interpretation, in particular of finds of conspicuous human remains. In order to avoid these biases, I have tried to be clear about my arguments and to base my interpretations on the available evidence in its entirety. For the sake of transparency, the data are included in the appendices, so that the reader can draw his or her own conclusions.

13.5 Different types of ritual

Even though the archaeological record only reveals a small part of ritual practice in the past, the case studies of Englum and Ezinge indicate that ritual practice in these terp settlements was varied. Similarities between finds assemblages that were identified as the remains of rituals make it possible to organize this variation in different ways, which all reveal something about ritual practice.

First of all, the remains of rituals can be primary deposits, consisting of objects and materials (natural or manmade) that have been deposited deliberately as the main ritual, or secondary deposits, which consist of the remains of rituals that were performed aboveground and were deposited afterwards. Both categories may be called *ritual deposits*. Besides, objects that once played a role in rituals may have ended up in the soil unintentionally.

The types of objects and materials in deposits play an important role in their interpretation:

- Objects with a certain economic or a utility value, such as food (parts of animals or pots that served as containers) or complete objects.
- Pots, ranging from miniature to very large, household utensils, tools.
- Personal objects that are related to the social appearance of the individual, such as clothing, brooches and rings, combs, and personal tools that people always carry with them, such as spindle whorls or knives of which only the handle is left.
- Objects that were deliberately broken or otherwise modified (e.g. painted or perforated pottery, burnt objects).
- Human remains, including human hair.
- Complete animals, animal horns or animal hair.
- Potsherds and animal bone fragments.
- Objects with an intrinsic meaning or power (e.g. bones of uncommon animals, playing counters, pieces of flint, foot and ankle bones of cattle and horses, or sherds of *terra sigillata*).

Objects used in rituals in the terp region are not of an outstanding quality (Ch. 11.2.2). On the contrary, pots, used as containers for offerings in both Englum and Ezinge are often pots at the end of their lifetime. Most objects in ritual deposits are normal household objects and animal and human remains, but now and then, objects were especially made or modified for ritual use. Some human bones were worked, and on occasion, small pots were quickly made for the purpose of a ritual. Pot bases were sometimes perforated to allow fluids to seep into the soil (Ch.10.2.6). Some of the pottery in ritual deposits is painted with an organic substance, perhaps blood. This practice may be related to the sacrifice of animals (Ch. 10.3.2 and 11.2.2).

Interpretation cannot be based on objects alone. The locations and contexts of deposits are equally important,

⁴ Hill 1995, 30-31.

as is the way objects were deposited. In the practice of deposition, four types can be distinguished (Ch. 10.3.2):

Type 1: deposition in natural or manmade features (liminal places) without filling them in.

Type 2: deposition during backfilling natural features such as creeks or manmade features that were dug for another purpose.

Type 3: deposition by burying something in a small or large pit that is dug for the occasion and that is back-filled immediately after.

Type 4: deposition by placing something on the surface and covering it.

These categories cannot be used as interpretative categories in themselves, but from the character of the deposited materials (e.g., food), it may be inferred that Type 1-deposits can usually be considered offerings to a supernatural being. Type 2-deposits are variable; some are related to social practices such as the relocation of boundaries; others may be associated with the liminal character of features and can be considered offerings. Type 3-deposits are even more variable; they may be offerings, but many are associated with individual or household affairs; these are not necessarily religious in character. Type 4-deposits, which in the terp region concern deposits in house platforms such as the skulls from Englum, seem to be related to households; many of them may be connected to the ancestors and to family or household identity.

An interpretative classification system that is based on the qualitative analysis of the Englum case-study orders rituals according to the social categories to which they are primarily related: the individual, the family or household, the community or the supernatural (Ch. 10.3.2). These categories can all be identified in the remains of rituals from the two case studies.

Rituals connected to the individual person are primarily rites of passage. Deposits of personal possessions and of cut-off human hair are interpreted as rites of separation, in which objects that belong to the past life stage or social category are deposited. Deposits of horse hair suggest that rites of passage were not limited to people, but could also be performed for horses. Burial practice, inhumation as well as excarnation or cremation, also belong to the category of rituals for individuals, although other social categories usually play a role: the dead are also part of a household, the choice of funerary ritual may be related to the identity of the family and its status within the community, and the dead become supernatural ancestors. In burial practice too, animals were sometimes treated as persons, as is indicated by a buried dog in a house and a horse near a house. Apart from rites of passage, the use of instrument-special objects such as amulets can be considered personal ritual behaviour.

Rituals related to the family or household can be religious, for instance offerings for the benefit of the household, but also non-religious, associated with the life cycle

of the house or with the identity of the family. Examples are foundation and abandonment deposits, or rituals in which objects that are associated with the identity of the family or the household are deposited.

Rituals related to the community include offerings to supernatural beings for the benefit of the community, rituals that are associated with socio-political life, with keeping the peace within the settlement, or with the relocation of household territories.

Rituals related to the supernatural may involve the supernatural in several ways. The supernatural may be included as a *special patient*: the ritual aims to influence the supernatural being by way of the ritual exchange of gifts (offerings) for a beneficial attitude or help. Offerings include objects with a certain economic or a utility value, for instance food. The supernatural may also be involved as a *special agent*, represented by a religious practitioner, but agent-special rituals have not been identified in the case studies. A third type of supernatural involvement is the *instrument-special ritual*, in which an object with an intrinsic power or a special act is applied to achieve some purpose.⁵ *Instrument-special objects* may have been added to deposits to bring luck or to reinforce the effect of the deposit. Deliberate destruction is often part of religious rituals. It underlines the removal of offerings from the human world, and it prevents contact with objects that have become sacred, that is dangerous, because they were involved in religious rituals.

The many finds of the Ezinge case study enable an interpretative classification system of rituals that combines the previous categories with the occasions on which rituals were performed (Ch. 11.3.3). Objects, locations, actions such as breaking or burying, the supernatural and other elements are involved in the rituals from each of these categories in different ways:

1. Rituals concerning individual persons.
2. Rituals accompanying the life cycle of houses.
3. Rituals aimed at the household.
4. Rituals associated with technological processes.
5. Rituals concerned with the community.
6. Rituals associated with social contacts outside the settlement.
7. Rituals associated with socio-political life.
8. Rituals associated with cosmology and with ordering the world.

These categories are not mutually exclusive. Rituals in liminal places, belonging to the eighth category, may be meant to benefit the household or the community, and the rituals that accompany the life cycle of houses are aimed at the wellbeing of the household, through the house.

⁵ The distinction between agent, patient, and instrument-special religious rituals is made by Lawson and McCauley (1990; also McCauley & Lawson 2002).

A dichotomy with wide implications exists between rituals in the imagistic and doctrinal modes (Ch. 7.4 and 11.3.1), that is: infrequently performed rituals that are reinvented every time they are performed, vs. frequently performed, uniform rituals that are transmitted by learning.⁶ These different modes are associated with different types of social organization: the imagistic mode with small-scale societies with a low degree of organization, the doctrinal mode with large-scale societies and centralized organization. Although rituals in both modes can be found in any society, one mode is usually dominant. This dichotomy may be used to learn more about social organization. The finds, especially the numerous ritual deposits in Ezinge, made it possible to detect changes in the ratio between rituals in the imagistic and doctrinal modes.

The following sections will return to the initial research questions of this study, which were formulated in chapter 1.2. Categories of ritual practices such as the ones above are useful in the interpretation of the remains of rituals, but they only offer a limited view on ritual practice. A narrative that combines the results of the quantitative and qualitative analyses in the chapters of Part 3 with what is known about daily life, provides a fuller picture of ritual practice in the past society of the terp region. That approach is attempted below.

13.6 Rituals in daily life and in social contacts

In a terp settlement, women, men and children lived together in houses they shared with their livestock. They kept the terp in good condition, tended their livestock on the salt marsh, cultivated their land, made pottery, clothing and tools, prepared and ate meals, built and abandoned houses, negotiated territories, married, gave birth, educated their children, went on expeditions to acquire stones and wood, occasionally did some hunting and fishing, became ill, recovered, died, and were finally disposed of.

Apart from these practical aspects of daily life, people were part of families and households. Households included people who were raised in the settlement itself and often also people from elsewhere, in particular women who had joined their husband's family. They can be recognized by the deviating pottery they made and in one case by deviating stable isotopes (Ch. 4.2; 11.2.2; 12.4.3). Households and families were part of communities. Communities were part of extensive social and cultural networks. On all these levels relationships were maintained. The inhabitants of the terp region had friends and relatives and probably occasional enemies, although they were not seeking war and tried to keep the peace (Ch. 4.3.3). Women left the settlement to marry

men in other communities, and thus created family ties with places nearby and faraway.

Many of the actions and situations in daily life were accompanied by rituals and ritual behaviour; some of these practices left traces in the archaeological record. We have evidence of rituals on the level of individual people, of households, and of the community. During building house platforms and houses, human remains and also dog remains were sometimes buried in the house platform, and offerings were made, accompanied by ritual meals. These rituals made the house into a family home that literally included the ancestors and that guaranteed their protection. Many of the small deposits in and near houses may be offerings to the ancestors to ask for help in crises such as childbirth, diseases of people or animals, and external threats. Houses were not only protected by the ancestors, but also by objects with an intrinsic power, which were buried in or near them. When houses were abandoned, a part of the utensils and household goods were dismantled or destroyed and left in the house.

Families maintained collections of meaningful objects, such as memorabilia, heirlooms, and inalienable objects (Ch. 10.3.2 and 11.5.3). These collections included potsherds that were exchanged during special events, meaningful objects such as ancient stone tools and fossils, decorated small pots, which had been acquired as gifts, and bones of deceased family members. Such collections functioned as family archives, which connected the family to its ancestry and to important events in the past. The exchanged fragments and objects in these collections also connected the family to other people and symbolized the social networks in which the family members participated.

The importance of family or household identity and prestige in community life made it necessary to underline the identity of the family on every possible occasion; ritual practice was an important means to that end. Objects from family collections were deposited during rituals in which the identity of the family played a role. That implies that they were deposited in or near houses, in family land or in ditches that served as boundaries. They were also part of deposits in abandoned houses. The deposition of human remains and of meaningful objects underlined the connection between a household and its land.

Livestock was important, not only economically but also in ritual practice (Ch. 11.2.2). Pigs are the exception; they do not seem to be part of ritual practice in the terp region. Cattle, sheep and horses served as offerings and were eaten during ritual meals. There does not seem to be a difference between cattle and sheep in ritual practice, but horses probably had a slightly different position. They sometimes seem to have been considered individual personalities, as can be inferred from deposits of horse hair and a complete horse burial that can be in-

⁶ Whitehouse 2004b.

terpreted as being part of rites of passage for individual animals. Dogs played a special role because of their role in excarnation, which connected them to the world of the ancestors (Ch. 12.5.6). Wild animals are rare among the normal settlement finds; if they occur, they often are part of ritual deposits.

In the socio-political sphere, feasts or ritual meals were an important means to establish and maintain good relations within the community and with visitors. During feasts, beer and food were served. Breaking and depositing the pottery that was used in a meal could, for instance, seal an agreement on boundaries between neighbours. The participation of a supernatural being in a ritual meal as the recipient of a food offering, potentially made the tableware, cooking pots and food remains unfit for further use and consumption; in such cases, the remains of the meal and the tableware were collected and broken afterwards and then buried (Ch. 10.3.2).

13.7 Burials customs and the use of human remains

The evidence of burial customs in the terp region consists of rare single inhumations, a very small number of cremation graves, and single human bones in various contexts (Ch. 12). The most common burial custom cannot be identified. Several types of funerary practice coexisted. Inhumation was clearly one of these, but only a very small percentage of the total population was interred.

Because cremation probably was the common way of dealing with the dead in contemporary settlements outside the terp region, it has been argued that cremation also must have been the common mortuary ritual in the terp region during the research period (Ch. 4.4.1). The lack of cremation burials is thought to be caused by later sedimentation or erosion and by the small chance of finding scattered cremated bone fragments in the salt marsh. Nevertheless, a small number of cremation burials have been found in the terp region (Ch. 12.5.4). Two types can be distinguished: cremation pits, and small pots with burnt bones. Neither of these types is difficult to identify. That implies that a larger number of cremations might be expected in the terp region, if indeed cremation had been common during the research period. The small number of cremation burials therefore indicates that cremation was a rare practice in the terp region, much rarer than inhumation. It is possible that the scarcity of firewood is the main reason that cremation never became common in the terp region, even though it probably was the common burial ritual inland during the pre-Roman and Roman Iron Age.

A third practice was excarnation. This may have been the most common funerary practice. The evidence indicates that corpses were exposed to scavengers, probably birds and almost certainly dogs (Ch. 12.6.5). Excarnation with the aid of dogs explains the presence of skulls and skull parts and a small number of postcranial bones.

If headhunting had been practiced, postcranial bones would be absent. It also explains the similar deposits of human and dog remains. Dogs may have become the mediators between the world of the living and the dead. When decomposition was complete, the remaining bones were collected and stored in family collections of meaningful and inalienable objects. At the end of the late pre-Roman Iron Age and the beginning of the Roman Iron Age, bones were sometimes modified and worked into objects such as bowls or amulets.

It is not certain what caused the differences in treatment. The age and sex of the inhumation burials are representative of the population as a whole, considering that most people died before the age of 40. Differences in body posture of inhumations also suggest that a specific selection was not made and that people who were interred were random community members, who died of a variety of causes, and who were buried in accordance with their personality, their position during life, or the circumstances of their death. Crouched, on the side or supine, and extended supine were the most common postures. In some cases, it was apparently thought necessary to adjust the position of the body or to remove some parts (Ch. 12.5.1). A personal preference of the deceased, based on burial traditions in his or her area of origin, might play a role in the choice of burial ritual. That has been suggested for deviating burials in cemeteries elsewhere, and it may also be the reason behind the rare cremations in the terp region (Ch. 12.5.4). The moment of death in relation to the lifecycle of a house or of features near it may also have played an important role, especially in the choice of inhumation. A death during the building of a terp platform or a house, or around the time that a ditch or pit was filled in, may have induced inhumation of the deceased in or near the house, or in the fill of a ditch or a pit.

The remains of the deceased, either inhumations, cremation burials or deposited single bones, played a role in maintaining and establishing family identity. They were deposited in or near houses or in family territory; thus ancestral grounds were created. The deceased also became part of an ancestor collective with supernatural powers, as can be inferred from offerings near deposits of human remains (Ch. 10.2.7).

This interpretation applies to human remains in and near settlements. The interpretation that single inhumations must be human sacrifices because they are deviating from the normal burial custom (supposedly cremation) is not accepted here. That does not mean that human sacrifice did not occur in the terp region. The bog bodies that are found in Drenthe and elsewhere indicate that human sacrifice was occasionally practiced during the research period. A find of three bog bodies is also known from the terp region, but its date is uncertain (Ch. 12.5.3). It might belong to pre-salt marsh habitation in

the late Bronze Age. If human sacrifice was practiced in the terp region, the victims were probably deposited in liminal places at some distance of settlements.

Cemeteries from the research period in the terp region are unknown. Only a pair of graves found in Ezinge may be interpreted as a forerunner of the cemeteries with inhumations and cremations that occurred since the end of the Roman Iron Age, in the northern Netherlands (including Noord-Holland) and in Lower Saxony (Ch. 5.5). These new mortuary practices were undoubtedly related to changes in the roles of the family and the ancestors.

13.8 Beliefs and religious concepts

It is often taken for granted that the *Edda* and other medieval historical sources reflect religious beliefs and myths that prevailed in northwestern Europe long before they were laid down in writing.⁷ Finds from the Iron Age in the coastal areas of the Netherlands have also been interpreted against the background of these texts.⁸ The validity of that approach is contestable (Ch. 4.4.2), since the continuity of beliefs is highly questionable over such a long period. Even contemporary texts from the Roman Period cannot be trusted to give a complete and reliable image of the religious beliefs of the inhabitants of the vast area that was called Germania by the Romans. At best, these historical sources give an impression of regional customs and beliefs, for instance of the Nerthus-ritual of the Suebi that is described by Tacitus.⁹

From texts and inscriptions, it is clear that during the Roman Iron Age, a large variety of religious concepts played a role throughout Europe. These involved general gods, gods with specific functions or territories, spirits, deified people (the emperors) and ancestors. Romans, Gauls and Germans recognized traits of their own gods in the gods of other peoples and sometimes adopted each other's gods (Ch. 4.4.2). We may assume that the inhabitants of the coastal region of the northern Netherlands were not exceptional in the character of their religious concepts, but that assumption does not elucidate what religious concepts they actually had.

This study concentrates on ritual, since, as archaeologists dealing with periods of which written records are not available, we can only say something about human thinking through the remains of human actions. Since both ritual and religion come from the mind, it is through the remains of rituals that we may be able to say something about religious and other ideas. It may be clear that the view on beliefs and religious concepts that these remains offer is very limited. Still, the remains of rituals that were identified in Englum and Ezinge do allow some conclusions on religious concepts.

Firstly, it was probably believed that some types of objects, for instance pieces of flint, certain parts of animals, fossils, *terra sigillata* sherds and playing counters, had special, intrinsic power. These instrument-special objects were probably thought to bring luck and to give protection when deposited in and near houses. They may also have been thought to reinforce the effect of offerings and other rituals (Ch. 11.3.1).

Secondly, offerings were sometimes made in liminal places such as creeks. The supernatural being involved probably was some deity. In Englum, this being was offered a partial horse, the rest of which may have been eaten during a ritual meal (Ch. 10.3.2). The large portion that was offered suggests that this god was not thought to be satisfied with only a small or symbolical part of the horse. That indicates that this deity was not of the type that knows what people think and judges them by their intentions (Ch. 6.4; 8.4.1). It rather was a god who was not thought to be able to read people's minds, and who would therefore only appreciate a costly offering. Perhaps this god had a special function or territory, and was worshipped only on occasions that were related to this function or territory (Ch. 8.4.1). The small number of deposits in liminal places suggests that this supernatural being was not very important in daily life, but it has to be taken into account that locations that may be considered liminal places are rarely excavated in the terp region, because they are usually found outside settlements. Still, potentially liminal places within excavated areas, such as ditches and wells, only rarely contain deposits that can be interpreted as offerings. Only a small number of complete pots, which probably served as containers for offerings, were found in open ditches.

Thirdly, a general belief in supernatural ancestors can be inferred from offerings near deposited human remains (Ch. 10.2.7; 11.3.3). These offerings are numerous but relatively small. That suggests that the ancestors were considered supernatural beings who were supposed to be able to read people's minds, and who judged people by their intentions rather than by the value of their offerings. They were expected to protect the household and to provide help if needed. As supernatural beings of an all-knowing character, they may have been the supernatural beings that were most important to people in their personal and daily lives. Ancestor worship must be connected to beliefs about the afterlife. The finds of the remains of women and men of different ages suggest that deceased family members lost their individual identities after a while. The dead, not only the ones with actual offspring but all family members, were probably conceived of as becoming part of an ancestor collective with the power to influence the lives of their living family members.

Besides these beliefs in supernatural beings, there must have been cosmological views, associated with the

⁷ De Vries 1956; Simek 2003.

⁸ Therkorn 2004.

⁹ Tacitus, *Germania* 40.

origin and order of the world. It is quite possible that animals and inanimate objects were thought to have a soul, or that an animistic or pantheistic worldview prevailed (Ch. 8.4.1). However, the finds do not provide us with clues that enable an insight into such views.

13.9 Changing ritual practice

Ritual practice was not constant over time. There are, for instance, changes in the deposits associated with houses, in the deposition of human and animal remains, of pottery, of personal possessions and of instrument-special objects. These changes go hand in hand with social, political and cultural developments and influences and probably reflect those developments and influences. In the following, some trends will be highlighted.

The history of the population of the salt marsh area of the Northern Netherlands starts in the early pre-Roman Iron Age, in the 7th or 6th century BC, when the first colonists settled in the area (Ch. 3.2.1). The new land needed to be appropriated, not only by technological adaptations such as building house platforms, but also by ritual means. Some of the dead were buried in the new land, and the bones of decomposed bodies were deposited in and near houses. These practices symbolically transformed the land into ancestral land and thereby induced a sense of belonging in the living. The identity of the colonists, or their family's identity, became rooted. This practice also created a place for the worship of the ancestors in their capacity as supernatural beings. Since they dwelled in the family's grounds, they could be asked and thanked for help by depositing offerings there. This use of human remains and the role of the ancestors as supernatural beings remained important throughout most of the research period, but it did not remain unchanged.

The well-known building sacrifice in the first excavated house in Ezinge, dated to the 5th century BC, consists of three partial animals (Ch. 4.4.3; 11.2.2). It is clearly a sacrifice to supernatural beings, but the supernatural being involved may be a god, rather than the ancestors. Human remains are not associated with this house. The large offering suggests that the supernatural being or beings, for which this offering was intended, were not of an all-knowing nature. If these supernatural beings were ancestors, they did not play an important role in daily life, that is to say, as supernatural beings. The deposit of human skulls, two centuries later, in a house platform of Englum, is of a different character. It is clearly a foundation deposit, but it is not an offering in itself. Rather, the cattle bones and offered food are offerings to the ancestors whose bones were buried here (Ch. 10.2.7). That suggests that the role that was ascribed to the ancestors had changed; their significance as supernatural beings had increased.

The role and worship of the ancestors in particular gained importance when the population increased and a

radial settlement structure emerged, in Ezinge during the late pre-Roman Iron Age (Ch. 11.2.3). Formerly communal land on and near the terp probably became divided among separate households in this period and became household territory. Inhumations occurred closer to houses or even within them. A large number of deposits related to rites of passage in and near houses in this period also clearly link the individual to the house and its immediate surroundings. The growing importance of ancestor worship can be inferred from the large number of small offerings, especially small pots that probably served as containers, during the late pre-Roman Iron Age. At the same time, the use of instrument-special objects, which had been an important element in ritual practice during the middle pre-Roman Iron Age, strongly diminished. Apparently, people felt more dependent on supernatural beings in this period and less inclined to force effects by the use of powerful objects (Ch. 11.4.2). The ancestors in this situation probably became the main supernatural beings; because of their all-knowing nature, they required frequent ritual attention.

Rites of passage for individual people during the entire pre-Roman Iron Age were often accompanied by the deposition of objects that belonged to a former stage of life: a brooch, some clothing, a comb, or hair clippings (Ch. 10.3.2; 11.2.2). In Ezinge, the number of such deposits in and near houses and the occurrence of human burials in houses correlate (Ch. 11.2.3); this correlation points to an exceptionally strong bond between some households and their grounds, and a family tradition that treasured the deposition of personal possessions during rites of passage for humans and even for animals.

During the early Roman Iron Age, the size of the population reached a peak (Ch. 10.3.2; 11.4.3). Human bones were now sometimes worked, which gave them an additional value. The use of these objects, either in family rituals, as amulets or perhaps for practical purposes, was a constant reminder of the identity of the family and of its ancestry. The increased population put relationships under pressure. Because of the population growth, territorial boundaries needed to be adjusted and negotiated. Ritual meals were part of negotiations; the sherds of the pottery that was used during those meals were deposited in the former boundary ditches when they were filled. Claims for rights to land came with claims for descent from distant ancestors. Deposits outside houses, including many pots and sometimes worked or unworked human bones, demonstrate that the public space had become an arena in which claims for land and rights were contested by emphasizing family identity. A competitive element must have been part of such rituals. The extravert ritual practice of this period came with an increase in the use of instrument-special objects. Apparently, the help of the ancestors was not considered enough.

The use of human remains changed in the course of the middle Roman Iron Age. Inhumations near houses still occurred, but deposits of single human bones became less frequent. The public space was no longer an arena. After the dust had settled, ritual practice gradually turned inwards again. Deposits became smaller, but their frequency strongly increased. The ancestors were apparently still worshipped, but the decrease in the secondary use of human bones suggests that the ancestors became more abstract. Their character may have changed, from ancestors that were naturally always on the side of the living but appreciated ritual attention, into supernatural beings with a more general, protective character that needed to be convinced to choose the side of the living. Protective powers were also forced by the use of instrument-special objects, in particular *terra sigillata* sherds, which were adopted as objects with an intrinsic power. Instrument-special objects were now also part of deposits of personal possessions during rites of passage.

At the end of the Roman Iron Age, cemeteries develop with inhumations and cremations. A pair of graves in Ezinge (Ch. 11.2.2) perhaps forebodes this change. This pair, and small clusters of graves in Midlaren-De Bloemert in Drenthe and in settlements in Noord-Holland (Ch. 5.5), indicate that they were initially located near houses. Later cemeteries no longer belong to separate households but to communities. The break in the direct connection between the dead and their family homes, which can be derived from the relocation of cemeteries, must be indicative of changes in the role that different households played within communities, and probably in the role of the ancestors. These changes entailed that communities no longer had independent households as the main constituents, from whose midst leaders were chosen on the basis of merit and prestige. Rather, communities had become subordinate to a ruling family, an aristocracy, which supplied the leader.

The emergence of an aristocracy during the Roman Iron Age probably has several causes (Ch. 4.3). It is undoubtedly partly due to the influence of and contacts with the Romans who favoured local elites, but that may not be the only cause. This development can also be considered a consequence of the contest for territories and rights of the early Roman Iron Age. Some families may have profited from this situation more than others. These were the natural candidates for the emerging elite; they could build on the existing structure that was based on merit, ancestry and family identity, to the cost of the prestige and status of non-ruling families. Roman diplomacy may have reinforced this process.

The gradual change in social organization, which can be inferred from the very subtle changes in depositional practice described above, is confirmed by a development that was established in the case study on Ezinge: during

the research period, ritual practice gradually changed from the imagistic mode to the doctrinal mode. During the middle pre-Roman Iron Age, deposits are highly diverse and suggestive of rituals in the imagistic mode, but in the course of time, the degree of uniformity increases. During the middle Roman Iron Age, rituals are still not uniform, but many of them are so similar that they may be taken to be indicative of the doctrinal mode.

It is telling that these changes in social organization went hand in hand with the decrease in the secondary use of single bones that was mentioned above. The family ancestors must have gradually faded into the background during this process of social change. Their place may have been taken by supernatural beings of a more general character, to which communities as a whole felt connected. Perhaps the ancestors of the elite acquired a new, general status. The *Alaisiagae*, of which we know from inscriptions in Housesteads (Ch. 4.4.2), may have been such general ancestral mothers, just like the *matres* and *matronae* of the Lower Rhine region (Ch. 8.4.2).¹⁰ They may have developed from an older family ancestor cult of the kind that can be identified in Ezinge and Englum.

13.10 Epilogue

This study is based on finds that are taken as evidence of ritual practice, rather than on a preconceived model. The theoretical part helped to understand the variability of human ritual behaviour, and to accept the various ways, in which it is expressed. The results are hypothetical and are meant to be tested by future research, because the evidence is still incomplete. Many questions are still unanswered. For instance: Does household ritual occur elsewhere in the same way as in Ezinge and Englum? Can the practice of excarnation, with or without involving dogs, be confirmed? Is the deposition of single human bones a continuing practice into the Middle Ages, and does it have the same meaning then? Can the idea that fragments, especially potsherds, were exchanged be confirmed? And will we ever find ritual deposits outside the terp settlements?

One thing is clear: the changes in ritual practice throughout the research period show that the life cycle of the individual, the prosperity of the family or the household, the ancestors, the family territory, and the community, as well as the houses, animals, objects and rituals that are associated with these aspects, cannot be fully understood in isolation. They form a continuum, in which the different elements may gain or lose importance in the course of time. That implies that the meaning of any of these separate elements should always be evaluated against the background of this continuum, a picture of life that is as complete as possible.

¹⁰ See Derks 1998, 127-130.

14

Recommendations

“It is clear that if we want to study these phenomena more closely we need explicit information about both the bones and the context. Such information is often missing from publications and reports...In the Netherlands this kind of research is very new and in descriptive terms especially is often not done in such a way as to make further research possible. The necessary co-operation between anthropologists and archaeozoologists, and between them and cultural archaeologists is very often lacking.”
(Roel Lauwerier 2002, 67).

14.1 Introduction

Although this study makes it possible to give a picture of ritual practice in the terp region during the pre-Roman and Roman Iron Age, the dataset on which it is based has its limitations. More data are needed to test the interpretations that were made in this study and that were summarized in the previous chapter. These data must come from future research. In the following, some recommendations are made in view of excavation practice and future research on the remains of rituals in the archaeological record. These recommendations are not meant for the terp region alone, but apply to Iron Age archaeology in general, wherever similar excavation techniques are practiced.

14.2 The identification of the remains of rituals in retrospective

In an ideal situation, the remains of rituals are already identified when they come to the light during an excavation. In that case, they can be excavated with extra care, paying attention to every detail. In many cases, however, ritual deposits are not identified as such during an excavation, or there is no time to excavate them with all the necessary care. Nevertheless, although some information will be lost then, it is still possible to identify and to examine them as the remains of ritual practice. The case study of Englum has shown that close reading of the documentation of an excavation may result in the identification of the remains of rituals, even though they were not identified as such when they were still *in situ* and although the field drawings and context descriptions were not always optimal. That was also the case in Ezing; 80 years after the excavation, the remains of rituals could still be identified and analysed, even though much information was lost. That was possible because the documentation met the fundamental requirement that finds are numbered, and that find numbers on field drawings mark the locations of the finds. Nevertheless, more reliable informa-

tion would have resulted in a complete picture of ritual practice.

14.3 Modern excavation procedure in Iron Age archaeology

In modern excavation practice, it is customary to section a feature and to dig out the finds, ideally paying attention to different fills. The finds are put in a find bag, to be cleaned and studied afterwards. A first description of the feature is made during excavation, but without knowing much of the finds. Pits with many bones and sherds are usually called ‘refuse pits’, being obviously the place where broken objects ended. However, as was noted in chapter 9.3.1, it is not certain that refuse was dumped in refuse pits at the time. In the archives of modern excavations, they are certainly overrepresented.

After the excavation, the find material is cleaned if possible and divided into several find categories: pottery, with subdivisions such as hand-built or wheel-thrown; metal objects; slag; animal bone; human bone; wood, botanical samples etc. These finds are then handed over to specialists who examine them in more or less detail, and write their reports.

Afterwards, the director of the excavation combines all results and writes a synthesis that will conclude the final publication. The main objective of this synthesis usually is an understanding of the organization of successive stages of the settlement and of the surrounding landscape. Such an overview usually mentions some nice or conspicuous finds and it may use some of the specialists’ conclusions. There is usually not much attention paid to individual features, except when they are clearly associated with technological activities. Some ritual deposits that were accidentally noticed may be mentioned to enliven the narrative.

However, if we want to learn more about ritual practice in the past, something is missing in the standard

procedure described above: a phase, preferably *before* the final concluding synthesis, in which all finds are virtually reunited with their archaeological context.¹ A list or a relational database of features and fills with all the available information, including an overview of the associated finds assemblages and the results of specialist research, would not only facilitate the interpretation of features in general, but can also be searched for indications of ritual practice with the aid of the toolkit described in chapter 9, even after the excavation results are published. Such a list or database should always come with the standard excavation report.

In addition to this general recommendation and to normal excavation standards, some practical recommendations concerning excavation technique and the collection of finds can be made:

1. It is undesirable to make a selection of finds during the excavation, even if the number of finds is very large. All potsherds, bone fragments or twigs may be informative and should be collected. Deselection, if desired, should not occur until after specialist research is completed.
2. Random sampling of features does not provide sufficient information to study depositional practice. Features such as pits, wells and ditches should be excavated completely.
3. It is very important to distinguish between possible depositions in dug features and the artefacts that came with the fill or that were dug in later. It is therefore important to distinguish different fills, and to record always the location of objects in different fills during the excavation, for example by giving them different find numbers and noting their location.

14.4 The finds

Specialist research is often aimed at types, dates, technology and origins of objects. If we want to study ritual practice, these aspects are important, but additional information on the cultural biographies of objects is indispensable. We also want to know how they were actually used, and how they were discarded. Specialist research should therefore include traces of use and wear and of deliberate destruction. Restoration should only take place after these aspects were examined, and it should not conceal traces of use. Objects of organic materials should only be impregnated if dates are certain, or only after radio-

carbon samples are taken, even if finances do not permit immediate radiocarbon dating.

Extra attention should be paid to burials and human bones. When reliable dates cannot be inferred from the context or from the stratigraphy, samples should be radiocarbon dated. It is also recommended to have stable isotopes of carbon (¹³C) and nitrogen (¹⁵N) measured, in order to establish the origin of people, and to create a larger dataset for future research on reservoir effects and palaeodiet.

When sorting the finds, human bones are usually considered a separate category. The commendable aim usually is to have them examined by a physical anthropologist. The result of this practice, however, often is that they are not studied at all, since an anthropologist is not always available. Hessing already recommended that archaeozoological research would include human bones.² I will repeat that recommendation here. In particular single bones will often not be studied at all, unless they are included in the archaeozoological material. Archaeozoologists are able to identify human skeletal elements, and are experienced in the identification of cut and gnaw marks.³

Oddly enough, human remains were often not paid much attention to in archaeology in the past. However, as this study has shown, they may play an important role in ritual practice of past periods. This role can only be assessed properly if we have reliable information on these remains at our disposal. By examining all human remains in detail from now on, we may be able to compensate for the neglect of human remains in the past.

14.5 The landscape

The last recommendation is concerned with off-site structures, found in the landscape surrounding settlements. Terp archaeology usually concentrates on the terps themselves. Features and structures outside the original settlement are only discovered and excavated if they are located under later terp layers, as was the case in Englum. However, ritual practice in the past undoubtedly was not confined to the terps themselves. People possibly used the landscape to bury people or to spread cremation remains, or to make depositions in special places. To complement the finds from terps, future research should attempt to learn more about the use of the landscape, and about finds and features outside the terps.

¹ This point was already made by Merrifield (1987, 3).

² Hessing 1993, 30.

³ Good examples in this research area are the archaeozoological studies of Paddepoel (Knol 1983) and of Wommels-Stapert (Woltinge 2003; 2005).

Appendices

- A Catalogue of remains of rituals from Englum
- B Ezinge
- C Catalogue of human remains from the terp region in the provinces of Friesland and Groningen

A

Catalogue of remains of rituals from Englum

For the location of the finds, see fig. 10.18.

These descriptions are based on the examination of the pottery by the author (Nieuwhof 2008b), the animal bones by Prummel (2008), and the human remains by Tuin (2008b).

- a. location
- b. find number
- c. short description
- d. date
- e. description context
- f. description finds
- g. why ritual

1

- a. Trench 4, northern section, feature 825.
- b. 946
- c. Pit (water pit?) with human bone and potsherds.
- d. 5th-3rd century BC.¹
- e. One of the features in the northern section was a pit, which had been back-filled in one go with humous salt marsh sods (fig. A.1). The pit was dug into the salt marsh not far from the early platforms. Because of the location of this feature in the deepest part of the section, it was not completely excavated, to avoid the collapse of the terp profile. The top of the pit was 0.50 m -NAP, the bottom was deeper than 1.10 m -NAP, reaching into the marine sand below the salt marsh layers. The feature probably functioned as a water pit to store rain water, and may have had a lining of sods on the surface, to keep salt water from coming in. These were possibly used to refill the pit after its final use.
- f. About 20 cm under the top of the fill, part of a human bone, the distal end of a left radius (a spoke-bone), was found (fig. A.2), together with six wall sherds that had belonged to a single pot and a small piece of cattle rib. Missing sherds of the same pot may have been removed while cleaning the section, or staid behind in the non-excavated part of the feature. It must have broken shortly after death, when the bone was still fresh. The bone shows some shallow, parallel scores, probably

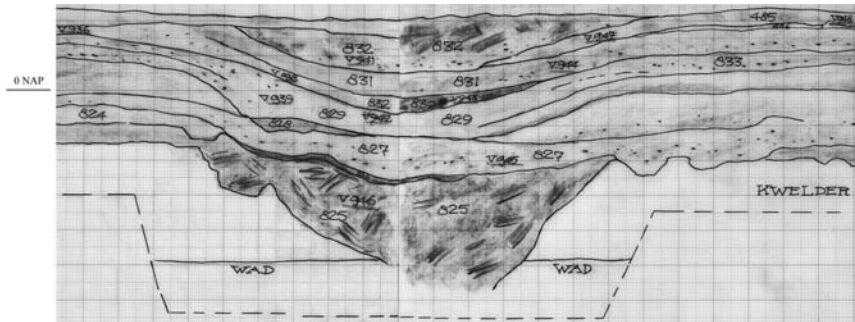


Fig. A.1. Cat. no. 1. Detail of the field drawing of the northern section in trench no. 4, with (water) pit no. 825. Archive RUG/GIA.

- g. made by dog teeth. The deposition was made in the upper part of the fill of the water pit during filling-in. The finds are included in the catalogue because of the presence of human bone. The sherds belonging to one pot and the virtual absence of other finds (except a cattle rib fragment) strengthen the identification as an intentional deposition of selected objects.



Fig. A.2. Cat. no. 1. Distal part of a human radius, found in feature no. 825. The arrows indicate parallel scores, probably made by dog teeth.

¹ In the section drawing of Appendix 2 in the Englum publication (Nieuwhof 2008a), the feature was incorrectly represented as a late pre-Roman Iron Age feature.

2

- a. Trench 4, level 2, feature 559.
- b. 793
- c. Cut-off human hair.
- d. First half 4th century BC.
- e. The early platform in the western part of trench no. 4 (the platform west of the dung layer with human crania), consisted of several layers of dung and clay.
- f. In one of the dung layers of this platform, some hair was found. It was studied under the microscope and compared to human hair, sheep's wool and horsehair. Based on structural similarities with human hair, its fineness and the form of the hair cutting, it was identified as human hair. The separate hairs were only about 2 cm long and 12 cm wide, and must have been cut off in one go. It was found as one piece, but fell somewhat apart after excavation (fig. A.3). The dung layer in which it was found was radiocarbon dated: 2320 ± 30 BP, i.e. 429-357 cal BC (2σ).²
- g. Cohering stretches of short hair clippings will not end up buried in the floor accidentally; they would normal-

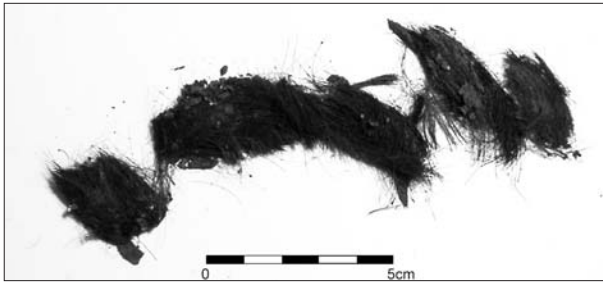


Fig. A.3. Cat. no. 2. Hair clippings found in a dung layer in an early platform.

ly fall apart quickly and spread. In this case, the hair was carefully kept together and buried in the floor of the house, so this must be an intentional deposit.

3

- a. Trench 5, level 1, feature 1.
- b. 388
- c. Inhumation.
- d. 4th-3rd century BC.
- e. In the levelled part of the terp, a pit was found, 1.9 m long and 0.55 m wide, about 20 cm deep. It was back-filled with slightly humous, sandy clay. The pit was dug into the natural salt marsh soil, about 60 m south of contemporary habitation platforms (as far as we know their location). There were no postholes or other features from the same period nearby.
- f. In the pit was a human skeleton (fig. A.4). It was complete, except for a part of the skull. The grave was situated directly under the top soil in the levelled area, with the head reaching just into it, which had caused



Fig. A.4. Cat. no. 3. Grave of a middle-aged man in the salt marsh subsoil, dated to the 4th or 3rd century BC. Photo RUG/GIA.

damage to the skull caused by ploughing. This implies that the grave was extremely shallow; the highest part of the body cannot have been more than about 20 cm below the original soil surface. The bone was in bad condition, probably as a result of dehydration, acidification and contact with oxygen after levelling. The body was lying stretched on its back, with the head oriented to the northeast. The arms were folded, the right arm lying across the stomach, the left arm somewhat lower across the abdomen. The body belonged to a man aged 37-62; his height was an estimated 1.62 m. Because of the bad condition of the bone, the presence or absence of pathologies or other details could not be examined (Tuin 2008b, 105). There were no grave goods or other objects in the grave. Next to the left upper arm, a thin black line showed that the body had probably been placed on a layer of organic material. The date is based on radiocarbon dating of the bone: 2260 ± 20 BP, 396-352 or 296-228 cal BC (2σ).³ The grave was possibly marked by a small barrow or some other funerary monument. A small barrow would better protect the body in the shallow grave. Such a feature would have been covered by younger terp layers later, during the Roman Iron Age, and disappeared during quarrying of the terpsoil; nothing was left of it during the excavation.

- g. The ritual aspect of burial does not need to be argued.

4

- a. Trench 4, level 2 and 3, feature 556/568 and 704/707/708.
- b. 571; 572; 691; 692; 693; 694; 695; 696; 697; 730; 670; 680; 691; 729; 817
- c. Dung layer with human bone (eight crania and cranial parts), animal bone, pottery and a grinder.
- d. 3rd century BC.
- e. See Ch. 10.
- f. Excavation data and results of the study of the human crania (Tabel A.1).

² GrN-25934.

³ GrN-25933.

Table A.1 Human skulls, deposit 4, details.

Cranium no. 1 find no. 691		Sex:	Female (based on score: -19/23). Features are mainly feminine, except for the crest above the mastoid (looks masculine) and the zygomatic arc and glabella (neutral). The processus mastoideus has a rough surface, but is small.
NAP-level*:	0.02 m -NAP	Age:	25-34. The endocranial closure of sutures is in phase I (23-40 years old). The ectocranial sutures have not fused, indicating an age of less than 34. Dental wear indicates an age of 25-35.
Position:	On the right side, facing southwest.	Pathology:	No traces of trauma or neoplasm. In the right eye socket, cribra orbitalia ("pitting") are visible, indicating a haemolytic form of anaemia. At the inside of the temporal bone, the canals of the arteria meningea media are extremely developed. In the irrigation area of this artery, the tabula interna is more porous ("pitting") than elsewhere. This may be the result of a bacterial or viral infection of the cerebral membrane (meningitis) or of malaria. The area with porous bone is not sharply defined, which means that it is not caused post mortem by underground water. In de maxilla, 3 out of 16 elements are retained: 16, 17 and 26. All other elements were lost post mortem.
Status:	Complete, but without mandible and the left os sphenoidale.	P.m. marks:	None.
Sex:	Female (based on score: -8/24). The zygomatic arc, the cheekbone and the occipital plane score masculine, other features are decisively feminine. The processus mastoideus has a rough surface, but is small.	Cranium no. 4 find no. 694	
Age:	Ca. 25. The closure of the ectocranial pars obelica indicates an age of 25-34; the wear of dental element no. 26*** indicates an age of 17-25.	NAP-level:	0.04 m -NAP
Pathology:	No traces of trauma, pathological loss of bone density or neoplasm. In de maxilla, 1 out of 16 elements was retained. All other elements were lost post mortem.	Position:	Upside down, front to the east.
Post mortem marks:	None.	Status:	Highly incomplete. Only the frontal bone with ossa nasalia is preserved.
Cranium no. 2 find no. 692		Sex:	Female (based on score: -3/6), based on the zygomatic arc and the shape of the eye sockets. Moreover, the bone appears to be fragile; frontal tubera are prominent.
NAP-level	0.04 m -NAP	Age:	23-40. The endocranial sutura coronale was not fused (phase I).
Position:	On the left side, facing southwest.	Pathology:	No traces of trauma, pathological loss of bone density or neoplasm.
Status:	Complete, except for the mandible and both processus styloidei.	P.m. marks:	Some black colouring, probably caused by weathering.
Sex:	Female (based on score: -26/24). The glabella is neutral; other features are more or less feminine. The processus mastoideus has a rough surface, but is small.	Cranium no. 5 find no. 695	
Age:	35-43. The endocranial closure of sutures is, as far as it was visible****, in phase I (23-40 years old). The closure of the ectocranial sutures indicates an age of 43-52; the wear of dental element no. 26 indicates a younger age: 25-35.	NAP-level:	0.05 m -NAP
Pathology:	No traces of trauma, pathological loss of bone density or neoplasm. In de maxilla, 2 out of 16 elements are retained: a fragment of a root of element 24, and element 26. All other elements were lost post mortem.	Position:	Upright, back of the head to the north.
P.m. marks:	None.	Status:	Highly incomplete. The back half of the cranium cerebrale was preserved, with complete occipital bone, a major part of the left os parietale, the left temporal bone (with pars petrosa) and a small part of the right os parietale. Of the cranium viscerale, the maxilla bone and both cheekbones are present. Find no. 670 includes some small fitting fragments, a.o. the right mastoid.
Cranium no. 3 find no. 693		Sex:	Male (based on score: +6/15). Sexual dimorphic features of the occiput look masculine; the cheekbones feminine.
NAP-level:	0.05 m -NAP	Age:	40-45. The endocranial closure of sutures is in phase IV (40-80 years old). Dental wear of the molars indicates an age of 35-45.
Position:	On the left side, facing north.	Pathology:	There are no traces of trauma, pathological loss of bone density or neoplasm. In de maxilla, 2 out of 16 elements are retained: 16 and 27. All other elements were lost post mortem. There is a fragment of a root of element 17.
Status:	Incomplete. The face, the base of the skull, and its sides are incomplete or broken. The mandible is missing, as well as parts of the maxilla, the palate, the vomer, both ossa sphenoidalia and the frontal part of the right temporal bone. At the left, the frontal part of the processus zygomaticus is missing. Underneath the occipital bone, major parts near the foramen magnum are missing.		

* NAP = Amsterdam Ordnance Datum, measured at the top of the cranium.

** Sex and age determinations are based on the non-metric, macroscopical methods of the Workshop of European Anthropologist (1980) and of Maat & Mastwijk 2005.

*** Numbering of teeth follows *Fédération Dentaire Internationale*.

**** Since crania from this period are extremely rare, it was decided they were not to be sawn through, although this is a common method in anthropology; this had as a disadvantage that the closure of the sutures at the inside of the crania could not be studied well.

P.m. marks: The skull was cleaved in two by a sharp object, probably as a result of ploughing. After quarrying of part of the terp, this skull was lying directly under the top soil. Some black colouring on the right parietal bone was probably caused by weathering.

Cranium no. 6 find no. 697

NAP-level: 0.05 m -NAP

Position: Upside down, facing west.

Status: Highly incomplete. The cranium viscerale is entirely missing. Of the cranium cerebrale, the cheekbones, the maxilla, the palate, the nasal bones, the os sphenoidale and parts of the temporal bones are missing.

Sex: Female (based on score: -4/22). Most features are neutral; decisively feminine are the eye sockets, the zygomatic arc and the curves on the crown of the cranium.

Age: 30-34. The endocranial closure of sutures is in phase II (30-60 years old). On the outside, the closure of the sutures indicates an age of 25-34.

Pathology: The cranium shows some grooves with bone reaction (ante mortem). On the frontal bone are two small osteomae.

P.m. marks: None.

Cranium no. 7 find no. 697

NAP-level: 0.07 m -NAP

Position: Face down, front to the northwest.

Status: Highly incomplete. Only the frontal bone with the nose, the maxilla and the cheekbones are preserved.

Sex: Indeterminable (based on score: 0/10). The glabella is masculine but the eye socket and cheekbones feminine. Fragile appearance.

Age: 15-25. There is no endocranial closure of the sutura coronalis (phase I). The sphenio-occipitale synchondrosis is not ossified.

Pathology: No traces of trauma, pathological loss of bone density or neoplasm. All teeth have been lost post mortem. There is a small fragment of a root of element 26.

P.m. marks: Black colouring on the glabella and the lateral sides of the frontal bone was caused by weathering.

Cranium no. 8 find no. 730

NAP-level: 0.03 m +NAP

Position: Left forehead down, facing north.

Status: Complete, except for the mandible and both processus styloidei.

Sex: Female (based on score: -20/24). All features are neutral or feminine except for the masculine looking crest above the mastoid.

Age: 18-25. Ectocranial, all sutures are open (younger than 34). Dental wear indicates an age of 17-25. The sphenio-occipitale synchondrosis is ossified, the age must be 18 at least.

Pathology: No traces of pathological loss of bone density or neoplasm. A groove on the right tuber frontale shows signs of bone reaction. On the left os parietalis, a small dent indicates healed trauma. In de maxilla, 6 out of 15 elements are retained, and a tip of molar 17. All other elements were lost post mortem.

P.m. marks: None.

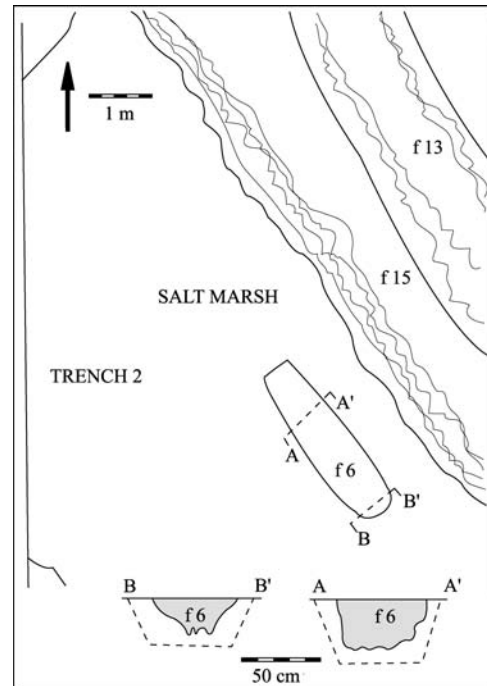


Fig. A.5. Cat. no. 5. An elongated pit (feature no. 6) in trench no. 2, near some ditches that were later filled in with dung.

5

- a. Trench 2, level 1, feature 6.
- b. 159; 213
- c. Pit with pottery, animal bone, wood and stone.
- d. 2nd century BC.
- e. A pit was dug in the natural salt marsh soil, parallel to and near a contemporary ditch that which was later filled-in with dung (features 13 and 15; fig. A.5). At the time, the pit and the ditch were situated outside the terp. The pit was 2.8 m long, 0.5-0.8 m wide and 20-32 cm deep after levelling. The upper part of the pit must have disappeared in the topsoil.
- f. The pit was full of artefacts, embedded in a dark brown, extremely humous matrix. There were many twigs and other pieces of wood (unfortunately these were not collected), three small stones one of which is burnt, and many animal bone fragments and potsherds. The 130 sherds were found close to each other in the pit; their total weight is 8 kg, making a high average of 61.5 g per sherd. The pot sherds belong to ten different pots (fig. A.6); the finds include a fragment of a lid (no. 1185). An almost complete pot is no. 463, a large pot with a rim diameter of 35 cm. Another almost complete pot was no. 856/464. There are large parts of several other pots. Pot no. 856/464 and the small pot no. 460 can be recognized as cooking pots, as there was some charred residue on the inside and soot on the outside of the pots. Typologically, all pots are from the transition stage between middle pre-Roman Iron Age and late pre-Roman Iron Age: they are late G3 types (no. 465) or early G4 types and K2-type (nos. 460, 461

g. See Ch. 10.

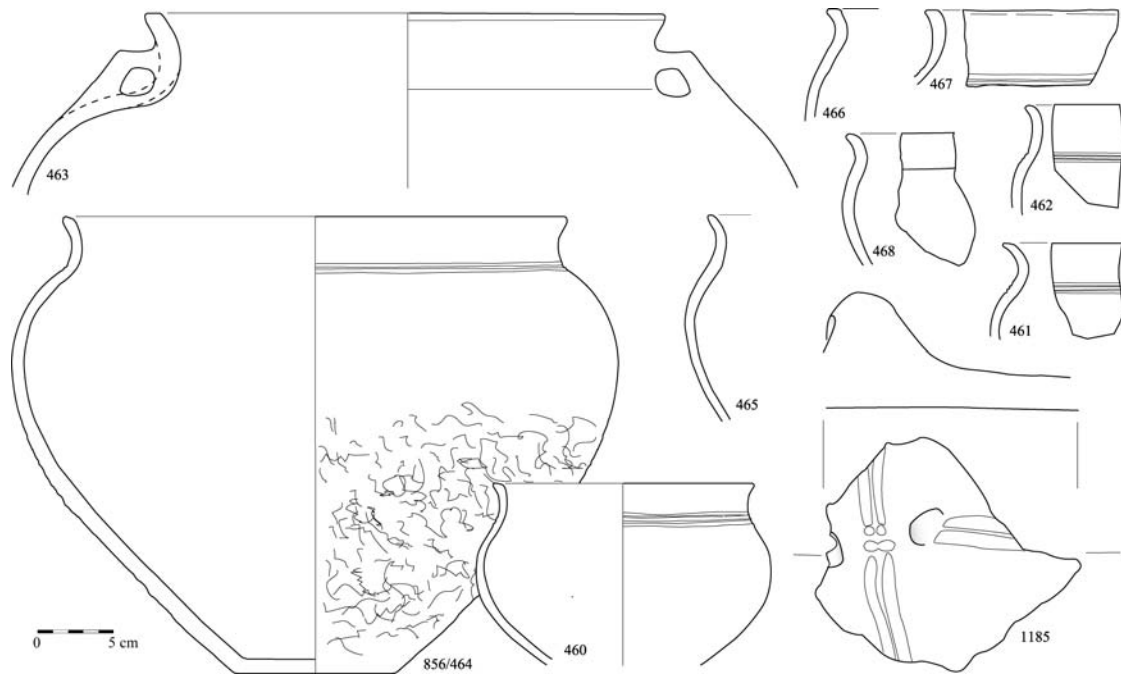


Fig. A.6. Cat. no. 5. Pottery from the 2nd century BC, found in a pit. Note the very large pot, no. 463. No. 1185 is the fragment of a lid. Nos. 856/464, 460, 467, 461 and 462 have *streepband* decoration.

and 468), chiefly with a stone temper.⁴ Many pots have *streepband*-decoration. Typology and fabric indicate that the finds assemblage must be dated to the early 2nd century BC. The assemblage is homogeneous in appearance and most of it may well be the work of one potter.

Besides potsherds, 85 fragments of animal bone were found, weighing over 760 g. The low average of 8.9 g per fragment is caused by the unusual high percentage of bones and bone fragments of foetuses, infantile and juvenile individuals of sheep/goat as well as of cattle and pig. At least four individual young animals were identified: a cattle foetus, one or two infantile and/or juvenile cattle, a juvenile sheep/goat and a juvenile pig. There were bone fragments of sub-adult and adult cattle as well. The largest bone was a complete cattle *metacarpus* of an adult individual. Cut marks on the bones indicate that at least part of the young animals had been eaten.

- g. The homogeneous appearance of the pottery assemblage, the large average weight of the sherds that belong to a limited number of pots, and the uncommon emphasis on young animals indicate selection and intent.

6

- a. Trench 7, level 1, feature 8.
- b. 555
- c. Concentration of animal bone (horse) in a creek.
- d. (Late) pre-Roman Iron Age-(early) Roman Iron Age.
- e. Parts of a former natural creek on the east side of the terp were uncovered in trenches nos. 1 and 7. This creek was about 5 m wide and at least 60 cm deep. In

the northern section of trench no. 7, a 20 cm thick, layered clayey sediment was visible at the bottom of the creek. Above this sediment, the fill of the creek was more homogeneous: a natural, dark, ferriferous, only slightly sandy clay. A section through the feature in trench no. 1 showed that the fill of the creek there only consisted of this homogeneous clay; the layered sediment was missing. That indicates that the part of the creek in trench no. 7 was near the end of the creek; it was in a process of silting up.

The finds assemblage was found in the top of the fill of the creek in trench no. 7. The finds were not dug in but must have been deposited in the soft mud of the creek and was entirely covered by the dark, clayey sediment when the creek ended its lifetime. Only a few artefacts were found in the creek. Some wall sherds from *terp*-pottery with a temper of grog and plant material indicate that the creek silted up in the late pre-Roman Age or the Roman Iron Age. The creek, which was situated on the margin of the original *terp*, was covered by *terp* layers no earlier than the middle Roman Iron Age. A precise date for the creek's end is therefore problematic. The most likely date for the last phase of the creek, when the deposition was made, is the late pre-Roman Iron Age or early Roman Iron Age.

- f. In the middle of the creek, a concentration of animal bone was found (over 2400 g). A major part of this material (almost 1800 g) consists of the remains of a small, adult horse: a number of ribs, some vertebrae, a shoulder blade and part of a foreleg (fig. A.7). Because of continuous flooding in this trench during the excavation, it was not recorded whether these bones were found articulated. This seems likely, since the bones clearly belong together. The other bones in this assemblage are a major part of a cattle mandible of an adult individual

⁴ Pottery types follow Taayke 1996b.

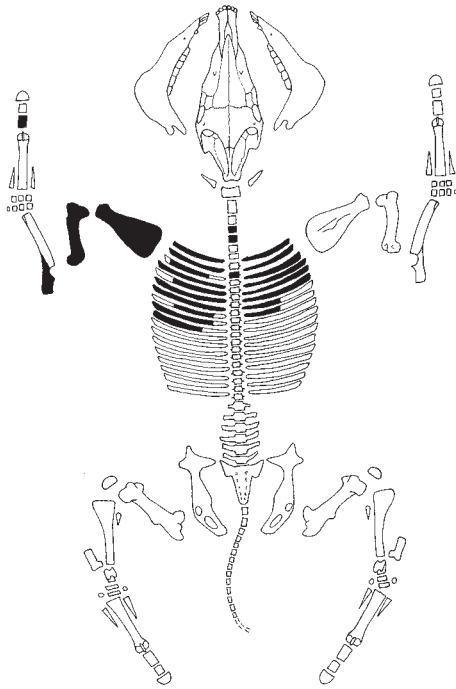


Fig. A.7. Cat. no. 6. The bones of a horse found in a creek in trench no. 7.

(over 450 g), a part of a second left foreleg of a horse and some small fragments of cattle and sheep/goat. There are cut marks on one of the cervical vertebrae of the horse and on the cattle mandible, indicative of butchering. Given the continuous flooding of this trench, it is likely that not all bones belonging to the original assemblage were collected. Part of the assemblage may also have disappeared during levelling or later ploughing. The recovered bones probably constitute only a part of the original deposit.

g. The deposition of animal bones in a creek might be interpreted as an easy way of waste disposal. However, the fill of the creek was clean, apart from this assemblage. There are no indications that it was in use as a place to dump waste. The bones cannot be considered common butchering waste. The horse bones are coming from the complete thorax and the left foreleg. They almost certainly belong together. The cattle mandible and the second horse foreleg probably belong

to the deposition as well. The cut mark on the cervical vertebra indicates that the horse was butchered. The deposition of a part of a horse is more difficult to explain than the burial of a complete horse. If the horse had died of natural causes and was to be removed, it would not have been cut to pieces. If the horse had been butchered to be eaten, this part could have been consumed as well. The find of a part of a horse (or any other animal) implies that it was an intentional, ritual deposition in a liminal part of the landscape.

7

- a. Trench 3, level 1, feature 13.
- b. 262; 282
- c. Concentration of potsherds.
- d. (Late 1st century BC/) early 1st century AD.
- e. The finds assemblage consists of two separate concentrations, found about 1 m apart. Both were dug in equally deep in one of a cluster of ditches. Above the concentration of sherds was a black burnt layer, right under the topsoil; it was observed on the surface and in the wall of the trench near the features (feature no. 16, figs. A.8 and 9). The estimated minimum size of this black layer is represented by a grey rectangle in the drawing (fig. A.8). The date is based on pottery types.
- f. Two concentrations were found:
 - 1. 86 sherds weighing over 2800 g, nos. 730-734.
 - 2. 419 sherds weighing over 9400 g, nos. 716-721 (fig. A.10).
 The total number of sherds is 505, the total weight is 12,274 g, the average weight per fragment 24 g. Both concentrations were excavated and numbered separately.

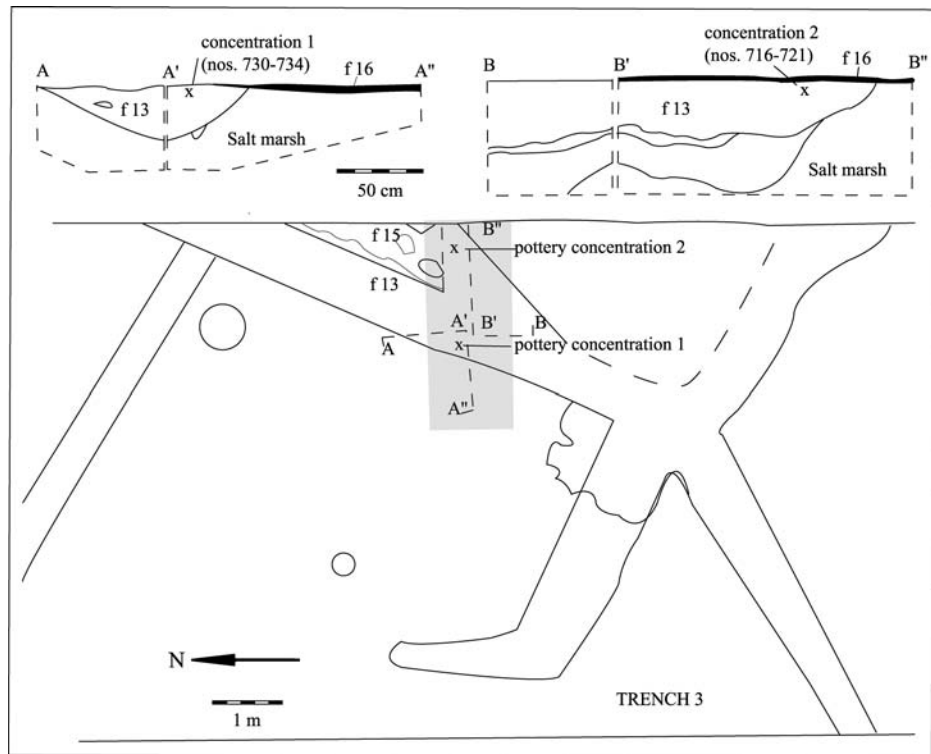


Fig. A.8. Catalogue no. 7. Plan of a part of trench no. 3 with section drawings of feature 13.



Fig. A.9. Cat. no. 7. Concentration (no. 2) of potsherds near the wall of trench no. 3. The black burning layer described in the text is visible in the wall, just above the potsherds. Photo RUG/GIA.

Concentration 2 contains the sherds of three, almost complete pots (nos. 717, 718 and 721); two of these pots are very similar and were probably made by the same potter. From the sherds of concentration I, another almost complete pot can be reconstructed (no. 733). Besides, there are sherds of six more pots, while some sherds from concentration I fit sherds from concentration 1 (nos. 716, 731 and 732). Both concentrations must have been deposited at the same time. The pottery of two generations is present in this assemblage: the pots with nos. 721, 730 and 733 belong to the group of pots of type Gw4, dated ca. 200 BC-AD 50(100). All other pots are of the Gw5c type (AD

0-100/150), belonging to the so-called Wierum-style. All pottery can be from the same period, although it belongs to successive pottery types. The date of the introduction of the Wierum-style is not entirely certain (see also nos. 8 and 9); this deposit must probably be dated to around the beginning of the 1st century AD. The nearly complete pots, nos. 717, 718 and 721, were used as cooking pots; there are traces of soot on the outside and some charred residue on the inside. The other pots may be cooking pots as well, but there are no traces of soot or residue on them.

g. The two concentrations of pottery within a short distance, of which some sherds out of each concentration fit to the sherds of the other concentration, and which consist of sherds of four nearly complete pots and some incomplete ones, are clearly not the remains of discarded pots that were just thrown away. There are pots from two different generations in both concentrations. The pots must have been broken deliberately, before they were divided in two and added to the fill of a ditch, close to each other. It is possible that the area was then covered with an organic layer that was set on fire, but this may also have happened later. The fire did not affect the sherds.

8

- a. Trench 5, level 1, feature 50.
- b. 602
- c. Elongated pit with pottery and animal bone (dog).
- d. (Late 1st century BC/) early 1st century AD.

e. An elongated, northeast-southwest oriented pit was situated on the west side of trench no. 5. The pit was about 4.5 m long, 0.40-0.80 m wide and still 25-30 cm deep. The boundaries of the pit were not defined very well during the excavation; its length is an estimate. The fill of the pit was dark brown and very humous; at the bottom of the pit was a blackish brown layer, about 10 cm thick.

f. In this feature, a large, broken pot was found. The pot had been placed upside down in the pit; it was only broken after being deposited. Taking the base of the pot away brought some dog bones to light: a dog skull, the lower extremities and the tailbones (fig. A.11 and 12). These bones must have been attached to the skin of a dog. The average-sized dog was aged 4-5. The cause of death could not be established. Besides the dog remains, there were three playing counters made of wall sherds in the pot. Further excavation of the pit uncovered a second pot, complete except for its two handles. This much smaller pot had been placed upright, west of the first pot. Apart from soil, nothing was found in it. Wet screening of the soil from this feature resulted in a variety of additional finds: several sherds of types K2, G5 and G4 (fig. A.13), fragments of animal bone (in particular sheep/goat and cattle, one bone of a cod), a

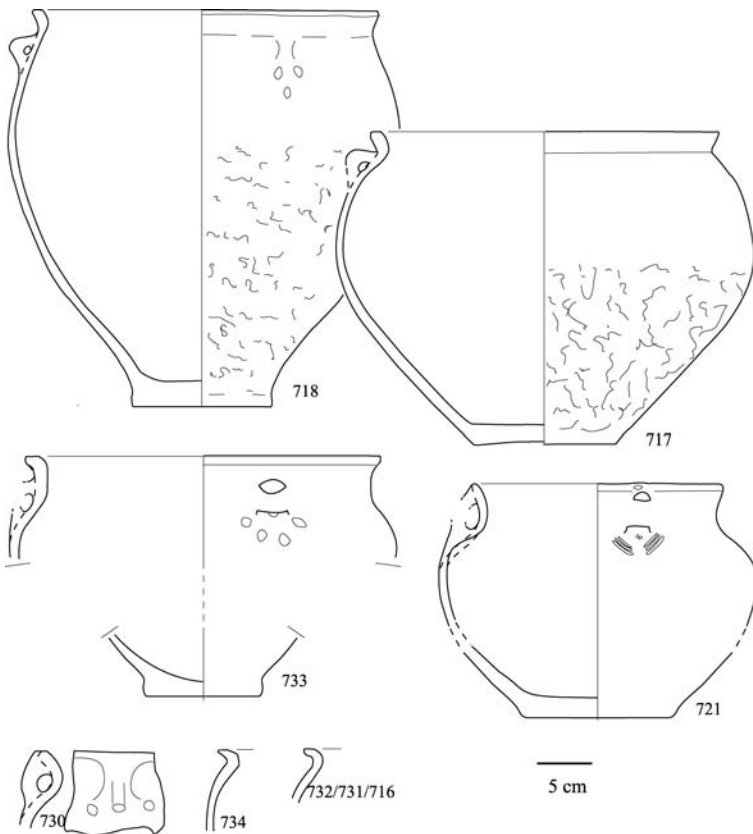


Fig. A.10. Cat. no. 7. Pottery, found in two concentrations, from feature no. 13 in trench 3.

fragment of a crucible, a piece of cinder, a small stone and some very small stone fragments, a piece of a dried dung-cake and a coprolite (of a dog), a fragment of a hearth-pit lining, a fragment of a lid and a piece of a small ceramic ball. These objects probably came with the fill of this pit. The small complete pot (no. 567) is of type K2, a small, black pot, 13 cm high, dated ca. 200 BC-AD 50.⁵ The large pot (no. 565) is a cooking pot with one handle, 30 cm high, of type Gw5c (Wierum-style), usually dated to the 1st century AD. One of the dog bones was radiocarbon dated. This resulted in an unexpected earlier date: 2085 ± 35 BP (GrA-27804), 199-36 cal BC (92.4% probability). However, a deviating ¹⁵N concentration ($\delta^{15}\text{N}$ is 11.6, while $\delta^{13}\text{C}$ is a normal -20.35) shows that a reservoir effect is possibly to be calculated; the radiocarbon date may be too old (see chapter 12.4.3). If the earlier date is

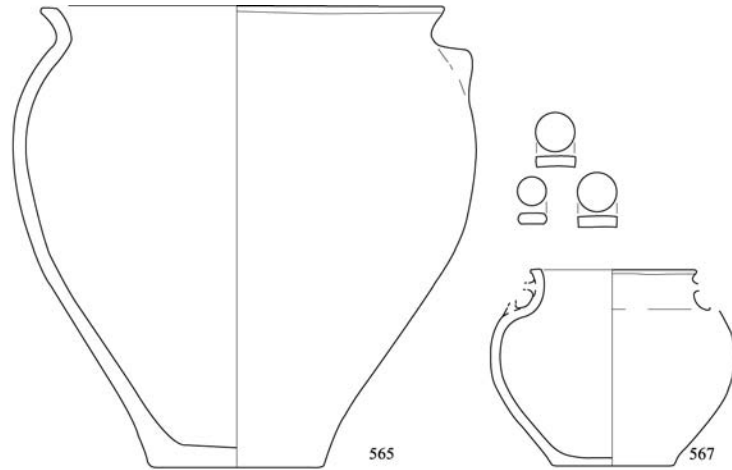


Fig. A.13. Cat. no. 8. Pottery found in feature no. 50 in trench no. 5. The large pot, no. 565, was placed upside-down. The playing counters were found in this pot. The single sherds probably came with the filling soil.



Fig. A.11. Cat. no. 8. Cranium and leg bones of a dog, found in an inverted pot. The photo was taken after the (broken) base was removed. Trench no. 5, feature no. 50. Photo RUG/GIA

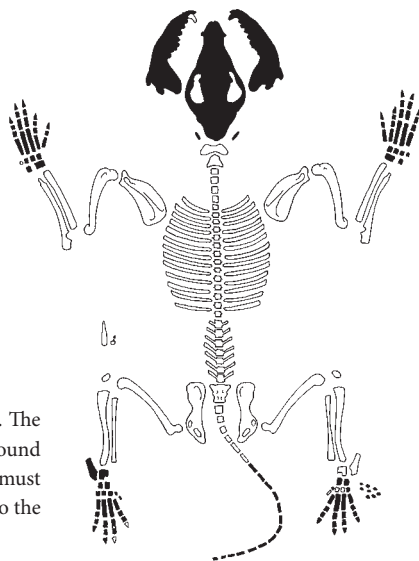


Fig. A.12. Cat. no. 8. The bones of the dog found in a pot; the bones must have been attached to the dog's skin.

⁵ Lanting and Van der Plicht (2006, 335-336) identified this pot incorrectly as type Ge4.

correct, it supports the introduction of Wierum-style pottery in the late pre-Roman Iron Age.

g. A functional explanation of the inverted pot with a dog skin and playing counters is inconceivable. The upright, small pot was deposited during the same event.

9

- a. Trench 5, level 1, feature 49.
- b. 547
- c. Pit with pottery and animal bone (cod).
- d. (Late 1st century BC/) early 1st century AD.
- e. This find was found only 3 m from the previous one, no. 8. Both pits had the same, northeast-southwest orientation, and the same elongated shape, and were found outside the contemporary terp. The fill of both pits was dark brown and very humous. This pit was about 2.5 m long and 75 cm wide.
- f. In the pit, the skeletal parts of a big fish and a number of potsherds were found. The fish, a cod (*Gadus morhua*) with a length of about 1 m, misses its head and tail and two of the middle vertebrae. All other bones were in articulation (fig. A.14). The absence of two of the mid-

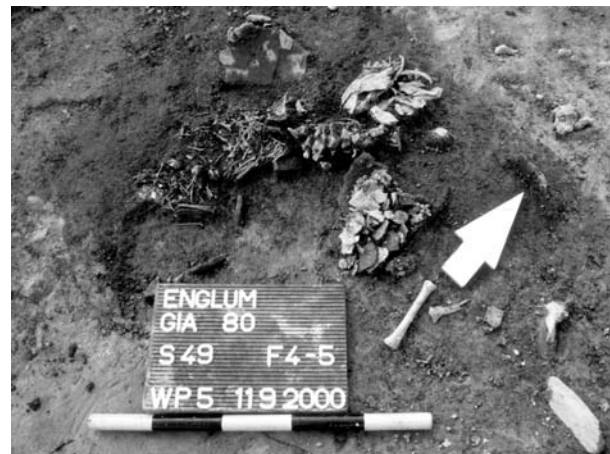


Fig. A.14. Cat. no. 9. Bones of a cod and potsherds found in feature no. 49, trench no. 5. Photo RUG/GIA.

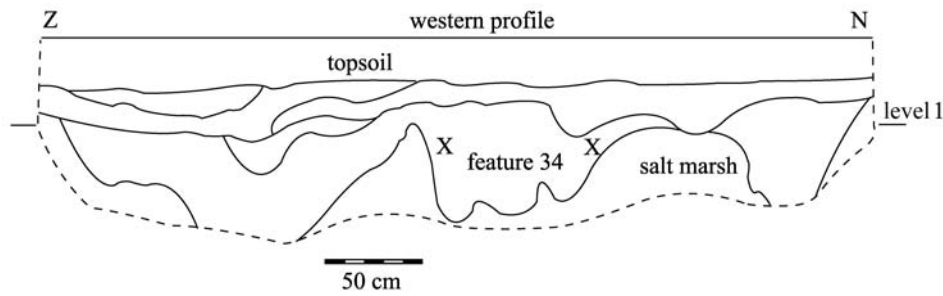


Fig. A.15. Cat. no. 10. Part of the western section of trench no. 5, with feature no. 34. X indicates the location of two concentrations of sherds belonging to only one pot.

dle vertebrae indicates that the edible part of the fish was cut in two. These parts were placed transversely to the longitudinal axis of the pit. Since the parts were found in articulation, the fish cannot have been eaten. Potsherds were already visible when the trench was opened, so part of the pottery will certainly have been mixed with the topsoil or disappeared by quarrying. The remaining sherds belong to three pots, of which only one profile can be reconstructed. Of two pots, a part of the rim and the wall was preserved: a pot of type Gw4a, and a pot of type Gw5c, again pots of two generations. Of a third pot, only the base and part of the wall were preserved. A radiocarbon dating of the fish dates the find to 1975 ± 35 BP, 49 cal BC – cal AD 87 (2σ).⁶ Given the resemblance with the previous deposition, no. 8, the dates of these depositions are probably not far apart. A date around the beginning of the 1st century AD is likely. Some other sherds and a cinder were found in the pit, as well as some bone fragments of cattle and of sheep/goat, a.o. an indefinable small implement made of cattle bone. These may belong to the deposit, or came with the fill of the pit.

- g. The presence of large edible parts of a cod, together with large sherds of a number of pots in a pit, is not easy to explain as something functional. If it were litter that had been buried, the head and tail of the fish would be expected rather than the edible parts in between. A dead fish washed ashore does not need to be buried: seagulls, crows, dogs and other scavengers would deal with it so that it would soon be gone. It may be assumed that edible parts of the fish in this pit were deliberately deposited here, together with some complete or broken pots. Since cod was not a common kind of food, the fish may have been caught for the occasion.

10

- Trench 5, level 1, feature 34.
- 703; 711
- Ditch with potsherds.
- 1st century AD.
- Several filled-in ditches and a natural creek were uncovered in trench 5; they partly cut over each other, thus forming a cluster that was quite difficult to disentangle. Feature 34 is part of this cluster. From the section in the western wall of the trench (fig. A.15) it became clear that this feature consisted of three different ditches, which were filled-in in one go. At the time of

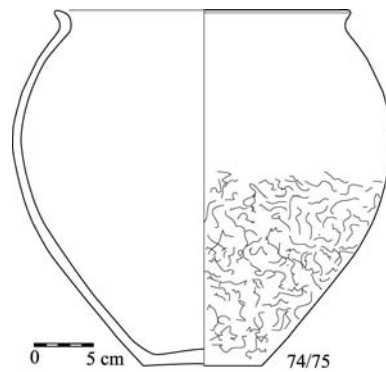


Fig. A.16. Cat. no. 10. The early-Roman Iron Age pot, of which the fragments were found on opposite sides of a ditch, feature no. 34.

their use, these ditches were outside the contemporary terp, dug into the salt marsh.

- Two concentrations of sherds were found across each other on opposite sides of the ditch, around 1 m apart, near the side of the trench. Most sherds belonged to a large pot (31 cm high) of Wierum-style type Gw5a, dated ca. AD 0-100/150 (fig. A.16). Some charred residue on the inside shows that it was used as a cooking pot.
- Potsherds in the fill of a ditch do not make much of an impression at first sight. However, finds that come with the fill of a feature need to be distinguished from finds that were deliberately placed there. The location of these finds on opposite sides of a ditch is conspicuous, as is the fact that these sherds fit together and belong to one pot that could largely be reconstructed. The ditch was situated outside the actual terp. This implies that there were no nearby houses for which the ditch was the obvious place to dump litter. The cluster of ditches was filled-in with soil that came from the terp itself and from the salt marsh. Some litter (bone and pottery fragments) came with this material. However, it is extremely unlikely that the sherds of a complete pot in this material would remain together and would accidentally land on the two locations where they were found. This must therefore be an intentional deposit, made when the ditch was filled-in.

11a + b

- Trench 5, level 1, feature 27.
- 701; 256
- Complete pot in a ditch.
 - Human bone fragment in ditch.
- 1st-early 2nd century AD.
- These finds are from the same complicated cluster of ditches in trench no. 5 as no. 10. On the surface, it

⁶ GrA-27784, marine reservoir effect included.

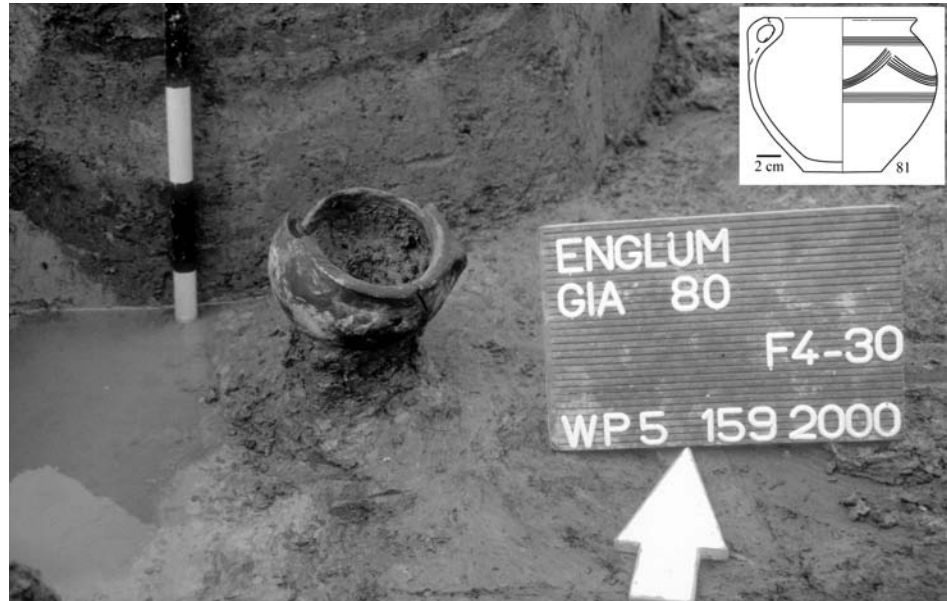


Fig. A.17. Cat. no. 11. A small pot, found in the fill or on the slope of a ditch in trench no. 5. Part of the rim is missing. Photo RUG/GIA.

- seemed to be one, wide feature. Random sectioning showed that it consisted of several ditches.
- f. a. During sectioning, an almost complete pot (no. 701) was found, standing upright near the slope of one of the ditches (fig. A.17). The contents were not preserved. The pot is a small, decorated pot (12.5 cm high) of the Wierum-style group (type K3). It had broken after deposition, because of the pressure of the heavy terp layers above it. Part of the rim is missing, probably because of careless excavating or quarrying. The position of the pot is not entirely clear. It is most likely that it was placed in the soft mud in the ditch while it was still in use. Other finds in the fill of the ditch show that the ditch remained open until the early 2nd century AD (there were some early middle-Roman Iron Age sherds in the fill). It is unlikely that the pot stood on the slope of the ditch for a long time undisturbed, which dates the deposit to the beginning of the 2nd century AD, not long before the ditch was filled.
- b. In the fill of another part of this ditch, part of a human femur was found (no. 256).
- g. A complete, decorated and well-finished pot in a ditch seems special at first sight. It was certainly no discarded waste. Moreover, it must have been placed with some care, or it would have tumbled down. The deposit differs from the previous deposit of pottery in a ditch (no. 10): a small vessel was used, it was deposited (nearly) complete, and it was probably deposited while the ditch was still in use, although not long before it was filled-in. The human bone was probably added to the fill when the ditch was filled, or it was deposited when the ditch was still in use. It was found near the edge of the feature.
- 12**
- a. Trench 5, level 1, feature 10.
 b. 486; 679
 c. Human vertebra on a layer of reeds in a pit, with pottery and animal bone.
- d. 1st century AD.
- e. Feature no. 10 was a round pit, partly covered by a somewhat younger, shallow pit (no. 45; see fig. 10.25), with a diameter of about 3 m and a depth of 70 cm. The upper part must have disappeared during later digging and levelling. Conspicuous was the find of a 3 cm thick, woody layer in this pit, about 50 x 70 cm in size, 25 cm under the surface. The location of the finds within the feature was not properly recorded.
- f. The finds, consisting of pottery, bone and a piece of rope, were found directly under and above the layer of 'wood'. Botanical research showed that this layer actually was a thick layer of gramineous stems, probably reeds.⁷
- The pottery assemblage consists of 316 sherds, weighing over 5200 g. It belongs to the types Gw5a, Gw5b, V4, K3 (all Wierum-style pottery), dated to the 1st century AD. At least twelve individual pots can be identified in this material. The sherds are relatively small, with an average of 16.5 g per sherd. There are many fragments of at least two pots; these may have been more or less complete. One of the bones was a complete, human lumbar vertebra (fig. A.18). The animal bone material consists of bone fragments and some complete bones of cattle (n = 33; 554 g), sheep/goat (n = 35; 194 g) and horse (n = 2; 67.5 g). The bones belonged to animals of different ages, including a foetus of sheep/goat. The bone assemblage makes the impression of being butchering and consumption waste. The piece of rope has a length of only some centimetres and was made of flax fibres. its location and function in the deposit is unknown.
- g. The find of a human vertebra is primarily responsible for the entry of this find in the list of ritual remains, but the thick layer of reeds is also conspicuous. It indicates structure and intent, although the finds may seem a dump of waste material. A large part of the pottery was found together, not spread through the fill of the pit.

⁷ Identified by J.N. Bottema-McGillavry.



Fig. A.18. Cat. no. 12. Lumbar vertebra found in a pit in trench no. 5. It was lying on or under a thick layer of reeds, together with a large amount of potsherds and animal bone fragments.

Unfortunately, the exact location of the finds in the pit was not recorded; it cannot be established which part of the finds belong to the deposit itself, an which part came with the fill. The combination of a human vertebra, a layer of reeds and a homogeneous pottery assemblage makes identification as a ritual deposit plausible.

13

- a. Trench 4, northern section, feature 852.
- b. 962
- c. Pendant made of *terra sigillata* in a pit.
- d. Early Roman Iron Age.
- e. Feature 852, a pit, was one of the deep features of trench no. 4, part of early Roman Iron Age strata.
- f. In this pit, of which only a section is known, a small number of sherds were found. They are of hand-built, early-Roman Iron Age types, in accordance with their stratigraphical date, with the exception of a small fragment of *terra sigillata* (TS). This sherd is not only conspicuous for the rarity of imported material in Englum, but also for the small, rounded hole that was drilled in one of its corners (fig. 10.23). The tiny sherd is of an unfamiliar ware. It was identified as the fragment of a large plate of an early type, probably Arretine ware of type *Conspectus 11* (Haltern 1b/Service 1a) dated 20 BC-0, an exceptional find in the northern Netherlands.⁸ The small sherd measures 21 x 23 mm and has smoothed edges. The nice finishing of the pottery fragment and the presence of the small hole make it likely that the sherd was used as a pendant.

⁸ Personal communication M. Polak (Radboud University Nijmegen). In an earlier publication (Nieuwhof 2008b), the sherd was dated to the middle or late Roman Iron Age.

- g. It cannot be assessed whether this deposition was deliberate or not. The pit did contain some inconspicuous sherds; the small pendant may have landed in this feature accidentally during filling-in, or was part of a larger deposit. The pendant is entitled to a place in this list because of the symbolic meaning of the use of TS, which can be inferred from its use as a pendant.

14

- a. Several features.
- b. 152; 189; 204; 389; 754
- c. Painted pottery.
- d. Late pre-Roman Iron Age-Roman Iron Age.
- e. A small number of potsherds that seemed to be painted were found during opening trenches and in a small number of features. These features did not stand out as ritual contexts, nor did the location of the finds in these contexts suggest ritual deposition. The features concerned were a large watering hole in trench no. 2, from which an enormous amount of sherds and other finds was collected, a cultural layer in trench no. 4 and a well from the Migration Period. The finds were probably not deposited in these features deliberately, but accidentally landed there by being part of the terp layers that were used to fill in features.
- f. The finds concerned are ochre coloured sherds that seem to have been painted with dark stripes and dots (fig. A.19). At first sight, the decoration seems to be caused unintentionally by burning in of splattering food drops while cooking. However, the stripes do not only run from the rim, but horizontal as well so deliberate application is likely. The decoration is applied in a rather rough way, as if a liquid pigment had been allowed to run over the wall of the pot while it was turned around; small dots were caused by a dripping pigment solution. The colouring is not very well merged with the surface of the sherds; it can be rubbed off, which implies that the pigment was not applied before firing. Decorative patterns do not occur. The sherds are of type Gw5c and a transition form of Gw5c/6a. Both are dated to the 1st century or the beginning of the 2nd century.
- g. Pottery with this type of decoration was also found during several excavations in the provinces of Zeeland (see chapter 5.3) and Noord-Holland in contexts that were thought to be ritual (Abbink 1999). The pots were painted after their last use as cooking pots, which suggests that the paint was applied right before or as part of their last use in a ritual, after which they were broken.



Fig. A.19. Cat. no. 14. Potsherds found on various locations, informally decorated by letting a liquid pigment run over the wall of the pot and by dripping or splattering. No. 445: see also fig. 10.20.

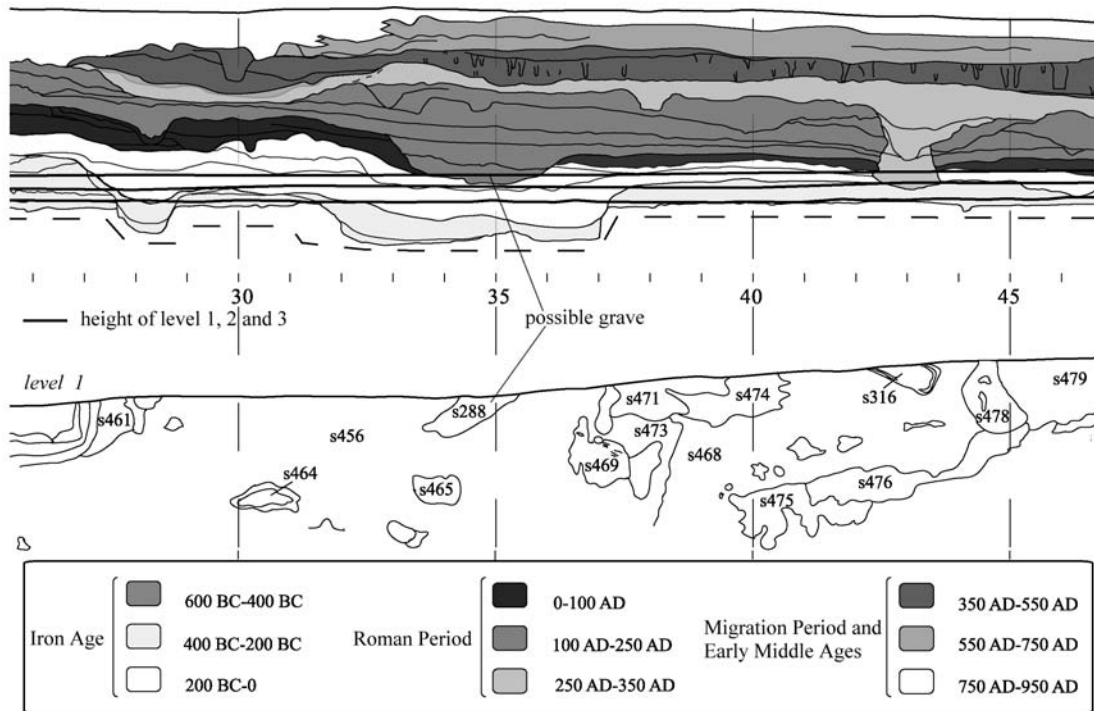


Fig. A.20. Cat. no. 15. The only possible location of a grave from the middle-Roman Iron Age, from which some bones landed in the excavated soil during the opening of level 2. After Jongma 2008.

15

- Trench 4, level 2, X = 35 (feature 288?).
- 637
- Human bone (probably skeleton).
- AD 120 – 350 (2nd century AD).
- This find was not made in situ, but in the excavated soil from the opening of the second level in trench no. 4, at X = 35 in the local grid. The only feature in the vicinity with approximately the same date was an elongated pit, feature 288, found in the northern profile as well as in level 2, which had been dug from a higher level. All other features in this part of the trench were from the pre-Roman Iron Age (fig. A.20). Part of the pit was hidden in the terp. The pit was 0.5-0.7 m wide, at least 1.8 m long and 0.8-1 m deep, and oriented northeast-southwest. Feature 288 was not recognized as a grave during the excavation, probably because the mechanical digger tended to open new levels in a rather rude way.
- In the excavated soil, some well-preserved human bones were found: parts of arms (the humeri, the ulnae, the right radius), legs (the right femur, part of the left femur, part of the left tibia, a fragment of a fibula), and some ribs. All bones are likely to be from one individual, an adult woman (probably) with an estimated height of 1.55 m (Tuin 2008, 105-106). The presence of right and left body parts suggests that this individual was buried complete. There are no traces of trauma or pathology on the bones. The skull would have been noticed during digging, which implies that it probably stayed behind in the part of the pit that was hidden in the terp remain-

der, at the northeast side of the grave. Missing parts, such as vertebrae, sternum, shoulder blades and pelvis, probably disappeared with the excavated soil. Radiocarbon dating of the bone results in a date of 1795 ± 40 BP, that is cal AD 126-342 (2σ).⁹ This is the only skeleton with stable isotopes nearly within the normal range ($\delta^{15}\text{N} +9.1\%$), in a long list of radiocarbon dated human remains from the salt marsh area (see chapter 12); this may be taken to indicate that this woman was not native to the area, or at least that she had not lived there her entire life.

- This is probably a single grave and therefore can be considered the remainder of a ritual. The grave was situated on the terp itself, which extended over 1 hectare at the time.

16

- Trench 4, northern section, feature 845.
- 954
- Pit with pottery and animal bone.
- 3rd century AD.
- One of the features in the northern section of trench no. 4 was a large pit, apparently filled with sherds. Stratigraphically, this pit belonged to the Roman Iron Age layers. Part of the finds could be collected, but collecting had to stop when the feature appeared to reach too far into the terp remainder. That implies that the collected material is probably far from complete, despite its large quantity.

⁹ GrA-34492.

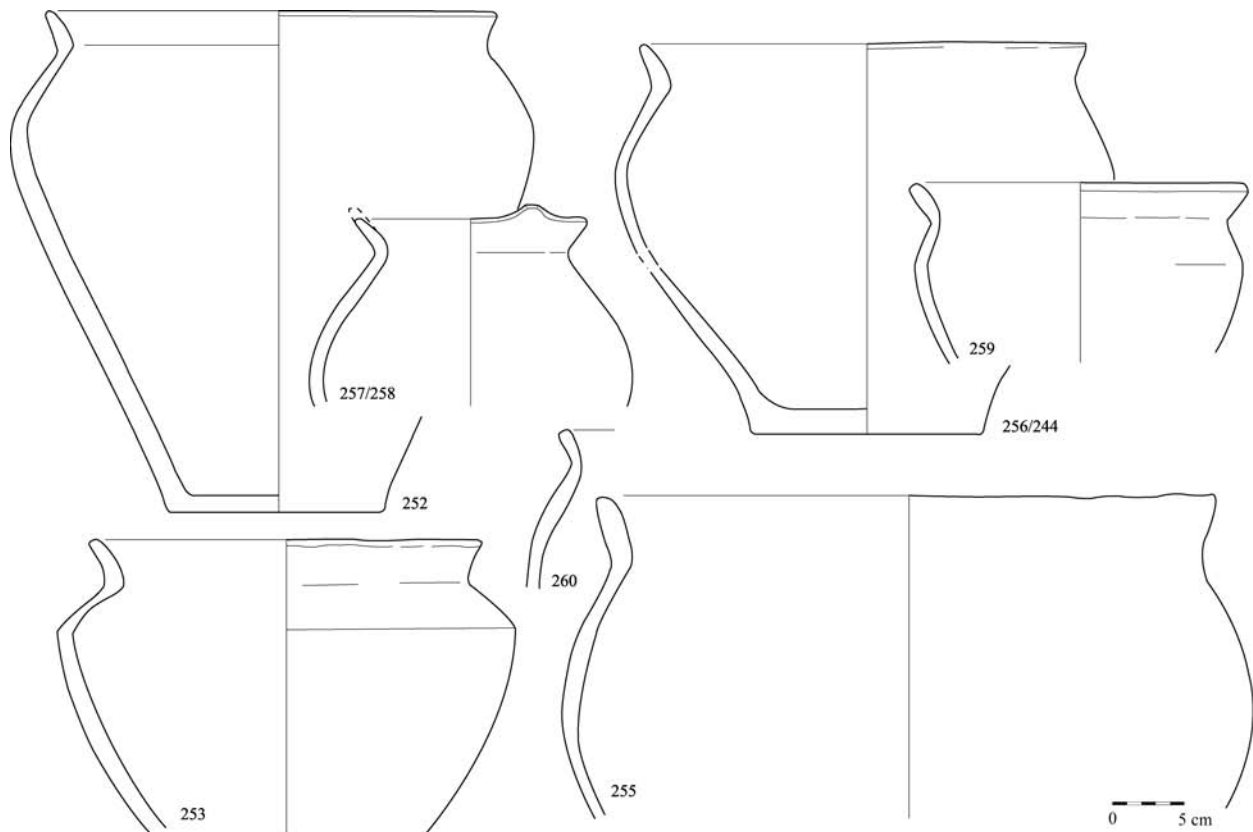


Fig. A.21. Cat. no. 16. Pottery found in feature no. 845 in trench no. 4. Note the very large pot, no. 255.

f. The find material includes pottery and animal bone. The pottery (fig. A.21) consists of 242 sherds, weighing over 19 kg, with a considerable average weight of 79 g per sherd; tiny fragments were collected, implying that there are many sherds far above the average weight. These sherds belong to eight different pots, six of whom can largely be reconstructed. Almost all pots are large or very large specimens of type Gw6b, while some of them have Gw6a-characteristics (an almost triangular, thickened rim with a sharp edge on the inside on the wall-rim transition: nos. 252 and 256/244). Only no. 257/258 belongs to another type; this is a narrow-mouthed jug with a pulled out pouring lip of type Ge6. Type Gw6b, so-called Driesum-style pottery (see chapter 3.2) is usually dated ca. AD 200-350; because of its carination, no. 253 must be dated early in this period. That dates the entire finds assemblage to the 3rd century AD. Besides the jug, there are four cooking pots, with charred residue on the inside and soot on the outside. The function of the other pots can not be determined; they may have been used for cooking or storage. A great variety of tempers occurs in these pots: plant material (the jug), grit of various kinds of stone, shell fragments, stone grit with coarse sand, and grog with plant material. All fabrics are hard-fired and the pots are thick-walled, often over 1 cm. In spite of the diversity of tempers, the pots make a homogeneous impression, although it does not seem likely that one potter would use such a variety of tempers. The shape suggests that at least nos. 252 and 256/244 were made by the same potter,

although they are differently tempered. Experimenting with tempers was not uncommon in the coastal area during the middle and late Roman Iron Age.¹⁰ While in most cases we just assume deliberate breakage, in this case it can be demonstrated. On two pots (nos. 252 and 255), spalls have come off from the outside of the wall, precisely where fracture lines meet (see fig. 10.19). If such a pot would accidentally fall on a hard object, a spall would probably come off where the pot hit the object (see also chapter 11), but not several spalls on different places. This indicates that these pots were deliberately broken, probably by hitting them with a stone. Moreover, accidental breakage on prehistoric surfaces such as loam floors is, in fact, much less likely to happen than is often assumed, as was shown experimentally.¹¹ This is even more so if pots are as strong as these middle-Roman Iron Age pots. Accidental breakage would probably leave some large sherds, not many smaller ones (an average number of 30 per pot in this deposit). We may conclude that not only pot nos. 252 and 255, but all pots in this finds assemblage were broken deliberately, although they do not all show such clear marks. From the same context, 46 animal bones and bone fragments were collected, weighing over 1200 g. Over 1100 g of these are cattle bones, coming from several individuals. Besides, there are some bones of a young dog

¹⁰ An observation made by E. Taayke, NAD-Nuis (personal communication).

¹¹ Chapman & Gaydarska 2007, 7-8.

and of a sheep/goat, and seventeen bones of a young pig (a sucking pig, less than four months old).

- g. A ritual interpretation is justified for this finds assemblage, consisting of several large pots that were deliberately broken, together with a substantial amount of animal bone, including a number of bones of a sucking pig and other young animals.

17

- a. Trench 5, level 1, feature 35.
 b. 640
 c. Ditch with pottery.
 d. Late 3rd century AD.
 e. In the southern part of trench no. 5, just outside the contemporary terp, part of an east-west oriented ditch was found. The ditch was 1 m wide and only 20 cm deep. Since it was directly under the topsoil in the levelled area, the upper part of the ditch will have disappeared. The feature was filled-in with a dark brown, extremely humous material.
 f. During sectioning of the ditch, a concentration of sherds was found (approx. 2.5 kg), together with twigs and a small amount of animal bone; the twigs were not collected. Part of the pottery probably disappeared with the topsoil. The sherds consist of the remains of five or six pots. The profile of a very large, hard-fired pot of type Gw6a with a height of 42 cm can be reconstructed (fig. A.22). It is dated to the middle Roman Iron Age, no later than AD 300. A very small rim fragment of a late type, probably K7 (dated after AD 250), dates the feature to the second half of the 3rd century AD.

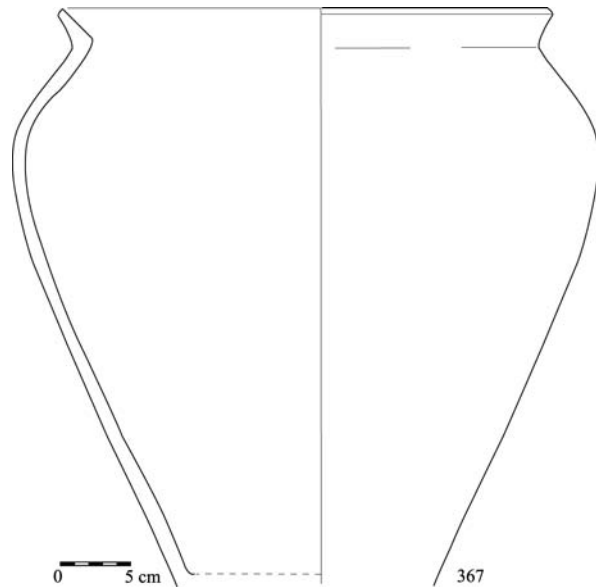


Fig. A.22. Cat. no. 17. A large, broken pot, which was found in a ditch in trench no. 5.

- g. The incomplete pot, together with the other fragments, could easily be interpreted as waste. However, the find resembles other finds of pottery in ditches that were described above (nos. 7 and 10). This was also a ditch outside the inhabited area and not a common place to dispose of waste. Moreover, many fitting fragments of one vessel were found, which is not to be expected from sherds that accidentally landed in the ditch during filling-in.

B

Ezinge

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B.3 Statistics

B.1 Finds per excavated level

In the following, all finds assemblages from Ezinge that were interpreted as possibly ritual are described in excavation order, downwards from the highest excavated level. The maps that accompany the description of the finds are based on the neat drawings by BAI-draughtsman Praamstra, who edited and combined the original excavation drawings in the 1950s. The large trench in the northern part of the terp, which was excavated in only one level, is presented separately at the end of this overview. All other trenches are combined.

The neat drawings by Praamstra combined field drawings of several excavation years and trenches, resulting in outline drawings of the entire excavated area per level. Capital letters were used to indicate excavation levels; these designations are adopted here. Praamstra had some difficulties with matching levels of the same phase of habitation from different trenches. One of the reasons was that the height between excavation levels differed between trenches and over the years. Moreover, pottery and pottery dates were not known well at the time, which made it difficult to date features and phases. To overcome some of the difficulties, Praamstra sometimes omitted trenches from the outline drawings. For the purpose of this overview, trenches were sometimes combined in a different way on the basis of new insights. In some cases, problems with the dates of adjacent trenches were solved by overlaying transparent plans from different levels. That way, finds assemblages can still correctly be linked to specific structures such as houses. Despite these adaptations, differences in dates between adjacent trenches in one level do occur. Features from different periods can occur in one level because of the general structure of terps. In one level, features that are farther from the centre of the terp are often younger than features near the centre.

During the excavation, the numbers of finds and finds assemblages were noted on the field drawings to indicate the location of the finds and they were entered in a series of finds books. The finds books sometimes give details, but many pages with identical entries such as 'sherd' or 'sherds and bones' indicate that the lists of finds often were only completed afterwards. The finds books can only be used as

a trustworthy source of information if unusual details were added. The information on the location of finds and finds assemblages that were described below is based on the field drawings. By combining the information from the finds books, the field drawings and the artefact drawings which were made during the period of excavation, occasional problems with numbers and locations could often be solved. The description of the finds themselves is largely based on the results of the Odyssey-research project (see chapter 12.1), except when finds are missing and the finds books or field drawings are the only source of information.

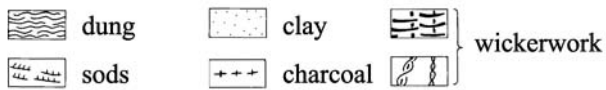
Dates are based on datable objects, combined with the stratigraphy. In the following, only excavation levels with finds from the research period, until ca. AD 300, are included. Higher excavation levels (A-F) are left out. Finds from sections and profiles have only been included if their association with a structure in one of the excavation planes is certain. Dates are abbreviated, following chapter 3.1; centuries BC or AD are sometimes added. Combinations of periods, for instance E/MROM (early/middle Roman Iron Age), indicate that the finds can be of either date, or are from the transition phase between periods.

To facilitate a description of the association of finds assemblages with specific houses, the houses were numbered. These numbers are applied to all consecutive house phases on one location, because different phases are often difficult to entangle. The house numbers mentioned with the finds assemblages in the records below represent the most likely relation.

Several specialists were involved in the study of the Ezinge material as part of the Ezinge Odyssey-project or afterwards (Nieuwhof 2014a). The following data are based on their work. Apart from hand-built pottery, which was examined by this author, Roman import ware was studied by Tineke Volkers, animal bones by Wietske Prummel, Susanne Manuel and Mirjam Post, stones and stone artefacts by Harry Huisman, flint by Dick Stapert and Inger Woltinge, wheel thrown pottery by Sopie Thasing, glass beads by Wil van Bommel-van der Sluijs, and metal objects by Egge Knol (Groningen Museum). Bert Tuin examined the available human skeletons. Bert Boekschoten (VU University Amsterdam) identified two fossils. Saddha Cuijper (EARTH Integrated Archaeology) examined a number of burnt bone fragments. Textiles and wooden objects still await further investigation.

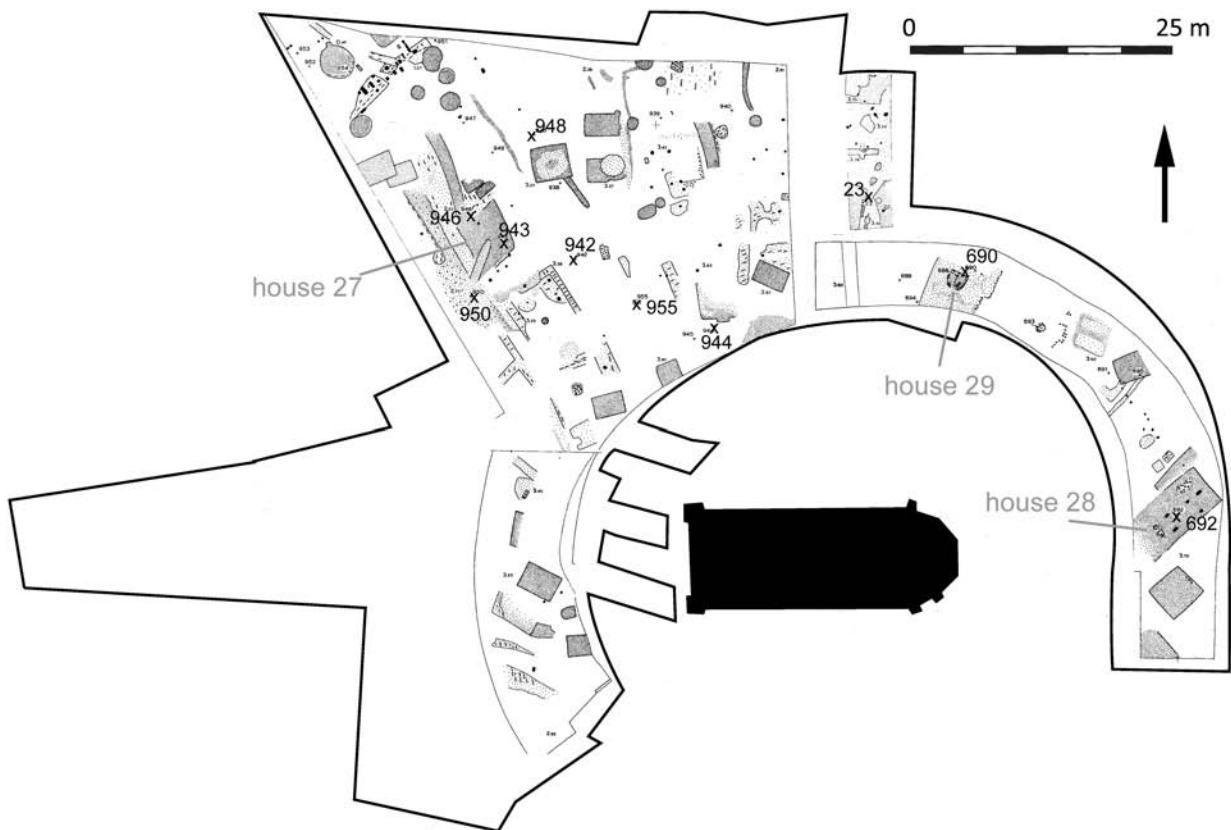
In the following, * refers to terra sigillata sherds with traces of intentional breakage, working or use. Pottery types, following the typology by Taayke 1996b, are in brackets. MNI: Minimum Number of Individuals.

Legend



Level G

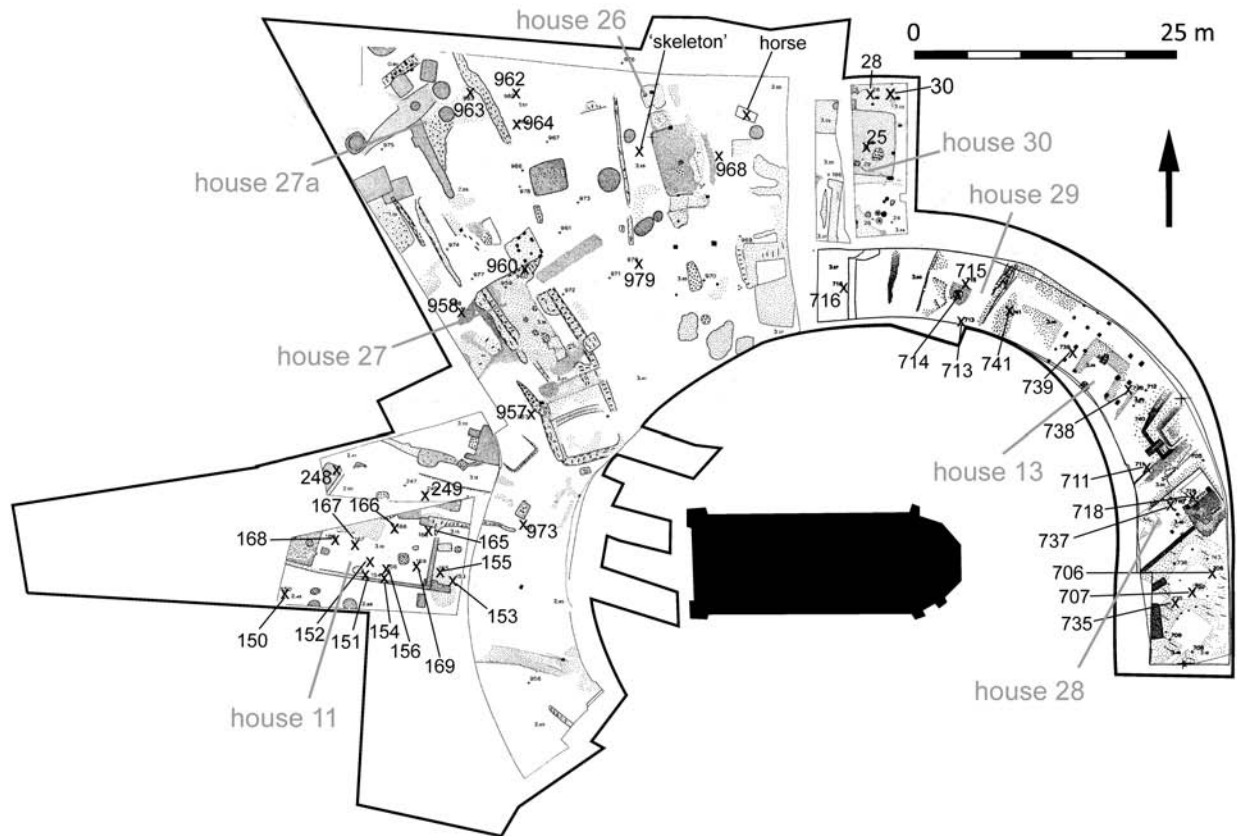
Most features in level G are dated to 4th and 5th centuries, but some deeper, middle Roman Iron Age features were recorded in this excavation level.



find no.	description	house no.	location	date
23	A ceramic spindle whorl and a crucible, with a sherd.		Unclear	M/LROM
690	A loom weight and some sherds.	29	Inside, next to hearth	MROM
692	A nearly complete and half a miniature pot and some sherds, one of them with paint.	28	Inside	MROM
942	Complete, miniature bowl.		Outside, in layer	M/LROM
943	A nearly complete pot with paint stripes from the rim (Ge5); large part of a pot (Gw5); lower half of a pot with a perforated base; and sherds, including one from Friesland.	27	Inside	MROM, 2nd AD
944	TS sherd*.		Outside	MROM or younger
946	Complete, whole small pot (possibly of Frisian origin, Oostergo K4c), with paint stripes from the base.	27	Inside	MROM, 2nd AD
948	Coin (no information available).		Outside, in layer	M/LROM or younger

950	A human skeleton was noted on the drawing; MPRM sherds with the same number must come from deeper layers.	27	Outside, near west wall	MROM, 3rd AD
955	Human skull (missing).		Outside, in layer	LROM/MP

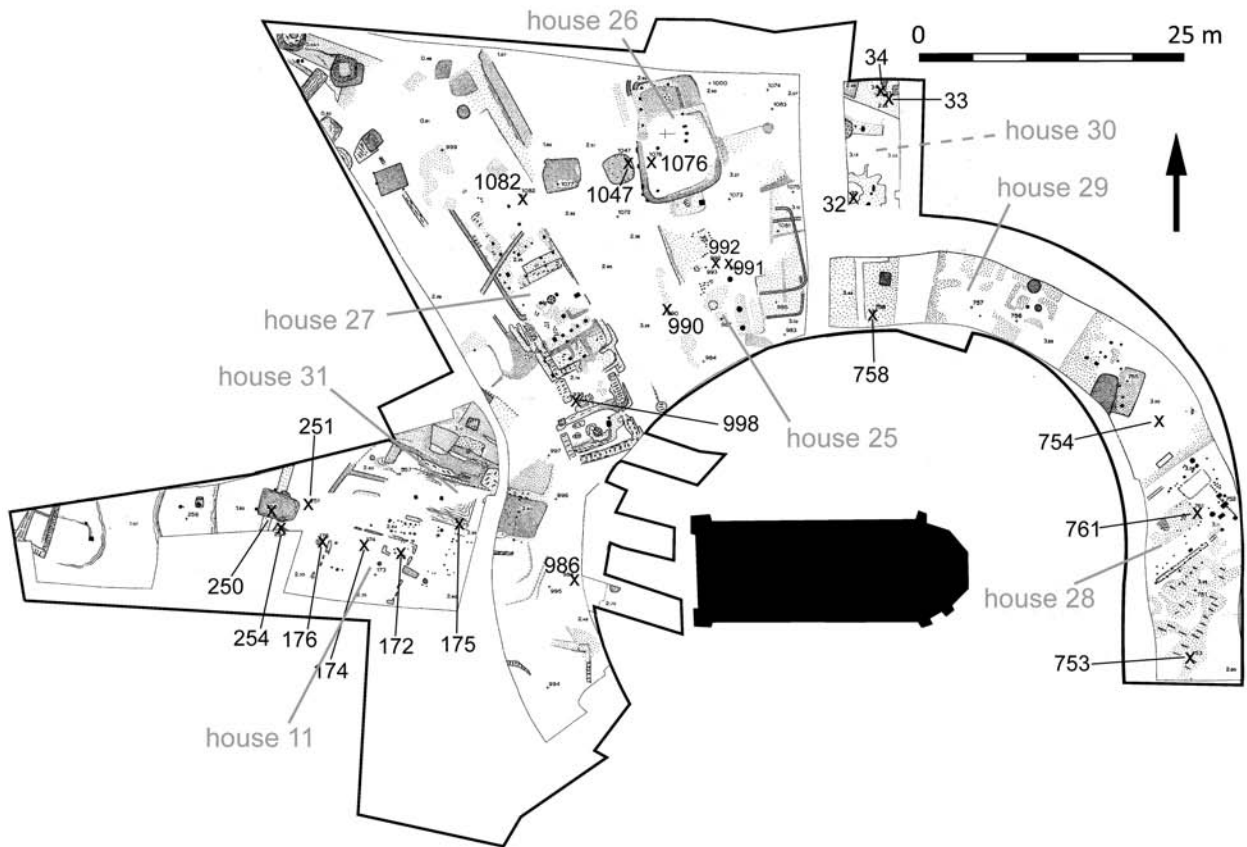
Level H



find no.	description	house no.	location	date
25	Nearly complete pot (Ge6) and a TS playing counter*. A partial dog skull (missing) was probably found in the same feature.	30	In hearth	MROM
28	TS sherd (missing).	30	Outside, <5 m	MROM
30	TS sherd*.	30	Outside, <5 m	MROM
150	TS sherd* and a bone spindle whorl.	11	Outside, <5 m	MROM
151	Two small pots (atypical and K4), at least one deposited complete.	11	Inside, near wall	MROM
152	Nearly complete, large pot (V5) and a ceramic playing counter.	11	Inside	MROM
153	Small pot (Ge6), deposited complete, and two ceramic spindle whorls (one missing).	11	Outside, <5 m	MROM
154	Handle made of sheep bone and complete cattle metatarsus.	11	Inside, near wall	MROM
155	Worked antler tool (hoe?) and ceramic spindle whorl.	11	Outside, near wall	MROM
156	Small pot (K4), deposited complete, and ceramic spindle whorl.	11	Inside	MROM
165	Handle made of sheep bone, complete miniature bowl, wooden spindle and some sherds.	11	Inside, near wall	MROM
166	Small, atypical pot, deposited complete.	11	Inside	MROM
167	Small pot (K4), deposited complete.	11	Inside	MROM
168	TS sherd*, a large fragment of a whetstone, and a loom weight.	11	Inside	MROM
169	Two small, broken pots (K4).	11	Inside	MROM

248	Three TS sherds*, among them two pendants (one of them incomplete).	?	Possibly in a rectangular pit, but unclear	MROM
249	Implement, consisting of a sheep molar mounted in a cut horse metatarsus, and two sherds.	11?	Outside, in layer	MROM
706	Decorated spindle whorl.	28	Outside, <5 m	MROM
707	Small pot (K5a), deposited complete.	28	Outside, <5 m	MROM
711	Over 1 kg of sherds (13 different rim sherds, average 94 g), including a sherd of Frisian origin, half of a small pot (K5a) and a piece of flint (a Neolithic flake; 29.9 g).	28	Outside, <5 m	MROM
713	Three complete loom weights and three sherds, probably made by the same potter.	29	Inside	E/MROM
714	A spit rest shaped as a bovine head.	29	Inside, in a hearth with a clay lining	E/MROM
715	A loom weight (identical to find no. 713) and a miniature pot, both complete.	29	Inside, near hearth.	E/MROM
716	1 kg of sherds (MNI = 8; average 77 g), including sherds of four pots made by the same potter, with traces of intentional breakage.	30?	Outside, <5 m	E/MROM
718	Half of a large pot (Gw6a), and some other sherds.	28	Inside	MROM
735	TS sherd and a large part of a decorated pot (K5a).	28	Outside, <5 m	MROM
737	Decorated miniature pot without rim and some sherds.	28	Inside	MROM
738	Decorated miniature pot with perforated base and sherds.	13	Inside	MROM
739	Loom weight, half of a decorated disc with a central hole (lid?), and some sherds.	13	Probably inside	MROM
741	Large part of a small pot (V4) and some sherds.	29	Outside, <5 m	MROM
957	Four different TS sherds (three of them *).	27	Outside, <5 m	MROM
958	Six playing counters of TS* (one missing), probably made of one vessel.	27	Outside, <5 m	MROM
960	Nearly complete, sloppy, atypical beaker.	27	Inside, near wall	MROM
962	Small pot (K5a), deposited complete.	27a	Outside, <5 m	MROM
963	Miniature bowl with paint stripes from the base.	27a	Under house	MROM
964	Two TS sherds, one*.	27a	Outside, <5 m	MROM
968	Small pot (K4), deposited complete, and two large parts of a runner of a rotary quern.	26	Outside, <5 m	MROM
973	A loom weight, two burnt stones, a TS sherd*, and over 8 kg of sherds (MNI = 30; average 50 g), some with paint.	?	Near hearth	MROM
979	TS sherd.		Outside, in layer	MROM
No number	'Skeleton' is written in the area west of house 28; the skeleton is probably human.	26	Outside, <5 m	MROM
No number (1176a?)	A horse skeleton is depicted on the field drawing and a photo. It was lying on its left side with strongly flexed forelegs. The horse, a 12-13 year old mare, was lifted <i>en bloc</i> , and turned around; it is now on its right side. This is probably the horse that was later numbered 1176a in the finds book.	26	Outside, <5 m	MROM

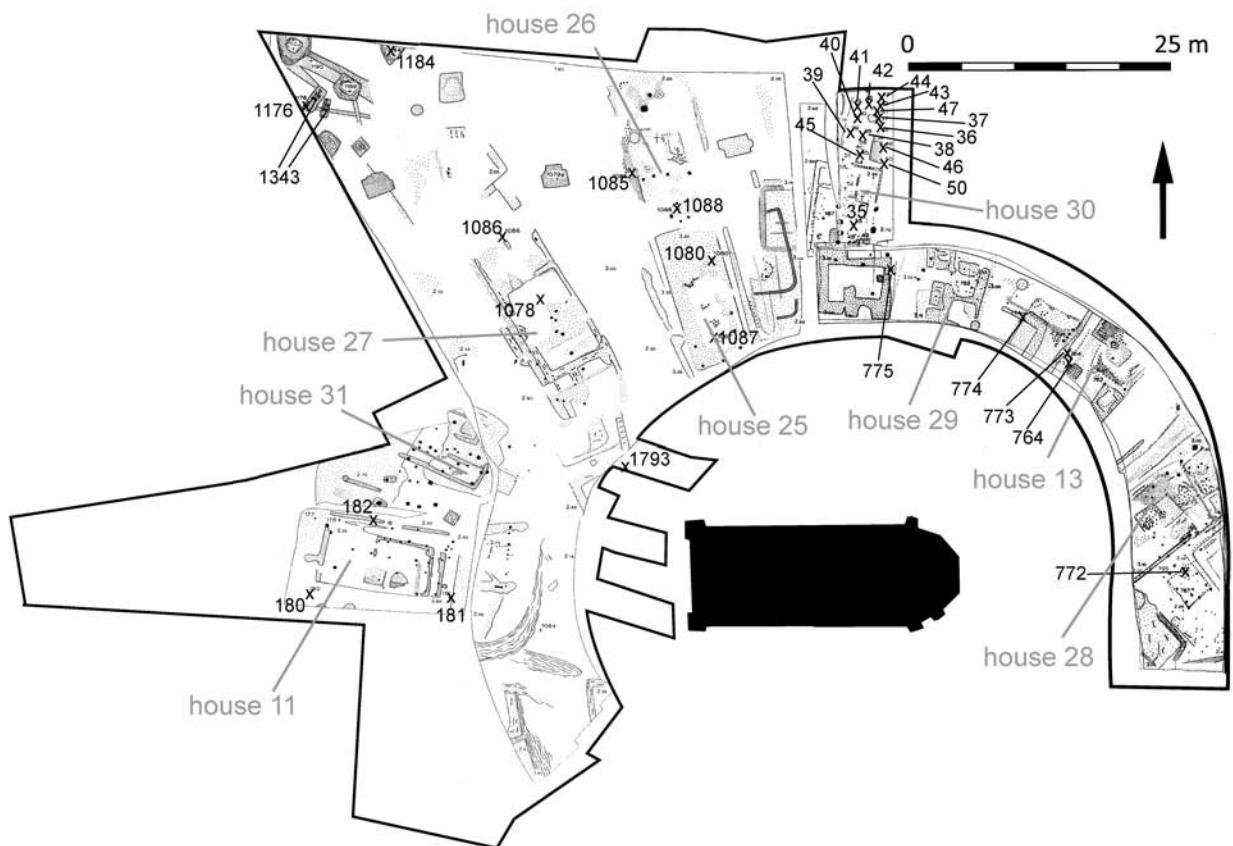
Level I



find no.	description	house no.	location	date
32	Nearly complete, small ceramic funnel.	30	Outside or under house	MROM
33	Large, broken pot (Gw6b; rim ø 38 cm, H 41 cm), probably deposited complete.	30	Outside, <5 m	MROM
34	Small, atypical pot, complete but without rim, and TS sherd*.	30	Outside, <5 m	MROM
172	Ceramic spindle whorl.	11	Inside	E/MROM
174	Two ceramic sling stones, a ceramic spindle whorl and the central part of a lid.	11	Inside	E/MROM
175	A small (K4) and a miniature pot (imitation Roman), both deposited complete.	31	Probably in the house platform	MROM
176	Large broken pot (V4), deposited complete.	11	In hearth	E/MROM
250	Ceramic spindle whorl, TS sherd (missing) and some other sherds.	11/31	Outside, in large rectangular pit	MROM
251	Two bronze hairpins (one certain, one possible) and a TS sherd*.	11/31	Outside, in layer	MROM
254	A ceramic, pumpkin shaped spindle whorl and a sherd, possibly from Noord-Holland.	11	Outside, in rectangular pit	MROM
753	Single sherd of unknown origin, possibly an early Hallstatt-type, dated 6th century BC.	28	Outside, in sod layer	context MROM
754	Many sherds belonging to two burnt pots (V5; Gw5c), probably from the same potter, and 5.6 kg of sherds (MNI = 20; average 52 g).	28	Outside, unclear	MROM
758	Complete small pot (K5a), with crack caused by tempering particle.	?	Outside, in layer	MROM
761	Half a bedstone of a rotary quern.	28	Inside	MROM
986	TS sherd.	?	Outside	MROM
990	Large sherd (Ge6) with paint stripes and spots.	25	Outside, <5 m	MROM
991	TS sherd.	25	Inside	MROM

992	Piece of amber.	25	Inside	MROM
998	Loom weight and some sherds.	27	Outside, in platform	E/MROM
1047	Small pot (K4), deposited complete.	26	Outside, large pit	MROM
1076	“Bones of a sheep” were recorded in the finds book.	26	Inside	MROM
1082	Two nearly complete and half a large pot (2 Gw5, 1 Ge5); large part of a small pot (K4/5a), and small number of sherds.	27	Inside or in platform	MROM

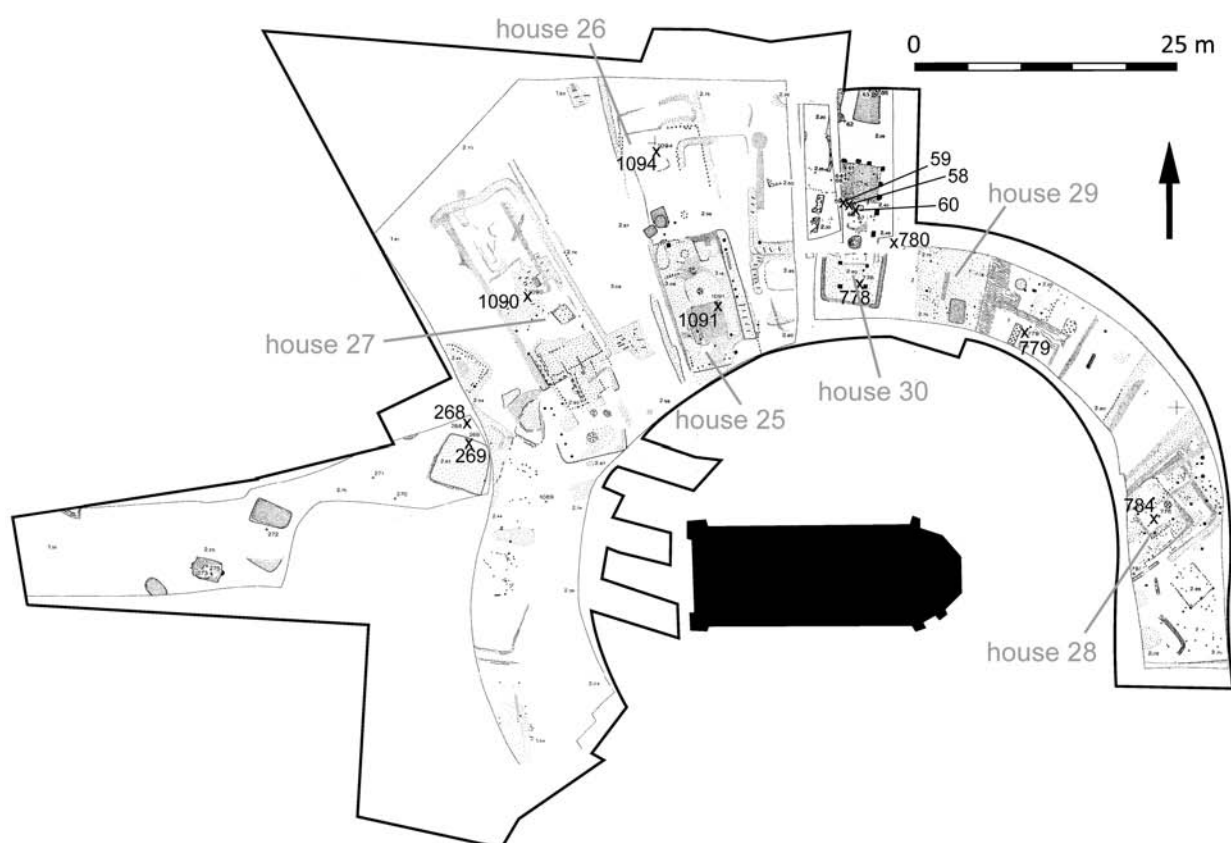
Level J



find no.	description	house no.	location	date
35	Very large pot (Ge6; rim ϕ 26 cm, H 42.5 cm), probably deposited complete.	30	Inside, near hearth	MROM
36	Set of playing pieces, consisting of five tali of cattle (one of them filled with iron) and a worked horse phalange.	30	Outside, <5 m	MROM
37	Miniature bowl (missing).	30	Outside, 5-10 m	MROM
38	TS sherd*.	30	Outside, <5 m	MROM
39	TS sherd.	30	Outside, <5 m	MROM
40	TS sherd (missing).	30	Outside, 5-10 m	MROM
41	TS sherd*.	30	Outside, 5-10 m	MROM
42	TS sherd (missing).	30	Outside, 5-10 m	MROM
43	TS sherd*.	30	Outside, 5-10 m	MROM
44	TS sherd (missing).	30	Outside, 5-10 m	MROM
45	Large whetstone.	30	Outside, <5 m	MROM
46	Loom weight.	30	Outside, near the fence of a quadrangular enclosure <5 m	MROM
47	Cuttlebone (inner shell of <i>Sepia officinalis</i>) (missing).	30	Outside, 5-10 m	MROM

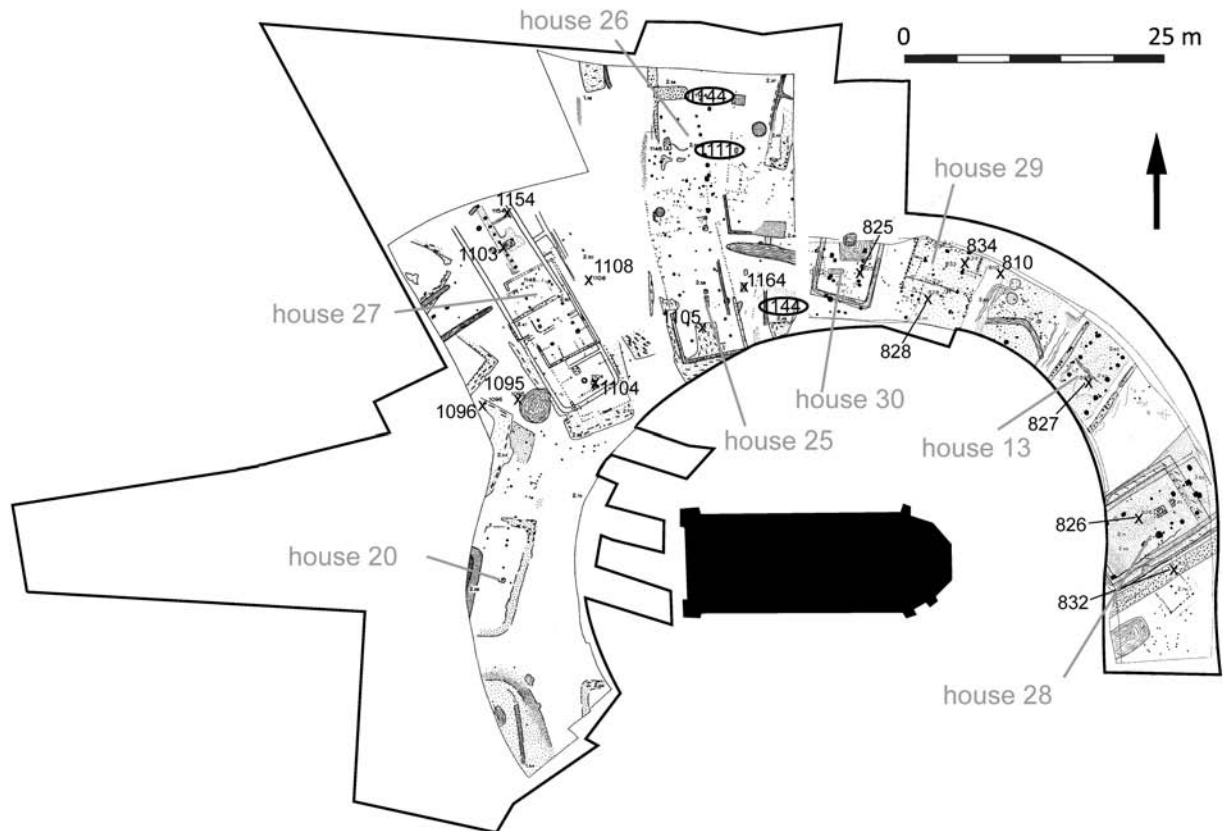
50	Partly burnt whetstone and animal bones (the latter only recorded).	30	Outside, near the fence of a quadrangular enclosure <5 m	MROM
180	Cattle horn (missing).	11	Outside, <5 m	EROM
181	Small pot (K2), deposited complete.	11	Outside, <5 m	EROM
182	Polishing stone and toothed cattle rib fragment.	11	Inside, near/under wall	MROM
764	Bronze ring, TS sherd and a small piece of flint (a Neolithic flake; 2.9 g).	13	Inside, near wall	MROM
772	TS sherd*.	28	Outside, near the fence of a quadrangular enclosure <5 m	MROM
773	Complete small pot (K4) that had been used as cooking pot, 3 kg of sherds (MNI = 21; average 64 g), including sherds with paint and fragments of a baking sheet and of the clay lining of a hearth, and a burnt and broken granite anvil.	13	Inside, near wall	MROM
774	Loom weight and some sherds.	?	Unclear, near or in a house	MROM
775	Loom weight and some sherds.	30	?	MROM
1078	1.5 kg of sherds (MNI = 7; average 101 g); the finds book records a broken pot and a crate of sherds. Among the sherds are two opposite fragments of one pot with handles (Ge6), both with paint stripes, which must have been the complete pot.	27	Inside	MROM
1080	TS sherd*.	25	Inside	MROM
1085	Miniature pot and a small pot, both deposited complete, recorded with many sherds (missing).	26	Unclear, near wall	MROM
1086	Dog skull (missing) and some sherds.	27	Inside	MROM
1087	Well finished and decorated disc with central hole, possibly a lid (compare no. 1091 in level K), and some sherds.	25	Inside	MROM
1088	“Several large pots” (missing).	25/26	Unclear, probably in pit	MROM
1176	A small, complete, decorated pot (K3), according to the finds book found in a burial pit (no. 1343) near the feet of the skeleton; the pot is considerably older than the skeleton.	27	Outside, ca. 10-25 m	E/MROM
1184	A complete pot, half a beaker and a ceramic playing counter.		Outside, in pit 10-25 m	MROM
1343	Two human burials in supine position, the eastern was numbered 1343. See Appendix C for details.	27	Outside, ca. 10-25 m	MROM
1793	Three TS sherds (all*) and two LPRM beads.	27?	Outside, <10 m	MROM

Level K



find no.	description	house no.	location	date
58 + 59	Set of 20 loom weights (also some with no. 60).	30	Inside	E/MROM
60	Complete rotary quern, according to the field drawing broken into wedges (missing).	30	Inside, near hearth	E/MROM
268	Loom weight.	?	Outside	MROM
269	Two TS sherds* and some burnt sherds.	?	Outside, near fence of quadrangular enclosure	MROM
778	Large part of a "cheese mould" and sherds, including one with paint.	30	Inside	MROM
779	Two cattle metapodia (one of them with traces of use) and some sherds.	?	Probably outside	E/MROM
780	Small pot, deposited complete.	30	Probably in platform	E/MROM
784	6 kg of sherds (MNI = 35; average 97 g), including a perforated base and a painted sherd, parts of a lid and a baking sheet.	28	Inside	EROM
1090	Decorated beaker (K5a), deposited complete.	27	Inside	MROM
1091	TS sherd*, probably belonging to the same vessel as 1295 and 1298 (see Northern trench); a complete, now broken whetstone; a well decorated and finished disc with a central hole (lid?), almost identical to no. 1087 from the same house (level J); and a bronze object, probably a bead.	25	Inside	MROM
1094	Two loom weights and some sherds.	26	Inside?	MROM

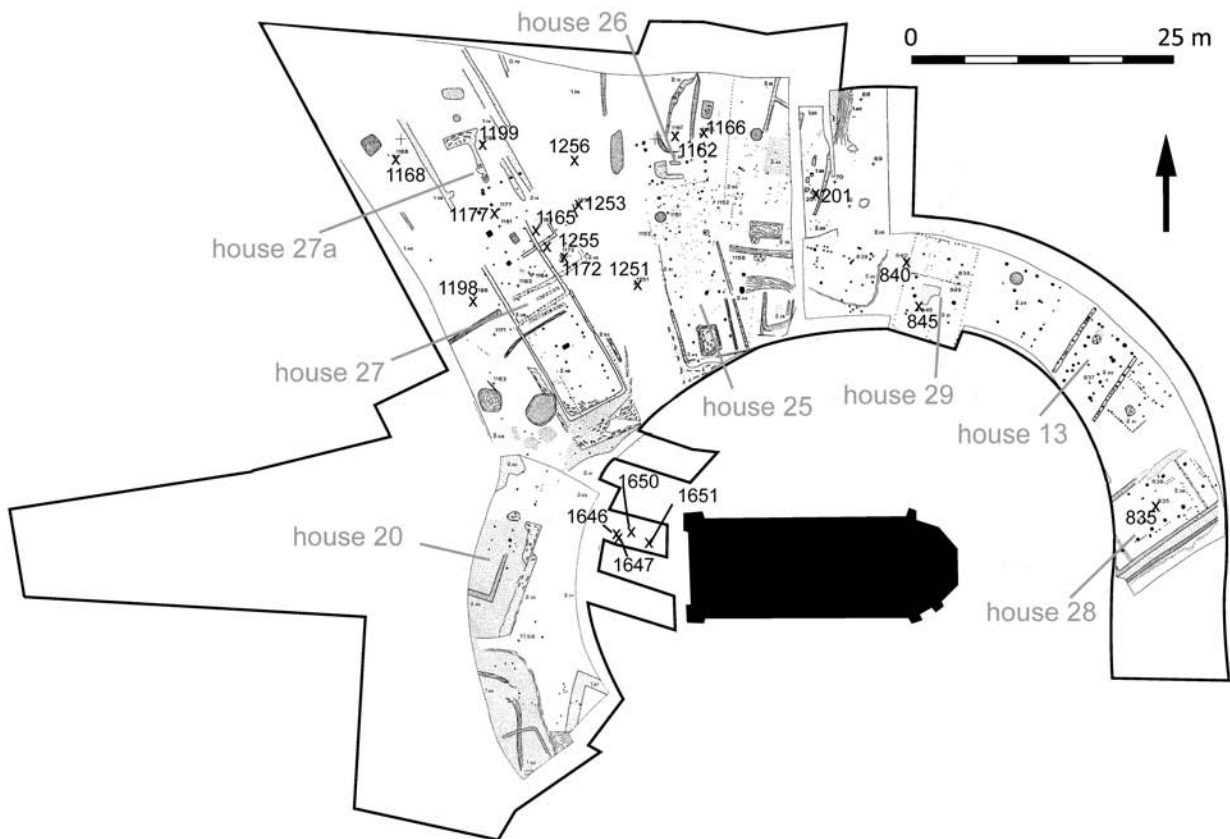
Level L



find no.	description	house no.	location	date
810	Complete brooch.	29	Outside, <5 m	E/MROM
825	Complete brooch.	30	Inside	EROM
826	Very large pot (V4, rim diameter 34.5 cm, height 41.5 cm), probably deposited complete.	28	Inside	E/MROM
827	Broken pot (missing) and some sherds.	13	Inside	EROM
828	Broken pot (missing).	29	Inside	E/MROM
832	Broken pot (missing) and some sherds.	28	Outside, ditch?	E/MROM
834	Two complete, small, ceramic lids, a miniature pot and a bead made of sheep bone.	29	Inside	E/MROM
1095	Miniature pot and loom weight.	27	Outside, <5 m	EROM
1096	Bead (missing), large part of a large pot (V4) and about 1 kg of sherds (MNI = 8; average 83 g).	31?	In platform (see levels I and J)	E/MROM
1103	Nearly complete, broken, baking sheet, with fitting fragments in no. 1104 (same house) and in 1105 (house 25); large part of a small pot (type K3); large part of a pot with paint stripes from the base (Gw5); a complete cattle metatarsus.	27	Inside	E/MROM
1104	Large part of a large pot (V5); two bone handles, one of a human humerus and one of a sheep bone; fragment of a baking sheet, fitting nos. 1103 and 1105; complete cattle metacarpus.	27	Inside, in hearth	E/MROM
1105	Wooden bowl (missing) and fragment of the same baking sheet as nos. 1103 and 1104.	25	Inside	E/MROM
1108	A shiny, perforated human skull fragment (amulet?), two loom weights (one secondarily burnt) and large parts of three large pots (all Gw5), including two burnt pots.	27	Outside, <5 m	EROM

1111	Finds from the area east of house 26, between levels J and K. Among the finds are a large part of a dish, three loom weights and a spindle whorl.	25	Outside	E/MROM
1144	Finds from the area east of houses 25 and 26. Among the finds are two large, broken, burnt pots, a ceramic disk with a central whole (possibly a weight), a spindle whorl, a loom weight and a nearly complete small pot.	25	Outside	E/MROM
1154	Handle made of horse bone and some sherds.	27	Inside, near wall	EROM
1164	Human skull fragment (missing) and mandible with traces of gnawing.	25	Outside, dug in or in small pit, < 5 m	EROM

Level M



find no.	description	house no.	location	date
201	Large part of a large pot (Gw5) and two loom weights.	?	Unclear	EROM
835	Spindle whorl and sherd.	28	Inside	EROM
840	Large part of a pot (according to a drawing) and a loom weight.	29	Outside, against wall	EROM
845	Parts of a spoked wheel.	29	Inside	EROM
1162	Brooch (missing) and large pot (V4), deposited complete.	26	Inside or under house	EROM
1165	Miniature pot.	27a	Inside	MROM 2nd AD
1166	1.2 kg of sherds (MNI = 12; average 102 g), including two sherds of the same potter as a pot in North-1261 and a sherd of Noord-Holland pottery, and some bones of cattle and horse, including three cattle metatarsi.	26	Outside, <5m	MROM, 2nd AD

1168	Decorated small pot (exotic K3), probably deposited complete, 1.9 kg of sherds (MNI = 18; average 75 g), including the lower part of a wheel thrown <i>terra nigra</i> -like beaker, and a cattle metacarpus.	27a	Outside, <5 m	MROM, 2nd AD
1172	A miniature pot with paint from the rim and 2.6 kg of sherds (MNI = 7; average 48 g), including a perforated base.	27	Inside	MROM, 2nd AD
1177	Dog skull and part of a fox skull.	27a	Inside	E/MROM
1198	Cattle skull, ceramic spindle whorl and some sherds.	27	Outside, <5 m	EROM
1199	Bone spindle whorl and some sherds.	27a	Inside	EROM
1251	Wooden bowl.	25	Outside, <5 m	EROM
1253	Small pot (K4), deposited complete.	27a	Outside, <5 m	E/MROM
1255	6.8 kg of sherds (MNI = 32; average 53 g), among them several with paint, a bone handle, a round/cubical stone and horsehair.	27a	Inside, deeper level	MROM
1256	Half of a large pot (Gw5), probably deposited complete, with paint stripes from the base.	27a	Outside, <5 m	E/MROM
1646	The complete shell of a whelk (<i>Buccinum undatum</i>).	?	Outside	E/MROM
1647	A cattle skull (missing), near the whelk of no. 1646.	?	Outside	E/MROM
1650	Large part of a pot with paint stripes and spots on handle and shoulder (Gw5/6), and 1.2 kg of sherds (MNI = 5; average 41 g).	?	Outside	E/MROM
1651	Dog skull without mandible and several sherds.	?	Outside	E/MROM

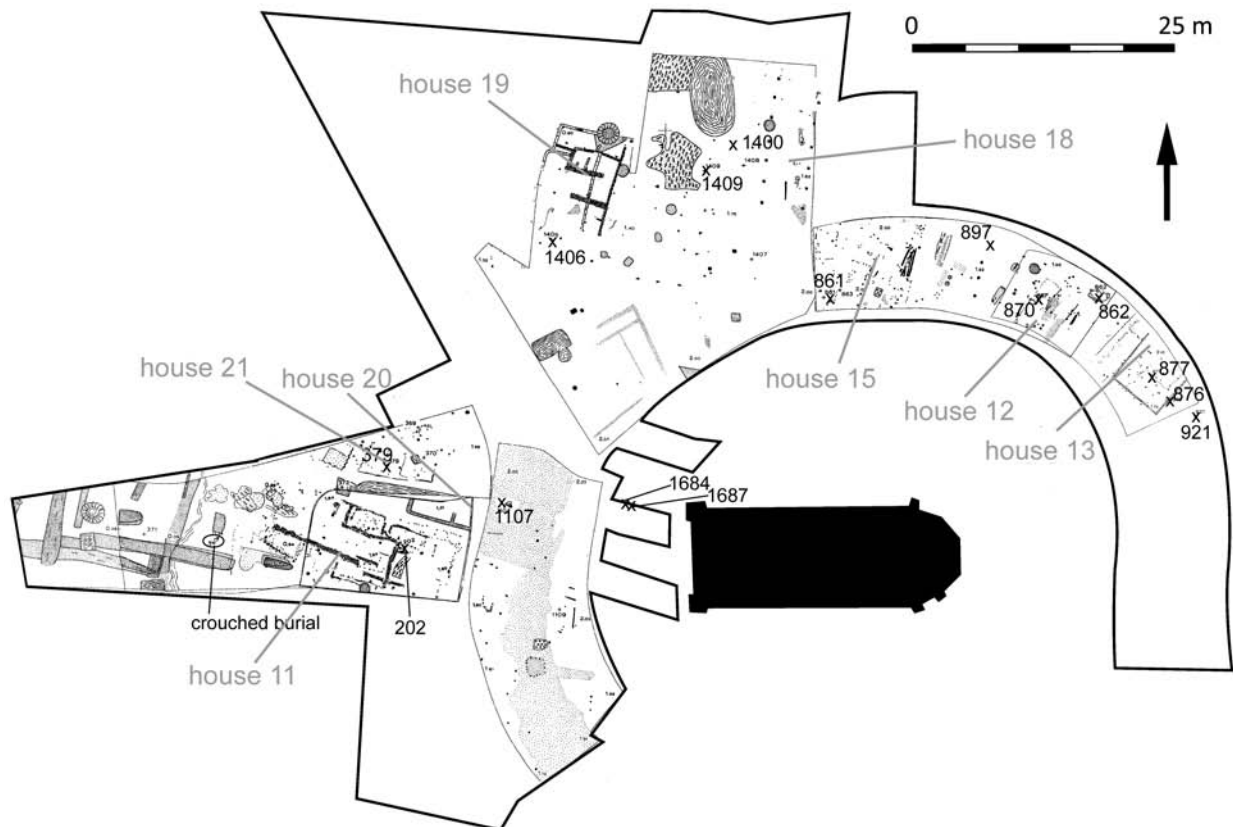
Level N



find no.	description	house no.	location	date
189	Decorated and well finished ceramic playing counter.	11	Inside	EROM
189a	Large part of a disc wheel.	11	Inside	EROM
190	Human skull fragment.	11	Outside, <5 m	EROM

191	Large part of a large pot (Ge4) and some sherds.	20	Probably in lining of platform	EROM
192	Complete small pot (K3) with a secondary hole in the base.	11/20	Between houses	EROM
193	Large part of a large pot (Gw5).	11	Inside	EROM
199	A bone and a ceramic spindle whorl, and a bone scraper.	11	Outside, <5 m	EROM
340	TS sherd*.	11	Outside	MROM
346	Horse bones (missing).	11	Outside, 5-10 m	E/MROM
363	Whetstone and six sherds, including one with paint stripes and spots.	11?	Outside, 10-15 m	EROM
803	Human skeleton in supine position, found in a long profile along this trench, which was documented (from the outside) before the trench itself was excavated.	22	Inside, under the floor	LPROM
809	Two large pots and one small pot, deposited complete (now missing).	23?	Outside, <10m	LPROM / EROM
855	Complete ceramic lid and several burnt sherds.	13	Inside	EROM
857	Broken pot (missing)	29?	Outside or under house (level M)	EROM
1106	Small pot (atypical), deposited complete, and a Noord-Holland sherd.		Outside	LPROM/ EROM
1195	Bone spindle whorl and some sherds.	26	Inside	EROM
1196	Wooden bowl and small pot (both missing).	18/25?	Outside, <5 m	EROM
1200	Small, complete pot (K3).	26	Inside	EROM
1203	Needle made of sheep bone.	?	Unclear	EROM
1205	Several sherds of one pot with paint stripes and spots (Gw5).	25	Outside, <5 m	EROM
1207	Miniature pot, a nearly complete and two half broken pots (2 Gw5, 1 V4, all cooking pots) and 9.5 kg sherds (MNI = 20; average 92 g), many of one potter, several with paint stripes and spots, and a perforated base.	26	Inside	EROM
1277	A nearly complete and half a small pot (both K3), 1.8 kg of sherds (MNI = 18; average 84 g) and a cattle metacarpus.	26	Inside	EROM
1278	Small pot (missing) and a small, whole ceramic lid.	16/27	Outside, <5 m	EROM
1279	Brooch.	22	Outside, <5 m	LPROM
1304	Very large pot (V4; rim ø 39 cm; H 46 cm) with perforated base (possibly deposited complete), a small pot (K3), a ceramic playing counter, two cattle metapodia and some sherds, one of Frisian origin.	19	Outside, <5 m	EROM
1306	Metatarsus horse and six metapodia cattle; eleven rim sherds (1.2 kg) of ten different pots.	19	Inside, in byre	LPROM/ EROM
1327	Small complete pot (atypical).	19	Outside	LPROM/ EROM
1334	Incomplete bronze neck ring.	22	Outside, <5 m	LPROM
1335	Several large pots, only one available (V3, used as cooking pot).	24	Outside, in rectangular pit <5 m	LPROM/ EROM
1339	Ceramic spindle whorl (made of the base of a small pot) and a horse metacarpus.	16	According to the finds book inside the house	LPROM
1348	Two pieces of fabric in two qualities; woollen cord (Schlabow 1974, 203-204) and a sherd.	22	Inside	LPROM
1354	Two large pots (Gw4b; Ge4) and a small one (K2), all nearly complete.	16	In large pit dug into the house	LPROM
1359	Flint nodule (51.4 g), possibly a flake, and some large rim sherds.	26	Under house	EROM
No number	Sheep, complete or partial skeleton.	25	Inside, in a large rectangular pit	EROM

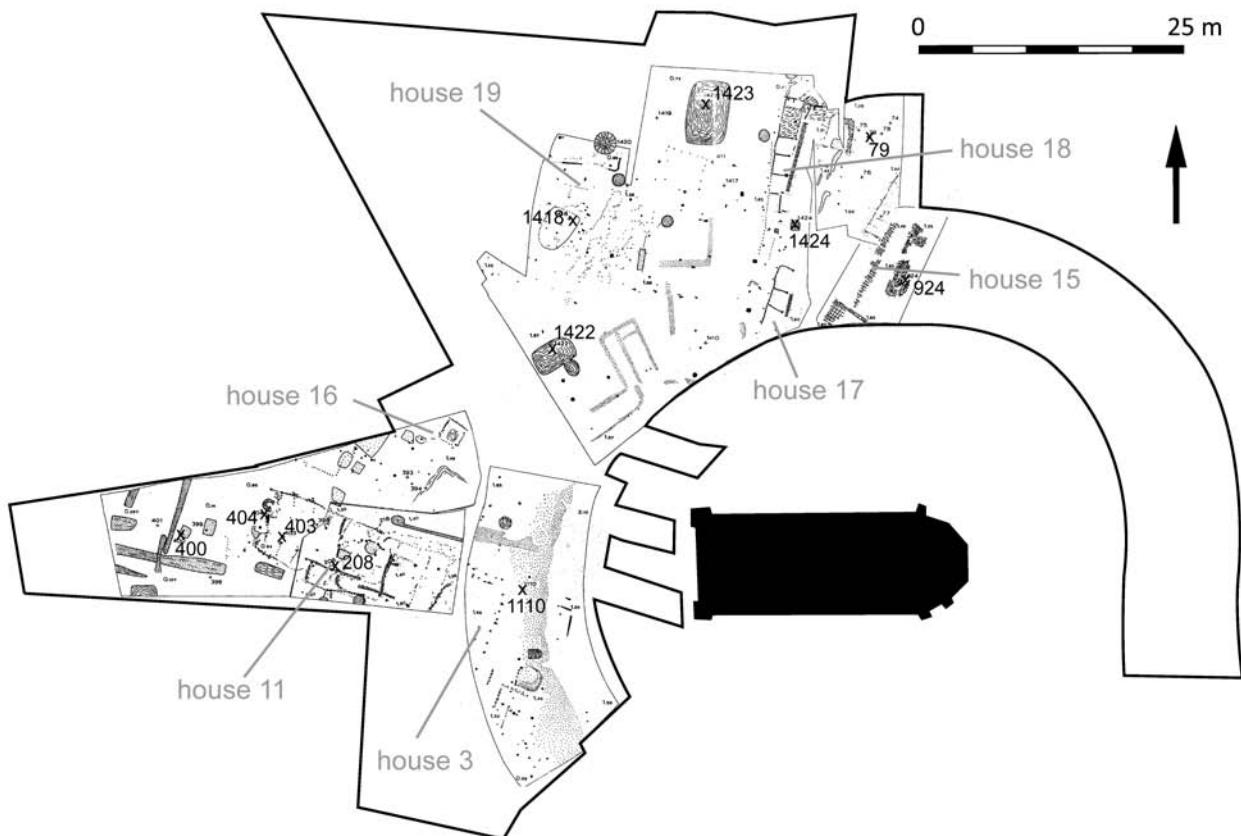
Level O (+ P1)



find no.	description	house no.	location	date
202	Nearly complete cheese mould, deliberately broken base of a large pot, whetstone (missing) and sherds.	11	Inside	LPROM
379	Small pot without rim and sherds.	21	Inside	LPROM
861	Large pot (V4), probably deposited complete.	15	Inside	EROM
862	Level N: more or less oval shape with several objects indicated on the excavation drawing. This level: five large burnt granite boulders (one that was kept weighs over 6 kg), forming a hearth. Objects: slag (indicating it was a fireplace for pyrotechnic activities), parts of a cattle mandible, a blackened loom weight, a large part of a decorated small pot (K4) and other sherds, partly burnt; unspecified seeds.	12	Unclear	(end of) EROM
870	Small pot (K2), deposited complete.	12	Inside	EROM
876	Playing piece made of antler; buzzer (or button) made of cattle rib.	13	Outside, against wall	EROM
877	Round/cubical lapstone and some sherds.	13	Inside	EROM
897	Two complete small pots and half a small pot (all K2) were found high in the fill of a round pit (described as a small cellar), excavated in an extra level between O and P; deeper in the fill: two metapodia of one horse.	?	Outside, in pit <5 m	LPROM
921	Horsehair.	13	Outside, <5 m	EROM
1107	Fragment of a spoked wheel and a fossil ammonite (most likely origin eastern Netherlands or adjacent Germany).	20	Unclear, in a large pit	EROM
1400	Small complete pot (K2).	18	Outside, <5 m	LPROM
1406	Over 8 kg of potsherds from the entire pre-Roman Iron Age (MNI = 27; average 53 g), including (large part of) a cheese mould; see also no. 1418 in level P.	19	Outside, probably in the upper fill of a pit	LPROM

1409	Large whetting and grinding stone, and sherds (missing).		Outside	LPROM/ EROM
1684	Cattle skull and some sherds, found in section.	?	?	EROM
1687	Human skull part, worked into a small bowl, found in section.	?	Unclear	LPROM
No number	Crouched burial, only noted on the field drawing.	11	Outside, 5-10 m	EROM

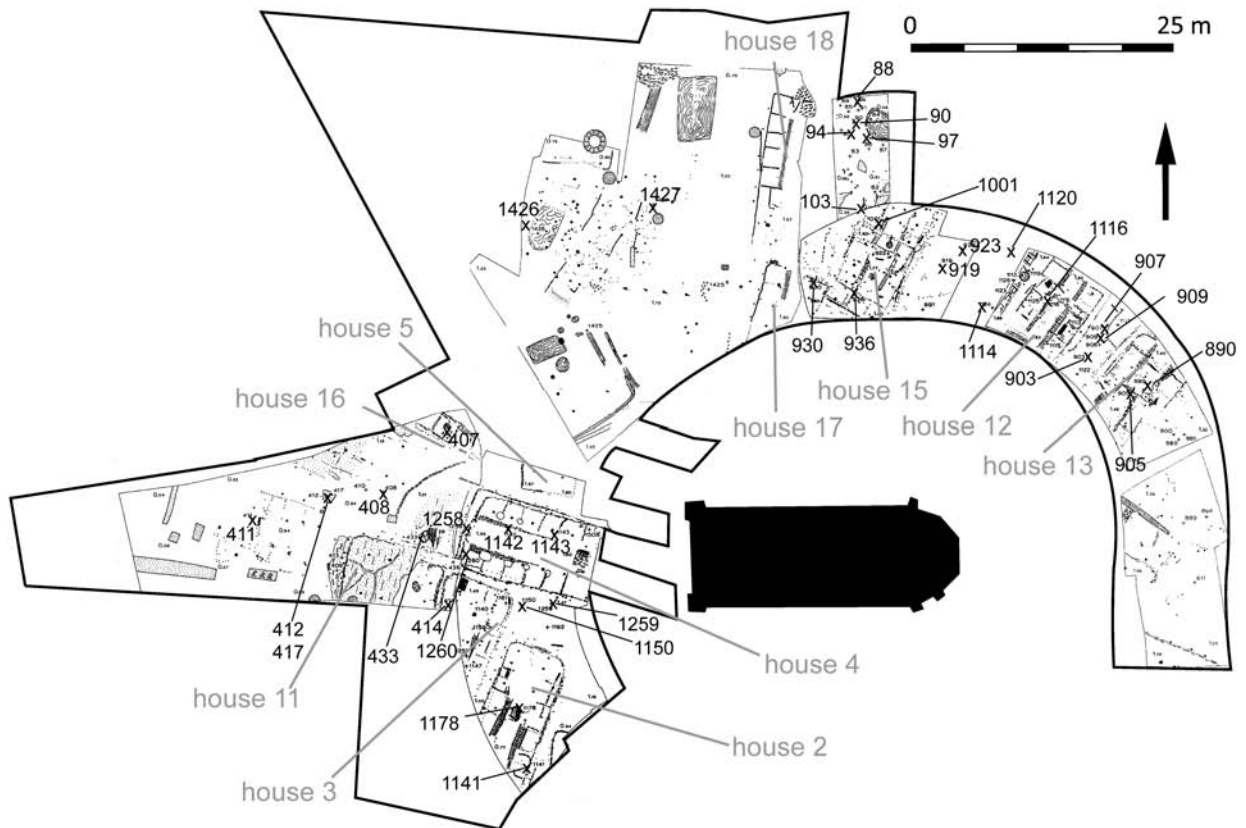
Level P



find no.	description	house no.	location	date
79	Cut off human hair.	15/18	Outside, <5 m	LPROM/ EROM
208	Small pot (missing) and two lap- or rubbing stones, including a round/cubical stone.	11	Inside	LPROM
400	Ceramic spindle whorl (see also 415, level RS).	11	Outside, in quadrangular pit, 5-10 m	LPROM/ EROM
403	Piece of fabric (missing) and sherd.	11	Inside	LPROM/ EROM
404	Antler tool (possibly hammer) and some sherds.	11	Outside, near threshold	LPROM/ EROM
924	Pile of wickerwork and beams from the house	15	Inside	LPROM
1110	Small pot (missing), ceramic spindle whorl and some sherds.	3	Outside, <5 m	LPROM
1418	Nearly complete pot (Ge4) and large part of a small pot (atypical), both possibly deposited complete, small clay ball (sling stone?) and several sherds. See also no. 1406 (level O).	19	Outside, large shallow pit	LPROM
1422	5.4 kg of potsherds (MNI = 20; average 40 g), including a base with a secondary hole and deliberately broken sherds, and a burnt whetstone.	27	Inside, in rectangular pit (see level N)	EROM

1423	Large parts of a large pot, a dish and a small pot (Gw4b, S3, K2), two bases with secondary holes and some sherds with traces of deliberate breakage and paint, and two Noord-Holland sherds. See also no. 1445, level RS. In 1423 and 1445 together: 8 kg of sherds (MNI = 19; average 67 g).		Outside, in rectangular pit	LPROM/ EROM
1424	Two nearly complete pots of one potter (both V2/3), one with traces of deliberate breakage, large part of a small pot (K1) and some sherds.	18	Inside, in pit	LPROM (2nd BC)

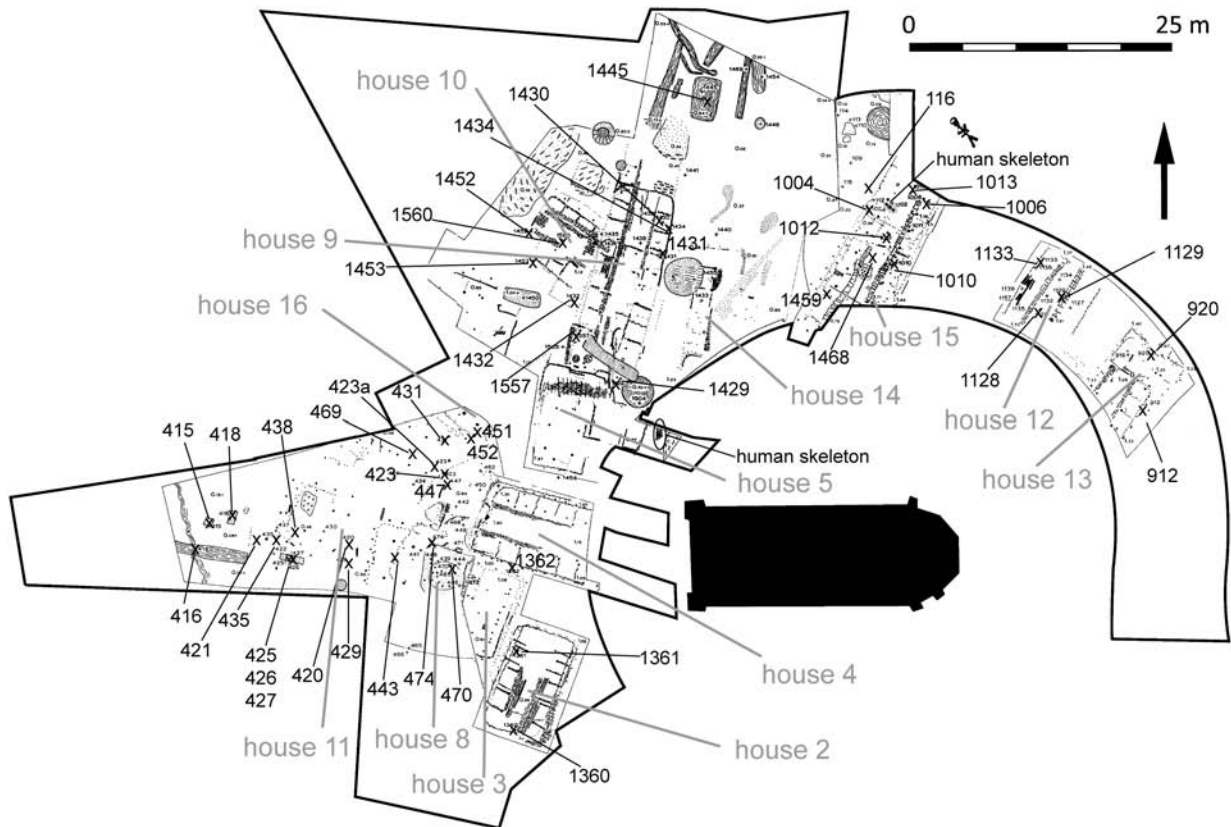
Level Q



find no.	description	house no.	location	date
88	Horn of a sheep (missing).	15/18	Outside, <5 m	LPROM
90	Horsehair (missing).	15/18	Outside, <5 m	LPROM
94	Complete brooch.	15/18	Outside, <5 m	LPROM
97	Cattle horn (missing).	15/18	Outside, <5 m	LPROM
103	Ceramic spindle whorl.	15	Outside, <5 m	LPROM
407	Two complete miniature pots.	16	Inside, in byre	LPROM
408	Two bone spindle whorls, wooden peg (spindle?) and some sherds.	4/11/16	Outside, 5-10 m	M/LPROM
411	Piece of iron (missing), rope (missing), ceramic playing counter, two pieces of flint (one used in Ezinge, one unworked), some sherds.	11	Outside, near threshold	LPROM / EROM
412/417	Two pots (Gw5), one a clear cooking pot and one with paint and a perforated base, which were deposited complete. Besides, half of a third pot (V4) was found, several sherds, including one with traces of intentional breakage, and a cattle phalange.	11	Outside, <5 m	EROM

414	Complete wooden yoke, allegedly for two horses (Hayen 1973, 168).	3	Inside, in byre	LPROM
433	Short wooden planks and stakes (only on field drawing).	4	Outside, within fence <5 m	LPROM
890	Broken pot (missing) and some sherds.	13	Inside	LPROM
903	Over 3 kg of potsherds (MNI = 9; average 47 g), including a perforated base.	12/13	Outside <5 m	LPROM, 2nd BC
905	Spoked wheel (now only 1/6).	13	Inside	LPROM
907	Broken large pot (V2).	12/13	Outside <5 m	LPROM
909	Worked wood (missing) and bone buzzer (or button).	12/13	Outside <5 m	LPROM
913	Piece of fabric. Not on drawing, reported to be found above house (or under younger phase).	13	Inside	LPROM/EROM
915	Piece of fabric. Not on drawing, but in this house according to finds book.	13	Inside	LPROM
919	Two nearly complete, unburnt, large pots (Ge4 and Gw4a), at least one deposited complete, in a burnt layer.	15	Outside, <5 m	LPROM
923	Some very small human cremation remains, two cattle teeth and three dog teeth, and a cattle metatarsus, in a burnt layer.	15	Outside, <5 m	LPROM
930	Broken pot (missing).	17	Inside	LPROM
936	Complete miniature pot with paint.	15	Inside, near wall.	LPROM
1001	Piece of fabric and two fitting base sherds.	15	Inside	LPROM
1114	Large part of a small pot (K1), which was probably deposited complete, and 1.1 kg of sherds (MNI = 8; average 77 g); three cattle metapodia from different animals.	12	Outside, <5 m	LPROM, 2nd BC
1116	Miniature bowl, made of damaged small pot.	12	Inside, in byre	LPROM, 2nd BC
1120	Nearly complete small pot (K1).	12	Outside, <5 m	LPROM, 2nd BC
1141	Broken pot (missing).	2	Inside, in byre	M/LPROM
1142	Complete, small pot (K2, used for cooking).	4	Inside, in byre	LPROM
1143	Inverted pot.	4	Inside, in byre	LPROM
1150	Cattle bones (missing) and some sherds.	3/4	Outside, <5 m	LPROM
1178	At least two parts of a wooden disc wheel and other large pieces of wood.	2	Inside, in the middle of the byre	M/LPROM
1258	Worked wood (missing), two cattle metapodia (one with traces of use), a whetstone and some sherds.	4	Outside, against wall	LPROM
1259	Piece of fabric (missing).	4	Outside, <5 m	LPROM
1260	Small pot (K1), deposited complete.	4	Inside, in byre	LPROM
1426	Large part of a large pot with perforated base (G3a).	?	Outside, <5 m	LPROM
1427	Nearly complete miniature pot with paint and a large pot (Gw5), with some sherds.	?	Outside, <5 m	LPROM/EROM

Level RS

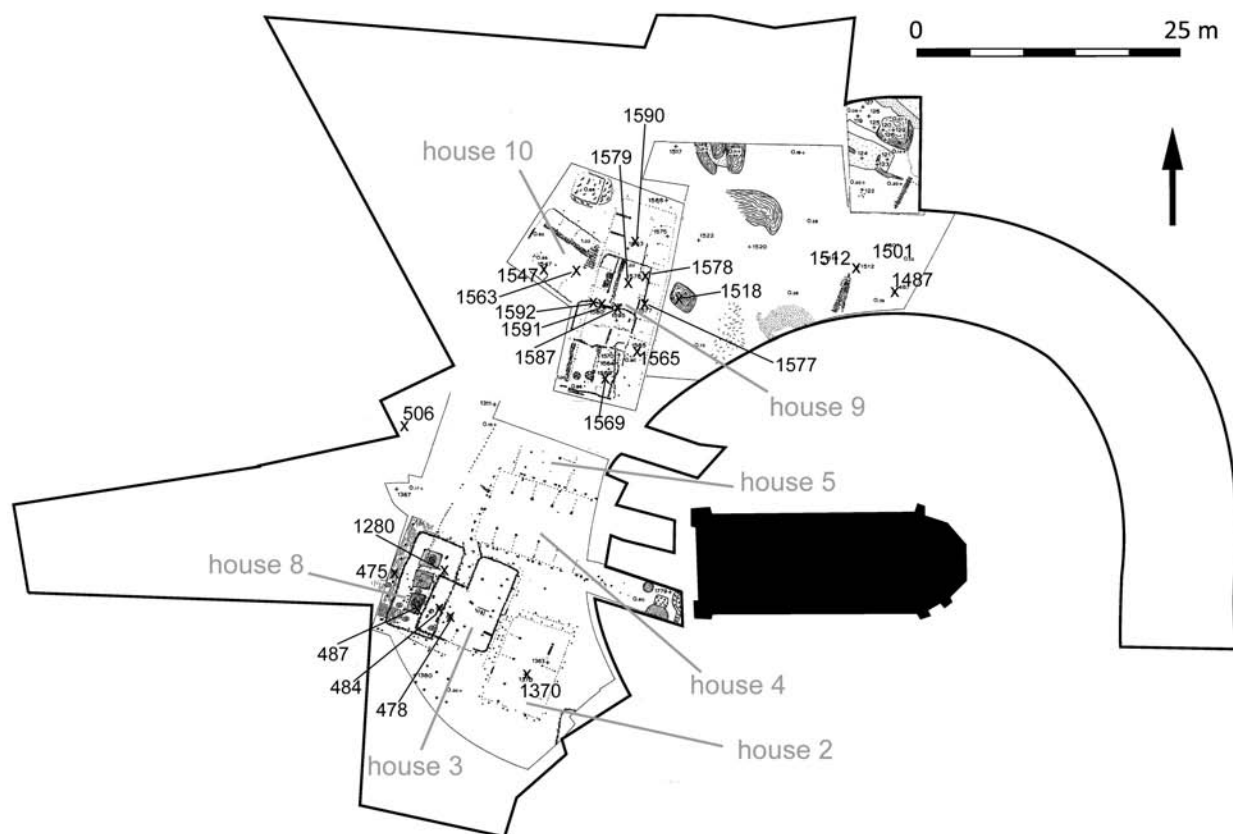


find no.	description	house no.	location	date
116	Bronze needle and some sherds.	15	Outside, <5 m	LPROM
415	Strongly contracted human skeleton, two cattle phalanges and some sherds. See also no. 400, level P.	11	Outside, in quadrangular pit, <10 m	LPROM/EROM
416	Complete large pot (Gw5) and nearly 3 kg of sherds (MNI = 14; average 147 g), including several with paint stripes and spots, and cattle foot bone.	11	Outside, in ditch 5-10 m	EROM
418	"Sherds and bones", including a cattle phalange.	11	Outside, in rectangular pit	EROM
420	Ceramic spindle whorl.	11	Outside, near threshold	MPROM
421	Piece of fabric.	11	Outside, <5 m	MPROM
423	Loom weight.	4	Outside, between stakes of fence, 5-10 m	MPROM
423a	Piece of fabric.	4	Outside, near fence 5-10 m	MPROM
425/ 426/ 427	Three complete pots (Ge4, two cooking pots: another Ge4 and Gw5), large part of a fourth pot (cooking pot Gw5) and a pierced horse phalange. Reported to be found in a 'cellar'.	11	Outside, in rectangular pit <5 m	EROM
429	Three ceramic playing counters and some sherds.	11	Outside, near threshold	MPROM
431	Round/cubical lapstone; implement made of cattle rib, two cattle foot bones (calcaneus and phalange) and a cattle humerus.	16	Under house	MPROM
435	Cattle phalange and rope (missing).	11	Outside, <5 m	MPROM
438	1.5 kg sherds (MNI = 4; average 29 g), some with traces of deliberate breakage.	?	In subsoil	MPROM
443	Two ceramic playing counters, some sherds (including one with traces of deliberate breakage) and a wooden peg.	11	Inside, near wall	MPROM

447	A ceramic spindle whorl, a ceramic playing counter, and sherds.	4	Outside, <5 m (within fence)	MPROM
451	Burnt flint nodule (128.2 g) with a hole through the stone (ø 1 cm), and sherds.	16	Under house	MPROM
452	Vertebra of a meagre (<i>Argyrosomus regius</i>), perforated and without spinal processes, probably a bead or pendant.	16	Under house	MPROM
469	Well finished, decorated ceramic playing counter and 1.7 kg of sherds (MNI = 29; average 28 g), including one with traces of deliberate breakage, and a sherd of Frisian origin.	?	Outside, in layer or in house podium	MPROM
470	Wooden bowl, spit rest and sherds (unburnt), including one with traces of deliberate breakage.	8	Inside, near hearth	MPROM
473	Sheep skull (missing) and shiny fossil sea urchin (<i>Echinocorys conica</i>). Not on the field drawing, but most likely from this level.	?	?	MPROM?
474	Well finished ceramic playing counter, bone spindle whorl and several sherds.	8	Inside	MPROM
912	Nearly complete pot (V3 used as cooking pot), awl of pig bone and several sherds.	13	Inside, against wall	LPROM
920	Small wooden 'sword' (missing), probably a weaving sword.	13	Outside, <5 m	LPROM
1004	Bone needle.	15	Inside	LPROM
1006	Piece of fabric (missing) and glass bead.	15	Inside, in byre	LPROM
1010	Small, decorated wooden board.	15	Inside, in byre	LPROM
1012	Ceramic spindle whorl and several sherds.	15	Inside	LPROM
1013	Piece of fabric (missing).	15	Inside	LPROM
1128	Piece of fabric.	12	Inside, in byre	M/LPROM
1129	Large piece of flint (251.3 g), used for hammering.	12	Inside, in byre	M/LPROM
1133	Small pot without rim.	12	Inside	M/LPROM
1360	Two spindle whorls and sherds.	2	Inside, in byre	MPROM
1361	Wooden bowl (missing).	2	Inside, in byre	MPROM
1362	Large part of small pot (K1) and 1.8 kg of sherds (MNI = 18; average 31 g).	4	Outside, <5 m	MPROM
1429	Complete miniature pot, two nearly complete large pots (Gw4a), probably deposited complete, and large part of a large pot (Gw4b), a dog skull (missing), and a hammer axe from the late Bronze Age, with traces of use as a hammer.	9	Inside	LPROM
1430	Iron chisel.	9	Inside, in byre	LPROM
1431	Fragment of a human skull.	9	Inside, in byre	LPROM
1432	A large pot (G3a), deposited complete.	9/10	Inside or outside in rectangular enclosure, <5 m	LPROM, 2nd BC
1434	Bird bones are recorded in the finds book. There is one bone (a tarsometatarsus) of a crane (<i>Grus grus</i>) with this find number.	9	Inside, in byre	LPROM
1445	Complete and nearly complete large pot, and a nearly complete small pot (Ge4, Gw4a, K2/3). See also no. 1423 (level P).		Outside, in rectangular pit	LPROM/EROM
1452	Upper part of a human skull.	10	In platform or under wall	MPROM
1453	Two ceramic playing counters, and a "crate full of sherds and bones", found in a dung layer while digging to a deeper level, so not from a closed context. Many sherds are weathered.	10	Outside, <5 m	MPROM
1459	Two pieces of fabric.	15	Inside	M/LPROM
1468	Ceramic spindle whorl and over 12 kg of sherds (MNI = 38; average 31 g).	15	Inside	M/LPROM
1557	Loom weight and two sherds.	9	Inside	LPROM, 2nd BC
1560	Human bones and sherds (all missing).	10	Inside, in byre	MPROM

No number (1)	Icon of supine human skeleton on field drawing of deeper level.	15	Inside/under house	LPR0M
No number (2)	A supine human skeleton with a forked branch beside it, of which only the upper part was excavated.	?	Outside?	LPR0M

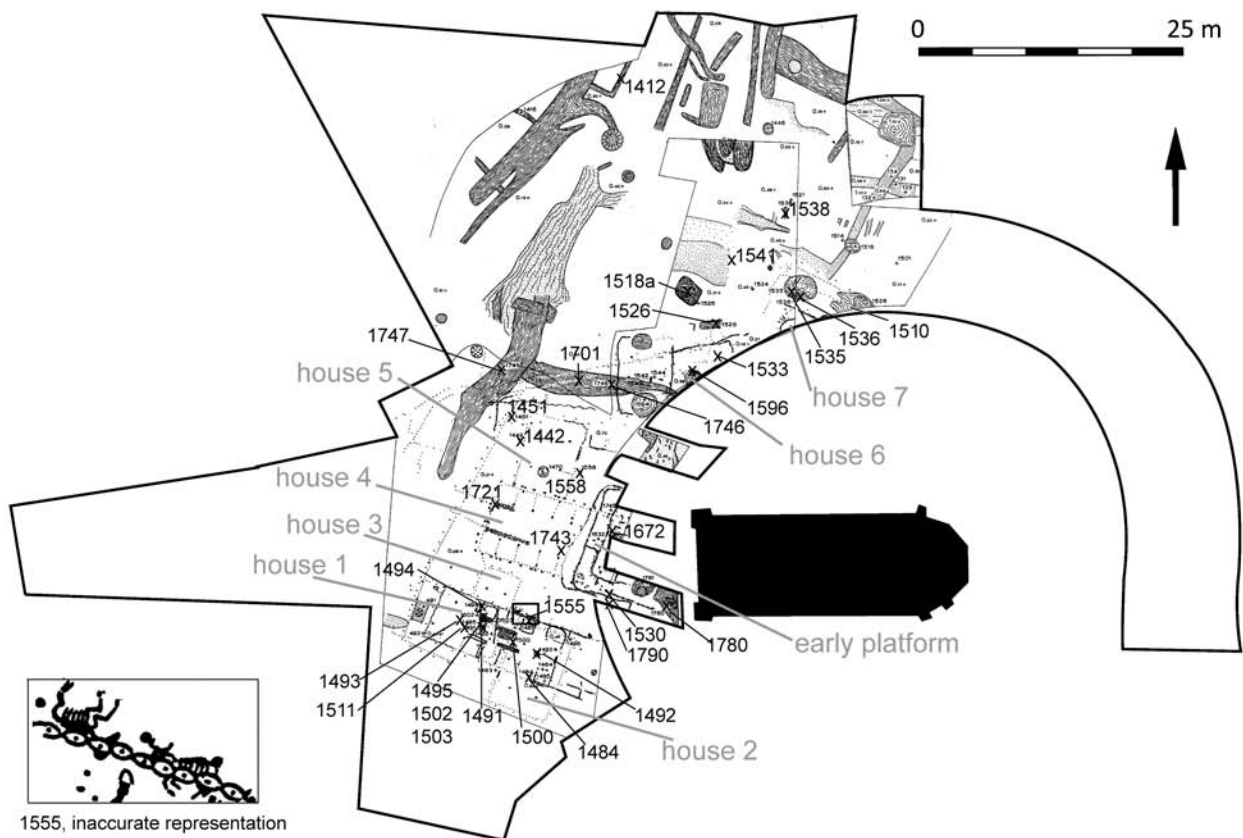
Level T



find no.	description	house no.	location	date
475	Bone spindle whorl and wooden peg (spindle?).	8	Outside, near wall	MPROM
478	Round/cubical lapstones.	3/8	Outside, <5 m	MPROM
484	Small wooden, worked board with handle, probably used to serve food.	8	Inside, against wall	MPROM
487	'Clothes' (missing).	8	Inside, near hearth	MPROM
506	Brooch (location, compare level Q).	16	Inside	LPR0M
1280	Two round/cubical lapstones.	8	Inside	MPROM
1370	Whetstone and some sherds.	2	Inside	MPROM
1487	Small pot (K1), deposited complete.		Outside	MPROM
1501	Ceramic playing counter and sherds, probably not all found together.		Outside	MPROM
1512	Two half horn combs (both drawn complete on the field drawing), on and near a pile of wickerwork		Outside	MPROM
1518/ 1518a	A large part of two large pots (G3a; G3b), a used cattle metacarpus and 1.5 kg of sherds (MNI = 13; average 51 g).	9	Outside, in large pit	MPROM
1547	Some sherds, one with traces of deliberate breakage, and a used cattle metatarsus.	10	Inside	MPROM

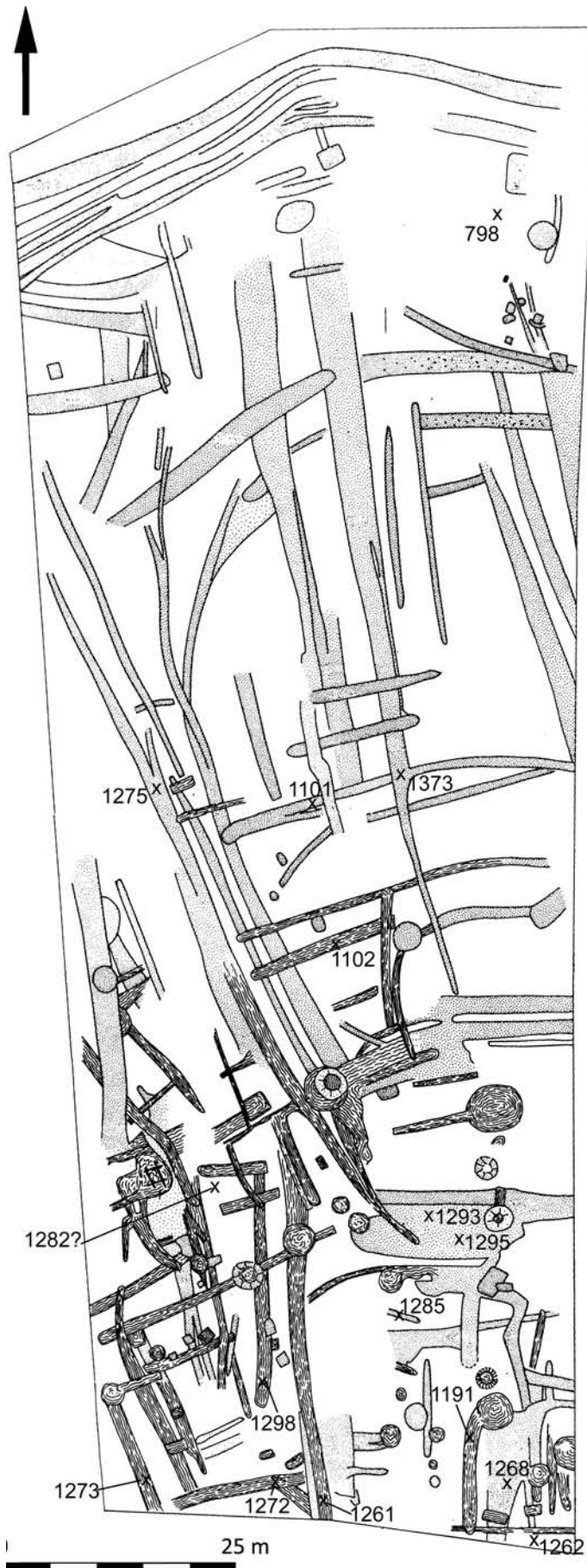
1563	Two horn combs (one complete, one half) and a bronze ring (missing).	10	Inside, under floor	MPROM
1565	Dog skull and two sherds.	9	Inside	MPROM
1569	Skeleton of a dog, the "toes somewhat deeper than the head" according to the finds book, and some sherds.	9	Inside	MPROM
1577	Ceramic spindle whorl, large part of large pot (G3b) with paint stripes and 1.4 kg of sherds (MNI = 9; average 45 g).	9	Inside, in byre	MPROM
1578	Horn comb (missing).	9	Inside	MPROM
1579	Needle (missing).	9	Inside, in floor	MPROM
1587	Enterolith of a horse.	9	Between the stakes of the wall directly east of the threshold of one of the house phases	MPROM
1590	Braided horsehair and rope.	9	Inside, in floor	MPROM
1591	Bone spindle whorl and handle (latter is missing).	9	Under the post west of the same threshold as no. 1587	MPROM
1592	Small pot.	(9)	Deep under the house	MPROM

Level UV



find no.	description	house no.	location	date
1412	Small pot (missing).		Outside, in a small ditch	probably EROM
1442	Ceramic spindle whorl and some sherds.	5	Outside, <5 m	MPROM
1451	Nearly complete, very large pot (G3b; rim ø 32 cm; H 43 cm), probably deposited complete.	5	Outside, <5 m	MPROM

1484	Antler tool (short awl).	1	Inside	MPROM
1491	Round/cubical stone.	1	Inside, in hearth	MPROM
1492	Antler tool (awl) and two round/cubical stones.	1	Inside, in hearth	MPROM
1493	Round/cubical stone (deeper level than previous number).	1	Inside, in hearth	MPROM
1494	Wooden 'spade', perhaps a paddle (only on field drawing).	1	Inside, on floor	MPROM
1495/ 1502/ 1503	Two lateral segments of two wooden disc wheels and the central part of one of these wheels on a black burnt layer (Van der Waals 1964, 110-111).	1	Inside, on the floor near the hearth	MPROM
1500	Piece of fabric and bone handle (latter is missing).	1	Inside	MPROM
1510	Bronze ring with two burnt beads, which were found in the middle of the fill and probably came with the fill. Not included as ritual deposit.		High in the fill of a well	LPROM
1511	Round/cubical lapstone (same level as 1493).	1	Inside	MPROM
1518a	See level T.			
1526	Small pot (K1), deposited complete.	6	Outside, in ditch	MPROM
1530	Amber bead.		In the first platform	MPROM
1533	Horsehair and rope (both missing).	6	Inside, under floor	MPROM
1535/ 1536	Nearly complete cooking pot with residue (G3a, no handles), some sherds and cattle metatarsus.		Outside, in the fill of a well	MPROM
1538	Partial human skeleton in grave pit.	6/7	Outside, ca. 10 m	MPROM
1541	Bronze hairpin and a sherd.	6/7	Outside, ca. 10 m	MPROM
1546	Bone spindle whorl and some sherds, all unburnt (not on drawing).	1	Inside, in hearth	MPROM
1555	The famous building sacrifice of Ezinge. Although Van Giffen later described it as large parts of the skeletons of a horse, a cow and a <i>dog</i> (Van Giffen 1963, 246-248), the finds book describes them as the skeletons of a cow, a horse and a <i>sheep</i> . It is likely that Van Giffen later confused the species. The bones were not collected. Excavation photos (fig. 4.2) do not show leg bones, only skulls and the spine of the larger animal and a series of vertebrae of the smaller animal on the outside of the wall. These partial animals were probably not buried under the wall, as the drawing by Praamstra suggests (see inset on the above map).	1	Outside, against or partly under the wall	MPROM
1558	Loom weight.	5	Outside, <5 m	MPROM
1561	Three ceramic playing counters and over 4 kg of sherds (MNI = 13; average 31 g). Reported to be found under the sods of a platform, under a (partial or complete) sheep. Number or sheep not noted on field drawing.	?	In or right under platform	MPROM
1596	A bone spindle whorl and half of a ceramic weight.	6	Inside	MPROM
1672	Complete pot apart from the rim (G1 or G2), ceramic playing counter and over 3 kg of sherds (MNI = 4; average 49 g).		In the first platform	MPROM
1701	Human skull fragment, bones of several animals (dog, pig, cattle, sheep), some cockle shells, an unused whetstone and a broken and burnt whetstone, and sherds.		in the upper fill of a creek	MPROM
1721	Unworked flint nodule (24.8 g), unburnt (at a deeper level than this drawing).	4	In hearth	MPROM
1743	Loom weight and some sherds. Building sacrifice according to the finds book, in or with a large basket (missing).	4	In house platform	MPROM
1746	Dog skull (missing), loom weight and two sherds.		In one of the arms of a creek	MPROM
1747	Dog skull (missing) and some sherds.		In another arm of the same creek as no. 1746	MPROM
1780	Human skull part worked into a small bowl, ceramic playing counter and two fitting sherds with traces of deliberate breakage.	?	In a large pit	EROM
1790	Ceramic spindle whorl (pumpkin shaped).		In the first platform	MPROM



Northern trench

In the large trench in the northern part of the terp, only one level was excavated. Most features seem to be dug into the natural subsoil, but in the southern part, closer to the centre of the terp, terp layers were still in situ. A relatively small number of finds were collected, which makes it difficult to date features. The oldest features can be dated to the late pre-Roman Iron Age. Numerous wells in this trench belong to early medieval occupation, which was no longer situated in the centre of the terp as in earlier periods, but rather on its flanks.

find no.	description	house no.	location	date
798	TS sherd*.		Outside	MROM
1101	Antler tool.		Ditch	?
1102	Skull of cattle and calf.		Ditch	?
1191	Complete miniature pot and sherds, among them a sherd of Frisian origin.		Ditch	EROM
1261	Nearly complete pot and sherds, some with paint and some with traces of deliberate breakage, and burnt stone.		Ditch	MROM 2nd AD
1262	Over 2.6 kg of sherds (MNI = 7; average 112 g), including sherds with traces of deliberate breakage.		Ditch	LPRM/ EROM
1268	Complete small pot (K2), 1.3 kg of sherds (MNI = 8; average 46 g), including a base with a secondary hole and traces of deliberate breakage, and a dog metatarsus.		Layer?	EROM
1272	Large, nearly complete pot with perforated base (Gw4), small pot (atypical) and half a large pot (Gw5), with some sherds. All pots have paint stripes from the base.		Ditch	EROM
1273	1.7 kg of potsherds (MNI = 12; average 127 g), including sherds from six pots made by the same potter with traces of deliberate breakage.		Ditch	EROM
1275	Miniature pot and 'sherds and bones' (missing).		Ditch	EROM
1282	Human skull (also recorded as: skull of a child). No. 1282 is not on the map; it is probably one of two numbers 1283. The number on the drawing is the most likely location.		Layer?	?
1285	Two large pots (Gw5), both nearly complete, and a cattle metatarsus.		Ditch	EROM
1293	TS sherd*.		Probably layer	MROM
1295	Brooch, TS-sherd*, which fits a sherd from 1298 (see next no.) and possibly from K-1091, and a sherd of a Waasland grey (<i>terra nigra</i> -like) jar.		Probably layer	MROM
1298	Two TS-sherds*, both worked after breaking, fitting a sherd from 1295 (see previous no.), and possibly from K-1091.		Ditch	MROM
1373	Sheep skull (missing) and sherd.		Ditch	EROM or younger

B.2 TABLES

The tables include most of the finds mentioned in the previous overview. A small number of finds from the middle/late Roman Iron Age are omitted since they probably fall outside the actual research period. Finds that cannot be dated (I-753) or which are not from closed contexts (L-1111 and 1144) are also left out, just as most of the unworked animal bones, unnumbered piles of wood, assemblages of ordinary potsherds weighing less than 1 kg, and burnt stones that probably belonged to a hearth (O-862). In view of the sherds that have gone missing after the excavation, all pots that have survived for 50% or more are counted as one. One pot with paint, of which four large sherds remain (N-1205), was counted as one, because it would otherwise not be represented in the tables. Non-quantifiable finds (e.g. fabrics, rope, numbered collections of wooden beams and planks and large deposits of sherds) are also counted as one. The occurrence of potsherds with characteristics that may be related to ritual practices, such as paint, traces of deliberate breaking or perforated bases is recorded per find number in table B.1, but such sherds are not counted.

Section B.4, at the end of this Appendix, presents the results of some statistical probability tests on the differences between periods in the number of inside and outside deposits and deposited objects, and in single and composite deposits.

Table B.1 Overview of artefacts in possibly ritual deposits

Abbreviations

OBJECTS

am	amber (unworked)
ant	antler object
be	bead
bi	bird
bo	bowl/dish or worked board
bon	bone object
br	brooch
bu	burnt stone
buz	buzzer
c	cattle
cfb	cattle foot or anklebone
ch	cattle horn
cm	cheese mould, sieve or funnel
cma	cattle mandible
cme	cattle metapodium
co	comb (horn or bone)
cr	crucible
crem	cremation remains
cs	cattle skull
cu	round/cubical stone
db	deliberate breaking
d	dog
dec	decorated wood
ds	dog skull
fa	(piece of) fabric/clothing
fi	fishbone
fl	flint
fos	fossil
fs	fox skull
h	horse
ha	handle
hai	human hair
hbo	human bone object
hfb	horse foot or anklebone
he	horse enterolith
hh	horsehair
hme	horse metapodium
inv	inverted
ir	iron object
li	lid/baking sheet or disc with central hole

lw	(loom) weight
m	miniature
ne	needle
pa	painted pottery
pb	perforated base
pc	playing counter or piece
pe	peg or spindle
pi	(hair) pin
pol	polishing stone
ri	ring or neck ring
ro	rope
rq	upper or lower part of rotary quern
s	small
sh	sheep
shh	sheep horn
shs	sheep skull
sl	sling stone or clay ball
sp	spade (wood)
sr	spit rest
sw	spindle whorl
ts	terra sigillata fragment
wh	whetstone
wx	number of wooden beams or planks
x	present
y	yoke

LOCATIONS

b	in a byre
re	rectangular enclosure
f	on a floor
fe	near a fence
h	in/near a hearth
H	directly associated with a house
O	at some distance of a house
t	near a threshold
u	under a house/in a platform
w	associated with wall
x	not counted

1533	6	H/u															hh ro
1535/ 1536		O/well				1cme	1										
1538	6/7	O 10m	<1														
1541	6/7	O 5-10m										1pi					
1546	1	H/h											1sw				
1547	10	H								db			1cme				
1555	1	H/w				c, h, sh											
1558	5	O <5m											1lw				
1560	10	H/b		x													
1561		platform			sh					4kg			3pc				
1563	10	H/u										1ri	2co				
1565	9	H				1ds											
1569	9	H			d												
1577	9	H/b					1			1.4kg pa			1sw				
1578	9	H											1co				
1579	9	H											1ne?				
1587	9	H/t				1he											
1590	9	H															hh ro
1591	9	H/t											1ha 1sw				
1592	9	H/u						1s									
1596	6	H											1lw 1sw				
1672		platform					1			3kg			1pc				
1701		creek		1											2wh		
1721	4?	H/h															1fl
1743	4	H/u											1lw				
1746		creek				1ds							1lw				
1747		creek				1ds											
1790		platform											1sw				

Middle to Late Pre-Roman Iron Age (3rd-2nd century BC)

n = 8

vnr	house	location	human skeleton	human bone	animal skeleton	animal part	large/medium pot or bowl	small or miniature pot	potsherds	wooden wheel, part	wooden object	metal object	ceramic object	bone or antler object	stone tool	ancient stone object	miscellaneous
408	4/ 11/ 16	O 5-10m									1pe			2sw			
1128	12	H/b															fa
1129	12	H/b														1fl	
1133	12	H						1s									
1141	2	H/b					1										
1178	2	H/b								2	wx						
1459	15	H															fa
1468	15	H							>12 kg				1sw				

Late Pre-Roman Iron Age (2nd-1st century BC)

n = 63

vnr	house	location	human skeleton	human bone	animal skeleton	animal part	large/medium pot or bowl	small or miniature pot	potsherds	wooden wheel, part	wooden object	metal object	ceramic object	bone or antler object	stone tool	ancient stone object	miscellaneous
88	15/18	O <10m				1shh											
90	15/18	O <10m															hh
94	15/18	O <10m										1br					
97	15/18	O <10m				1ch											
103	15	O <5m											1sw				
116	15	O <5m										1ne					
202	11	H							db			1cm		1wh			
208	11	H						1s						1cu + 1			
379	21	H						1s									
407	16	H/b						2m									
414	3	H/b									yo						
433	4	O <5m									wx						
506	16	H										1br					
803	22	H/u	1														
890	13	H					1										
897	?	O/pit <5m				2hme		3s									
903	12/13	O <5m							3kg pb								
905	13	H								1							
907	12/13	O <5m					1										
909	12/13	O <5m									1			1buz			
912	13	H/w					1							1bon			
915	13	H															fa
919	15	O <5m					2										
920	13	O <5m									1						
923	15	O <5m		crem		x											
924	15	H									wx						
930	17	H					1										
936	15	H/w						1m	pa								
1001	15	H															fa
1004	15	H												1ne			
1006	15	H/b															1be fa
1010	15	H/b									dec						
1012	15	H										1sw					
1013	15	H															fa
1110	3	O <5m						1s					1sw				
1114	12	O <5m				3cme		1s	1.1kg								
1116	12	H/b						1m									
1120	12	O <5m						1s									
1142	4	H/b						1s									
1143	4	H/b					1 (inv)										
1150	3/4	O <5m				c											
1258	4	H/w				1cme					x			1cme	1wh		
1259	4	O <5m															fa
1260	4	H/b						1s									
1279	22	O <5m										1br					

810	29	O <5m											1br							
826	28	H					1													
828	29	H					1													
832	28	O <5m					1													
834	29	H						1m						2li	1be					
1096	31?	plat- form					1		1kg											1be
1103	27	H				1cme	1	1s	pa					<1li						
1104	27	H/h		1hbo		1cme	1							(<1li)	1ha					
1105	25	H											1bo	(<1li)						
1177	27a	H				1ds 1fs														
1253	27a	O <5m						1s												
1256	27a	O <5m					1		pa											
1646	?	O <10m			whelk															
1647	?	O <10m				1cs														
1650	?	O <10m					1		1.2kg pa											
1651	?	O <10m				1ds														

Middle Roman Iron Age (2nd-3rd century AD)**n = 107**

vrnr	house	location	human skeleton	human bone	animal skeleton	animal part	large/medium pot or bowl	small or miniature pot	potsherds	wooden wheel, part	wooden object	metal object	ceramic object	bone or antler object	stone tool	ancient stone object	miscellaneous	
25	30	H/h				1ds	1						1ts/ pc					
28	30	O <5m											1ts					
30	30	O <5m											1ts					
32	30	?											1cm					
33	30	O <5m					1											
34	30	O <5m						1s					1ts					
35	30	H					1											
36	30	O <5m				4cfb								1cfb 1hfb				
37	30	O 5-10m						1m										
38	30	O <5m											1ts					
39	30	O <5m											1ts					
40	30	O 5-10m											1ts					
41	30	O 5-10m											1ts					
42	30	O 5-10m											1ts					
43	30	O 5-10m											1ts					
44	30	O 5-10m											1ts					
45	30	O <5m													1wh			
46	30	O/re <5m											1lw					
47	30	O 5-10m			1sepia													
50	30	O/re <5m													1wh			
150	11	O <5m											1ts	1sw				
151	11	H/w						2s										
152	11	H					1						1pc					
153	11	O <5m						1s					2sw					

Table B.2 Type and number of objects possibly deposited during ritual events, per period

	MPROM		LPROM		EROM		MROM		All periods	
	n	%	n	%	n	%	n	%	n	%
number of possibly ritual events during which were deposited (number of objects)	71		71		73		135		350	
human skeleton	1	1	3	3	2	1	4	2	10	1.6
human remains										
<i>unworked bone or fragment</i>	3	3	1	1	3	2			7	1.1
<i>worked fragment</i>			1	1	2	1	1	0.4	4	0.6
<i>deposit with cremated bones</i>			1	1					1	0.2
<i>hair</i>					1	1			1	0.2
animal skeleton										
<i>horse</i>	1	1					1	0.4	2	0.3
<i>cattle</i>	1	1							1	0.2
<i>sheep</i>	2	2			1	1			3	0.5
<i>dog</i>	1	1							1	0.2
<i>whelk/sepia</i>							2	1	2	0.3
animal remains										
<i>cattle skull</i>					2	1	1	0.4	3	0.5
<i>cattle horn</i>			1	1	1	1			2	0.3
<i>cattle mandible</i>					1	1			1	0.2
<i>cattle metapodium</i>	1	1	4	4	10	7	8	3	23	3.7
<i>cattle foot bone</i>	3	3			5	3	4	2	12	1.9
<i>cattle bones</i>			1	1					1	0.2
<i>dog skull</i>	3	3	1	1			4	2	8	1.3
<i>fox skull</i>							1	0.4	1	0.2
<i>horse bones</i>							1	0.4	1	0.2
<i>horse enterolith</i>	1	1							1	0.2
<i>horse metapodium</i>			3	3	1	1			4	0.6
<i>horsehair</i>	2	2	1	1	1	1	1	0.4	5	0.8
<i>sheep skull</i>	1	1							1	0.2
<i>sheep bones</i>							1	0.4	1	0.2
<i>sheep horn</i>			1	1					1	0.2
<i>bird bones</i>			1	1					1	0.2
bone/antler/horn object										
<i>antler object</i>	2	2			2	1	1	0.4	5	0.8
<i>bone object</i>	1	1	1	1	1	1	2	0.8	5	0.8
<i>handle</i>	2	2			1	1	4	2	7	1.1
<i>comb</i>	5	4							5	0.8
<i>spindle whorl</i>	6	5	2	2	3	2	1	0.4	12	1.9
<i>bone needle</i>	1	1	1	1	1	1			3	0.5
<i>buzzer/bead/button</i>			1	1	1	1	1	0.4	3	0.5
<i>worked fish bone</i>	1	1							1	0.2
<i>used cattle metapodium</i>	2	2	1	1			1	0.4	4	0.6
<i>used/worked cattle foot bone</i>							1	0.4	1	0.2
<i>used/worked horse foot bone</i>					1	1	1	0.4	2	0.3
pottery										
<i>medium/large pot</i>	6	5	18	16	35	24	26	10	85	13.6
<i>dish</i>					1	1			1	0.2
<i>small pot</i>	4	3	15	14	17	12	30	12	66	10.5
<i>miniature pot</i>			5	5	5	3	13	5	23	3.7
<i>>1 kg of sherds</i>	7	6	4	4	10	7	12	5	33	5.3
ceramic object										
<i>playing counter</i>	15	13			4	3	2	1	21	3.3
<i>loom weight</i>	5	4	1	1	7	5	35	14	48	7.7
<i>spindle whorl</i>	6	5	5	5	4	3	9	4	24	3.8
<i>clay ball and sling stone</i>			1	1			2	1	3	0.5

	<i>cheese mould</i>			2	2			2	1	4	0.6
	<i>lid/baking sheet/perforated disc</i>					2	1	6	2	8	1.3
	<i>terra sigillata fragment</i>							50	20	50	8.0
	<i>spit rest</i>	1	1					1	0.4	2	0.3
wooden objects											
	<i>wheel, partial</i>	3	3	3	3	3	2			9	1.4
	<i>bowl or worked board</i>	3	3			2	1	1	0.4	6	1.0
	<i>yoke</i>			1	1					1	0.2
	<i>decorated wood</i>			1	1					1	0.2
	<i>peg/spindle</i>	2	2	1	1			1	0.4	4	0.6
	<i>spade</i>	1	1							1	0.2
	<i>other objects</i>			3	3					3	0.5
	<i>pile of wood (beams, planks)</i>			3	3					3	0.5
metal objects											
	<i>iron object</i>			1	1	1	1			2	0.3
	<i>brooch</i>			3	3	2	1	2	1	7	1.1
	<i>bronze (hair) pin</i>	1	1					2	1	3	0.5
	<i>bronze bead?</i>							1	0.4	1	0.2
	<i>bronze (neck)ring</i>	1	1	1	1			1	0.4	3	0.5
	<i>bronze needle</i>			1	1					1	0.2
stone artefacts											
	<i>round/cubical lapstone</i>	9	8	1	1	1	1	1	0.4	12	1.9
	<i>whetstone</i>	3	3	3	3	2	1	4	2	12	1.9
	<i>part of rotary quern</i>							3	1	3	0.5
	<i>other stone objects</i>			1	1			5	2	6	1.0
ancient stone object											
	<i>flint</i>	2	2	1	1	3	2	2	1	8	1.3
	<i>ancient tool</i>			1	1					1	0.2
	<i>fossil</i>	1	1			1	1			2	0.3
miscellaneous											
	<i>fabric</i>	4	3	8	7	2	1			14	2.2
	<i>glass/amber bead</i>	1	1	1	1			3	1	5	0.8
	<i>rope</i>	3	3			1	1			4	0.6
	<i>unworked amber</i>							1	0.4	1	0.2

Table B.3 Objects in possibly ritual deposits per type of context

Abbreviations: CFB = cattle foot bone; HFB = horse foot bone; lid etc = lid/baking sheet/perforated disc; TS = terra sigillata.

	MPROM						LPROM													
	associated with house						associated with house													
							outside			outside										
							0-10 m		>10 m	0-10 m										
	in floor or platform	hearth	wall	near threshold	byre	on floor/in pit	unclear	pit or well	fence/enclosure	layer or unclear	creek/ditch	layer or unclear	in floor or platform	wall	byre	on floor/in pit	unclear	pit	fence/enclosure	layer or unclear
human skeleton									1			2								1
human remains														1			1			
unworked bone	1					1					1									
worked fragment																				
cremated bones																				1
hair																				
animal skeleton																				
horse			1																	
cattle			1																	
sheep	1		1																	
dog	1																			
sepia/whelk																				
animal remains																				
cattle skull																				
cattle horn																				1
cattle mandible																				
cattle metapodium								1					1							3
cattle foot bone	2								1											
cattle bones																				1
dog skull	1										2	1								
fox skull																				
horse bones																				
horse enterolith				1																
horse metapodium												1					2			
horsethair	2																			1
sheep skull							1													
sheep bones																				
sheep horn																				1
bird bones														1						
bone/antler object																				
antler object	1	1																		
unspecified bone tool	1												1							
handle	1			1																
comb	3										2									
spindle whorl	2	1	1	1	1															2
bone needle	1											1								
buzzer/bead/button																				1
worked fish bone	1																			
used cattle metapodium	1							1					1							
used /worked CFB																				
used/worked HFB																				
pottery																				
medium/large pot	1				1		3	1				5	1	2	4		1	1	4	
dish																				
small pot	1							1		1	1	3		2	2		4			4
miniature pot												2	1	2						

	EROM										MROM									
	associated with house					unclear	outside				associated with house				unclear	outside				
	in floor or platform	wall	near threshold	byre	on floor/in pit		0-10 m	>10 m			in floor or platform	hearth	wall	on floor		0-10 m	>10 m			
						pit	layer or unclear	ditch	pit	layer or unclear					pit	fence/enclosure	layer or unclear	creek/ditch	grave/pit	layer or unclear
human skeleton							1	1										2		
human remains																				
unworked bone								3												
worked fragment							1	1				1								
cremated bones																				
hair								1												
animal skeleton																				
horse																1				
cattle																				
sheep					1															
dog																				
sepia/whelk																		2		
animal remains																				
cattle skull							1	1										1		
cattle horn								1												
cattle mandible							1													
cattle metapodium	1			6				2	1		1	1	1					5		
cattle footbone								4		1								4		
cattle bones																				
dog skull											2	1						1		
fox skull											1									
horse bones																		1		
horse gastrolith																				
horse metapodium				1																
horsehair								1			1									
sheep skull																				
sheep bones											1									
sheep horn																				
bird bones																				
bone/antler object																				
antler object		1	1															1		
unspecified bone tool									1					1				1		
handle		1									1	1	2							
comb																				
spindle whorl	2								1									1		
bone needle							1													
buzzer/bead/button		1									1									
worked fish bone																				
used cattle metapodium																		1		
used /worked CFB																		1		
used/worked HFB							1											1		
pottery																				
medium/large pot	9					1	11	9	5		13	3				2	6	1	1	
dish							1													
small pot	4					1	2	8	1	1	11		5			2	10			2
miniature pot	1							2	2		9		2	1			1			

Continuation table B.3																				
	MPROM										LPROM									
	associated with house						unclear	outside				associated with house				unclear	outside			
	in floor or platform	hearth	wall	near threshold	byre	on floor/in pit		0-10 m		>10 m		in floor or platform	wall	byre	on floor/in pit		0-10 m			
							pit or well	fence/enclosure	layer or unclear	creek/ditch	layer or unclear					pit	fence/enclosure	layer or unclear		
>1 kg of sherds	2				1		1		2					1			1	2		
ceramic object																				
playing counter	5		2	3			1		3		1									
loom weight	2							1	1	1	1									
spindle whorl	1			1	2				2					3				2		
sling stone																	1			
cheese mould														1			1			
lid etc																				
TS fragment																				
spit rest		1																		
wooden objects																				
wheel, partial						3							1		2					
bowl or worked board		1	1		1															
yoke															1					
decorated wood															1					
peg/spindle			2															1		
spade						1														
pile of wood													1	1				1		
other objects																		3		
metal objects																				
iron object															1					
brooch													1					2		
bronze (hair) pin									1											
bronze bead?																				
bronze (neck)ring	1																	1		
bronze needle																		1		
stone artefacts																				
round/cubical lapstone	4	4							1				1							
whetstone	1									2		1	1					1		
part of rotary quern														1						
other stone objects																				
ancient stone obj.																				
flint		1							1						1					
ancient tool													1							
fossil							1													
miscellaneous																				
fabric	2								2				5		2			1		
glass/amber bead	1														1					
rope	2								1											
unworked amber																				
Total per context	42	9	9	7	7	4	4	6	1	18	7	4	33	6	18	6	1	10	1	35

	EROM										MROM											
	associated with house					outside					associated with house					outside						
						0-10 m		>10 m								0-10 m		>10 m				
	in floor or platform	wall	near threshold	byre	on floor/in pit	undear	pit	layer or unclear	ditch	pit	layer or unclear	in floor or platform	hearth	wall	on floor	undear	pit	fence/enclosure	layer or unclear	creek/ditch	grave/pit	layer or unclear
>1 kg of sherds ceramic object	3			1	1		1		3	1	4		1		1				5			1
playing counter	1		1				1	1			1										1	
loom weight						3		4			6			24	3		1	1				
spindle whorl	1						1	2			3					2		4				
clay ball and sling stone											2											
cheese mould											1				1							
lid etc	1							1			6											
terra sigillata fragment											4	1	1		5	1	3	30	2			3
spit-rest												1										
wooden objects																						
wheel, partial	2						1															
bowl or worked board								2			1											
yoke																						
decorated wood																						
peg/spindle											1											
spade																						
pile of wood																						
other objects																						
metal objects																						
iron object			1																			
brooch	2																	1				1
bronze (hair) pin																		2				
bronze bead?											1											
bronze (neck)ring													1									
bronze needle																						
stone artefacts																						
round/cubical lapstone	1										1											
whetstone					1						2						1	1				
part of rotary quern											1			1				1				
other stone objects													2		2					1		
ancient stone object																						
flint	1		2										1						1			
ancient tool																						
fossil							1															
miscellaneous																						
piece of fabric	1					1																
glass/amber bead																		2				
rope			1																			
unworked amber											1											
Total per context	30	3	6	8	3	9	26	42	13	0	3	77	9	17	26	12	8	5	87	4	6	5

Table B.4.b Associated and single objects from the late pre-Roman Iron Age. Total number of deposits D = 71; b/c = bone/ceramic; c/h = horse/cattle; metapodia: worked and unworked.

Associations LPRM	human skeleton	c/h metapodium	dog skull	bone implement	>1kg of sherds	large/medium pot	small pot	miniature pot	spindle whorl (b/c)	sling stone	cheese mould	wooden object	wheel part	cubical stone etc.	whetstone	ancient stone object	piece of fabric	bead	bone buzzer/button	Deposits of single objects	Number of deposits	% of D		
human skeleton	1											1								2	3	4		
c/h metapodium		3			1	2	1				1				1						4	6		
dog skull			1			1	1									1					1	1		
bone implement				1																	1	1		
>1kg of sherds		1			x	1	2	1	1												1	4	6	
large/medium pot			1	1	1	4	3	1		1						1					7	13	18	
small pot		2			2	3	1		1	1				1							6	13	18	
miniature pot			1			1		1								1					2	4	6	
spindle whorl (b/c)		1			1	1	1		1			1									2	6	8	
sling stone					1	1	1															1	1	
cheese mould																1						1	1	
wooden object	1	1							1							1			1		3	7	10	
wheel part																					3	3	4	
cubical stone etc.							1															1	1	
whetstone		1														1					1	2	3	
ancient stone object			1			1	1															1	2	3
piece of fabric																						7	8	11
bead																						1	1	
bone buzzer/button												1										1	1	
																						2	2	3
																						1	1	1
																						1	1	1
																						1	1	1
																						1	1	1
																						1	1	1
																						4	4	6
																						2	2	3
																						1	1	1
Total single finds																					51			

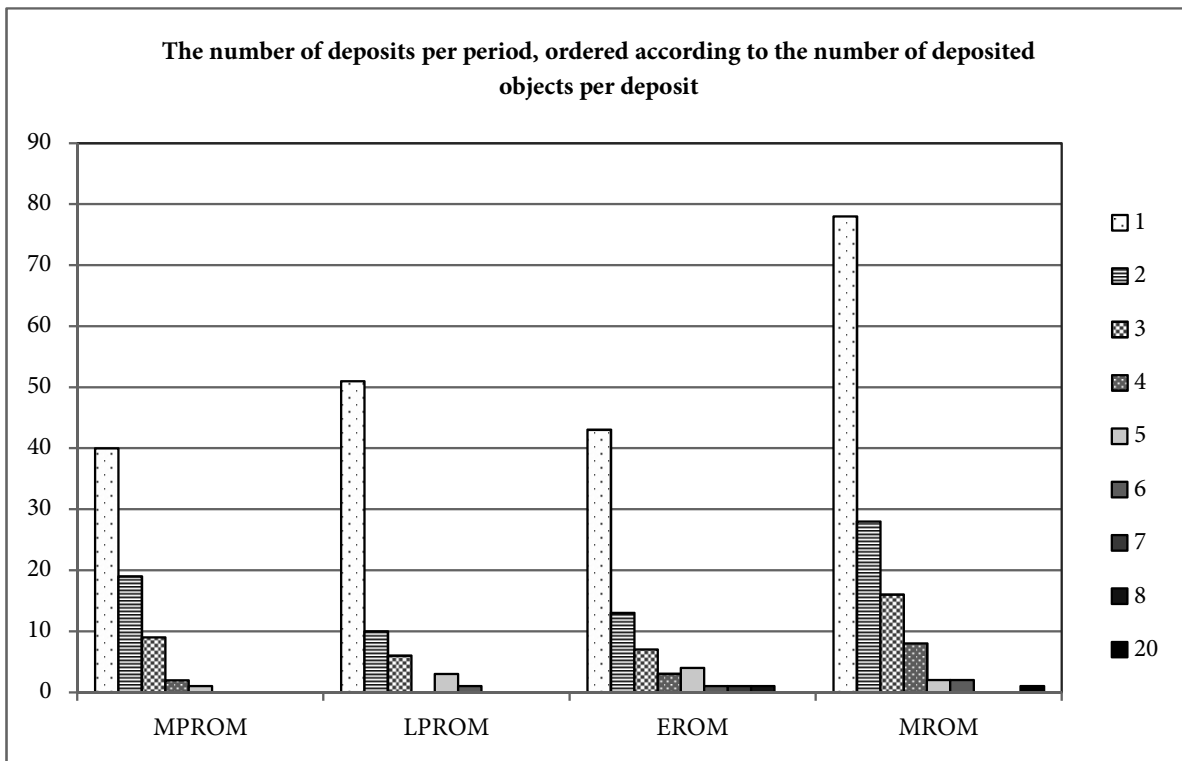
Table B.4.c Associated and single objects from the early Roman Iron Age. Total number of deposits D = 73; c/h = cattle/horse; b/c = bone/ceramic.

Associations EROM	human skeleton	human bone	cattle skull	c/h foot bone	cattle metapodium	cattle mandible	bone/antler tool	>1kg of sherds	large/medium pot	small pot	miniature pot	loom weight	spindle whorl b/c	lid etc.	playing counter	wooden bowl	wheel fragment	iron object	whetstone	ancient stone object	bronze jewellery	rope	antler playing piece	buzzer/button	Deposits of single objects	Number of deposits	% of D
human skeleton				1									1												1	2	3
human bone		1							1		1			1											1	4	5
cattle skull													1												1	2	3
c/h foot bone	1			1				1	3				1												1	5	7
c/h metapodium					2			2	2	2					1											4	5
cattle mandible										1		1														1	1
bone/antler tool													1												1	2	3
>1kg of sherds				1	2			x	3	3	1								1						3	10	14
large/medium pot		1		3	2			3	9	4	2	2			1						1				7	21	29
small pot					2	1		3	4	2		1		1	1	1									6	15	21
miniature pot								1	2				1												2	5	7
loom weight		1				1		2	1	1		2														5	7
spindle whorl b/c	1		1	1			1						1												3	6	8
lid etc.										1															1	2	3
playing counter		1			1				1	1								1		1		1			1	4	5
wooden bowl										1															1	2	3
wheel (fragment)																					1				2	3	4
iron object															1					1		1				1	1
whetstone							1																		1	2	3
ancient stone object															1	1	1			1		1			1	3	4
bronze jewellery								1																	1	2	3
rope															1		1		1						1	1	1
antler playing piece																									1	1	1
buzzer/button																								1	1	1	1
																					sheep skeleton				1	1	1
																					cattle horn				1	1	1
																					bone handle				1	1	1
																					bone needle				1	1	1
																					cubical stone				1	1	1
																					piece of fabric				2	2	3
																					human hair				1	1	1
																					horsehair				1	1	1
																					Total single finds				43		

B.3 Statistics

The validity of the conclusions made in chapter 11 partly depends on the comparability and the reliability of the data. Throughout the discussion, the data ordered according to four different periods, each with different ratios between deposits inside and outside houses, and between single and composite deposits. These different attributes are tested below. The data from the four different periods are considered as four different samples.

B.3.1 Inter-sample variation, considering single and composite deposits. All samples show the same type of distribution, which probably represents an aspect of depositional practice in these different periods: single deposits are always the most numerous and the number of objects per deposit is inversely proportional to the number of deposits. The p-value of 0.31 for all the data and the p-values that were calculated for the changes between the different period (all $> \alpha$) do not demonstrate significant variability between these samples.



	number of objects per deposit				total rows	p-value chi-square
	1	2	3	≥ 4		
MPROM	40	19	9	3	71	
LPROM	51	10	6	4	71	0.06
EROM	43	13	7	10	73	0.09
MROM	78	28	16	13	135	0.38
total columns	212	70	38	30	350	

$\alpha = 0.05$; chi-square all data: p-value 0.31.

B.3.2 Combination of the composite deposits of B.3.1 into one category of deposits of ≥ 2 deposited objects, results in clear patterning, in the number of deposits and even more so in the number of deposited objects. The changes from MPROM to LPROM and from LPROM to EROM are statistically significant. See also fig. 11.61.

Statistical probability of differences between numbers of single (1) and composite deposits (deposits containing ≥ 2 deposited objects), per period.

	Observed 1	Observed ≥ 2	Expected 1	Expected ≥ 2	total rows	chi-square test, p-value
MPROM	40	31	43	28	71	
LPROM	51	20	43	27	71	MPROM-LPROM: 0.038
EROM	43	30	44	29	73	LPROM-EROM: 0.050
MROM	78	57	82	53	135	EROM-MROM: 0.468
total columns	212	138			350	

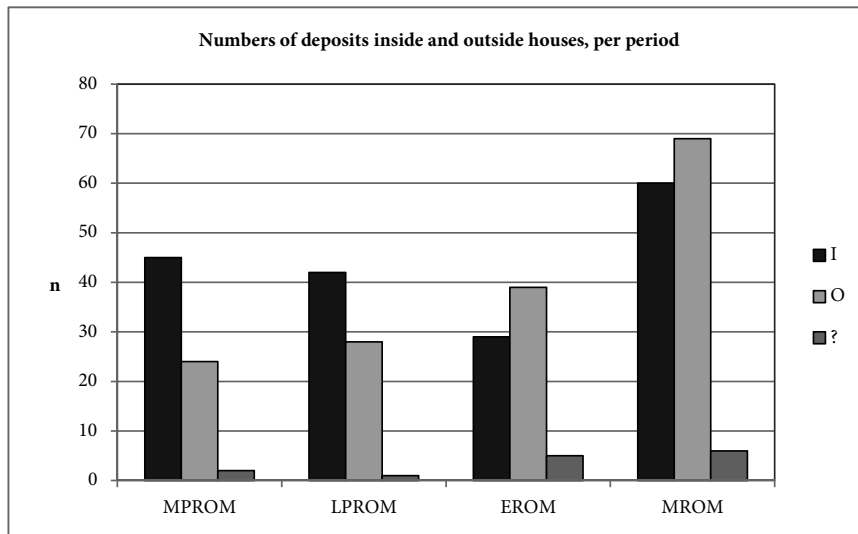
$\alpha = 0.05$; chi-square test all data: p-value 0.18

Statistical probability of differences between numbers of deposited objects in single (1) and composite (≥ 2) deposits, per period.

	Observed 1	Observed ≥ 2	Expected 1	Expected ≥ 2	total rows	chi-square test, p-value
MPROM	40	78	40	78	118	
LPROM	51	59	37	73	110	MPROM-LPROM: 0.005
EROM	43	100	48	95	143	LPROM-EROM: 0.003
MROM	78	178	87	169	256	EROM-MROM: 0.140
total columns	212	415			627	

$\alpha = 0.05$; chi-square test all data: p-value **0.019**

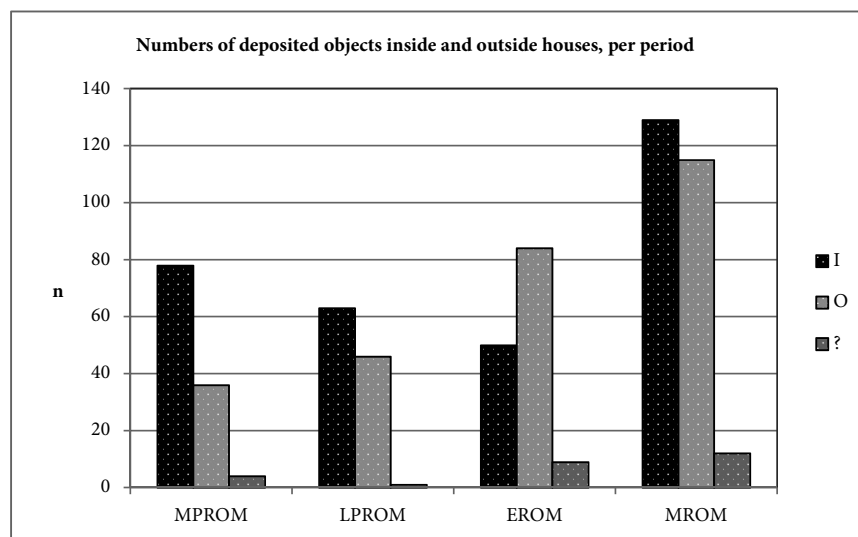
B.3.3 Ordering according to inside and outside deposits reveals significant differences on all levels, in the entire sample as well as between each pair of samples (periods). See table 11.9 and fig. 11.56 for percentages.



Statistical probability of differences between deposits inside (I) and outside (O) houses, per period.

	Observed I	Observed O	Expected I	Expected O	total row	chi-square test, p-value
MPROM	45	24	36	33	69	
LPROM	42	28	37	33	70	MPROM-LPROM: 0.013
EROM	29	39	36	32	68	LPROM-EROM: 0.040
MROM	60	69	68	61	129	EROM-MROM: 0.037
total column	176	160			336	

$\alpha = 0.05$; chi-square test all data: p-value < **0.02**



Statistical probability of differences between deposited objects inside (I) and outside (O) houses, per period.

	Observed I	Observed O	Expected I	Expected O	total row	chi-square test, p-value
MPROM	78	36	61	53	114	
LPROM	63	46	58	51	109	MPROM-LPROM: 0.001
EROM	50	84	71	63	134	LPROM-EROM: 0.000
MROM	129	115	130	114	244	EROM-MROM: 0.000
total column	320	281			601	

$\alpha = 0.05$; chi-square test all data: p-value < **0.001**

C

Catalogue of human remains from the terp region in the provinces of Friesland and Groningen

Introduction

All known human remains from the terp area, as far as dated to the research period, are described in this Catalogue of human remains. A small number of finds from other periods were added for comparison: some Bronze Age finds from before the colonization of the salt marshes started, and a number of finds from the early Middle Ages. The data provided by this catalogue are discussed and analysed in chapter 12.

Information in this catalogue is derived from many sources. Invaluable as a starting point was an unpublished master-thesis written by Egge Knol (1986b), in which all finds of human remains that were known to him, were described, though emphasizing early-medieval burials. Equally helpful was a catalogue of all human skulls of the Frisian Museum that were part of the so-called *Huizinga collection* (Knol & Uytterschaut 2010).

This information was completed with published excavation accounts and with unpublished data from archives, in particular the archives of the Groningen Archaeological Institute of the University of Groningen, of the archaeological depot of the three northern provinces (NAD) in Nuis, of the Groningen Museum and of the Frisian Museum (in particular the *Terpboeken*, handwritten descriptions of finds per terp, mostly by P.C.J.A. Boeles).

It was attempted to include all human remains from the research period in this catalogue. This aim was certainly not fully achieved, due to the long time span during which the finds were made, the circumstances during which the human remains were found, and the various ways in which they were recorded. While the list will thus not be complete, at the same time it is certainly too long, since many finds may actually be younger than the research period. It was not possible to radiocarbon date all finds and thereby reduce the time range to only some centuries.

The catalogue first lists the finds from the province of Friesland, and then from the province of Groningen (fig. C.1). Each entry in the catalogue is described following the same format:

- **Place name (Dutch/Frisian)**
- **Toponym**
- Municipality
- National coordinates (RD-coordinates)
- The number of the monument in the Dutch digital archaeological archive *Archis2* (CMA-number)

Administrative data are followed by separate finds per terp, numbered a,b etc.

- **a.** Description of the find.
- Specifications: Physical anthropological data.
- Date: arguments and conclusion (see below).

- Museum/find number.
- References.

Administrative data and description

Place names, toponyms and coordinates appeared surprisingly variable. The administrative information presented is based on original accounts and modern sources such as the national archaeological information system Archis 2. In the case of conflicting sources, the data provided by Galestin and Volkers (1992) were decisive. When *Village* is used as a toponym, it refers to the village on the present terp.

Descriptions

Descriptions of finds of human remains are as complete as possible. That implies that the information provided, which comes from a variety of sources, is highly variable. Since skulls were in many cases the only parts collected from complete skeletons, although without explicitly recording so, 'cranium' is often followed by 'skeleton?.'

Specifications

Under this heading, data from anthropological research are recorded, if available. Anthropological research was not the primary goal of this catalogue. In many cases the material evidence of the find was lacking entirely.

Date

Dates of the finds are based on available information, such as the location in the terp, stratigraphy, associated finds, pottery dates and radiocarbon dates. For the problems concerning the use of radiocarbon dates from this area, see chapter 12.

Dates are usually periods of several centuries. To avoid circular reasoning, the 4th century occupation gap (see chapter 3.2) is ignored in these dates. That is not to imply that the 4th century is as likely as earlier or later dates. It only means that on principal grounds, the 4th century cannot be excluded. Dates are abbreviated, following the chronology in chapter 1. All pottery descriptions and dates follow Taayke 1996a.

Museum/find-numbers

It was not always possible to find the material that is described in present collections. For future reference, find numbers and collection numbers have been added if they could be retrieved. Though collection numbers could usually be retrieved, in many cases the material itself was not available.

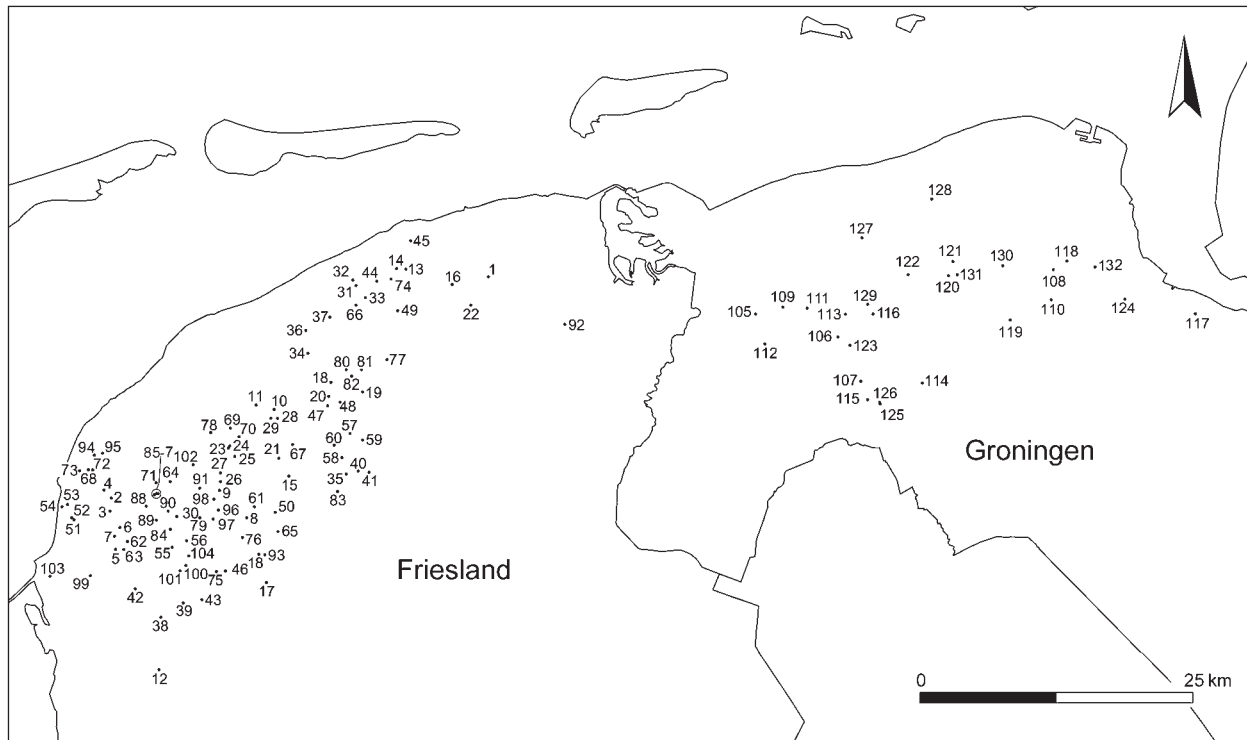


Fig. C.1 Locations mentioned in the catalogue.

FRIESLAND

1. Aalsum
2. Achlum-Gouden Kroon
3. Achlum
4. Achlum-IJslumburen
5. Arum-Allingastate
6. Arum-Timmenga
7. Arum-Baarderburen
8. Baard
9. Baijum
10. Beetgum-Beetgumermolen
11. Beetgum-Besseburen
12. Blauwhuis
13. Blija-Sytsma
14. Blija-Vaardeburen
15. Boksum
16. Bornwird
17. Bozum
18. Britsum
19. Britsumer Oudland
20. Cornjum
21. Deinum-Heechhimsreed
22. Dokkum-Drie Terpen
23. Dronrijp-Noord
24. Dronrijp-Schatzenburg
25. Dronrijp-Fûgellân
26. Dronrijp-Hatsum I
27. Dronrijp-Hatsum II
28. Engelum
29. Engelum-west
30. Fatum
31. Ferwerd-Burmania I
32. Ferwerd-Nieuwe terp
33. Ferwerd-Kloosterterp
34. Finkum

35. Goutum
36. Hallum-Mariëngaarde
37. Hallum-surrounding area
38. Hartwerd-Zijns
39. Hartwerd-Oldeclooster
40. Hempens-Teerns
41. Hempens-Glins
42. Hichtum-Wybrandastate
43. Hidaard-Sânleansterdyk
44. Hogebeintum
45. Holwerd
46. Itens
47. Jelsum
48. Jelsumer Oudland
49. Jislum
50. Jorwerd
51. Kimsward-Harlingerweg
52. Kimsward-Ljippeterp
53. Kimsward-Minnema-de With
54. Kimsward (northwest)
55. Kubaard
56. Kubaard-Barkwerd
57. Leeuwarden-Hoogterp
58. Leeuwarden-Huizum
59. Leeuwarden-Wijlaard
60. Leeuwarden-Oldehoofsterkerkhof
61. Lions
62. Lollum-Hizzard
63. Lollum-Groot Saksenoord
64. Lutjelollum
65. Mantgum-Tjeintgum
66. Marrum-De Beer
67. Marssum-Ritsumaburen
68. Menaldum-Graldastate

69. Menaldum-terp Hoek
70. Midlum-Hoogeterp
71. Midlum-Middelstein
72. Midlum-Gratingastate
73. Miedum
74. Oosterbeintum
75. Oosterend-northeast
76. Oosterlittens-Wammert
77. Oudkerk-Alde Miedwei
78. Slappeterp
79. Spannum
80. Stiens-Kramer
81. Stiens-Kalma
82. Stiens-Brandenburg
83. Techum-Oude Diep Zuid
84. Tritsum
85. Tzum-De Klaverbloem
86. Tzum-Holprijp
87. Tzum-De Kroon
88. Tzum-Greate Vlearen
89. Tzum-Groot Tolsum
90. Tzum-Groot Barrum
91. Welsrijp
92. Westergeest-De Zwemmer
93. Wieuwerd-Bessens
94. Wijnaldum
95. Wijnaldum-Tjitsma
96. Winsum-Bruggeburen
97. Winsum-Schelum
98. Winsum-Monnikebaaijum
99. Witmarsum-Hoogterp
100. Wommels-Stapert
101. Wommels-Westerlittens
102. Wommels-Walperd
103. Zürich-Kop Afsluitdijk

104. Zweins-near Kingmastate

GRONINGEN

105. Aalsum
106. Brillerij
107. Dorkwerd
108. Eenum
109. Englum
110. Enzelens
111. Ezinge
112. Frytsum
113. Garnwerd
114. Groningen-Beijum
115. Groningen-Friesestraatweg
116. Groot Wetsinge
117. Heveskesklooster
118. Leermens
119. Lellens-Borgweg
120. Middelstum-Boerdamsterweg
121. Middelstum
122. Onderendam-kleine wierde
123. Oostum
124. Opwierde-surrounding area
125. Paddepoel II
126. Paddepoel III
127. Rasquert
128. Usquert-Kloosterwijterd
129. Valcum
130. Westeremden
131. Westerwijterd-Noordoost
132. Wierhuizen

Abbreviations used in the catalogue

BAI	Biological Archaeological Institute of the University of Groningen (now GIA)
BKNOB	Berichten van de Koninklijke Nederlandse Oudheidkundige Bond (journal)
CMA	Centraal Monumenten Archief (Central Monuments Archive)
FM	Frisian Museum
GIA	Groningen Institute of Archaeology of the University of Groningen (former BAI)
GM	Groningen Museum
H.	Height
HC	Huizinga collection
JVT	Jaarverslagen van de Vereniging voor Terpenonderzoek (journal)
NAD	Noordelijk Archeologisch Depot (northern archaeological depot) in Nuis
ROB	Rijksdienst voor het Oudheidkundig Bodemonderzoek (now Rijksdienst voor het Cultureel Erfgoed/State Service for Cultural Heritage)
RUG	Rijksuniversiteit Groningen/University of Groningen
VFG	Verslag Friesch Genootschap (journal)
VGM	Verslag Groninger Museum (journal)

FRIESLAND**1****Aalsum/Ealsum****Village**

Municipality: Dongeradeel

RD-coordinates: X/Y 196.0/595.0

Terpboek number: 33 and 165

CMA-number: 06B-044

a-c. During levelling in the late 19th century, *three crania (skeletons?)* were found 'in the deep terp layers' (not together).

Spec.: Folmer 1887; 1890: one female, two male. Folmer 1890, 604: Sutures of one of the male crania (M 296) were partly closed; molars are abraded.

Date: EROM-EMA.

Museum/find number: FM M. 235; FM M. 296; one male cranium unknown.

Ref.: Folmer 1887, 423-424; Folmer 1890, 604-605.

d. A skull bowl with handle (fig. 12.33) that was described by Brongers (1967) (FM 1963-X-7). It is part of a collection of objects that turned out to be forgeries after they were purchased from a 'collector' over a period of several years by the Frisian Museum (Elzinga 1975).

2**Achlum****Gouden Kroon**

Municipality: Franekeradeel

RD-coordinates: X/Y 161.4-6/574.8

Terpboek number: 186

CMA-number: -

a. A *skeleton with trepanned skull* was found during levelling in the 1920s. The body was buried in crouched position. The cranium was collected, but has not been retrieved yet.

Spec.: -

Date: MPROM-EMA.

Museum/find number: BAI 1926/VI-1.

Ref.: GIA-archive.

3**Achlum****Village**

Municipality: Franekeradeel

RD-coordinates: X/Y 161.4/573.6

Terpboek number: 74B

CMA-number: 10E-003/183

Human remains were found during levelling and during an excavation by the GIA in 2009.

a. During levelling in the 1880s, a *cranium (skeleton?)* was found 'in the deepest terp-layers'.

Spec.: Folmer 1890, 605: female; teeth are moderately abraded, sutures are very clear.

Date: MPROM – EMA.

Museum/find number: FM M 164/HC 232 FM 2.

Ref.: Folmer 1890; Knol & Uytterschaut 2010 (NB. according to these authors the find was made in the terp Groot Ludum near Achlum).

b. A *fragment of a human cranium* was found in a ditch, with a large number of animal bones.

Spec.: B.P. Tuin: thick fragment of the parietal or occipital bone (6 g). Probably adult.

Date: MROM.

Museum/find number: 223, in feature no. WP1-level 2-S152.

Ref.: Nicolay, forthcoming Achlum-report; Tuin, idem.

c. A *fragment of a long bone* was found in the fill of a watering place.

Spec.: B.P. Tuin: The fragment (11 g) was severely damaged; upper, medial and frontal surfaces were missing; the fragment is possibly a heel bone or the distal part of a femur.

Date: MROM.

Museum/find number: 359, in feature no. WP1-section 1-S166.

Ref.: Nicolay, forthcoming Achlum-report; Tuin, idem.

d. The shaft of the *tibia of an infant* was found in the excavated soil.

Spec.: B.P. Tuin: The fragment (4 g) was weathered and eroded; length 67 mm; age ca. 10 months after conception.

Date: PROM-MA.

Museum/find number: 443.

Ref.: Nicolay, forthcoming Achlum-report; Tuin, idem.

e. A *cranial fragment* was found in the excavated soil.

Spec.: B.P. Tuin: An *os frontale* (127 g) of a male adult. In both eye sockets, *cribra orbitalia* ("pitting") are visible, indicating a haemolytic form of anaemia, caused by malaria or another infectious disease.

Date: PROM-MA.

Museum/find number: 456.

Ref.: Nicolay, forthcoming Achlum-report; Tuin, idem.

4

Achlum

Ijslumburen/Ieslumbuorren

Municipality: Franekeradeel

RD-coordinates: X/Y 160.8/575.5

Terpboek number: 74I

CMA-number: 05G-133

a. During levelling in 1900, a *skeleton* was found, in crouched position with a bronze bracelet on one of the arms (fig. C.2). All bones were reported to be collected complete, but the skeleton is incomplete now (Knol & Uytterschaut 2010).

Spec.: Knol & Uytterschaut 2010: female, 30-40 years old, H. 1.73 m.

Date: Boeles (1900) thought bracelet and skeleton might be Celtic.

Radiocarbon dated bone collagen: GrA-43721: 1705 ± 30 BP, cal AD 252-401 (2 σ); (δ¹⁵N 11.97; δ¹³C -20.26, there is a possible reservoir effect, see chapter 12): M-LROM-MP.

Museum/find number: 271 FM 74i-7.

Ref.: Boeles 1900; Halbertsma 1963, 47, fig. 3; Knol & Uytterschaut 2010.

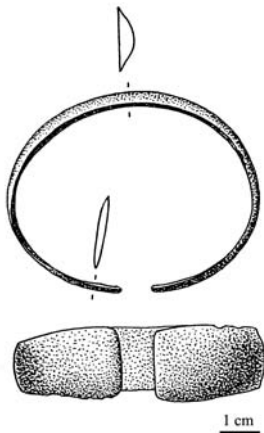


Fig. C.2 Achlum-Ijslumburen: Bracelet of unknown date that was found on one of the arms of a skeleton. Drawing H.R. Roelink (BAI).

5

Arum

Allingastate and/or Grauwe Kat

Municipality: Wûnseradiel

RD-coordinates: X/Y 161.9/570.1

Terpboek number: 211

CMA-number: 10E-047/048 and 084

The location consists of one terp or of two, connected terps; they were probably silted over in MROM (Archis 2; Galestin & Volkers 1992, no. 286).

a. During levelling in 1928, *parts of a skeleton* were collected, found 1.75 m under the surface of the terp, allegedly together with the base of a hand shaped pot. The skeleton was

possibly found complete. Only the cranium and the right part of the mandible are left now.

Spec.: Knol & Uytterschaut 2010: female, 35-50 years old; post mortem marks on left *os frontale*.

Date: Radiocarbon date bone collagen: GrA-43722: 2245 ± 30 BP, 393-346 or 321-206 cal BC (2 σ); (δ¹⁵N 13.85; δ¹³C -19.79, there is a possible reservoir effect, see chapter 12): MPROM.

Museum/find number: FM 211-8/HC 260 FM 159.

Ref.: Terpboek V, 351; VFG 100, 1927/1928, 36; Knol & Uytterschaut 2010.

b. During levelling in 1929, the *upper part of a cranium* was found. Part of an *os occipitale* from Arum was found in the Huizinga-collection; this may be the part concerned. It is a relatively thick and unworked skull part, broken along the sutures.

Spec.: -

Date: EPROM-EMA.

Museum/find number: FM 211-28/HC 260 FM 160. The fragment from the Huizinga-collection is numbered 20.

Ref.: Terpboek V, 351; VFG 101, 1928/1929, 38.

6

Arum

Terp belonging to Timmenga/Beyumerlaan

Municipality: Wûnseradiel

RD-coordinates: X/Y 162.3/572.1

Terpboek number: 80CC

CMA-number: 10E-041

a-b. In 1906, the *Terpboek* recorded a *cranium without mandible* and 'an arm or leg'.

Spec.: -

Date: MPROM-EMA.

Museum/find number: FM 80CC-2/HC 253 FM 119 (cranium); FM 80CC-3 (arm or leg bone).

Ref.: Terpboek IV, 53; Knol & Uytterschaut 2010.

7

Arum

Baarderburen/Baarderbuorren

Municipality: Wûnseradiel

RD-coordinates: X/Y 161.8/571.3

Terpboek number: 226

CMA-number: 10E-049

a. In 1933, the *Terpboek* recorded the find of a small, perforated disc, a *worked human skull fragment* (fig. 12.38).

Spec.: 54 x 48 mm; ø perforation 6 mm. The edges are rounded, the surface is matt. The fragment is probably cut out of the right *os frontale*. Protruding parts have been rasped away.

Date: EPROM-EMA.

Museum/find number: FM 226-211.

Ref.: Terpboek V, 383.

8

Baard/Baerd

Village

Municipality: Littenseradiel

RD-coordinates: X/Y 173.9/573.0

Terpboek number: 59

CMA-number: 10F-054

a. The Huizinga collection contains a number of *bones* from this terp, probably coming from the same skeleton: the left and right part of a pelvis; one metacarpal, one phalanx and one metatarsal.

Spec.: -

Date: MPROM-MA.

Museum/find number: FM M 109/HC 269 FM 109.

Ref.: Knol & Uytterschaut 2010.

9

Baijum/Baaium

Village

Municipality: Littenseradiel

RD-coordinates: X/Y 171.4/575.5

Terpboek number: 63AA

CMA-number: 05H-060

a. During levelling in the 1880's, a *cranium (skeleton?)* was found, 2 m under the surface of the terp. It was collected without mandible.

Spec.: Folmer 1887, 416: male, 'moderately advanced age'.

Date: MPROM-EMA.

Museum/find number: ?

Ref.: Folmer 1887; Knol 1986b.

10

Beetgum/Bitgum

Beetgumermolen/Bitgummole

Municipality: Menaldumadeel

RD-coordinates: X/Y 176.4/582.9

Terpboek number: 46

CMA-number: 05H-139

a. During levelling in the late 19th century, a *cranium with mandible (skeleton?)* was found, 3 m below the surface of the terp.

Spec.: Folmer 1887, 418 and 1890, 604: young male; Knol & Uytterschaut 2010: possibly male, aged 35-45.

Date: LPROM-ROM.

Museum/find number: FM M 302/HC 244 FM 67.

Ref.: Folmer 1887; 1890; Knol & Uytterschaut 2010.

b. A *cranium (skeleton?)* was found during levelling.

Spec.: Knol & Uytterschaut 2010: male, 35-50 years old.

Date: LPROM-EMA.

Museum/find number: FM M 304/HC 244 FM 69

Ref.: Knol & Uytterschaut 2010.

c. Another *cranium (skeleton?)* was found during levelling.

Spec.: Knol & Uytterschaut 2010: male, ca. 45 years old.

Date: LPPROM-EMA.

Museum/find number: FM M 298/HC 244 FM 70.

Ref.: Knol & Uytterschaut 2010.

d. The Huizinga collection contains a *left and right tibia*, that were found during levelling, 3-3.5 m below the surface. They may belong to the same skeleton as one of the crania above.

Spec.: -

Date: LPROM-ROM.

Museum/find number: FM M 133/HC 282 133.

Ref.: Knol & Uytterschaut 2010.

11

Beetgum/Bitgum

Besseburen/Bessebuorren

Municipality: Menaldumadeel

RD-coordinates: X/Y 174.75/583.3

Terpboek number: 46A

CMA-number: 05H-024/148

During levelling in 1891, a mixed cemetery from the Migration Period was uncovered (Boeles 1951, 214-215; Prummel 1998; 1999; Knol 1991; 2008). A number of human remains were also found outside this cemetery:

a. In 1886/7, a *skeleton* was found about 2 m below the surface of the terp, allegedly together with a pointed bone implement (animal).

Spec.: -

Date: ROM-EMA

Museum/find number: FM 46A-198.

Ref.: VFG 59, 1886/87; Knol 1986b.

b. During levelling, a *cranium (skeleton?)* was found. Only the upper part of the skull was preserved or collected.

Spec.: Knol & Uytterschaut 2010: female, ca. 50 years old.

Date: LPROM-EMA.

Museum/find number: FM M 300/ HC 240 FM 52.

Ref.: Knol & Uytterschaut 2010.

12

Blauwhuis/Blauhûs

-

Municipality: Wymbritseradiel

RD-coordinates: X/Y 165.88/559.10

Terpboek number: -

CMA-number: 10G-007 (Feytebuorren)

The location consists of features covered with sediment, directly west of a levelled terp (probably Feytebuorren).

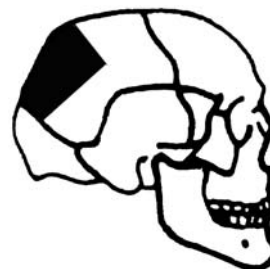


Fig. C.3 Blauwhuis: Skull fragment found in a feature from the pre-Roman or Roman Iron Age.

a. During ditching in 1989, *part of a cranium* was found in the excavated soil. In the slope of the ditch, features filled with dung and possibly wells were identified. The find must come from one of these features. The fragment was probably cut out of a skull, but shows no signs of handling (fig. C.3).

Spec.: Part of the right *os parietale*.

Date: MPROM-ROM.

Museum/find number: FM 1989-VI-4.

Ref.: NAD-archive.

13

Blija/Blije

Sytsma terp

Municipality: Ferwerderadiel

RD-coordinates: X/Y 188.4/595.7

Terpboek number: 28B (see below)

CMA-number:

Blija-Sytsma and Blija-Vaardeburen are two neighbouring terps; during levelling, they received the same number in the *Terpboek*. Nos. 28B: 270-676 and 28B: 679-693 come from Sytsma terp, while 28B: 1-269 and 677 were found in Vaardeburen. 28B: 678 could come from either terp (Galestin & Volkers 1992). An inspector of the Frisian Society, J.P. Wiersma, reported many finds that were made during levelling.

a. During levelling in May 1909, a *skeleton* was found, about 0.5 m 'under the black' (probably a dung layer). Only the skull with mandible was collected.

Spec.: Knol & Uytterschaut 2010: female, 40-50 years old.

Date: Radiocarbon date molar: GrA-43173: 1800 ± 35 BP, cal AD 128-264 or 273-331 (2 σ); ($\delta^{13}\text{C}$ -19.30): M-LROM.

Museum/find number: FM 28B-274/HC 251 FM 109.

Ref.: *Terpboek* I, 460a; VFG 81, 1908/1909, 40; Knol & Uytterschaut 2010.

b. During levelling, on September 29, 1909, a secondarily burnt *inhumation grave* was found, containing a *partial skeleton* probably in extended position. It was especially noticed and made a national newspaper (the NRC), because a complete plate of eastern-Gaulish *terra sigillata* (with stamp BOU(D)ILUFI) was found with it (fig. C.4). The grave was excavated by Boeles. It was situated 1.50 m under the surface of the terp, ca. 1.10 cm +NAP, in 'the grey clay'. The upper part of the body was reported to have perished as a result of burning, while the lower part of the body was unaffected. The plate was found near the head. The bones do not seem to be cremated on purpose; it possibly was an inhumation grave that was disturbed by activities in higher layers (Knol & Uytterschaut 2010). The bones of the upper part of the body disappeared, while the plate and some of the bones were affected by the fire.

Spec.: Knol & Uytterschaut 2010: probably male, adult, H. 1.75 m.

Date: The TS-plate is dated AD 120-160. Radiocarbon date bone collagen: GrA-43133: 1755 ± 40 BP, cal AD 166-196 or 209-388 (88.7% probability); $\delta^{13}\text{C}$: -19.67; $\delta^{15}\text{N}$: 11.49, there is a possible reservoir effect, see chapter 12: MROM.

Museum/find number: FM 28B-328/HC 277 28bis/W3 (skeleton); FM 28B-327 (plate).

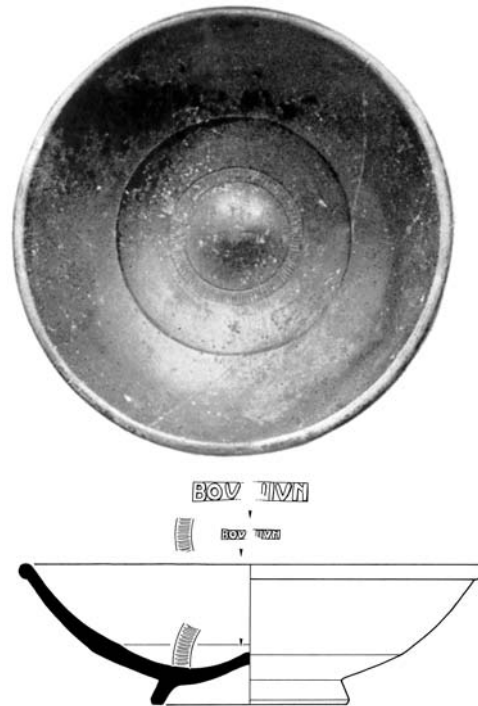


Fig. C.4 Terra sigillata plate, found with a partly burnt skeleton (13b), dated to the 2nd century AD. Photo: from Boeles 1951, pl. 22.6; drawing H.J.M. Burgers (AIVU).

Ref.: *Nieuwe Rotterdamsche Courant* 1909 (published in JVT 65); VFG 81, 1908/1909, 38-39; *Terpboek* I, 460b; Boeles 1951, pl. 22.6; Knol & Uytterschaut 2010.

c. During levelling, on 19 September 1910, a *skeleton* was found 4 m below the surface of the terp. Since it fell apart, only the skull was collected. The inspector of the Frisian Society, J.P. Wiersma, reported that the skeleton was lying as if it had been piled up. Knol and Uytterschaut (2010) surmise it was strongly contracted. There were no objects found near the skeleton.

Spec.: Knol & Uytterschaut 2010: Cranium with incomplete basis; female, 20-30 years old.

Date: Radiocarbon date molar: GrA-43223: 1925 ± 30 BP, cal AD 4-134 (2 σ); ($\delta^{13}\text{C}$ -19.36): E/MROM.

Museum/find number: FM 29B-353/HC 251 FM 111.

Ref.: *Terpboek* I, 460c; Knol & Uytterschaut 2010.

d. During levelling in 1909, a *skeleton* was found in sitting position. It was situated in the north-eastern part of the terp, 2.5 m under the surface. The skull was collected. Near the neck were 5 beads and an annular brooch (fig. 12.3).

Spec.: Knol & Uytterschaut 2010: female, older than 50.

Date: The beads are from the late pre-Roman Iron Age (Van Bommel-Van der Sluijs 2011, 49), while the brooch is dated between ca. AD 450 and the end of the 7th century (Knol 1993, 67). Radiocarbon date molar: GrA-45617: 1665 ± 40 BP, cal AD 254-303 or 315-433 (78.1% probability) or 489-533; ($\delta^{13}\text{C}$ -18.07): MP/EMA.

Museum/find number: FM 28B-304/HC 251 FM 110 (skull); FM 28B-303 (brooch) and 302 (beads).

Ref.: *Terpboek* I, 460b; VFG 81, 1908/1909, 40; Knol & Uytterschaut 2010; Van Bommel-Van der Sluijs 2011, 49.

14

Blija/Blije**Vaardeburen/Farebuorren**

Municipality: Ferwerderadiel

RD-coordinates: X/Y 187.6/595.7

Terpboek number: 28B (see Blija-Sytsma)

CMA-number: 06A-040

a. During levelling in 1905, a *skeleton* was found, flexed and lying on its right side, and oriented to the north (fig. C.5). It was reported by J. van der Werf, who was supervising levelling of the nearby terp of Hogebeintum in the same period. The skeleton was found 0.7 m under the surface of the terp in a part that had been levelled before.

Spec.: -

Date: EPROM-ROM.

Museum/find number: -

Ref.: Halbertsma 1954, 47; Knol 1986b.

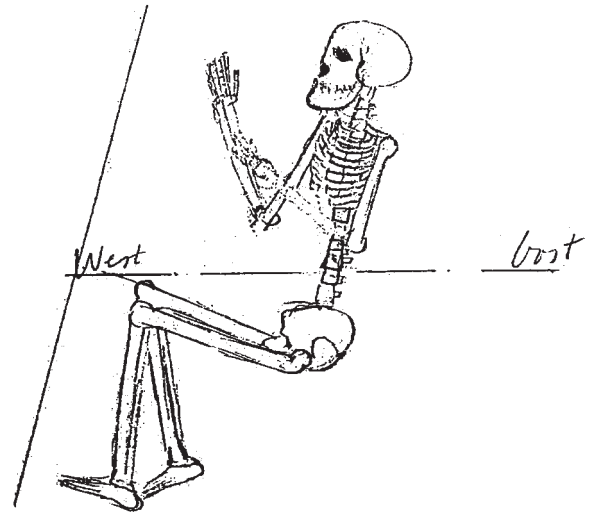


Fig. C.5 Blija-Vaardeburen: Sketch from the report by J. van der Werf on the find of a skeleton with flexed legs.

15

Boksum**Village**

Municipality: Menaldumadeel

RD-coordinates: X/Y 177.7/576.8

Terpboek number: 50C

CMA-number: 05H-048

a. During levelling, a well preserved *cranium* (*skeleton?*) was collected.

Spec.: Folmer 1881, 87: male, not young anymore.

Date: MPROM-MA.

Museum/find number: -

Ref.: Folmer 1881; 1887.

16

Bornwird/Boarnwert**Village**

Municipality: Dongeradeel

RD-coordinates: X/Y 192.7/594.3

Terpboek number: 32D

CMA-number: 06B-024

a. The terp of Bornwird is situated on a high, Pleistocene outcrop. During digging of a canal in 1909, two pots, described as urns, were found high in the Pleistocene sand by Van Giffen. One of the urns allegedly contained some *cremation remains*. The urns either belong to a pre-salt marsh occupation phase of this area, belonging to the urnfield cul-

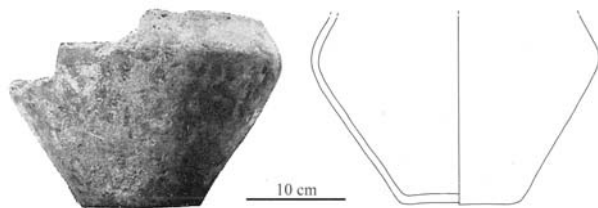


Fig. C.6 One of two pots found in a Pleistocene sand layer near Bornwird. The pot, which allegedly contained cremated bone, is either from the late Bronze Age or from the middle or late Roman Iron Age. Photo: from Van Giffen 1913, Taf 1.23; drawing E. Knol, Groningen Museum.

ture (e.g. Fokkens 1998, fig. 11), or to a much later phase. The pots are only preserved fragmentarily, the burnt bones are missing. The shape and ware of the pot that is available now (fig. C.6) might be from the middle or late Roman Iron Age, but also from the urnfield period. Taayke (1996c, note 124) doubts the early date of the find.

Spec.: -

Date: BRONZ-EPROM or M/LROM.

Museum/find number: FM Van Giffen collection 980.

Ref.: Van Giffen-archive RUG; Van Giffen 1910; 1913, Taf. 1, no. 23; 1920, 15; Knol 1986b; Taayke 1996c.

17

Bozum/Boazum**Village**

Municipality: Littenseradiel

RD-coordinates: X/Y 175.7/567.0

Terpboek number: 62

CMA-number: 10F-047

a-c. During levelling in 1920, *three skeletons* were found, about 0.25-0.5 m under the surface of a levelled part of the terp. Beads were found in two of the graves.

Spec.: -

Date: The beads and the fact that three graves were found together suggest a 6th or 7th century date: EMA1.

Museum/find number: FM 62-9 and 10.

Ref.: Terpboek III, 173; Knol 1986b.

d. During building activities in 1993 in an old school building, a complete *skeleton* was found, in crouched position. It was lying on its side with the head to the west, facing south, with the arms alongside the body. The burial was excavated by two employees of the Frisian Museum, who described the find. The skeleton was left *in situ*.

Spec.: According to a newspaper article, the body belonged to a child, H. ca. 1 m, ca. 7 years old.

Date: Based on the crouched position and two associated potsherds (probably not collected), it was reported to be ROM, but it might be younger: ROM-EMA.

Museum/find number: -

Ref.: Leeuwarder Courant, September 2, 1993.

18**Britsum****Village**

Municipality: Leeuwarderadeel
 RD-coordinates: X/Y 181.6/585.3
Terpboek number: 20B and 166
 CMA-number: 06C-009 and 095

a-b. Boeles recorded the find of *two skeletons* during levelling in 1905/1906. One of the skeletons was found in crouched or flexed position, the other was probably extended.

Spec.: -

Date: LPROM-EMA.

Museum/find number: -

Ref.: Knol 1986b.

c. In 1921, the *Terpboek* recorded a *cranium without mandible*.

Spec.: -

Date: LPROM-MA.

Museum/find number: FM 166-6/HC 259 FM 156.

Ref.: *Terpboek* V, 255; Knol & Uytterschaut 2010.

19**Britsum****Britsumer Oudland**

Municipality: Leeuwarderadeel
 RD-coordinates: X/Y 184.5/584.5
Terpboek number: 174
 CMA-number: -

a. In 1933, the *Terpboek* recorded a *femur* found during levelling.

Spec.: Femur without marks.

Date: EROM-EMA.

Museum/find number: FM 174-14; HC 275.

Ref.: *Terpboek* V, 281; Knol & Uytterschaut 2010.

20**Cornjum/Koarnjum****Village**

Municipality: Leeuwarderadeel
 RD-coordinates: X/Y 181.4/584.1
Terpboek number: 20
 CMA-number: 06C-021

a. Notes by Van Giffen (May 19, 1911) mention the find of a human *skeleton* and a horse head in the base of the terp (not necessarily together).

Spec.: -

Date: MPROM-EMA.

Museum/find number: probably F2009-III-35.

Ref.: GIA-archive.

b. During levelling in September 1907, a *skeleton* was found at the foot of the terp south of the church. The cranium and mandible were collected.

Spec.: -

Date: MPROM-EMA.

Museum/find number: FM 20-29/HC 246 FM 80.

Ref.: *Terpboek* I, 192; VFG 79, 1906/1907; Knol & Uytterschaut 2010.

c-g. In 1914, *five crania with mandibles (skeletons?)* from Cornjum were added to the collection of the Frisian Museum. One of them was reported to be found in 'the blue clay', probably deep in the terp.

Spec.: -

Date: MPROM-EMA.

Museum/find number: FM 20-238/HC 246 FM 81; FM 20-239/HC 246 FM 82; FM 20-240/HC 247 FM 83; FM 20-241/HC 247 FM 84; FM 20-242.HC 247 FM 85.

Ref.: *Terpboek* I, 194b; VFG 86, 1913/14; Knol & Uytterschaut 2010.

21**Deinum****Heechhiemsreed or Ottema**

Municipality: Menaldumadeel
 RD-coordinates: X/Y 176.8/578.4
Terpboek number: 110
 CMA-number: 05H-135

a. A *skeleton* was found deep in this terp, during levelling in the 1920s. Not collected.

Spec.: -

Date: MPROM-ROM.

Museum/find number: -

Ref.: Halbertsma 1953, 252.

22**Dokkum****Drie Terpen/Trije Terpen**

Municipality: Dongeradeel
 RD-coordinates: X/Y 194.4/592.4
Terpboek number: 199
 CMA-number: 06B-035

a. During levelling of the most eastern of the three terps on this location in 1925 and 1928, a number of *skeletons* were found, about 1.25 m under the surface of the terp. Although several authors mention different numbers, it is most likely that there was a row with seven or eight extended skeletons. A parallel row was only partly uncovered. The graves were oriented to the west. One of the graves was excavated by Van Giffen (1931). It was situated 0.85 m above the base of the terp, at 0.54 m +NAP. From the description, it appears to be a *Reihengräber* cemetery.

Near one of the skeletons, a coin hoard consisting of 63 Roman coins was found, allegedly in a roll. The coins and the skeletons have been interpreted as belonging together by several authors (Van Giffen 1931, 17-19; Boeles 1951, 179). Van Giffen concluded that this must have been one of the earliest Saxon settlements in the Dutch coastal area. However, the association of coins and skeletons is not certain at all. It is quite possible that the coins were buried here long before the graves were dug on the same location in the terp. The orientation of the graves and the structure of the small cemetery make it unlikely that graves and coins are from the same period. This cemetery appears to be early-medieval. That is supported by the evidence of some sherds that were collected near the skeletons; Knol (1986b) recognized them as sherds from a globular pot and of a frying pan, dated to the 8th or 9th century.

Spec.: -

Date: All coins date from the 3rd century AD, 241-270 (Van Es 1960, 90). The structure and orientation of the cemetery and the pottery fragments indicate an early-medieval date: EMA2.

Museum/find number: -

Ref.: VFG 97, 1924/25, 26-27; VFG 100, 1927/1928, 53-54; Van Giffen 1931; Boeles 1951; Halbertsma 1954; Van Es 1960; Boersma 1970; Knol 1986b.

23

Dronrijp/Dronryp Noord

Municipality: Menaldumadeel

RD-coordinates: X/Y 172.22/579.36

Terpboek number: 49

CMA-number: 05H-116

a. During road construction in 1981, the *remains of a cremation* were found (fig. 12.25). The find consists of 116 g of burnt bones; a secondarily burnt, broken, incomplete beaker of wheel thrown pottery of *terra nigra*-like ware; 720 g of charcoal (alder, *Alnus*) and ashes, partly cemented together; 1010 g of burnt clay; and a polishing stone, probably burnt (145 g). Since the beaker was burnt and fitting sherds were affected by the fire in different ways, it is clear that it did not serve as an urn, but was probably one of the grave gifts on the pyre, together with the polishing stone.

The finds assemblage comes from the salt marsh on the margin of the present terp, outside the terp at the time of the burial.

Spec.: M. van der Wal (GIA): there are parts of long bones, the mandible, the skull and a vertebra of an adult; the sex could not be determined.

Date: *Terra nigra*-like beakers are probably wheel-thrown versions of local beaker types, made in production centres north of the Limes (Erdrich 1998). Similar beakers have been found elsewhere in Friesland, in Noord-Holland, Groningen, Drenthe and Overijssel, but a production centre is not known. *Terra nigra*-like beakers occur from the 2nd to the 5th century AD (Galestin 2008b; Lanting & Van der Plicht 2010, 99-100), but it is difficult to date them more precisely. Radiocarbon dating of the cremated bone gave two very different results that made them altogether unreliable: 1885 ± 35 BP (GrA-36015) and 2075 ± 30 BP (GrA-37954), cal AD 55-226 and 181-19 cal BC respectively (2 σ). The radiocarbon date of a sample of charcoal of an alder twig (*Alnus*) from the cremation seems more reliable, but is rather late: 1640 ± 25 BP (GrN-31590), cal AD 340-433 or 489-532 (2 σ).

The date of the cremation thus remains uncertain (see also chapter 12): MROM-MP.

Museum/find number: FM 1981-VII-29.

Ref.: Nieuwhof 2008f; pers. comm. M. van der Wal; Lanting & Van der Plicht 2010; 2012.

NB. During construction of the road another conspicuous find was made, about 100 m north of the cremation grave, in the same area right outside the Roman Iron Age terp (fig. 12.24). It consists of a jar of a type that is not common in Westergo, but that is well known in Groningen and northern Drenthe (type Wijster IIIA/Taayke Ge6). In it was another,

small pot with a serrated rim. These pots together were dated between AD 150 and 250. In the smallest pot, two pieces of cremated bone were found. These were identified by G.N. van Vark (University of Groningen) as cattle bones.

Ref.: Archive E. Kramer, Frisian Museum.

24

Dronrijp/Dronryp Schatzenburg

Municipality: Menaldumadeel

RD-coordinates: X/Y 172.3/579.5

Terpboek number:

CMA-number: 05H-36

This site is part of the same terp as the previous one, Dronrijp-Noord (fig. 12.24).

a. In 1987, employees of the Frisian Museum collected stray finds near the Schatzenburg estate, among them a variety of *human bones from several individuals*. Whether the bones are single bones of the remainders of graves, is not clear.

Spec.: -

Date: Handmade pottery from the late pre-Roman and Roman Iron Age was found on the same occasion, but the bones might still be younger: LPRM-EMA.

Museum/find number: FM 1987-VI-6.14, 20, 22, 25 and 104.

Ref.: NAD-Nuis.

25

Dronrijp/Dronryp Fûgellân

Municipality: Menaldumadeel

RD-coordinates: X/Y 172.8/578.6

Terpboek number: -

CMA-number: -

This terp (fig. 12.24) was discovered and partly excavated during building of the new residential area Fûgellân in the village of Dronrijp, in 2002 (Hielkema 2003).

a. In 2003 or 2004, an amateur archaeologist found in this area a small, atypical pot and a bowl (made of the base of a medium-sized pot), together with a whetstone. The pots were allegedly surrounded by cremation remains (white and bluish burnt bone fragments), which were not collected. According to the finder, the (broken) pot had been placed on the shallow orange bowl (fig. 12.26). It is not clear whether the finds belong together, and unknown whether the cremated bones were human or animal.

Spec.: -

Date: The atypical pot is probably dated: EROM.

Museum/find number: -

Ref.: Pers. comm. J. Veltman, Dronrijp.

26

Dronrijp/Dronryp Hatsum I

Municipality: Menaldumadeel

RD-coordinates: X/Y 171.5/576.3

Terpboek number: 49A

CMA-number: 05H-061

The last remainder of the terp (fig. 12.24) was excavated in 1922 by Van Giffen.

a. In the first excavated layer, 1.10 m +NAP, the *skeleton of an infant* was found in a dung layer. Only one individual was identified at the time, but the bones of two infants are among the collected material. Since infant bones are often missed, it is possible that not all bones were collected. Van Giffen's published field drawings and separate maps of post-holes show that the bones were found in or near a house (the structure of houses was not yet known at the time).

Spec.: Tuin: skull bones of two individuals show that there were two different infants, possibly twins. Postcranial bones might belong to one individual. Cranial bones belong to two individuals. The age of both infants is ca. 0-2 months *post partem*. There is no apparent *ante mortem* trauma, deformation or congenital anomalies. There are some abrasions on several bones, an incision on the left scapula, and possibly a cut mark on the right femur. These are all post mortem and may date from the excavation. The bones, postcranial and cranial, are not complete (see fig. C.7).

Date: Van Giffen dated the find, based on the stratigraphy and pottery finds, to the 4th century AD, but his knowledge of pottery was inadequate. In the same layer, about 5 m from the skeleton, a small pot was found, apparently (from the drawing) of a late-PROM/EROM type.

Radiocarbon date: 2115 ± 35 BP (GrA-42194), 207 – 45 cal BC (90.2% probability); ($\delta^{15}\text{N}$ 13.57; $\delta^{13}\text{C}$ -19.88, there is a possible reservoir effect, see chapter 12): LPROM/EROM.

Museum/find number: human remains: 1922-21; pot 1922-21b.

Ref.: Van Giffen 1924, 37; B.P. Tuin (ArcheoInzicht), unpublished report 2008.

b. In the 5th and deepest excavation layer, 0.45 m -NAP, the *skeleton of an adult* was found. The skeleton was su-

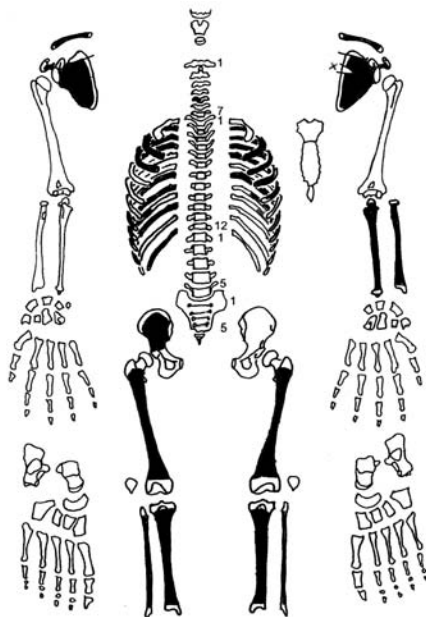


Fig. C.7 Postcranial skeletal parts of an infant from the late pre-Roman Iron Age (26a). Cranial parts include fragments of two individuals. The cut mark (x) is post mortem. Drawing B.P. Tuin, ArcheoInzicht.

pine, with the bent knees turned to the left (figs. C.8 and 12.10). The left arm was lying bent next to the upper body, while the right arm was folded over the abdomen. This skeleton came to be known as 'the hanged man of Hatsum' since it was reported to have been found with rope fragments around its neck. The excavation photos, however, do not show a rope fragment. Fragments were possibly removed to make a neat photo, or may never have been there at all (although Van Giffen reported the observation, it is not certain that he saw it himself; it may even have been a joke of his field workers). The body was not thrown in a ditch, as Halbertsma (1954) wrote, but was carefully buried high in the dung fill of a ditch, north of one of the early platforms. The published excavation drawings show that the ditch had been dug from a higher level, ca. 0.45 m +NAP. The body was oriented to the southeast, the ditch was oriented south-east-northwest.

A human maxilla (fragment, see below) comes from the same ditch.

Spec.: Van Giffen 1924, 37: skeleton of a very robust, adult male. Sutures are partly fused.

The vertebrae of the neck do not show any damage, but hanging or strangling does not necessarily produce any skeletal damage (James & Nasmyth-Jones 1992).

Date: Van Giffen dated the find to the 3rd century AD (but see above).

Radiocarbon date: 2260 ± 40 BP (GrA-43144), 400-345 or 322-206 cal BC (2 σ); ($\delta^{15}\text{N}$ 14.11; $\delta^{13}\text{C}$ -20.19, there is a possible reservoir effect, see chapter 12): M/LPROM.

Museum/find number: 1922-85.

Ref.: Van Giffen 1924, 37; Halbertsma 1954, 47; Galestin 1991, 88.

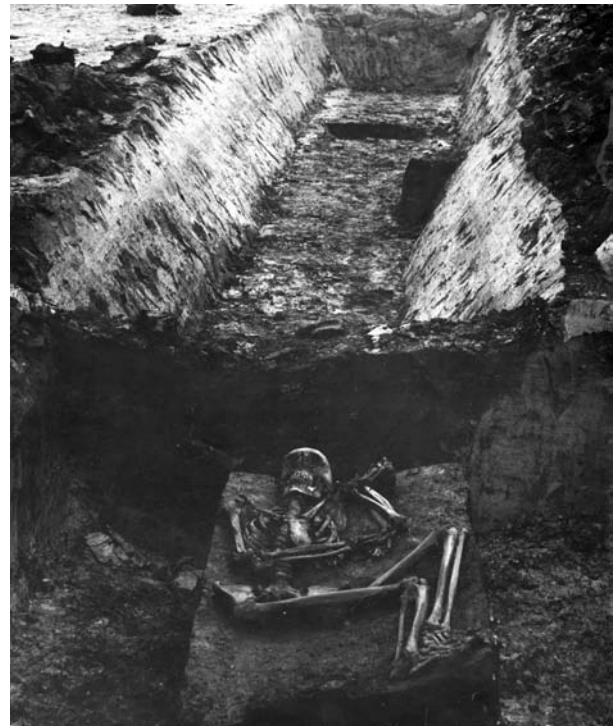


Fig. C.8 The location of the skeleton (26b) in a ditch. Salt marsh layers can be observed in the slope of the ditch; the excavated dung fill from the ditch is lying on the side. Photo RUG/GIA.

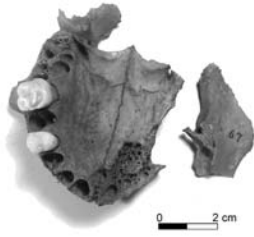


Fig. C.9 Part of a maxilla (26c), found in a ditch (the same ditch as the previous record) from the middle or late pre-Roman Iron Age.

c. Near the skeleton of the 'hanged man', about 3 m from it in the same ditch, *part of a maxilla* was found (fig. C.9).

Spec.: Van Giffen 1924, 37: adult.

Date: M/LPROM.

Museum/find number: 1922-67.

Ref.: Van Giffen 1924, 37.

27

Dronrijp/Dronryp Hatsum II/Hommema

Municipality: Menaldumadeel

RD-coordinates: X/Y 171.5/577.1

Terpboek number: 50

CMA-number: 05H-064

See fig. 12.24.

a. During levelling in 1925, the *upper part of a cranium* was found in the sole of the terp in the northwestern area, 'near the road of the Hommema terp'.

Spec.: -

Date: PROM-ROM.

Museum/find number: BAI 1925/VI-8.

Ref.: GIA-archive.

b. During levelling in 1925, a *cranium with mandible* was collected in the sole of the terp south of section A, excavated in the same year by Van Giffen (Van Giffen 1926, afb. 20).

Spec.: GIA-archive: young individual.

Date: PROM-ROM.

Museum/find number: BAI 1925/VI-9.

Ref.: GIA-archive.

c. During levelling in 1926, a *mandible* was collected.

Spec.: -

Date: PROM-ROM

Museum/find number: BAI 1926/VI-13.

Ref.: GIA-archive.

28

Engelum/Ingelum Village

Municipality: Menaldumadeel

RD-coordinates: X/Y 176.7/582.1

Terpboek number: 47

CMA-number: 05H-138/155

a. In 1952, a *skeleton* was found; a small excavation followed, although the finders had already thrown away the bones. Only part of the bones was retrieved. The skeleton was reported to be supine, with the legs and the arms bent. A shallow burial pit could still be excavated; it had been dug in the deepest terp layers of the terp and contained some

potsherds. In a letter to Boeles (21 July 1952) Halbertsma wrote they were decorated with *streepband*.

Spec.: Huizinga 1954, 50 and 56: female, 40-45 years old, H. 159.4 cm. Skull of 'type Midlum', that belonged to the earliest habitation phase (that is, before the early Middle Ages).

Date: Pottery: LPROM/EROM.

Museum/find number: ?

Ref.: Boeles-archive; VFG 124, 1952, 15; Halbertsma 1954, 47-48; Huizinga 1954; Knol 1986b.

29

Engelum/Ingelum Terp west of Engelum

Municipality: Menaldumadeel

RD-coordinates: X/Y 176.1/582.1

Terpboek number: 183

CMA-number: 05H-142 (?)

a. During levelling in 1924, a *skeleton* was found, 1 m below the surface of the terp, which had already been levelled earlier. It was excavated by the Frisian Museum in the presence of prof. dr. S. Loeschke from Trier. The skeleton was strongly contracted (fig. C.10). Two small potsherds and a small animal bone fragment were found near the body. The skeleton was not collected complete; the cranium and the lower legs were severely damaged, possibly during the excavation. The bone was probably affected by a disease, which had made it fragile. The left lower leg was probably cut during the excavation.

Spec.: Knol & Uytterschaut 2010: female, older than 45, H. 1.56 m; pathology: round hole in right *os parietale* (fig.



Fig. C.10 Engelum (terp west of-): Skeleton with strongly flexed legs. Photo RUG/GIA.

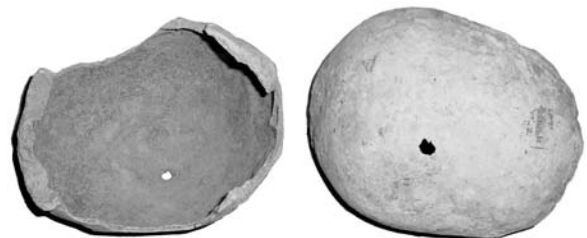


Fig. C.11 Engelum (terp west of-): Two sides of the skull of the skeleton in fig. C.10. The bone is affected by a disease, possibly multiple myeloma.

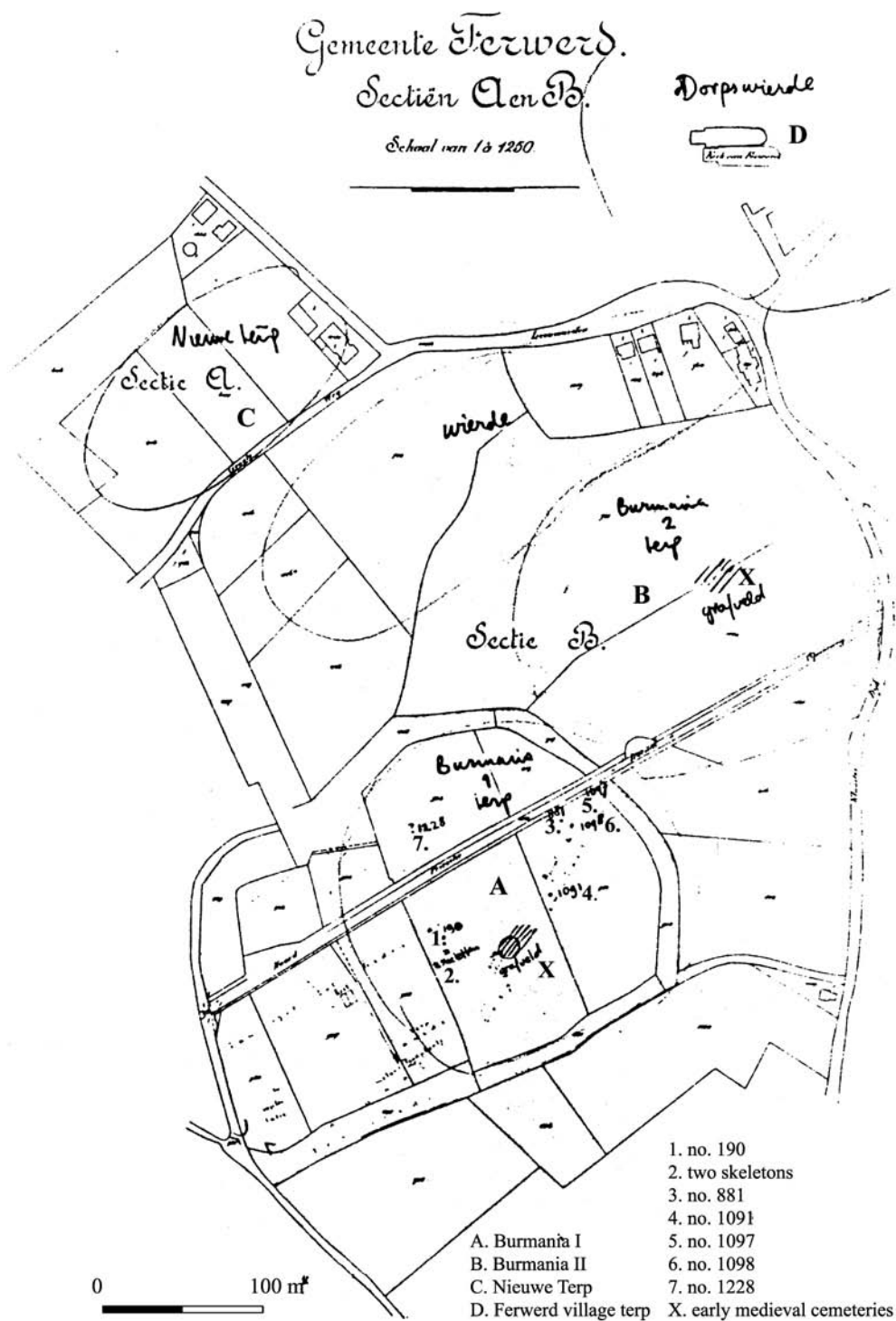


Fig. C.12 Map (a copy of a copy) of the terps near Ferwerd, with notes made by J.P. Wiersma, during levelling between 1907 and 1916. For the sake of clarity, printed numbers and letters were added to the handwritten notes.

C.11); on the inside, the cranium is affected on several places (multiple myeloma?).

Date: Radiocarbon date molar: GrA-43138: 1845 ± 40 BP, cal AD 71-253 (2 σ); (δ¹³C -18.72): E/MROM.

Museum/find number: FM 183-52/HC 266 FM 178.

Ref.: Terpboek V, 304; VFG 97, 1924/25, 25; Halbertsma 1954, 48; Knol & Uytterschaut 2010.

30

Fatum near Tzum

Municipality: Franekeradeel

RD-coordinates: X/Y 167.5/573.1

Terpboek number: 73D

CMA-number: 10E-18 + 19

a-b. The collection Huizinga contains *two crania* from this terp.
Spec.: -
Date: EROM-MA.
Museum/find number: HC 243 FM 66C and 66E.
Ref.: Knol & Uytterschaut 2010.

31

Ferwerd/Ferwert Burmania I

Municipality: Ferwerderadiel
RD-coordinates: X/Y 183.9/594.2
Terpboek number: 101
CMA-number: 06A-016

Burmania I is one of a cluster of terps within only a few hundreds of metres. This terp was levelled from 1907 until 1916. J.P. Wiersma was employed by the Frisian Society to document and collect finds. He noted the finds of human remains in the Ferwerd terps on a map (fig. C.12). Wiersma also sketched the locations of the other terps on this map. Burmania I, Burmania II and the *Nieuwe terp* (New Terp) were levelled in succession. Between Burmania II and the Nieuwe Terp, Wiersma sketched another heightened area, a wierde as he called it. According to Archis, this is now one of the two village terps of Ferwerd (CMA 06A-085). The map shows that two early-medieval cemeteries were found on the Burmania terps.

a. In 1908, the FM purchased a large fragment of a small bowl of roulette-stamp patterned Argonne ware with Christian symbols. It was found 1.80 m below the surface of the terp, in 'the grey layer'. The sherd is from the first half of the 5th century. In the bowl, either some soil with 'remains of burning' was found (*Terpboek*), or ashes and charcoal (Boeles 1951, 494). Boeles (1951, 212) suspects that it was used as a cremation urn, possibly in the middle or late 5th century, as one of the first Anglo-Saxon burials. Lanting and Van der Plicht (2010, 99) argue that the find does not belong to a cremation, but was found in a layer with ashes and charcoal (the grey layer).

Spec.: -
Date: the bowl is probably not part of a cremation burial. If so: MP.
Museum/find number: FM 101-190.
Ref.: Terpboek IV, 341; Boeles 1951, 167-171, 212, 494; Knol 1986b.

b-c. 3-8 May 1909, two *skeletons* were found, 3 m below the surface of the terp. The bones were in bad condition and therefore not collected. Though they were situated not far (12-13 m) from one of the early-medieval cemeteries, it is not likely that these graves were part of this cemetery since they were found much deeper (3 m instead of 0.5-1.5 m).
Spec.: The skeletons were described as belonging to young, small people.
Date: ROM or MP.
Museum/find number: -
Ref.: Knol 1986b.

d. 21-27 April 1912, a *cranium (skeleton?)* was found in grey clay, 1 m below the surface.

Spec.: Knol & Uytterschaut 2010: cranium and mandible of adult, 35-50 years old.
Date: probably EMA.
Museum/find number: FM 101-881/HC 256 FM 135.
Ref.: Terpboek IV, 357a; Knol & Uytterschaut 2010.

e. April 1913, a *cranium* was recorded in the *Terpboek*. In a note it was explained that this is one of a number of finds from the winter and spring of 1913 when Wiersma had not been present, therefore no further information on the finds is available and the find is not marked on the map.

Spec.: Knol & Uytterschaut 2010: male, 30-40 years old. It was probably not found near the early-medieval cemetery.
Date: MPROM-EMA.

Museum-number: FM 101-1040/HC 256 FM 138 (cranium and mandible were probably separated).
Ref.: Terpboek IV, 360a; Knol & Uytterschaut 2010.

f. 12-17 May 1913, a *skeleton* was found, 3 m below the surface of the terp, in black soil (probably a dung layer). The skull is trepanned. The skeleton was oriented to the east; grave gifts were not found. Only skull and mandible were collected. The skull appears to be trepanned twice (fig. 12.12), but the damage on the forehead is fresh and was made during excavating (Boeles 1951, 206).

Spec.: Brongers 1966, 223-224: "a male dolichocranic individual of about 40 years old." "In the parietal bones in the upper part of the skull is an opening of which far the largest part is somewhat to the left of the middle of the *sutura sagittalis*." Dimensions 39 mm x 27 mm. The wound is healed, "the *diploe* is nowhere visible. The perforation has a bevelled edge. ... It is ... not very probable that such an injury caused by brutal force would have given the opportunity of such a long survival as the wound healing indicates. ... There is no evidence for a pathological process." Brongers concludes that the hole was trepanned by means of a shaving technique.

Date: Probably ROM.
Museum/find number: FM 101-1091/HC 256 FM 139.
Ref.: Terpboek IV, 361a; Boeles 1951, 205-206; Brongers 1966.

g. 19-24 Mei 1913, a *cranium (skeleton?)* was found, 1 m. below the surface, in grey clay on the outer edges of the terp.
Spec.: Knol & Uytterschaut 2010: male, older than 45; conspicuous because of the extreme abrasion of teeth, especially to the inside.
Date: PROM-EMA.

Museum/find number: FM 101-1097/HC 256 FM 140.
Ref.: Terpboek IV, 361a; Knol & Uytterschaut 2010.

h. 19-24 May 1913, a *cranium (skeleton?)* was found, 3 m below the surface of the terp on the outer edges of the terp, in black soil (probably a dung layer). The cranium was collected without mandible.

Spec.: Knol & Uytterschaut 2010: female, older than 50.
Date: PROM-ROM.

Museum/find number: FM 101-1098/HC 257 FM 141.
Ref.: Terpboek IV, 361a; Knol & Uytterschaut 2010.

i. 23-28 June 1913, a *cranium (skeleton?)* was found 3 m below the surface of the terp. This find is not on Wiersma's map.

Spec.: Knol & Uytterschaut 2010: probably male, older than 50; parts of the cranium and the teeth are missing.
Date: PROM-ROM.

Museum/find number: FM 101-1129/HC 257 FM 142.

Ref.: Terpboek IV, 362a; Knol & Uytterschaut 2010.

j. September 1913, a *cranium (skeleton?)* was found, 0.5 m below the surface of the terp.

Spec.: Knol & Uytterschaut 2010: the basis of the cranium is missing. Male, older than 45. The bone is weathered.

Date: Probably EMA.

Museum/find number: FM 101-1228/HC 257 FM 144.

Ref.: Terpboek IV, 364a; Knol & Uytterschaut 2010.

32

Ferwerd/Ferwert

Nieuwe terp/ Gerbada/ Gerbald-state

Municipality: Ferwerderadiel

RD-coordinates: X/Y 183.6/594.7

Terpboek number: 225

CMA-number: 06A-087

a. In July 1931, *parts of a skeleton* were noted in the *Terpboek*: a. cranium without mandible; b. four long bones of the legs, a.o. femora; c. two humeri; d. part of the pelvis; e. two thin, long bones; f. two small bones. The skeleton, from which these bones were collected, was found about 1.5 m below the surface of the terp.

Spec.: Terpboek V, 377: old person.

Date: EROM-EMA.

Museum/find number: FM 225-14.

Ref.: Terpboek V, 377.

33

Ferwerd/Ferwert

Kloosterterp

Municipality: Ferwerderadiel

RD-coordinates: X/Y 184.7/593.1

Terpboek number: 27C

CMA-number: 27C-244

a. During levelling, probably in 1915, a beaker (or half of a beaker) was found, filled with *burnt bones*. The beaker is handmade and of a type that is common in this area (fig. C.13; Taayke 1996c, 111). The burnt bones (or part of them) had been collected in the beaker after the cremation, and were then buried. The beaker was not complete; the cremation remains were probably only partly retrieved.

Spec.: Cuijpers: The remaining burnt bones weigh 143 g. A large part of the fragments (123.4 g) measures over 10

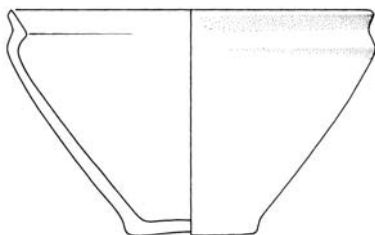


Fig. C.13 Ferwerd-Kloosterterp: A beaker of type K5b (2nd-3rd century AD), which was filled with cremation remains. Scale 1 : 4. From Taayke 1996c, Abb. 27.

mm. There are fragments of the cranium, vertebra and long bones, the remains of an adult individual, older than 19-20. Sex could not be determined. Fragments of animal bones were not found. The degree of burning is variable. A major part of the bones is coloured grey-white, indicative of a burning temperature of 800° C. Some fragments are coloured black or blue-grey, indicating a lower temperature of 400-550 ° C. A 'clinker' (melted bone/silicate glass) on one of the bones showed that locally the temperature was as high as 800-1000 ° C. Such glass-like pieces of melted bone are caused by the ashes of plants and wood that may function as a flux and thus cause a reduction of the melting point of bone (Schutkowski *et al.* 1987).

Date: Beaker-type K5b was in use from ca. AD 150 onwards, in particular in the 3rd century. Radiocarbon date of cremated bone: 1945 ± 30 BP (GrA-42752), 2 cal BC- cal AD 128 (2 σ): MROM (2nd century).

Museum/find number: FM 27C-163.

Ref.: Terpboek I, 432b; VFG 87, 1914/1915, 13; Boeles 1949, Plaat 28, no. 27; Halbertsma 1954, footnote 2; Van Es 1966, fig. 7; Van Es 1967, fig. 95.4; Taayke 1996c, fig. 27.7; Cuijpers, unpublished report 2009.

N.B. Knol 1993, 156 mentions Ferwerd-Foswerd as the location of this find; the location Kloosterterp is somewhat north of Foswerd.

34

Finkum/Feinum

Village

Municipality: Leeuwarderadeel

RD-coordinates: X/Y 179.5/588.0

Terpboek number: 24A

CMA-number: 05F-006/7

a. During levelling, a *cranium (skeleton?)* was found, deep in the terp.

Spec.: Folmer 1887, 415: female, middle-aged.

Date: ROM.

Museum/find number: -

Ref.: Folmer 1887.

b. During levelling, a well-preserved *cranium (skeleton?)* was found in the deepest part of the terp.

Spec.: Folmer 1900, 763: male, still young; the remaining teeth are abraded concave.

Date: ROM.

Museum/find number: -

Ref.: Folmer 1900, 763.

c. During levelling, a *cranium (skeleton?)* was found in the deepest part of the terp.

Spec.: Folmer 1900, 760: middle-aged man.

Date: ROM.

Museum/find number: -

Ref.: Folmer 1900, 760.

35

Goutum

Village

Municipality: Leeuwarden

RD-coordinates: X/Y ca.183/577

Terpboek number: 16A

CMA-number: ?

a. Halbertsma (1954, 46) reports the rumour he heard from the amanuensis of the Frisian Museum, E.J. Penning, that a *skeleton* 'in sitting position' was found during levelling of a part of this terp. Halbertsma does not know of any evidence of this find. Other information is not available.

Spec.: -

Date: LPROM-EMA.

Museum/find number: -

Ref.: Halbertsma 1954.

b. During groundwork in 1975, children found a *cranium*, which they used to play football with. When it was taken from them, it was already damaged. The skull may have come from a grave.

Spec.: -

Date: LPROM-EMA.

Museum/find number: 1975-V-18.

Ref.: NAD-archive.

36

Hallum

Mariëngaarde

Municipality: Ferwerderadiel

RD-coordinates: X/Y 179.3/590.1

Terpboek number: 26F

CMA-number: 05F-003

a-c. The *Terpboek* recorded *three crania*, which had been donated together in 1916. No. 53 was collected with some vertebrae, but they are missing now.

Spec.: -

Date: The terp was the location of a monastery, so the crania might come from the cemetery that belonged to it; some finds from this terp, however, are dated ROM; a similar date of the human remains cannot be excluded: ROM-MA.

Museum/find number: FM 26F-52/HC 247 FM 88; FM 26F-53/HC 248 FM 89; FM 26F-54/HC 248 FM 90.

Ref.: *Terpboek* I, 380; NAD-archive.

37

Hallum

surrounding area (?)

Municipality: Ferwerderadiel

RD-coordinates: X/Y 181.5/591.3 (Hallum)

Terpboek number:

CMA-number: -

a. One of the objects in a private collection (the collection Verleür) that was acquired by the Frisian Museum was a small vessel, a cup with one handle (fig. C.14), with cremation remains, allegedly from the surroundings of Hallum.

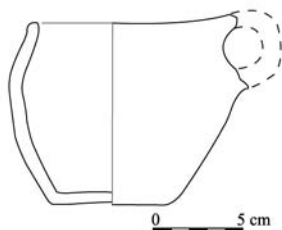


Fig. C.14 Hallum or surrounding area: Cup, which served as urn for cremation remains. After a sketch by E. Knol (Groningen Museum).

The urn was recognized as belonging to an earlier phase, the urnfield culture, from before the area was covered by salt marshes. When this location is correct (the article in the VFG already expressed some doubts), the urn must come from the area east of Hallum, where the Pleistocene subsoil is close to the surface.

Spec.: NAD-archive: some cremation remains, a.o. skull fragment, 3 fragments of diaphyses, fragments of vertebrae.

Date: Urn from the urnfield culture: BRONZ.

Museum/find number: FM 165-80.

Ref.: *Terpboek* V, 254; VFG 124, 1952, 15; NAD-archive.

38

Hartwerd/Hartwert

Zijns

Municipality: Wûnseradiel

RD-coordinates: X/Y 166.0/563.9

Terpboek number: 135

CMA-number: 10E-094

a. During levelling in 1913, a *skeleton* was found in a part of the terp that had been levelled before. According to the *Terpboek*, many sherds with geometrical decoration were found in the same level. The find had been reported, but the quarrying manager was not willing to send the bones to the Frisian Museum. Only the cranium was collected.

Spec.: -

Date: The grave may not be contemporary with the MPROM decorated sherds; it was probably dug in from higher layers. MPROM-ROM.

Museum/find number: FM 135-14/HC 258 FM 151.

Ref.: *Terpboek* V, 129; VFG 85, 1912/1913, 6; De Vrije Fries 22, 189; Knol & Uytterschaut 2010.

39

Hartwerd/Hartwert

Oldeclooster/Bloemkamp

Municipality: Wûnseradiel

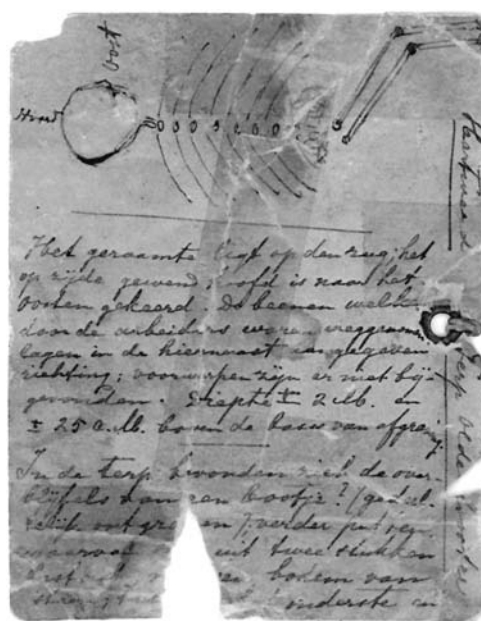


Fig. C.15 Hartwerd-Oldeclooster: Label, belonging to a cranium, with a sketch of the skeleton as it was found. Collection NAD-Nuis.

RD-coordinates: X/Y 168.1/565.2
 Terpboek number: 82
 CMA-number: 10E-072

a. This terp was the location of a medieval monastery. During levelling a *skeleton* was found that may date from an earlier occupation phase, 2 m deep and 25 cm above the deepest quarrying level, probably the base of the terp. The skeleton was in supine position, with flexed legs bent to the east; the head, oriented to the north, was also facing east (see fig. C.15).

Spec.: -

Date: Based on the stratigraphy: ROM-EMA.

Museum/find number: HC 233 FM 7.

Ref.: Knol & Uytterschaut 2010.

40

Hempens/Himpens

Teerns/Tearns

Municipality: Leeuwarden

RD-coordinates: X/Y 184.1/577.3

Terpboek number: 16D

CMA-number: 06C-084

a. During levelling in the 1880's, a *cranium* (*skeleton?*) was found in the deepest terp layers.

Spec.: Folmer 1887, 415: young woman.

Date: LPROM/ROM.

Museum/find number: Folmer: Catal. 136 M.

Ref.: Folmer 1887; possibly the same as Folmer 1890, 605.

41

Hempens/Himpens

Glins

Municipality: Leeuwarden

RD-coordinates: X/Y 185.1/577.1

Terpboek number: 16

CMA-number: 06C-035

a. Around 1930, a *worked human skull fragment* was found, a small, perforated round disc (figs. C.16 and 12.38). It is a stray find, the context of which is unknown. The smooth and shiny surface on both sides must have been caused by handling.

Spec.: Brongers 1967, 33: the average thickness is 4-5 mm and it is 42 x 44 mm at the inside (slightly larger at the outside). The hole in the middle (diameter 9 mm) is drilled from both sides. The object is made of one of the tubera parietalia.

Date: MPROM-EMA (Brongers: probably EROM).

Museum/find number: FM 1961-II-4.

Ref.: Brongers 1967; Elzinga 1961, 53.

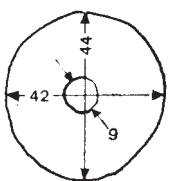


Fig. C.16 Hempens-Glins: Worked skull fragment. From Brongers 1967.

42

Hichtum

Wybrandastate

Municipality: Wûnseradiel

RD-coordinates: X/Y 163.7/566.5

Terpboek number: 82A

CMA-number: -

a-c. The *Terpboek* recorded *three crania* from this terp, found during levelling in the early 20th century.

Spec.: -

Date: MPROM-EMA.

Museum/find number: FM 82A-39/HC 253 FM 120; FM 82A-40/HC 253 FM 121; FM 82A-271/HC 253 FM 122.

Ref.: Terpboek IV, 75 and 80; Knol & Uytterschaut 2010.

43

Hidaard

Sânleansterdyk

Municipality: Littenseradiel

RD-coordinates: X/Y 169.8/565.5

Terpboek number: -

CMA-number: -

a. During ploughing in the northern part of a completely levelled terp south of Hidaard and north of the medieval stinswier of Donia (fig. C.17), a number of human bones were found. The bones, consisting of part of the pelvis, a number of long bones, six vertebrae, a skull and a mandible, probably belong to one individual.

Spec.: The bones were studied by J. Pasveer: possibly male, 40-45 years old; some deformations are indicative of arthritis.

Date: PROM-EMA.

Museum/find number: LIT 51.

Ref.: Archive mr. Hendrik de Jong, Argeologysk Wurkerbân Fryske Akademy.

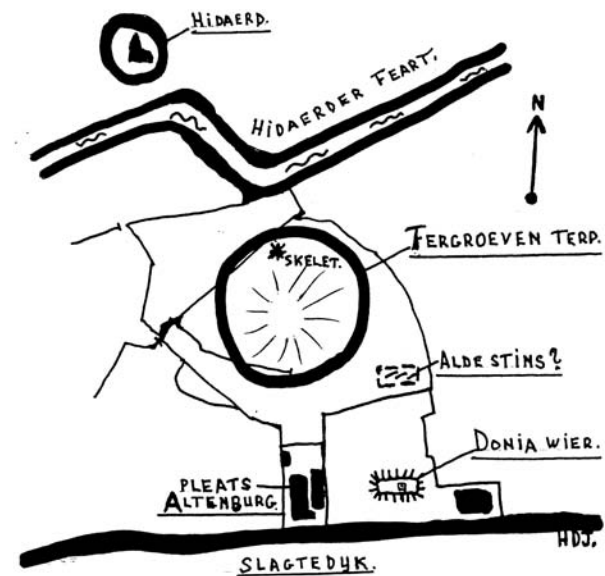


Fig. C.17 Map of the location of a skeleton in Hidaard-Sânleansterdyk. The location of the skeleton is indicated by a star within the circle that indicates the location of the levelled terp. Drawing H. de Jong, Tjalleberd.

44

Hogebeintum/Hegebeintum**Village**

Municipality: Ferwerderadiel

RD-coordinates: X/Y 185.8/594.6

Terpboek number: 28

CMA-number: 06A-044

The high (7-8 m) terp of Hogebeintum was levelled between 1870 and 1926. A large, early-medieval, mixed cemetery was found in 1904, in the south eastern part of the terp (a.o. Boeles 1951); from then on, a student (first J. van der Werf, later J.P. Wiersma, who also worked in Ferwerd) was appointed by the Frisian Museum to document features and to secure finds for the museum. Outside the cemetery, a small number of human remains were found that might be older.

a. In June 1901, a *cranium* (*skeleton?*) was found, 3 m below the surface at the west side of the terp. The cranium, with some hair still attached, was collected without mandible. Placed in a glass box, it was part of the exhibition of the Frisian Museum for some time. The hair is missing now. The workers who found the body claimed two bronze neck rings were found on the same location (fig. C.18).

Spec.: Knol & Uytterschaut 2010: female, 30-40 years old.

Date: The neck rings appear to be of pre-Roman Iron Age date. If we accept the date and the association: PROM.

Museum/find number: FM 28-5bis/HC 248 FM 93. Bronze neck rings: FM 28-6 and 28-7.

Ref.: Leeuwarder Courant and Nieuwe Rotterdamsche Courant June 22, 1901; VFG 73, 1900/1901, 53; Knol & Uytterschaut 2010.



Fig. C.18 Hogebeintum: Two neck rings, allegedly found with a skull or skeleton in 1901. Photo E. Kramer, Fries Museum.

b. 16-21 April 1906, *part of a cranium* was found in the north-eastern part of the terp, 2 m below the surface.

Spec.: -

Date: ROM-EMA.

Museum/find number: FM 28-849.

Ref.: *Terpboek* I, 446ff; Knol 1986b.

c. 6-11 August 1906, *part of a cranium and some other bones* were collected in the north-eastern part of the terp, 2 m below the rails made for soil transport.

Spec.: -

Date: PROM-EMA.

Museum/find number: -

Ref.: Knol 1986b.

45

Holwerd/Holwert**Village**

Municipality: Dongeradeel

RD-coordinates: X/Y 188.9/598.3

Terpboek number: 30 and 30A ("5 minutes walk SW of church")

CMA-number: 06A-036/077

a-b. The *Terpboek* reports *two crania*, found in 1899 about 5.50 m below the surface of the terp. The mandible of one of them is reported broken. They may well have been the only part collected from complete skeletons.

Spec.: Folmer 1900, 763 describes a skull from Holwerd, probably one of these: a male, prognate skull, 'advanced age'. Date: Habitation started here no earlier than the early Roman Iron Age: ROM.

Museum/find number: FM 30A-69/HC 251 FM 112; FM 30A-70/HC 252 FM 113.

Ref.: *Terpboek* II, 27; Folmer 1900; Knol & Uytterschaut 2010.

46

Itens**Village**

Municipality: Littenseradiel

RD-coordinates: X/Y 171.95/568.13

Terpboek number: 63

CMA-number: 10F-043

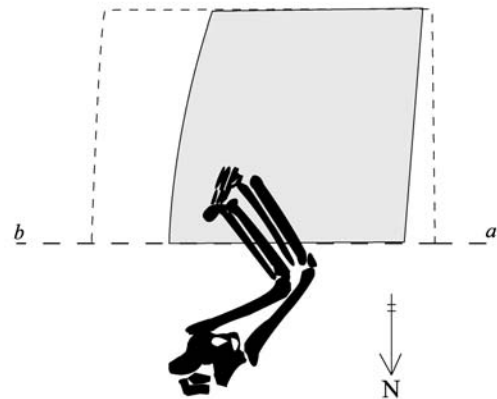
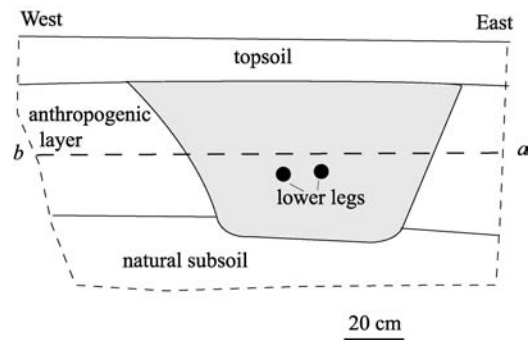


Fig. C.19 Itens: Neat version of the excavation drawing of a skeleton found in an elongated pit or a ditch. The upper part was not drawn, possibly because only the flexed legs were thought interesting. Original drawing: archive RUG/GIA.

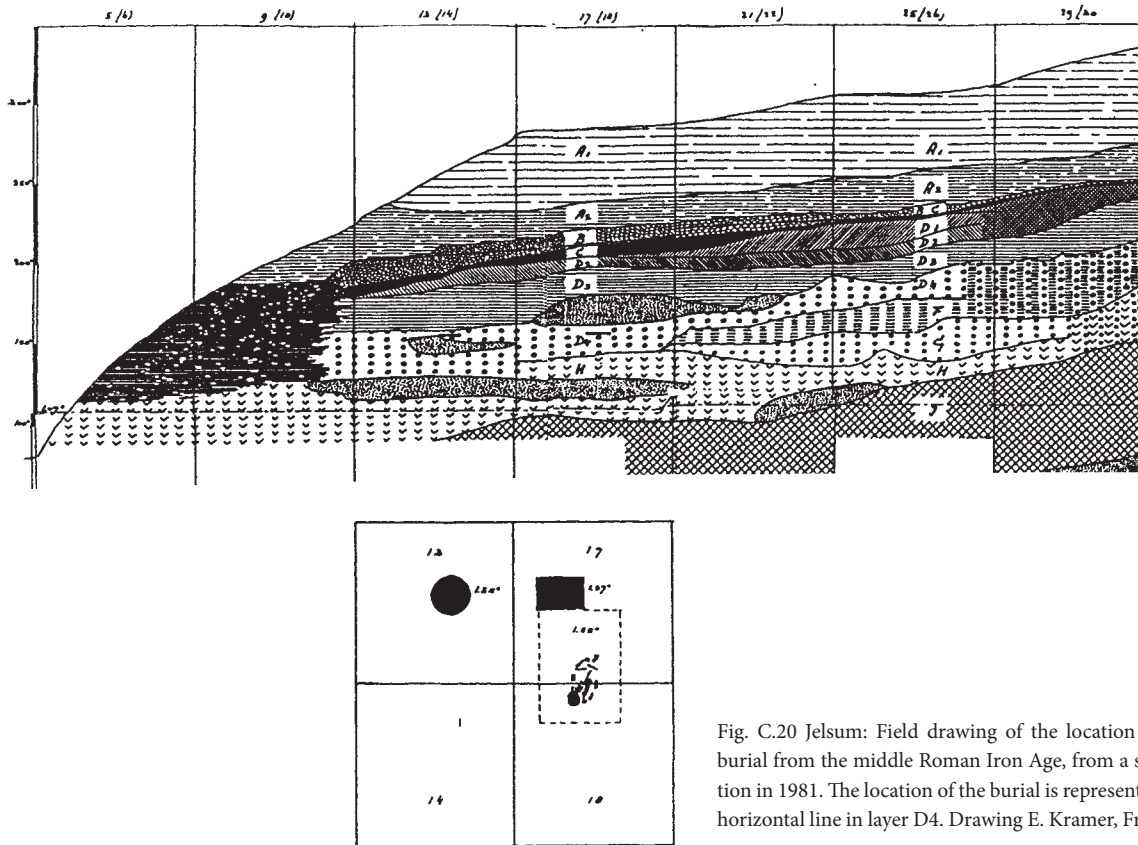


Fig. C.20 Jelsum: Field drawing of the location of an infant burial from the middle Roman Iron Age, from a small excavation in 1981. The location of the burial is represented by a short horizontal line in layer D4. Drawing E. Kramer, Fries Museum.

a. In May 1960, during digging in the levelled part of the terp, a crouched *skeleton* was found, about 40 cm below the present surface level. The find was documented by Elzinga (BAI). The body was lying on its right side, probably in a ditch, with the head to the north (fig. C.19). Though the description mentions a skeleton, the field drawing only represents the lower half of the body; the upper part may have been dug away earlier, was not drawn because supine and therefore thought not interesting, or was not accessible. In the fill of the pit, some *streepband*-pottery was found. The bones were probably not collected.

Spec.: -
 Date: LPROM/EROM.
 Museum/find number: Sherds: FM 1969-I-2/4/5/6.
 Ref.: GIA-archive; VFG 132, 1960, 38; Elzinga 1960, 130; Knol 1986b.

47

**Jelsum
 Village**

Municipality: Leeuwarderadeel
 RD-coordinates: X/Y 181.3/583.2
Terpboek number: 20A
 CMA-number: 06C-022

a. In June 1981, a 2 m wide test trench was made by the Frisian Museum, about 25 m north of the church of Jelsum. In the trench, the *skeleton of an infant* was found near one or two postholes, in layer D4 (figs. C.20 and 12.22). Some potsherd and animal bones (part of the pelvis of a sheep/goat is visible on the photo) were found near the skeleton. The child was buried on its left side with flexed legs, its head to the

west; the find was lifted collected en bloc. An excavation in 2010 (see b.) revealed that the postholes and the burial were situated inside a house.

Spec.: The length of the humerus (64 mm) suggests a post partem age of around two weeks - 1 month (Fazekas & Kósa 1978, 81-82). N.B. Cuijpers *et al.* 1999: 7 months.



Fig. C.21 Jelsum: Human skull (face down) and cattle atlas in the clay fill of a well (feature 1057), probably from the 6th century AD. Photo T. Varwijk, RUG/GIA

Date: The stratigraphy and associated pottery dates suggest MROM. Radiocarbon date bone collagen: 1820 ± 35 BP (GrA-36120), cal AD 121-259 (85.7% probability); ($\delta^{15}\text{N}$ 12.32‰; $\delta^{13}\text{C}$ -20.19, there is a possible reservoir effect, see chapter 12). This fits the archaeological date well: MROM.
Museum/find number: Unnumbered, in NAD-Nuis.
Ref.: Pers. comm. and archive E. Kramer (Frisian Museum), who directed the excavation.

b. In 2010, an excavation was made near the trench of 1981. One of the finds was a human skull with a cattle atlas, in the fill of a well (fig. C.21).
Spec.: Cranium without facial parts and without mandible.
Date: Pottery: probably 6th century AD.
Museum/find number: Trench 1, level 1001, feature 1057.
Ref.: pers. comm. Th. Varwijk (GIA).

48

Jelsum

Jelsumer Oudland

Municipality: Leeuwarderadeel
RD-coordinates: X/Y 182.4/583.5
Terpboek number: 20A (find numbers 1-185)
CMA-number: 06C-024

a-b. Two skeletons were found in the levelled terp area by the owner of the land.

Spec.: -
Date: LPROM-EMA.
Museum/find number: -
Ref.: Archis 2.

c. In 1997 the right half of a mandible was found during a mapping campaign.

Spec.: The mandible was broken in the middle and processes were broken off.
Date: LPROM-EMA.
Museum/find number: F2007-I-6356.
Ref.: Archis 2; Molema & Perger 2001.

49

Jislum

-

Municipality: Ferwerderadiel
RD-coordinates: X/Y 187.7/591.9
Terpboek number: 28C
CMA-number: 06A-065

a-b. Van Giffen (1924, 37) mentions two skeletons, found in this terp, right under "the" dung layers. They are recorded in one of Van Giffen's notebook of 1909; both were found in the base of the terp, about 0.65-0.70 m -NAP in the south east corner of the terp. One of them may be the skeleton that is later described by Van Giffen as being found on some grass (Van Giffen 1928a, 44).

Spec.: -
Date: Habitation probably started here in the early Roman Iron Age: ROM.
Museum/find number: Van Giffen no. 698 and 699 (untraceable now).
Ref.: Van Giffen-archive RUG; Van Giffen 1924; 1928a; Halbertsma 1954.

50

Jorwerd/Jorwert

?

Municipality: Littenseradiel
RD-coordinates: X/Y ca. 176.5/573.5
Terpboek number: 60?
CMA-number: 10F-127?

a. In 1903, a skeleton was found during levelling in a terp near Jorwerd. The find was advertised in a regional newspaper; interested parties could report to the owner (the church wardens of Jorwerd).

Spec.: The newspaper ascribed a sensational stature of 2 m to the body.
Date: PROM-EMA.
Museum/find number: -
Ref.: Archive of E. Knol (GM).

51

Kimswerd

Harlingerweg-Kimswerderlaan

Municipality: Wûnseradiel
RD-coordinates: X/Y 158.1/572.8
Terpboek number: 80
CMA-number: 10B-009

a. During a small excavation in 1981 by the Frisian Museum, in the base of a terp that had been levelled before, four human bone fragments were found among animal bones. Three of them, among them a cranium fragment, were found in a well (no. 7); the fourth in the excavated soil (a femur).

Spec.: -
Date: Pottery from the well is dated MPROM and LPROM/EROM.
Museum/find number: F2008-I-242 (femur); F2008-I-227 (cranium fragment).
Ref.: Kramer 1984; 1989; Milojkovic & Brinkhuizen 1984; 1989.

52

Kimswerd/Kimswert

Ljippeterp

Municipality: Wûnseradiel
RD-coordinates: X/Y 157.9/573.0
Terpboek number: 103
CMA-number: 10B-008

a. During levelling in 1908, a skeleton in 'sitting' position was found, 1.40 m below the surface of the terp.

Spec.: Knol & Uytterschaut 2010: female, 20-30 years old, H. 1.59 m.
Date: MPROM-EMA.
Museum/find number: FM 103-12/HC 270 FM 103/12.
Ref.: Terpboek IV, 357; VFG 80, 1907/1908, 43-44; Knol & Uytterschaut 2010.

53

Kimswerd/Kimswert

Minnema-de With

Municipality: Wûnseradiel
RD-coordinates: X/Y 157.5/574.2

Terpboek number: 121

CMA-number: -

a. During levelling in 1911, a *skeleton* was found '20 cm above the dung layer', in a part of the terp that had been levelled before. The skeleton was found with 31 beads.

Spec.: Knol & Uytterschaut 2010: female, 25-30 years old, H. 1.69 m.

Date: The beads (a.o. small *Überfangperlen*) are probably from the 4th or first half of the 5th century AD (pers. comm. Wil van Bommel-van der Sluijs); the example of Blijja-Sijtsma mentioned above (FM 28B-304) shows that beads sometimes are considerably older than the graves they are found in: MP/EMA.

Museum/find number: FM 121-17 (human bones); FM 121-18 (beads).

Ref.: *Terpboek* V, 59; Knol & Uytterschaut 2010, 90, 92ff.

54

Kimswerd/Kimswert

Terp northwest of Kimswerd, south of Harlingen

Municipality: Wûnseradiel or Harlingen

RD-coordinates: X/Y ca. 157/574

Terpboek number: ?

CMA-number: -

a-b. During levelling in 1912, Van Giffen collected *two crania* (from skeletons?), one with and one without mandible.

Spec.: -

Date: PROM-MA.

Museum/find number: Van Giffen collection 1176 and 1177.

Ref.: Van Giffen-archive RUG.

55

Kubaard/Kûbaard

Village

Municipality: Littenseradiel

RD-coordinates: X/Y 167.1/570.3

Terpboek number: 64A

CMA-number: 10E-143

a. Around 1900, during levelling, an extended supine *skeleton* was found. A small pot with bird bones was standing near the right knee. The present whereabouts of the skeleton and the pot with bones are unknown.

Spec.: -

Date: The frequent reports of bird bones associated with early-medieval burials (Prummel & Knol 1991; Prummel 1999) suggest an early-medieval date for this find: EMA.

Museum/find number: -

Ref.: Halbertsma 1954; Knol 1986b.

56

Kubaard/Kûbaard

Barkwerd

Municipality: Littenseradiel

RD-coordinates: X/Y 168.4/570.9

Terpboek number: 138

CMA-number: -

a. In 1913, the *Terpboek* recorded a *cranium (skeleton?)* found during levelling.

Spec.: -

Date: EPROM-EMA.

Museum/find number: FM 138-31/HC 258 FM 152.

Ref.: *Terpboek* V, 151; Knol & Uytterschaut 2010.

57

Leeuwarden/Ljouwert

Hoogterp/Harmswerd

Municipality: Leeuwarden

RD-coordinates: X/Y 183.4/580.7

Terpboek number: 14J

CMA-number: -

a-b. During levelling in 1909, *two skeletons* were found, 2 m below the surface. There were no grave gifts. Only the *crania*, including mandibles, were collected.

Spec.: -

Date: MPROM-EMA.

Museum/find number: FM 14J-16/HC 245 FM 74A; FM 14J-17/HC 245 FM 74.

Ref.: *Terpboek* I, 103; VFG 81, 1908/1909, 45; Knol & Uytterschaut 2010.

c. During levelling in 1924, a *femur* was found.

Spec.: No marks.

Date: MPROM-MA.

Museum/find number: FM 14J-166.

Ref. *Terpboek* I, 104c; Knol 1986b.

d-f. During levelling in September and October 1926, a human *cranium without mandible* was recorded and *two more crania*, one with half a mandible and the other without one (all probably collected from complete skeletons).

Spec.: -

Date: MPROM-MA.

Museum/find number: FM 14J-220/HC 245 FM 75; FM 14J-228 a/HC 245 FM 77; FM 14J-228 b/HC 245 FM 76.

Ref.: *Terpboek* I, 104e; Knol & Uytterschaut 2010.

g. In 1927, a *cranium with broken mandible* was recorded.

Spec.: -

Date: MPROM-MA.

Museum/find number: FM 14J-242/HC 246 FM 78.

Ref.: *Terpboek* I, 104e; Knol & Uytterschaut 2010.

h. In 1929, a *cranium* was recorded.

Spec.: -

Date: MPROM-MA.

Museum/find number: FM 14J-266/HC 246 FM 78A.

Ref.: Knol & Uytterschaut 2010.

58

Leeuwarden/Ljouwert

Huizum

Municipality: Leeuwarden

RD-coordinates: X/Y 182.6/578.5

Terpboek number: 187

CMA-number: 06C-074

a-b. During levelling, *two crania (skeletons?)* were found, according to Folmer in deep terp layers.

Spec.: Folmer 1881, 81 and 1887, 416: both are male, adult.

Date: ROM.

Museum/find number: -
Ref.: Folmer 1881; 1887.

59

Leeuwarden/Ljouwert Wijlaard

Municipality: Leeuwarden
RD-coordinates: X/Y 184.5/580.1
Terpboek number: 14
CMA-number: -

a. The Huizinga collection contains a fractured and healed human *femur*, probably taken from a grave.

Spec.: Knol & Uytterschaut 2010: probably male, adult. The femur had healed at an angle.

Date: ROM-MA.

Museum/find number: HC 275.

Ref.: Knol & Uytterschaut 2010.

60

Leeuwarden/Ljouwert Oldehoofsterkerkhof

Municipality: Leeuwarden
RD-coordinates: X/Y 181.9/579.7
Terpboek number: -
CMA-number: 06C-076

a. During an excavation in 2005 in one of the early terps that are at the basis of the later city of Leeuwarden, a *human cranium*, lying on its left side, was found in a pit. It was discovered while making a section with a mechanical shovel in one of the trenches, no. 18 (figs. C.22 and 12.45). The finds are probably disturbed, but it is not certain to what extent. The cranium was not found with a skeleton. The basis of the skull was broken; mandible and maxilla are missing, possibly as a result of mechanical excavating. The

tongue bone belonging to the skull was present, which indicates it was probably complete. A small part of the maxilla of a fully-grown, medium sized dog was lying against the skull. Considering the excavation damage, the dog skull may also have been complete. The find in that case consists of a human skull and a (partial?) dog skull, against each other in a small pit.

The find was situated at 0.20 m +NAP, on the northwestern slope of the terp, some metres from the northwestern wall of a farmhouse, which had an early phase in the 2nd century AD and was rebuilt several times until well into the 3rd century AD (building no. 2/3; Nicolay 2008a).

Spec.: Thilderkvist, unpublished report: sex is ambiguous, with a slight tendency towards female; age: older than 45.

Date: Not far from the cranium, in the same pit, some potsherds of MROM date were found. The stratigraphy of the layer suggests a 3rd century date. Radiocarbon date: 1850 ± 35 BP (GrA-36124), cal AD 78-241 (2 σ); (δ¹⁵N 12.80‰, δ¹³C: -19.55, there is a possible reservoir effect, see chapter 12). Stratigraphy and radiocarbon date: MROM (3rd century).

Museum/find number: 2778.

Ref.: J. Thilderkvist (GIA, unpublished report); Thilderkvist 2013, 129; Dijkstra *et al.* 2008, 339.

61

Lions/Leons Village

Municipality: Littenseradiel
RD-coordinates: X/Y 174.6/574.0
Terpboek number: 55B
CMA-number: 10F-017

a-b. During levelling in 1901, two *skeletons* were found, about 2.5 m below the surface, near a wooden wheel. The crania were bought by Boeles for the Frisian Museum after the find was described in the

Leeuwarder Courant. In 1904, the *Terpboek* recorded a bronze, Roman statuette representing Fortuna that had been found near a wheel some years earlier; this might be the same wheel. The skulls were noticed by the anthropologist Blok (Boeles 1908); Blok thought they were of Alpine or Celtic type rather than of Germanic type.

Spec.: Knol & Uytterschaut 2010:

a. one of the crania is male, 30-40 years old; it misses the face, the basis and the mandible;

b. the other cranium is probably female, 20-25 years old; it misses part of the face.

Date: Probably ROM.

Museum/find number: a. FM 55B-25/HC 252 FM 117; b. FM 55B-26/HC 252 FM 116.

Ref.: Terpboek III, 107; Boeles 1908, 49; Knol & Uytterschaut 2010.



Fig. C.22 Leeuwarden-Oldehoofsterkerkhof: Northern section of the large excavation trench of 2005. One of the features is a pit in which a damaged human skull was found (within white circle). Photo: ADC-ArcheoProjecten.

62**Lollum****Hizzard**

Municipality: Wûnseradiel

RD-coordinates: X/Y 163.5/570.3

Terpboek number: -

CMA-number: 10E-043

a. A *skeleton* was found during digging a pond in a largely levelled terp. The finders report that it looked as if it had been standing and was collapsed; it was possibly sitting and strongly contracted. It was allegedly found with pottery (one broken pot almost complete), part of a cattle skull and a horn core. The latter two probably belong together.

Spec.: adult.

Date: Pottery: M/LPROM (ca. 200 BC).

Museum/find number: included in the finds of the excavation Lollum-Groot-Saksoord.

Ref.: The find was reported to the archaeologists working at the excavation of Lollum-Groot Saksoord (see next item).

Pers. comm. Th. Varwijk (GIA).

63**Lollum****Groot Saksoord/Saxenoord**

Municipality: Wûnseradiel

RD-coordinates: X/Y 163.2/569.8

Terpboek number: -

CMA-number: 10E-044 and 107

a. During an excavation in the remainder of the levelled terp in 2013, a *tibia* was found in a ditch from the first phase of habitation, with pottery and animal bones.

Spec.: -

Date: pottery: 5th or 4th century BC: EMROM.

Museum/find number: 981.

Ref.: Pers. comm. Th. Varwijk (GIA).

64**Lutjelollum**

-

Municipality: Franekeradeel

RD-coordinates: X/Y 166.9/576.3

Terpboek number: 66A

CMA-number: 05G-119

Folmer described in various publications several crania, found in the deep layers of the terp during levelling.

a. *Cranium with mandible (skeleton?)* found during levelling in 1885/86.

Spec.: Folmer 1887, 413; 1890, 604: male, ca. 30 years old.

Knol & Uytterschaut 2010: male, 25-40 years old.

Date: LPROM-EMA

Museum/find number: FM M. 150/ HC 232 FM 4.

Ref.: Folmer 1887; 1890; Knol & Uytterschaut 2010.

b. *Cranium with mandible (skeleton?)* found during levelling in 1885/86.

Spec.: Folmer 1887, 414; 1890, 604: mandible is described ('high male'); male, adult.

Knol & Uytterschaut 2010: face is missing; female, older than 45.

Date: LPROM-EMA.

Museum/find number: FM M. 148/ HC 244 FM 72.

Ref.: Folmer 1887; 1890; Knol & Uytterschaut 2010.

c. *Cranium with mandible (skeleton?)* found during levelling in 1885/86.

Spec.: Folmer 1887, 417; 1890, 604: male, adult.

Knol & Uytterschaut 2010: teeth are complete; probably male, 25-40 years old.

Date: LPROM-EMA.

Museum/find number: FM M. 147/ HC 232 FM 1.

Ref.: Folmer 1887; 1890; Knol & Uytterschaut 2010.

d. *Cranium (skeleton?)* found during levelling in 1885/86.

Spec.: Folmer 1890, 603: male.

Knol & Uytterschaut 2010: male, 30-40 years old.

Date: LPROM-EMA.

Museum/find number: FM M. 149/HC 234 FM 17.

Ref.: Folmer 1890; Knol & Uytterschaut 2010.

e. During levelling before 1897, *two human femora* were collected, one of which (the right leg) had been broken and healed. They were probably part of a complete skeleton, collected for the conspicuous pathology.

Spec.: The right leg had healed but had become shorter: 40.8 cm, while the left femur was 47 cm.

Date: LPROM-EMA.

Museum/find number: FM 66A-77.

Ref.: Terpboek III, 246; Knol & Uytterschaut 2010, fig. 3.

65**Mantgum****Tjeintgum**

Municipality: Littenseradiel

RD-coordinates: X/Y 176.75/571.73

Terpboek number: 60B

CMA-number: 10F-024

a. The owner of this partly levelled terp reported the find of *human skeletons* in deep layers of the terp in earlier years.

Spec.: -

Date: MPROM-ROM.

Museum/find number: -

Ref.: GIA-archive: report H. Halbertsma, 15-20 August 1949.

b. In 1959, one of the steep sides and a small part of the levelled area were excavated. Among the bones was a fragment of a human *femur*.

Spec.: -

Date: MPROM-ROM.

Museum/find number: -

Ref.: VFG 131, 1959, 26-27.

66**Marrum****De Beer/Marrumermieden**

Municipality: Ferwerderadiel

RD-coordinates: X/Y 183.9/592.4

Terpboek number: 212

CMA-number: 06A-107

a. During levelling at the end of the 19th century, a worked skull bowl was found (figs. C.23 and 12.34). The edges of this object are rounded.

Spec.: Brongers 1967, 33: 85 x 87 mm; average thickness 4-5 mm, maximum depth ca. 14 mm. The bowl is almost circular and consists of a left *os parietale*; the *tuber parietale* is the deepest part of the bowl. The object is calcified and cracked.
Date: ROM-EMA (Brongers: probably EROM).
Museum/find number: FM 212-11.
Ref.: Terpboek V-353; Boeles 1943; Brongers 1967.

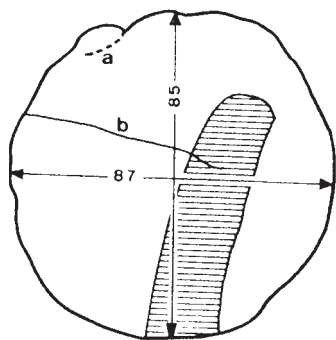


Fig. C.23 Marrum-De Beer: Worked skull fragment of unknown date. From Brongers 1967.

b. During levelling in 1927, a cranium with mandible was collected.

Spec.: -
Date: ROM-EMA.
Museum/find number: BAI 1927/VII-15.
Ref.: GIA-archive.

67

Marssum

Ritsumaburen

Municipality: Menaldumadeel
RD-coordinates: X/Y 178.1/579.7
Terpboek number: 52
CMA-number: 05H-041

a. During levelling in 1912, the upper part of a human cranium was found.

Spec.: -
Date: MPROM-EMA.
Museum/find number: FM 52-97.
Ref.: Terpboek III, 17.

b. During levelling in 1913, the upper part of a cranium and four long bones (tibia and femur) were collected.

Spec.: -
Date: MPROM-EMA.
Museum/find number: FM 52-142/HC 252 FM 114 + HC 273 52/142 + HC 274 52/142.
Ref.: Terpboek III, 18; Knol & Uytterschaut 2010.

68

Menaldum/Menaam

Graldastate/terp Lettinga

Municipality: Menaldumadeel
RD-coordinates: X/Y 173.2/580.4
Terpboek number: 45 and 189
CMA-number: 05H-035

a. During levelling in the 1880s, a skeleton was found, about 10 feet (3 m) below the surface of the terp. Only the jet arm

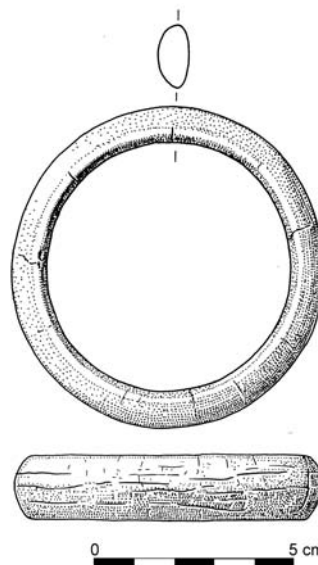


Fig. C.24 Menaldum-Graldastate: Yet bracelet, found on a skeleton. Drawing: H.J.M. Burgers in Knol 1993, fig. 54.

ring that was found on the skeleton (fig. C.24) was collected (Knol 1993, 190, fig. 54). It was recorded as a bone finger ring in the *Terpboek*.

Spec.: -
Date: Jet rings are difficult to date. They were probably produced between LPROM and LROM (Knol 1993, 87). The burial itself may still be younger: LPROM-MP.
Museum/find number: FM 45-33.
Ref.: Terpboek II, 330; VFG 57, 1884/85.

69

Menaldum/Menaam

terp Hoek/Slappeterpsterdijk

Municipality: Menaldumadeel
RD-coordinates: X/Y 172.4/581.2
Terpboek number: 125
CMA-number: 05H-018

a. The *Terpboek* recorded a cranium found during levelling.

Spec.: -
Date: LPROM-EMA.
Museum/find number: FM 125-48/HC 258 FM 147.
Ref.: Terpboek V, 80; Knol & Uytterschaut 2010.

70

Midlum/Mullum

Hoogeterp

Municipality: Franekeradeel
RD-coordinates: X/Y 159.4/577.4
Terpboek number: 69A
CMA-number: -

a. In 1909, the *Terpboek* recorded a cranium with four vertebrae. The vertebrae are missing now.

Spec.: -
Date: The terp row of Midlum was occupied around the beginning of our era: EROM-EMA.
Museum/find number: FM 69A-99/HC 252 FM 118.
Ref.: Terpboek III, 289; Knol & Uytterschaut 2010.

71

Midlum/Mullum**Middelstein/Almenum-oost**

Municipality: Harlingen

RD-coordinates: X/Y 158.6/577.3

Terpboek number: 126

CMA-number: 05G-073

a. In 1926, the *Terpboek* recorded the purchase of a *cranium*, found earlier during levelling.

Spec.: -

Date: The terp row of Midlum was occupied around the beginning of our era: EROM-EMA.

Museum/find number: FM 126-42/HC 258 FM 148.

Ref.: *Terpboek* V, 84; Knol & Uytterschaut 2010.

72

Midlum/Mullum**Gratingastate**

Municipality: Harlingen

RD-coordinates: X/Y 159.8/577.4

Terpboek number: -

CMA-number: 05G-194

a. During building of a slurry pit in 1950 behind the farm Gratingastate, a *skeleton* was found just below the surface, together with a (more or less complete) pot. From the strange, crouched position of the body and the shallowness of the burial, it was assumed that it was a murder victim, so the police was informed. The skull was taken by the police, while the remaining bones somehow disappeared. Some of the long bones, parts of the pelvis and the skull, including the mandible, were later recovered. The pot was taken by unknown visitors from nearby Witmarsum, who had read about the find in a newspaper. In a letter to Boeles, H. Halbertsma wrote that it was a pot with *streepband*-decoration (dd. 21 July 1952).

The shallowness of the pit suggests that the location is a levelled terp.

Spec.: Huizinga 1954: male, ca. 45 years old, H. 170.5 cm. Huizinga made this skull (fig. 12.1) the prototype of his 'type Midlum', representing the population of Friesland in the beginning of the Christian era (Huizinga 1954, 54).

Date: The terp row of Midlum was occupied around the beginning of our era; *streepband* pottery belongs to the late pre-Roman Iron Age and the 1st century AD: EROM.

Museum/find number: ?

Ref.: Archive RCE; Boeles-archive; H. Halbertsma in *Leeuwarder Courant* 14 October 1950; BROB 1950/21, 2; Halbertsma 1954; Huizinga 1954.

73

Miedum**near Tzum**

Municipality: Franekeradeel

RD-coordinates: X/Y 165.6/576.2

Terpboek number: 73E

CMA-number: 05G-120 + 154

a-e. The collection Huizinga contains *several crania* from this terp. Nr. 66 is reported to be damaged by sword gashes and a blunt object.

Spec.: -

Date: LPROM-MA.

Museum/find number: HC 241 FM 58; 242 FM 61 (probably); 62; 66; 66A.

Ref.: Knol & Uytterschaut 2010; NAD-archive.

74

Oosterbeintum/Easterbeintum

-

Municipality: Ferwerderadiel

RD-coordinates: X/Y 187.1/594.8

Terpboek number: 28bis

CMA-number: 06A-043

Oosterbeintum is well-known for its excavated and published early-medieval cemetery (dated ca. AD 450-750), containing 47 inhumations, 116 cremations, a horse burial and six dog burials (Knol & Prummel 1994; Knol *et al.* 1996).

a. A conspicuous find was a *skull*, standing upright under an early-medieval inhumation grave (figs. C.25 and 26), facing south (contra the captions of the photo in Knol *et al.* 1996). The inhumation grave was dated AD 675-750. At the time of publication, it was interpreted as the remainder of a disturbed burial (Knol *et al.* 1996, 289). However, the upright position of the skull and the absence of other bones suggest it might be a single skull, deposited during an earlier phase of occupation of the terp. There was a pit below the burial.

Spec.: Knol *et al.* 1996, 288: cranium without mandible, probably female, age 30-40.

Date: ROM-EMA.

Museum/find number: 474.

Ref.: pers. comm. E. Knol, Groningen Museum; Knol *et al.* 1996.

b. During an excavation in 2011, a large, distal part of a left *humerus* was found in the fill of a ditch, feature no. 15 (pers. comm. M. Bakker, GIA).

Spec.: Traces of gnawing by a dog were found on the distal end (pers. comm. W. Prummel, GIA).



Fig. C.25 Oosterbeintum: A skull, found under an early medieval inhumation burial, possibly from an older phase of occupation. From Knol *et al.* 1996.

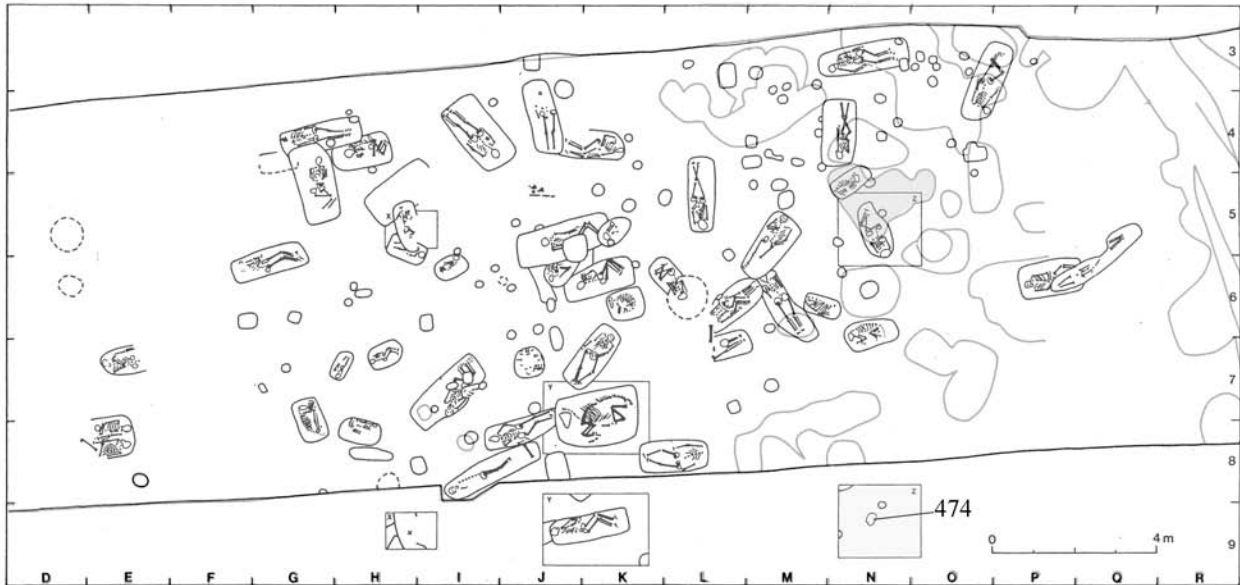


Fig. C.26 Oosterbeintum: Inhumation and animal burials in the early medieval cemetery. A single skull was found in a depression (grey) below one of the inhumation graves (the inset with find no. 474 depicts the situation in the level under the grave). From Knol *et al.* 1996.

Date: The ditch is dated EMA2. The fill is probably taken from older terp layers: PROM-EMA.

Museum/find number: 32.

Ref.: pers. comm. Th. Varwijk en M. Bakker (GIA).

75

Oosterend/Easterein Terp to the northeast

Municipality: Littenseradiel

RD-coordinates: X/Y 171.1/568.1

Terpboek number: -

CMA-number: probably the same terp as 10F-139

a. In 1989, some weathered *bone fragments*, including part of a cranium, were found here.

Spec.: -

Date: MPROM-EMA.

Museum/find number: FM 1993-VI.3.

Ref.: NAD-archive.

76

Oosterlittens/Easterlittens Wammert

Municipality: Littenseradiel

RD-coordinates: X/Y 173.5/571.2

Terpboek number: 57

CMA-number: 10F-096

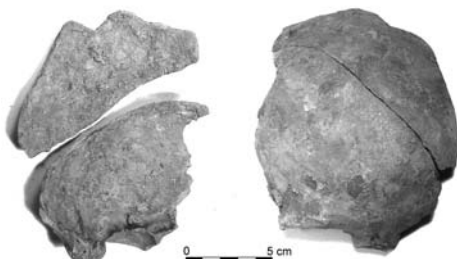


Fig. C.27 Oosterlittens-Wammert: Broken or cut skull fragment. Date unknown.

a. In 1965, two fitting *fragments of a human cranium* were found here (fig. C.27); several other finds were made on the same occasion (groundwork?), especially pottery from all habitation phases.

Spec.: Right part of the *os frontale* and part of the *parietale*, possibly cut.

Date: MPROM-EMA.

Museum/find number: 1155d.

Ref.: NAD-archive.

77

Oudkerk/Aldtsjerk Alde Miedwei

Municipality: Tytjerksteradiel

RD-coordinates: X/Y 186.7/587.4

Terpboek number: -

CMA-number: 06C-015

a. During road construction in 1967 on a part of a terp that had earlier been levelled, a *skeleton* in a burial pit came to the light. Details on the position of the skeleton were not recorded. Some sherds were found, presumably in the pit. The bones do not seem to have been collected.

Spec.: -

Date: The sherds were reported to be of MROM date, according to NAD-archive: types Gw6, Ge7, Gw8, V4, V5, K5b: MROM.

Museum/find number: potsherds 1122h and 1473g.

Ref.: Elzinga 1968, 135; Knol 1986b; NAD-archive.

78

Slappeterp Village

Municipality: Menaldumadeel

RD-coordinates: X/Y 170.6/580.8

Terpboek number: 47C

CMA-number: 05H - 010

a. During digging behind a farmhouse in 1952, a *skeleton* was found (fig. 12.16). A small excavation was executed by the ROB. The find report stated that the body was prone, with the legs slightly flexed. The arms were reported to have been folded across the chest, with the hands touching the shoulders.

The body was found only 30 cm below the surface, 'in terpsoil' in a levelled area. Some other finds were mentioned, but these were not described.

Spec.: Report Halbertsma, ROB, 2 December 1952: skeleton of a child; the teeth suggest an age of 7 or 8 years.

Date: Based on other finds (unknown to us) it was dated by Halbertsma to the early Roman Iron Age; the location in a deep terp layer is compatible with this date: EROM.

Museum/find number: ?

Ref.: RCE-archive; VFG 124, 1952, 15; Halbertsma 1954.

79

Spannum

Village

Municipality: Littenseradiel

RD-coordinates: X/Y 169.6/573.0

Terpboek number: 65

CMA-number: 10E-130

a. In the early 21st century, a metal detectorist found a number of metal objects in or near this terp (not in Tzum, as Erdrich wrote in his article on this find of 2004). The find consisted of a large rim fragment of a silver vessel of Germanic type, that had been cut from the vessel already before it had been deposited; a bronze brooch (a *Rollenkappenfibel* from the eastern series Almgren 39-41); and a bronze pair of scissors (fig. C.28). The objects were not found together, but 20-30 m apart. Erdrich (2004) argues they must belong together, since they are unusual finds, which all show traces of burning. Moreover, the brooch and the pair of scissors were found complete, suggesting that they were not ordinary settlement finds, but *burial gifts*. Therefore the finds must belong to a cremation burial from the Roman Iron Age. The finds, especially the brooch and the silver vessel, are uncommon in the Netherlands. Several bronze scissors have been found elsewhere in Friesland (pers. comm. T.B. Volkers, NAD-Nuis). The brooch originates in the area between the rivers Oder and Weichsel or southern Scandinavia. A burial with a silver vessel makes the find even more special; burials with metal vessels are known from elite burials in the area between Elbe and Weichsel; in the northern Netherlands they are only known from the Sommeltjesberg at Texel (see chapter 5.4) and Castricum in the province of North-Holland; in Castricum a burial with a bronze vessel and a bronze pair of scissors was found. Erdrich's conclusion is that the unusual finds must belong to a burial of the Lübsow-type, of a member of the elite with contacts in central Europe. He speculatively suggests that the objects belonged to a warrior that had to leave his homeland in central Europe after the Marcomannic wars in the second half of the 2nd century AD (Erdrich 2004, 795-6).

Spec.: -

Date: The finds are dated on typological grounds to the second half of the 2nd century or the early 3rd century AD: MROM.

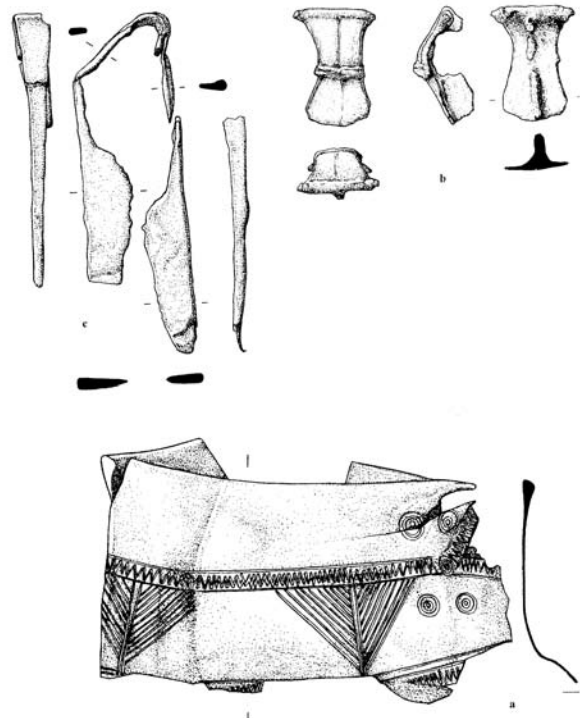


Fig. C.28 Spannum: Part of a silver vessel, a bronze brooch and a bronze pair of scissors, possibly grave gifts from an elite cremation burial from the middle Roman Iron Age. From Erdrich 2004.

Museum/find number: -

Ref.: Erdrich 2004; pers. comm. M. Erdrich.

80

Stiens

Kramer op het Oudland

Municipality: Leeuwarderadeel

RD-coordinates: X/Y 182.0-184.7/585.5-588 (Stienser Oudland)

Terpboek number: 22A

CMA-number: -

a. During levelling at the end of the 19th century, a *skull bowl* was found (figs. C.29 and 12.35). A small perforation (\varnothing 5 mm) near the rim suggests it had been hanging

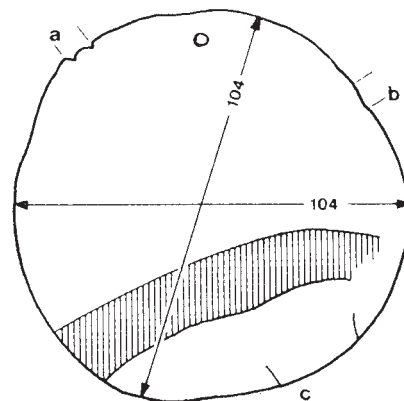


Fig. C.29 Stiens-Kramer: Worked skull fragment of unknown date. From Brongers 1967.

(Boeles 1943). However, “there are no traces of wear near the hole that could have been caused by suspension on a cord” (Brongers 1967). The surface on both sides and the edges are smooth and shiny, probably by handling. Spec.: Brongers 1967: a round skull bowl, 104 x 104 mm; average thickness 5 mm, maximum depth of the cup ca. 23 mm. “The fragment consists of a left *os parietale*; The *tuber parietale* forms the bottom of the cup. The *diploe* of the hole is completely exposed”, which implies it had not been made as a trepanation before death.

Date: LPRM-EMA (Brongers: probably EROM).

Museum/find number: FM 22A-70.

Ref.: Terpboek I, 251; Brongers 1967; Boeles 1943; 1951, p. 205 and Plate 29:4; Pleyte 1888 (according to Pleyte, this find comes from the terp Zwaard near Stiens).

81

Stiens

Kalma/Oudland

Municipality: Leeuwarderadeel

RD-coordinates: X/Y 184.4/587.5

Terpboek number: 21A

CMA-number:

During levelling between 1883 and 1893, a number of human remains were found. It is certain that records b) and c) are from this terp. The remains described by Folmer (1890) are probably from this terp.

a. A *cranium* (skeleton?) was found in a deep terp layer.

Spec.: Folmer 1890, 604: male, not very old.

Date: MPROM-EMA.

Museum/find number: FM M 297/ HC 235 FM 21.

Ref.: Folmer 1890; Knol & Uytterschaut 2010.

b. A *cranium and mandible* (skeleton?), location in the terp unknown.

Spec: The *Terpboek* reports as a curiosity that the first cervical vertebra has become fused with the occipital bone.

Museum/find number: 21A-362/ HC 233 FM 8.

Date: MPROM-EMA.

Ref: Terpboek I, 230; Knol & Uytterschaut 2010.

c. *Cranium with mandible* (skeleton?), found in a deep terp layer.

Spec.: Folmer 1890, 610: old female.

Date: MPROM-EMA.

Museum/find number: FM M 301/ HC 237 FM 35

Ref.: Folmer 1890; Knol & Uytterschaut 2010.

d. *Cranium with mandible* (skeleton?), found in a deep terp layer.

Spec.: Folmer 1890, 605: a small, female cranium.

Date: MPROM-EMA.

Museum/find number: FM M 303

Ref.: Folmer 1890.

e. *Cranium with mandible* (skeleton?), found in a deep terp layer.

Spec.: Folmer 1890, 604: male, all sutures open.

Date: MPROM-EMA.

Museum/find number: FM M 305.

Ref.: Folmer 1890.

82

Stiens

Brandenburg

Municipality: Leeuwarderadeel

RD-coordinates: X/Y 183.5/586.5

Terpboek number: 21B

CMA-number: -

A number of human remains collected during levelling in 1909, were recorded in 1922. Their context and other details of the finds are lacking.

a. A *cranium without mandible* (skeleton?).

b. Another *cranium without mandible* (skeleton?); part of this cranium is missing.

Spec.: -

Date: ROM-EMA.

Museum/find number: 21B-29/HC 247 FM 86; 21B-30/HC 247 FM 87.

Ref.: Terpboek I, 233-234; Knol & Uytterschaut 2010.

83

Techum (Goutum)

Oude Diep Zuid/Buma-west

Municipality: Leeuwarden

RD-coordinates: X/Y 182.3/575.2 (AMK 15.160);

182.1/575.6 (AMK 15.159)

Terpboek number: -

CMA-number: 06C-100

a. During a coring program in 2000-2001, settlement traces were discovered along a creek, an arm of the small river Oude Diep. There were several layers with find material, each covered by a layer of natural sediment. Finds consist of a conspicuous amount of bone, among it burnt bone, charcoal and burnt loam. It was suggested (Exaltus 2002) that this may have *been an area for special activities, such as cremation* or butchering. Unfortunately, the cremation remains were not collected.

A following excavation in 2008 (Zandboer 2009), slightly south of the area that was studied in 2000-2001, brought a number of agricultural layers with ditches to the light, each covered by sediment.

A final excavation in 2009 uncovered a living area near arable fields, but no other traces indicative of cremation. The suggestion by Exaltus could not be confirmed.

Spec.: -

Date: LPRM-ROM.

Museum/find number: -

Ref.: Exaltus 2002; Zandboer 2009.

b. During the excavation of AMK 15.160 in 2009, a *mandible* was found in a pit, together with a complete pot of middle pre-Roman Iron Age type G3b and a large part of another pot of the same type.

Spec.: Bergsma 2010: adult (ca. 45), male. Dental elements showed signs of *hypoplasia*.

Date: Pottery and stratigraphy: MPROM.

Museum/find number: Trench 5, feature 57, find no. 238.

Ref.: Tuinstra & van Malssen 2010; Bergsma 2010.

c. During the excavation of AMK 15.159 in 2009, a *human skeleton* was found in the salt marsh to the south of the terp,

not far from a creek that silted up during the pre-Roman Iron Age (fig. 12.21). The body was supine, with the bent knees fallen to the left. The head was oriented to the west. In the excavation report, the body was dated to the early Middle Ages because of the crouched position of the body, but there is no stratigraphic evidence to support this date. If the grave belongs to an older phase of the settlement, the nearby creek was still open at the time of the burial.

Spec.: Bergsma 2010: probably female, aged 18-20. Dental elements showed signs of *hypoplasia*.

Date: The burial might belong to the excavated early-medieval terp settlement, but also to older, nearby settlements: PROM-EMA.

Museum/find number: Trench 14, feature 14, find no. 317.

Ref.: Tuinstra & van Malssen 2010; Bergsma 2010.

84

Tritsum/Tritzum

-

Municipality: Franekeradeel

RD-coordinates: X/Y 166.9/571.9

Terpboek number: -

CMA-number: 10E-120

Part of this terp was excavated from 1958-1961 by the BAI (Waterbolk 1961; Taayke 2007). A number of skeletons and single human bones were uncovered. The extensive find material is not accessible at this moment. Dates are based on unpublished results.

a. In 1958, the find book recorded a *cranium fragment*.

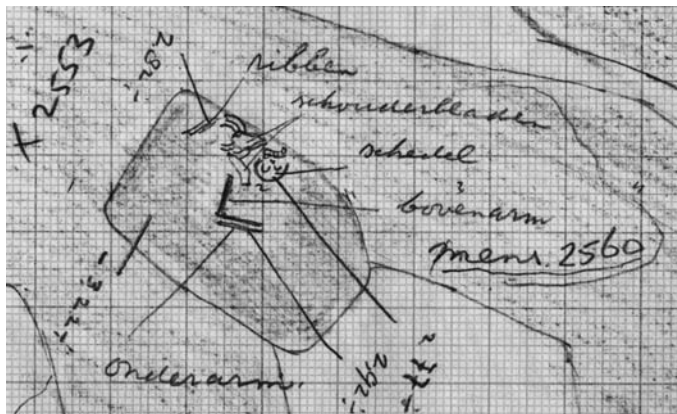


Fig. C.30 Tritsum: Field drawing of a pit with a human skeleton (probably complete and in articulation). Parts of this skeleton were excavated in higher levels. The find (find nos. 2167 and 2560) is dated to the late pre-Roman or Roman Iron Age. Drawing: archive RUG/GIA.

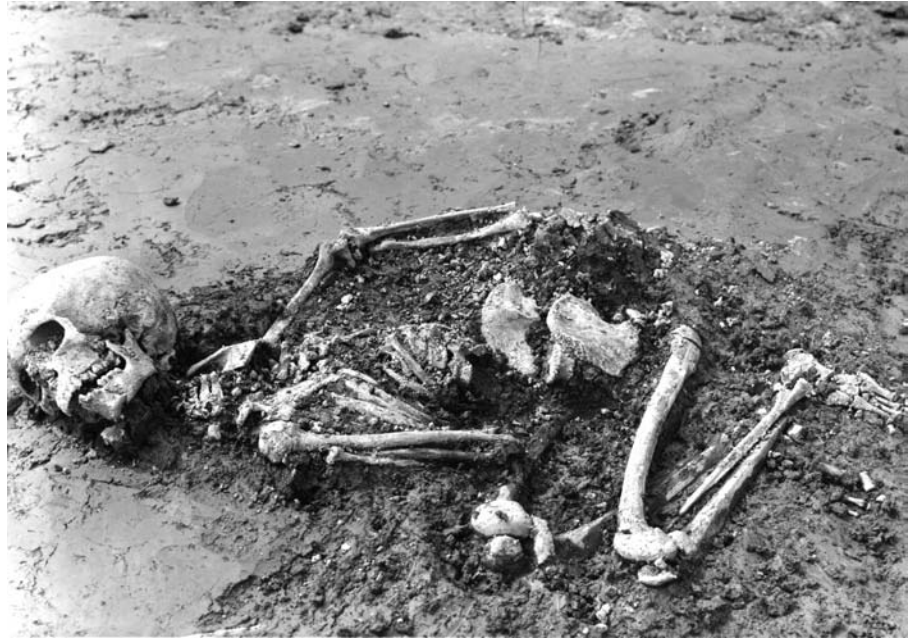


Fig. C.31 Tritsum: Skeleton in crouched position (find no. 3211), found on the slope or on the fill of a ditch; probably dated to the middle pre-Roman Iron Age. Photo RUG/GIA.

Spec.: -

Date: MPROM-EMA.

Museum/find number: 22.

Ref.: GIA-archive.

b-c. In 1959, a *mandible* was recorded twice. The first was found in the 3rd level of trench 1; the second in the 2nd level of trench 2. It is not entirely certain that the mandibles are human.

Spec.: -

Date: MPROM-EMA.

Museum/find number: 84 and 100.

Ref.: GIA-archive.

d. The *upper part of a skull* was found in 1959, in the 2nd level of trench 2. This might be the worked skull fragment mentioned by Brongers.

Spec.: -

Date: MPROM-ROM.

Museum/find number: 92.

Ref.: GIA-archive.; Brongers 1968, footnote 13; Knol 1986b.

e. In 1959, the find of unspecified *human bones* was recorded. They were found in a pit (no. 149) in the 8th level of trench 1. A femur was depicted in the feature.

Spec.: -

Date: MPROM-ROM.

Museum/find number: 1269.

Ref.: GIA-archive.

f. In the fill of a ditch in the 9th level of trench 2, an extended, supine *skeleton* was found (fig. 12.18). According to the excavation picture, both feet were found about 1 m from the lower legs. The detailed day report does not mention the separate bones, although the skeleton was measured from the feet up. The find book mentions still another skeleton with a

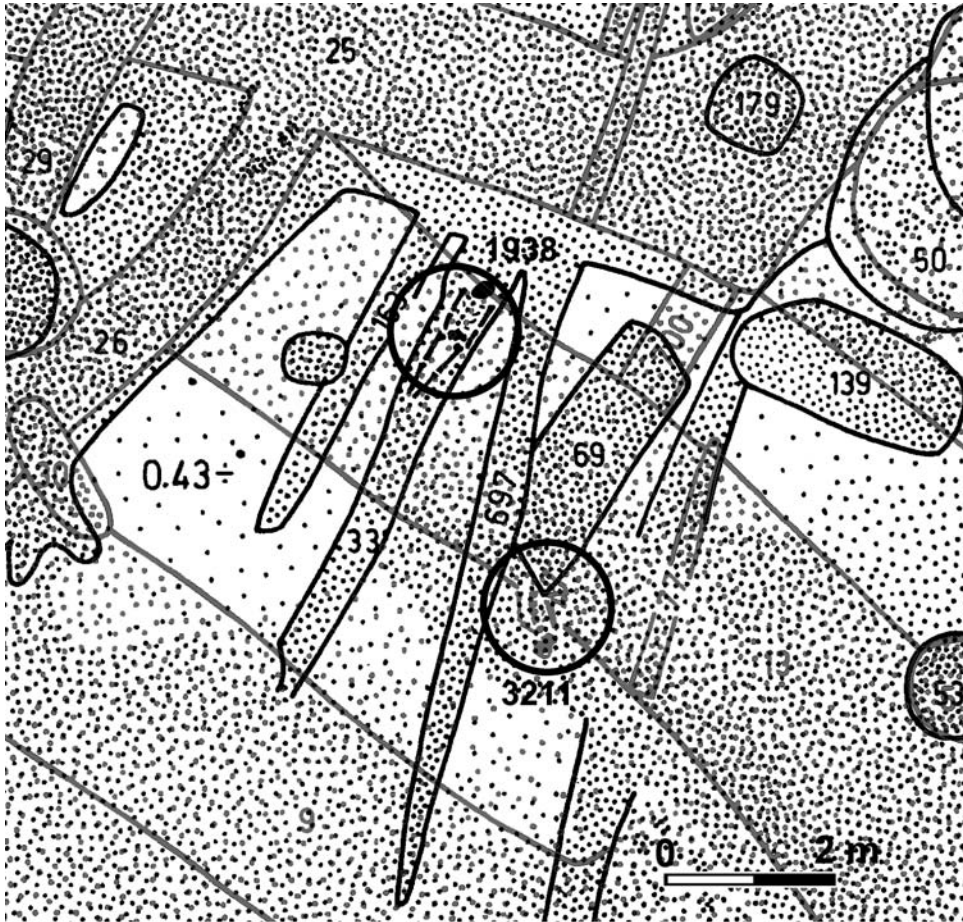


Fig. C.32 Tritsum: Two overlapping neat versions of field drawings with burials, one (no. 1938 in supine position) in and one (no. 3211 in crouched position) on the slope of a ditch. There are probably several centuries between the burials. Original drawings: archive RUG/GIA.

skull (possibly a second skull) in the next record, no. 1939. A second skeleton was, however, not depicted on the excavation drawing.

Spec.: Day report 31 May 1960: a length of 1.20 m from feet to shoulder, "the height of a 10 year old girl".

Date: Stratigraphy: LPROM-EROM.

Museum/find number: 1938; feet: 1938a.

Ref.: GIA-archive; Archeologische Cahiers 2 (ROB 1985), fig. 4; Knol 1986b.

g. The find registration mentions human *femurs*, found in a rectangular pit (no. 35) in the 9th level of trench 2, together with potsherds and animal bones (fig. C.30). The record also mentions the find of *human bones* in the previous level. A horizontal femur is depicted in the feature. On the 11th level, *part of the skeleton* was found. According to the day report, it was placed with the head down. The excavation drawing represents bones of the upper body in a corner of the pit, more or less in articulation (ribs, shoulder blades, an arm stretched backwards and the skull). The body seems to have been placed on this level in the pit, probably on the back, with the legs flexed or bent backwards over the body. The strange position of the arm and the legs in a higher level suggest that the body was rather carelessly placed in a corner of the pit.

Spec.: -

Date: LPROM-ROM.

Museum/find number: 2167 and 2560.

Ref.: GIA-archive.

h. In 1960, a human *cranium* was found in the 9th level of trench 3, in a shallow pit (no. 175).

Spec.: -

Date: PROM.

Museum/find number: 2909.

Ref.: GIA-archive.

i. In trench 2, a *complete skeleton* was found on the slope of a ditch or creek, or on its fill. The body was buried in crouched position, lying on its right side, with the right arm at the back of the body, and oriented to the south (fig. C.31). It was located close to the inhumation burial of no. 1938, but at a deeper level (fig. C.32). The skeleton was lifted *en bloc*, and has been part of the exhibition in the Frisian Museum for several years.

Spec.: Knol 1986b: young person.

Date: Stratigraphy: MPROM.

Museum/find number: 3211.

Ref.: GIA-archive; Archeologische Cahiers 2 (ROB 1985), fig. 5 (mistakenly dated AD 200); Lanting & Van der Plicht 2006, 320.

j. A *mandible* was found in a ditch in the 5th level of trench 5, together with sherds and animal bones.

Spec.: -

Date: MPROM-ROM.

Museum/find number: 3212.

Ref.: GIA-archive.

k. In 1961, a *skeleton* was found in the fill of a sunken hut between the 2nd and 3rd level of trench 7 (feature no. 577,

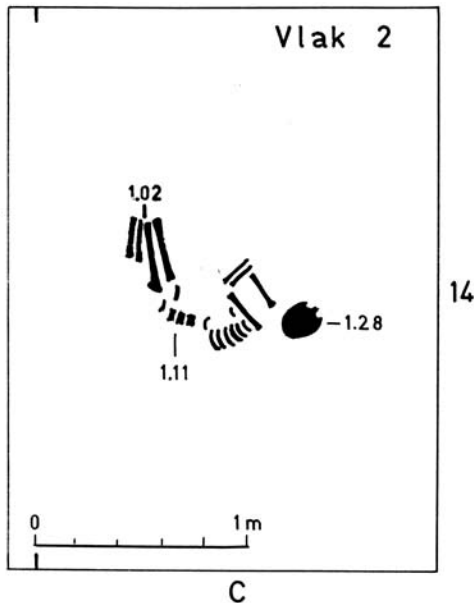


Fig. C.33 Tritsum: Neat drawing of a skeleton from a sunken hut (find no. 3753), dated 3rd century AD or later. *Vlak 2* = level 2. Drawing archive RUG/GIA.

in an area where several sunken huts were situated close to each other). According to the excavation drawing (fig. C.33), it was lying on its right side with the legs flexed. Only the cranium was recorded in the find book.

Spec.: -

Date: MLROM-EMA.

Museum/find number: 3753.

Ref.: GIA-archive; Knol 1986b.

85

Tzum/Tsjom

De Klaverbloem (op Holprijp)

Municipality: Franekeradeel

RD-coordinates: X/Y 165.6/575.2

Terpboek number: 157

CMA-number: ?

The terp is part of a serried row of terps, most of which have been levelled.

a. During levelling in the 1920's, a crouched, supine *skeleton* was found in the presence of Van Giffen, who photographed the find (fig. 12.17) and described it in his article on the nearby terp De Parel. It was found in the northwestern margin of the terp, in the salt marsh subsoil. The head was oriented to the southwest. There were no grave gifts. The bones were probably not collected.

Spec.: -

Date: MPROM-ROM.

Museum/find number: 1926/VII-26.

Ref.: Van Giffen 1928b, 50-51; Halbertsma 1954.

b-c. On 15 April 1929, the *Terpboek* recorded *two crania* and a number of cervical vertebrae, belonging to one of the skulls.

Spec.: -

Date: MPROM-EMA.

Museum/find number: FM 157-91bis/HC 259 FM 154; FM 157-96/HC 259 FM 155.

Ref.: *Terpboek* V, 233; Halbertsma 1954 (under Holprijp); Knol & Uytterschaut 2010.

86

Tzum/Tsjom

Holprijp

Municipality: Franekeradeel

RD-coordinates: X/Y 165.5/575.1

Terpboek number: 180

CMA-number: 05G-123

This terp is one in the same series as the above, Tzum-De Klaverbloem.

a. In 1918, the *Terpboek* recorded the find of a *skeleton* and of a 'wooden' bracelet (fig. C.34), that was found around both (underlined in the record) wrists of the arms, which were crossed over de body. This description was based on a report by J.P. Wiersma (see also Ferwerd). Only the jet bracelet was kept (Knol 1993, 190, fig. 54). The body was reported to be buried on its side in a right angle (flexed?), at the foot of the terp.

Spec.: *Terpboek*: the thin femur was ca. 10 cm shorter than would be expected of an adult: a young person.

Date: Jet bracelets were made during a long period, LPROM-LROM (Knol 1993, 87). The burial may still be younger: LPROM-MP.

Museum/find number: FM 180-1 (bracelet).

Ref.: *Terpboek* V, 295.

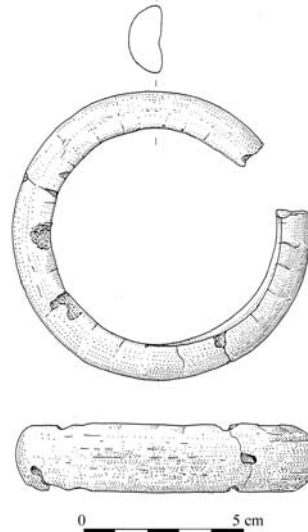


Fig. C.34 Tzum-Holprijp: Jet bracelet, found on one of the arms of a skeleton. Drawing H.J.M. Burgers, in Knol 1993, fig. 54.

87

Tzum/Tsjom

De Kroon (op Holprijp)

Municipality: Franekeradeel

RD-coordinates: X/Y 165.8/575.2

Terpboek number: 210

CMA-number: -

a. In 1929, the *upper part of a cranium* was recorded in the *Terpboek*.

Spec.: -

Date: MPROM-EMA.

Museum/find number: FM 210-12/HC 259 FM 158.
Ref.: *Terpboek* V, 349; Knol & Uytterschaut 2010.

88

Tzum/Tsjom Greate Vlearen/Sidlum

Municipality: Franekeradeel
RD-coordinates: X/Y 164.7/574.1
Terpboek number: 73 and 112
CMA-number: 10E-009

On several occasions, human remains were found or excavated in the terp Greate Vlearen.

a. During levelling in 1849, a *skeleton* was found. No other data available.

Spec.: -

Date: MPROM-EMA.

Museum/find number: -

Ref.: Pleyte 1877 tekst, 63; VFG 25, 1853-1854, 38; Knol 1986b.

b. During digging in 1959, a part of the terp that had been levelled before, a crouched *skeleton* was found. Several artefacts were found near the body, in particular pottery from the pre-Roman Iron Age. A small excavation showed that the body was probably buried in a ditch.

Spec.: -

Date: PROM.



Fig. C.35 Tzum-Greate Vlearen: Section through ditch 18; fragments of a human skull and Roman bronze objects, a.o. a statuette, were found in the deepest fill of the ditch. Photo E. Kramer, Fries Museum.

Museum/find number: -

Ref.: *Nieuwsbulletin* BKNOB 1960, 1; Elzinga 1961, 217-218; 233-234; Knol 1986b.

c. During the excavation in 1961 that followed the find of the skeleton, a *cranium* was found, together with some sherds and animal bones, in a ditch in the deepest level (1.25 m -NAP).

Spec.: -

Date: Probably PROM.

Museum/find number: 57.

Ref.: GIA-archive; Knol 1986b.

d. During an excavation by the Frisian Museum in 1983 in the levelled terp, five *fragments of a broken cranium* were found in a ditch (no. 18; fig. C.35). The skull was already fragmented when it was excavated; it may have been broken during or before deposition, or after deposition due to the pressure of the terp layers above. The assembled fragments leave a quadrangular hole in the upper part of the skull, with sides of 8.5 and 9 cm (fig. 12.41). This shows that the skull was probably fractured when a quadrangular piece was cut out of it. The find was associated with a bronze Mercurius statuette, a bronze brooch and a bronze plate (the only bronze Roman statuette that was found *in situ* in the terp area), and with potsherds, among them *terra nigra*-like pottery.

Spec.: Lower half of the back of the head; 189.9 g.

Date: The ditch was dated to the 2nd century AD, based on the typology of the Mercurius-statuette and an imprecise radiocarbon date (GrN-12416, 1820 ± 80BP, cal AD 48-390, 2 σ): MROM.

Museum/find number: FM 1983-XI-453.

Ref.: FM-archive; pers. comm. E. Kramer, Frisian Museum; Elzinga 1984, 127-128; Knol 1986b.

e. During the same excavation of 1983, a worked skull fragment was found in a ditch (no. 20). The rims were partly cut and are partly edges of sutures; the margins of the cut edges and the outer surface of the fragment are shiny, as if polished by handling (fig. 12.40).

Spec.: The fragment's size is ca. 13 x 11 cm; it is cut from the left and right *os parietale*. It is broken along the *sutura coronalis* and *sutura squamosa*. On the outside surface, a bone growth is visible.

Date: Ditch no. 20 was dated to the 2nd century BC on the basis of early *streepband* pottery: LPROM.

Museum/find number: FM 1983-XI-442.

Ref.: pers. comm. E. Kramer, Frisian Museum.

89

Tzum/Tsjom

Groot Tolsum

Municipality: Franekeradeel
RD-coordinates: X/Y 165.6/572.8
Terpboek number: 123
CMA-number: 10E-114

a-b. The *Terpboek* records *two crania* with mandibles, found during levelling. The first one was found in 'black soil', 0.56 m -NAP. The second was found 0.66 m -NAP.

Spec.: -

Date: MPROM-ROM.

Museum/find number: FM 123-287/HC 257 FM 146; FM 123-288/HC 257 FM 145.

Ref.: *Terpboek* V, 73; Knol & Uytterschaut 2010.

c. During levelling in 1912, Van Giffen collected a *cranium with mandible and a humerus* from a burial from the base of the terp.

Spec.: -

Date: MPROM-ROM.

Museum/find number: Van Giffen collection 1371 and 1371a.

Ref.: Van Giffen-archive RUG.

d. On the same occasion as the previous one, Van Giffen collected *bones* from another burial, found in the deepest layers of the terp: a cranium with mandible, a femur, a radius, the pelvis, a scapula, several ribs and a collar bone.

Spec.: -

Date: MPROM-ROM.

Museum/find number: Van Giffen collection 1372, a, b, c, d, e, f.

Ref.: Van Giffen-archive RUG.

90

Tzum/Tsjom

Groot Barrum/De Parel (Archis2: Tzum-Zuid)

Municipality: Franekeradeel

RD-coordinates: X/Y 166.7/573.6

Terpboek number:

CMA-number: 10E-112

a. During levelling, a pot was found in a terp to the south of Tzum (possibly this terp or a terp called *Klaverblad*), allegedly filled with *cremation remains*. The pot (without burnt bones) was acquired by a schoolmaster from the neighbourhood and did not make it to the collection of the Frisian Museum.

Spec.: -

Date: Halbertsma, while doubting the find of the cremation remains, thought the pot was probably from the 2nd century AD: MROM?.

Museum/find number: -

Ref.: Halbertsma 1954, 45.

b. During levelling, in 1926, a section was excavated by Van Giffen. A *cranium without mandible* was collected in the sole of the terp.

Spec.: -

Date: PROM.

Museum/find number: BAI 1926/VI-9.

Ref.: GIA-archive; Van Giffen 1926, 10-11, afb. 21.

91

Welsrijp/Wjelsryp

Village

Municipality: Littenseradiel

RD-coordinates: X/Y 169.6/575.7

Terpboek number: 65A

CMA-number: 5G-112/202/204

a-b. During levelling in 1911, *two skeletons* without grave gifts were found.



Fig. C.36 Welsrijp-village: String of jet beads from a grave in the subsoil of the terp. The beads are probably from the 3rd or 4th century AD. Drawing H.J.M. Burgers, in Knol 1993, fig. 54.

Spec.: -

Date: MPROM-EMA.

Museum/find number: -

Ref.: Knol 1986b.

c. The *Terpboek* mentions the find of a string of 39 identical black jet beads (fig. C.36), found on a skeleton in the subsoil of the terp, probably in or shortly before 1912. The next record mentions a *cranium and mandible*, both broken, which probably come from this skeleton and were taken to the Frisian Museum by P.C.J.A. Boeles.

Spec.: Knol & Uytterschaut 2010: 30-40 years old, sex could not be determined.

Date: The jet beads date to the 3rd or 4th century AD (Knol 1993, 87). A younger date of the burial is possible: MROM-MP.

Museum/find number: FM 65A-6 (beads); FM 65A-7/HC 261 FM 169 (skull).

Ref.: *Terpboek* III, 233; VFG 84, 1911-1912; Knol 1993; Knol & Uytterschaut 2010.

92

Westergeest/Westergeast

De Zwemmer

Municipality: Kollumerland en Nieuwkruisland

RD-coordinates: X/Y 202.2-204.2/590.5-590.8

Terpboek number: -

CMA-number: -

a-c. In June 1870, during dredging the canalized river Zwemmer near the village of Westergeest, *three bog bodies* were found, embedded in peat. A newspaper reported the find, which consisted of three 'skeletons', one female and two male; the head of one of the bodies was separated from the trunk (this may have been caused by dredging). The hair of the other two was still present. The finders reported that the woman and one of the men had been tied together by a rope. The find was discussed by Van der Sanden in his overview of Dutch bog bodies. Although the finds were not kept, the newspaper report is probably reliable. Near Westergeest, Pleistocene layers are found at the surface (fig. C.37). During the Holocene sea level rise, the area to the northwest was gradually covered by salt marsh sedi-

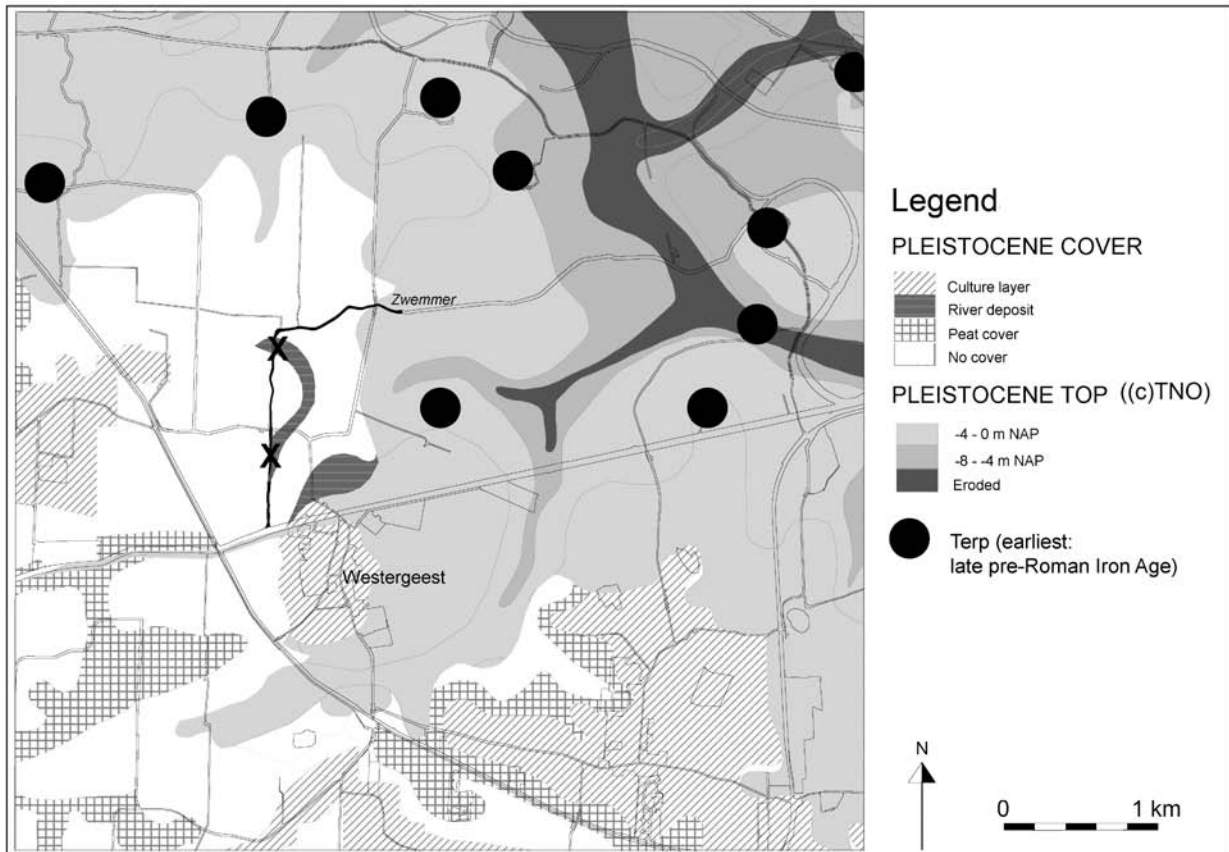


Fig. C.37 The area around Westergeest and the possible locations of three bog bodies (X) that were found during dredging of the river Zwemmer in 1870. The part that was dredged is represented by a black line. Map layers: from Archis 2 (Cultural Heritage Agency).

ment, alternated by one or more phases of peat formation from ca. 3850 BC onwards (Vos *et al.* 2011, 46ff). Van der Sanden (1990, fig. 8) depicts the part of the river Zwemmer that was probably dredged at the time of the find (black line in fig. C.37). This section of the river, especially the southern part, runs through an area where the Pleistocene soil is still surfacing. On two locations, it cuts through an older riverbed that was probably filled with peat. One of these intersections might be the location where the bodies were found. Alternatively, the bodies may have been found further to the northeast, in the part of the river that runs through the area where salt marshes cover peat above the deeper Pleistocene soil.

Several terps are situated in this area; the bodies may have been deposited when salt marsh habitation had already started, in the late pre-Roman Iron Age or the Roman Iron Age, or they may belong to earlier, pre-salt marsh occupation.

Spec.: Three adults, one female, two male.

Date: BRONZ-ROM.

Museum/find number: -

Ref.: Friesche Courant 16 June 1870; Van der Sanden 1990, 54-56.

93

Wieuwerd/Wiuwert

Bessens/Waltastate

Municipality: Littenseradiel

RD-coordinates: X/Y 175.5/569.6

Terpboek number: 62a

CMA-number: 10F-130

a. According to Halbertsma, only one *human skull* was found in this terp. It was not part of a cemetery.

Spec.: -

Date: MPROM-EMA.

Museum/find number: -

Ref.: Halbertsma [1957], 24.

94

Wijnaldum/Winaem

Village

Municipality: Harlingen

RD-coordinates: X/Y 159.9/578.7

Terpboek number: 77A

CMA-number: 05G-072/240

a. A *skeleton* was found here during levelling, about 3.5 m below the surface of the terp. It was oriented to the south. The cranium of this or another skeleton was described by Huizinga.

Spec.: Huizinga 1955, 3397: A cranium of the 'Midlum' type, from the earliest habitation of the area (according to Huizinga before the early Middle Ages).

Date: Habitation started here in the 2nd century AD: MROM.

Museum/find number: FM 77A-35.

Ref.: *Terpboek* III, 455; Huizinga 1955.

95

Wijnaldum/Winaem

Tjitsma

Municipality: Harlingen

RD-coordinates: X/Y 160.7/578.8

Terpboek number: 144

CMA-number: 05G-071

Tjitsma is part of the same series of terps as Wijnaldum-village. The terp became famous for the find of a 7th century disc-on-bow brooch that has been found here in the 1950's (Schoneveld & Zijlstra 1999) and the excavations that were executed from 1991 until 1993. Discontinuity in habitation is well documented here, for the period AD 325-425 (Gerrets & De Koning 1999, 99). Several skeletons of infants, the burial of a woman, and probably an Anglo-Saxon vessel with cremation remains (see **b.**) date to the period after the habitation break (Haverkort *et al.* 1993; Cuijpers *et al.* 1999, 310; Richards *et al.* 1999).

a. A small number of human remains may date to the Roman Iron Age, in particular *single human bones, bone fragments and teeth*, which were found in several features. Details have not been published yet.

Spec.: -

Date: MROM-EMA.

Museum/find number: several.

Ref.: GIA-archive.

b. An urn in seemingly Anglo-Saxon style with the cremated remains of (at least) two individuals, a child and an adult, was found in the salt marsh outside the contemporary terp. Some animal bones were burnt with the dead: vertebrae and ribs of a sheep/goat, metapodia fragments of cattle and a roe deer. Besides, a decorated spindle whorl made from red deer antler and another decorated implement of the same material, some fragments of rock crystal, several glass-like beads and parts of a bronze ornament had also been burnt on the pyre. The urn was damaged when the burial was cut over by a Carolingian ditch.

Spec.: Child: 3-5 years old; adult 20-35 years old; the colour indicates a burning temperature between 550 and 800°C. The total weight of the human bones is 360 g (Cuijpers *et al.* 1999).

Date: Two radiocarbon dates of cremated bones (human or animal?) resulted in surprisingly early, but similar dates: 1780 ± 35 (GrA-44595) en 1795 ± 35 (GrA-45845), an average of 1790 ± 35. The calibrated AD 132-333 (2 σ) places this cremation before the occupation hiatus, but is probably far too old, for unknown reasons (Lanting & Van der Plicht 2010, 142; see also chapter 12). The excavators date the find for stratigraphic reasons to the 2nd quarter of the 5th century AD, the beginning of the second period of habitation, after the occupation hiatus: MP.

Museum/find number: 4570, 4671, 4840.

Ref.: Cuijpers 1995; Cuijpers *et al.* 1999; Prummel 1998, 77; 1999; Lanting & Van der Plicht 2010, 142-145.

96

Winsum

Bruggeburen

Municipality: Littenseradiel

RD-coordinates: X/Y 171.3/573.7

Terpboek number: 53 and 53D

CMA-number: 10F-112 (different coordinates given by Archis 2)

The terp (originally 7 m high) was levelled between 1845 and 1900. In 1997, an excavation was executed in the levelled terp, where rich archaeological layers remained. The site stands out for the large amount of early Roman imported material, which has led to the conclusion that a Roman outpost of some sort was situated there (Bos *et al.* 1998). Human remains were found during levelling and during excavating. The finds from the first excavation level may have been disturbed by levelling or ploughing. The excavation has not yet been published, the information is probably incomplete; dates are all preliminary, based on a small amount of dated pottery.

a. A mandible. The *Terpboek* records that the part where the teeth had been placed, was cut off straight.

Spec.: -

Date: MPROM-EMA.

Museum/find number: FM 53-71.

Ref.: *Terpboek* III, 37.

b. A human *cranium fragment with perforation* (fig. 12.11). Spec.: Sypkens Smit 1943, 76ff: skull with deliberate trepanation, probably made by a drilling instrument. The *diploe* is covered by new bone cells, though weathering must have removed most of them. Some cracks in the *lamina externa* must have developed later. The hole is too round and neat to be caused by an arrow or bullet.

Brongers 1966, 222-223: probably a young male, because of a very well-developed *linea temporalis inferior* and the rather open coronal suture. "The fragment consists of the right part and a small piece of the left part of the frontal bone. ... the bone...has a thickness of 4-6.5 mm." There is no sign of healing. "The perforation is almost round and is situated 2 cm above the right eye-socket. The hole is rather



Fig. C.38 Winsum-Bruggeburen: Mandible fragment found with a pot, dated to the late pre-Roman or early Roman Iron Age.



Fig. C.39 Winsum-Bruggeburen: Rectangular pit with bones of two individuals; date unknown (find no. 121). Photo: RUG/GIA.

conical with the largest opening on the outside of the skull fragment. The diameter in the *tabula externa* is 17 mm. The diameter in the *tabula interna* measured on the same place is 14.5 mm. There are three radial cracks in the *tabula externa*... the cracks belong to the defect. The conical shape of the perforation must have been caused by the breaking off of bone fragments along the fracture-lines by a force coming from the **inside** of the skull." Brongers suggests it might be

the exit hole of a round arrow-head. These observations are consistent with recent research on late-medieval victims of battle (Cooper 2008, 114). The perforation in this skull fragment is probably not caused by deliberate trepanning, but by a forceful projectile such as an arrow from a crossbow or a bullet, probably through the back of the head.

Date: According to Sypkens Smit, who argued from his assumption that the perforation was caused by trepanning, the find was to be dated to the period 200 BC-AD 1000. Since it was a levelling find, the period may still be younger, even post-medieval: ROM-MA or post-MA.

Museum/find number: FM 53-177.

Ref.: Terpboek III, 40; Sypkens Smit 1943; Brongers 1966.

c. From this or a nearby terp, a *cranium* (skeleton?) was reported by Folmer (1890). A green discolouration behind the *crista semicircularis* of the *os frontis* was probably caused by a bronze or other copper alloy object.

Spec.: Folmer 1890, 605: female; all sutures are clear.

Date: MPROM-EMA.

Museum/find number: FM M 165/HC 232 FM 3 or 48?

Ref.: Folmer 1890; Knol & Uytterschaut 2010.

d. In 1972, *part of a mandible* was found, together with or in an almost complete pot (fig. C.38).

Spec.: The left and right parts of the mandible are missing, leaving an almost symmetrical object. No traces of handling. Date: The pot of type Westergo Ge5 dates the find: LPROM-EROM.

Museum/find number: 1972-"20b".

Ref.: NAD-archive.

e. During the excavation, a *cranium* was found in a large round pit in trench 1, level 1, together with pottery and animal bone.



Fig. C.40 Winsum-Bruggeburen: Left: partial skeleton, probably disturbed by ploughing or levelling (find no. 233); below: detail, showing a ring on a finger. The grave is probably from the early Middle Ages. Photo's: RUG/GIA.



Spec.: -

Date: The feature contains some early-medieval potsherds: EMA.

Museum/find number: 43.

Ref.: GIA-archive.

f-g. *Skeletal parts* were found in the dark fill of a quadrangular pit (4 m x 0.7 m; 20-30 cm deep) in trench 1, level 2, together with potsherds and metal objects (fig. C.39). The skeletal parts consist of the skull, trunk and incomplete right femur of one individual, while a second left pelvis and *os sacra* belonged to another individual.

Spec.: Van Kruining in prep.: both individuals are female; the age of the most complete individual was 27-32 years old. Date: MPROM-EMA.

Museum/find number: 121.

Ref.: GIA-archive; Van Kruining in prep.

h-i. In trench 2, level 1, *several partial skeletons* were found within a short distance (fig. C.40 and 41). They may have been burials that were disturbed during levelling or later ploughing. Potsherds and metal finds were probably associated with the burials.

Spec.: Van Kruining in prep.: no. 233 is male, 20-24 years old; H. ca. 1.78 m. No. 278 is male, 22-29 years old; H. ca. 1.70 m.

Date: According to the excavators, orientation of the burials and accompanying finds suggest an early-medieval date: EMA.

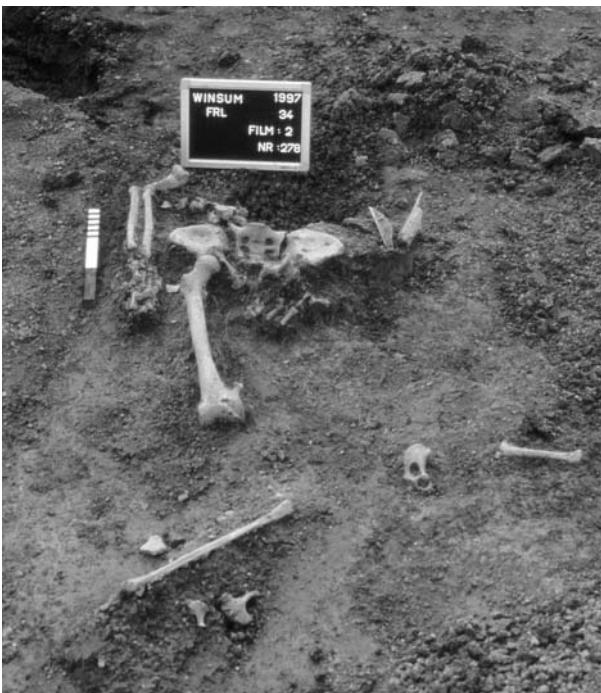
Museum/find number: 233 and 278.

Ref.: GIA-archive; Bos *et al.* 1998; pers. comm. M.J.L.T. Niekus (GIA); Van Kruining in prep.

j. On the 1st level of trench 4, a *cranium* was found, together with potsherds. The excavation picture shows it was found upside down (fig. C.42).

Spec.: -

Date: MPROM-EMA.



Museum/find number: 694.

Ref.: GIA-archive.

k. While opening the 3rd level in trench 3, *human bones* were found.

Spec.: -

Date: MPROM-EMA.

Museum/find number: 975.

Ref.: GIA-archive.

l. On the 1st level of trench 7, a *mandible* fragment (fig. C.43) was found in the fill of a well, at 0.55 -NAP.

Spec.: -

Date: ROM-EMA.

Museum/find number: 1203.

Ref.: GIA-archive.

m. During sectioning through a wide ditch in trench 5, a *mandible* was found.

Spec.: -

Date: A fragment of 1st century AD *terra nigra*-ware comes from the same feature (find no. 125; Galestin 2002a, 456) and sherds of handmade terp-pottery: EROM.

Museum/find number: 1252.

Ref.: GIA-archive.

n. A *phalanx* was found in a small ditch on the 2nd level of trench 7.

Spec.: -

Date: A feature over this ditch contains part of a 1st century AD amphora (no. 1264; Galestin 2002a, 451): LPROM-EROM.

Museum/find number: 1265.

Ref.: GIA-archive.

o. A *tooth* and a *tibia* were found in a large quadrangular feature, on the 2nd level of trench 7.

Spec.: -

Date: LPROM-EROM.

Museum/find number: 1285.

Ref.: GIA-archive.

Fig. C.41 (left) Winsum-Bruggeburen: Partial skeleton (find no. 278) probably an early medieval grave disturbed by ploughing or levelling. Photo: RUG/GIA.



Fig. C.42 Winsum-Bruggeburen: Undated skull (find no. 694). Photo: RUG/GIA.

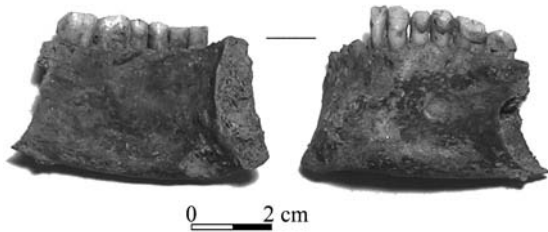


Fig. C.43 Winsum-Bruggeburen: Mandible fragment from a well (find no. 1203), dated Roman Iron Age or later.

p. During opening the 1st level in trench 8, *human bones* were found, probably from different features. No further information available.

Spec.: -

Date: PROM-MA.

Museum/find number: 1329.

Ref.: GIA-archive.

q. On the 3rd level of trench 7, a *mandible* was found.

Spec.: -

Date: MPROM-ROM.

Museum/find number: 1407.

Ref.: GIA-archive.

r. On the 3rd level of trench 7, a *partial skeleton* was found in a ditch, at 1.68 m –NAP. The parts that were found are represented in fig. C.44. Collected bones indicate that they were at least partly deposited in articulation.

Spec.: Unfused epiphyses suggest subadult, probably younger than 16.

Date: MPROM-ROM.

Museum/find number: 1445.

Ref.: GIA-archive.

s. On the 1st level of trench 9, a *partial skeleton* was found in a pit (fig. C.45). The location under the topsoil suggests it was disturbed during levelling or ploughing. Most



Fig. C.44 Winsum-Bruggeburen: Skeletal parts of a child aged under 16 (find no. 1445), found in a ditch and dated to the pre-Roman or Roman Iron Age.

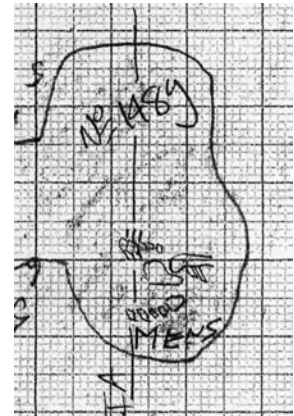


Fig. C.45 Winsum-Bruggeburen: Field drawing of a pit with a partial skeleton (find no. 1489), dated to the middle pre-Roman Iron Age. Field drawing: archive RUG/GIA.

of the remaining bones were damaged. Part of the bones show traces of burning. These traces were either caused by a fire on a higher level, above this pit, or by incomplete cremation. The size of the pit itself was large enough to contain a burial in supine position (ca. 2 x 1 m), but the field drawing suggests the bones were found on one of the sides of the pit, with the spinal column in two parts. Since the vertebrae belonging to these parts were found articulated, it is unlikely that this pit was dug during levelling to rebury human remains. The body parts must have been buried here before decomposition was complete.

Spec.: -

Date: MPROM-EMA.

Museum/find number: 1489.

Ref.: GIA-archive; NAD-archive.

t. During opening the 1st level in trench 10, an extended, prone *skeleton* was found in a burial pit, oriented to the north (fig. 12.15). The cranium is incomplete and may have been damaged by ploughing (the body was found in the first level under the topsoil). The shoulder blades, the left part of the pelvis, some vertebrae and ribs and some hand and foot bones are also missing, possibly by the same cause. A metal object (not studied yet) was found next to the left thigh.

Spec.: Van Kruining in prep.: female, 36-48 years old; H. ca. 1.65 m.

Date: The burial pit was dug in a layer with, a.o. a Roman coin from AD 12 (no. 1501; Galestin 2000, 230). According to the excavator, this burial is older than the early-medieval burials nos. 233 and 278: ROM-EMA.

Museum/find number: 1522.

Ref.: GIA-archive; Van Kruining, in prep.; pers. comm. M.J.L.T. Niekus (GIA).

u. Some metres from the previous find in trench 10, a *pair of forearms* was found in a ditch. The find was only documented on a field drawing. According to this drawing, the arms are only ca 10 cm apart, which indicates they were not left from a disturbed inhumation. It is not clear whether complete forearms were buried here, or single bones, either ulnae or radii.

Spec.: -

Date: A small potsherd of type Westergo V2a was found in the same feature, but that might be an intrusion: MPROM-ROM.

Museum/find number: -

Ref.: GIA-archive; NAD-archive.

v. During opening of level 2 in trench 10, a number of human *long bones* were found, belonging to at least two individuals. The find number is depicted in a ditch.

Spec.: -

Date: In the same level, an amphora sherd was found, as well as handmade sherds from the late Iron Age and the early Roman Iron Age: LPROM-EMA.

Museum/find number: 1557.

Ref.: GIA-archive; NAD-archive.

w. While opening the 1st level of trench 10, *human bones* were found, somewhat higher than the previous finds. They may belong to the skeleton of which only the forearms remained *in situ* (see u.). Further information is not available.

Spec.: -

Date: PROM-MA.

Museum/find number: 1590.

Ref.: GIA-archive.

97

Winsum

Schelum/Skyldum

Municipality: Littenseradiel

RD-coordinates: X/Y 170.8/572.9

Terpboek number: -

CMA-number: 10F-141

a. During digging in 1976 or 1977, two *cranium fragments* were found (figs. C.46).

Spec.: One of the fragments is a more or less rectangular fragment of a thick cranium; its straight edges do not follow natural sutures. The other fragment is a symmetrical part of the back of the head that also comes from a thick skull, possibly the same.

Date: MPROM-EMA.

Museum/find number: FM 1977-V-36, 1 and 2.

Ref.: NAD-archive.

98

Winsum

Monnikebaaijum/Mountsjebaayum

Municipality: Littenseradiel

RD-coordinates: X/Y 170.9/574.7

Terpboek number: 53E

CMA-number: 10F-001

a. During levelling in 1933, *several skeletons* were found here. These may belong to the cemetery of the monastery that was situated on this terp.

b. Earlier, in 1910, a *cranium* was recorded in the *Terpboek*.

Spec.: -

Date: MPROM-MA.

Museum/find number: FM 53E-5/HC 252 FM 115.

Ref.: *Terpboek* III, 77; Knol & Uytterschaut 2010.

99

Witmarsum/Wytmarsum

Hoogterp

Municipality: Wûnseradiel

RD-coordinates: X/Y 159.6/567.7

Terpboek number: 131

CMA-number: 10B-078 (Schraard-Van Aylvaweg)

a. In 1914, a *cranium* found during levelling was recorded in the *Terpboek*.

Spec.: -

Date: MPROM-EMA.

Museum/find number: FM 131-85/HC 258 FM 150.

Ref.: *Terpboek* V, 108; Knol & Uytterschaut 2010.

100

Wommels

Stapert/Zuid

Municipality: Littenseradiel

RD-coordinates: X/Y 168.3/568.6

Terpboek number: -

CMA-number: 10E-135

This terp was excavated in 1994 (Bos *et al.* 2002). Burials are not reported from this excavation. Some single human bones have been found during examination of the animal bones.

a. Central part of right *humerus* with gnawing marks (fig. 12.30 left), found in a large, round pit (no. 85), together with some potsherds and 29 fragments of animal bone (of horse and cow), all smaller than the humerus.

Spec.: Woltinge 2003, 24 and 36: adult (125.3 g).

Date: Pottery is dated to the 6th and 5th century BC, consistent with the stratigraphy: E/MPROM.

Museum/find number: 1.

Ref.: Woltinge 2003; database Woltinge/Prummel; Bos *et al.* 2002.



Fig. C46 Winsum-Schelum: Two skull parts and their location on the skull.



Fig. C.47 Wommels-Stapert: Central part of a right fibula (find no. 101) from a pit, dated to the middle pre-Roman Iron Age.

b. The central part of a right *fibula* (6.2 g), found in a large pit (no. 33) together with two almost complete pots of type G3a and V2a, a large number of sherds from 21 more pots, and around 120 bone fragments of mainly cattle, with some of horse, sheep and pig (fig. C.47).

Spec.: -

Date: The pottery belonging to types G0, G1, G2, G3a, G3b, V2a, V2b and one sherd V3/4 dates the feature to ca. 200 BC: M/LPROM, or MPROM if the V3/4 is an intrusion.

Museum/find number: 101 (fibula and pottery); 140 (pottery).

Ref.: Woltinge & Prummel 2005; database Woltinge/Prummel; Bos *et al.* 2002.

c. Complete *femur*, found in a pit with a complete pot of type G1, sherds of two other contemporary pots, and 8 bones and bone fragments, mainly of cattle (a.o. a complete metatarsus) with one of sheep/goat.

Spec.: Femur (78 mm; 5.3 g) of new born infant (probably some months after birth).

Date: The pottery of types G1 and V1 dates the feature before ca. 400 BC: E/MPROM.

Museum/find number: 159.

Ref.: Woltinge & Prummel 2005; database Woltinge/Prummel; Bos *et al.* 2002.

d. Central part of left *tibia*, with gnawing marks (121.6 g), found in a pit with the sherds of 11 different pots and 100 bones (a.o. a cattle humerus; a horse radius) and bone fragments, mainly of cattle but also some of horse and sheep/goat (fig. 12.30 right).

Spec.: -

Date: The pottery of types G1, G3a, G3b, V2a and V2b dates the feature: MPROM.

Museum/find number: 184.

Ref.: Woltinge & Prummel 2005; database Woltinge/Prummel; Bos *et al.* 2002.



Fig. C.48 Wommels-Stapert: Cranium fragment, dated to the pre-Roman Iron Age.

e. *Cranium fragment*; this is possibly the fragment mentioned in the day report of 15 November 1994.

Spec.: Day report: cranium fragment of a child. The cranium fragment that was found among the excavated bone material, however, belonged to an adult (fig. C.48).

Date: PROM.

Museum/find number: F.e 008.XII-1778.

Ref.: GIA-archive; Woltinge 2003.

f. *Tibia* (or fragments).

Spec.: -

Date: PROM.

Museum/find number: ?

Ref.: Woltinge 2003.

101

Wommels

Westerlittens

Municipality: Littenseradiel

RD-coordinates: X/Y 167.8/568.1

Terpboek number: 136

CMA-number: -

a-c. In 1953 and 1954, during ploughing, several pits were found in an area that had been levelled earlier. The pits contained the *unarticulated bones of three individuals*. They were interpreted as pits that were dug during quarrying in order to bury human bones that had been found during digging.

Spec.: Huizinga 1954, 50:

a. male, ca. 55 years old. This individual showed the characteristics of Huizinga's type Midlum.

b. female, ca. 45 years old.

c. sex unknown, ca. 30 years old.

Date: Huizinga dated some of the remains earlier than MP because of cranial characteristics, but there is no convincing evidence that type Midlum is related to a specific period in this area: EROM-EMA.

Museum/find number: -

Ref.: Halbertsma 1954; Huizinga 1954.

102

Wommels

Walperd

Municipality: Littenseradiel

RD-coordinates: X/Y 168.6/569.5

Terpboek number: 227

CMA-number: 10E-028

a-c. During levelling in the 1930s, several human remains were found. *Three crania* were recorded in the *Terpboek*.

Spec.: -

Date: EPROM-EMA.

Museum/find number: FM 227-17/HC 261 FM 167; FM 227-43/HC 260 FM 162; FM 227-44/HC 261 FM 168.

Ref.: *Terpboek* V, 386-387; Knol & Uytterschaut 2010.

103

Zürich

Kop Afsluitdijk

Municipality: Wünseradiel

RD-coordinates: X/Y 155.23/567.91

Terpboek number: -

CMA-number: -

a. During road construction, the skeleton of a young child was found in a dung layer. This layer belonged to a terp that was covered by sediment during the middle Roman Iron Age. The skeleton was found with fragments of textiles and six playing counters made of potsherds.

Spec.: -

Date: Potsherds from the same layer date to late pre-Roman Iron Age or early Roman Iron Age: LPROM/EROM.

Museum/find number: 1971-VI-5 (F2010-VII-1).

Ref.: NAD-archive; GIA-archive.

104

Zweins/Sweins

Terp near Kingmastate

Municipality: Franekeradeel

RD-coordinates: X/Y 169.0/577.8

Terpboek number: 72A

CMA-number: -

a. On 21 November 1900, the quarrying director of this terp wrote to Boeles, the curator of the Frisian Museum, that *skeletons* had been found in this terp, 1.5 m below the surface.

Spec.: -

Date: probably EMA.

Museum/find number: -

Ref.: Knol 1986b.

GRONINGEN

105

Aalsum

-

Municipality: Zuidhorn

RD-coordinates: X/Y 220.4/591.6

CMA-number: 07A-045

a. During levelling in the early 20th century, a small number of *skeletons* were found in terp layers that were deeper and probably older than the early-medieval (cremation and inhumation) cemeteries found in Aalsum. Grave gifts were not reported. Skeletal parts were not collected.

Spec.: -

Date: LPROM-EMA.

Museum/find number: -

Ref.: Knol 1986b.

106

Brillerij

-

Municipality: Winsum

RD-coordinates: X/Y 228.0/589.5

CMA-number: 07A-156, 160, 211 and 212

a. During levelling in 1912, Van Giffen collected a number of associated *human bones*: a dolichocephalous skull without mandible, two femora, two tibiae, two fibulae, one ulna and one radius, probably from an inhumation burial.

Spec.: -

Date: EPROM-EMA.

Museum/find number: Van Giffen collection 858 and 859.

Ref.: Van Giffen-archive RUG.

107

Dorkwerd

Village

Municipality: Groningen

RD-coordinates: X/Y 230.0/585.4

CMA-number: 07D-006/067/068

a. In an aside when discussing preliminary results of the excavation in Ezinge (Van Giffen 1928a, 44), Van Giffen mentions the find of a *skeleton* under the terp of Dorkwerd. It had been lying on some grass, just like a burial in Ezinge (cat. 111d). Van Giffen must have seen this grave during levelling in 1908, when he was employed to document sections and collect finds in Dorkwerd, but he did not mention the find of a grave in his notebook at the time (Knol *et al.* 2008).

Spec.: -

Date: LPROM-ROM.

Museum/find number: -

Ref.: Van Giffen 1928a.

108

Eenum

Village

Municipality: Loppersum

RD-coordinates: X/Y 247.7/595.6

CMA-number: 07E-006

a. In 1881, Folmer described a *skeleton* found some years earlier, 16 feet deep. Not far from it, 20 silver Roman coins were found.

b. Later, also 16 feet deep, 4 silver Roman coins were found and another *skeleton*, of a young person. Folmer describes the four Roman coins as *denarii* from Antonius Pius (136-161). The skull of b) was collected.

There is some confusion on these finds. A newspaper article of August 1, 1878 mentions a find in **Eenrum**, also 16 feet deep, of a skeleton. It was reported to be female, since it was found with a worked horn comb, which fell apart, and 17 silver coins in one of the hands.

Based on the same newspaper article, five coins from Eenrum found with a female skeleton are mentioned in the report of the Groningen Museum of 1878. Van Es (1960) does not mention any finds from either Eenrum or Eenrum. Only four of the coins are preserved; the youngest is dated AD 159/160 (Galestin 2001). Knol (1986b) concludes that Eenrum is the most likely location of the finds, since Folmer himself lived in Eenrum and would not have confused the names.

Spec.: Folmer 1881, 39-42: b. is a young person; some of the 28 teeth are slightly abraded.

Folmer Jr., 1900, 758-759: b. is ca. 15 years old; all teeth are present, except for the wisdom teeth; the last premolars are milk teeth, while the first molars are already abraded, thus showing an appetite for coarse food; the skull is brachycephal, therefore Folmer concluded this must be the skull of a young Roman.

Date: a) and b) probably MROM.

Museum/find number: b) BAI 1952/V 271.

Ref.: *Uittreksel uit het Provinciaal Verslag van Groningen over 1878 aangaande het kabinet van provinciale oudheden*, 2; Groninger Courant, August 1, 1878; Folmer 1881, 39ff.; 1887; 1892; Folmer 1900; Knol 1986b; Galestin 2001.

c. During levelling in 1926 west of the church, a badly preserved *cranium* was collected.

Spec.: -

Date: PROM-EMA.

Museum/find number: BAI 1926/IX-61.

Ref.: GIA-archive.

d. During levelling in 1926 west of the church, in the deepest layers of the terp, the *upper part of a cranium* was found.

Spec.: -

Date: PROM-ROM.

Museum/find number: BAI 1926/VII-24.

Ref.: GIA-archive.

109

Englum

-

Municipality: Zuidhorn

RD-coordinates: X/Y 233.0/592.3

CMA-number: 07A-055

The finds from the excavation of 2000 are discussed in the first case study (Ch. 10 and Appendix A). A concise list is presented here in chronological order. After the excavation report was published (Nieuwhof 2008c; Tuin 2008b), a number of bones that had been missing, were rediscovered

and could be examined. Some of the descriptions below therefore differ from the original report.

a. The *distal end of a left radius* was found in a water pit (fig. A.2).

Spec.: The bone was broken halfway. This must have happened shortly after death, when it was still fresh (Tuin 2008b, 107). The bone shows shallow, parallel scores, possibly made by dog teeth.

Date: MPROM.

Museum/find number: 946.

Ref.: Nieuwhof 2008c; Tuin 2008b.

b. Extended, supine *skeleton* in the salt marsh sub soil (fig. A.4).

Spec.: Tuin 2008b: Male, aged 37-62; H. ca. 1.62 m.

Date: see table 12.2: MPROM.

Museum/find number: 388.

Ref.: Nieuwhof 2008c; Tuin 2008b.

c-l. Eight *crania* in a dung heap (figs. 10.6-12), together with some small bones (a distal fragment of *os metacarpale* 5 and an *os carpale*; two molars).

Spec.: Six female, one male, one indet. Adults and young adults.

Date: see table 10.2 and 12.2: MPROM.

Museum/find number: 691; 692; 693; 694; 695; 696; 697; 730; 670; 680; 729.

Ref.: Nieuwhof 2008c; Tuin 2008b.

m-o. Small *fragments of human bones* were found in a ditch, east of the dung layer in which the *crania* (see above) were found: the shaft of a fibula, the mandible of a child, a cranial fragment (*os occipitale*).

Spec.: See table 10.3.

Date: MPROM.

Museum/find number: 571; 572; 817.

Ref.: Nieuwhof 2008c; Tuin 2008b.

p. *Vertebra* in pit (fig. A.18).

Spec.: Tuin 2008b: Nearly complete, some damage by unknown causes.

Date: EROM.

Museum/find number: 486.

Ref.: Nieuwhof 2008c; Tuin 2008b.

q. Fragment of a *femur* in a ditch.

Spec.: Proximal part of the shaft of a left femur, with a spiral fracture.

Date: EROM.

Museum/find number: 256.

Ref.: -

r. Bones, probably complete *skeleton*.

Spec.: Tuin 2008b: Adult, probably female, H. ca. 1.55 m.

Date: see table 12.2: MROM.

Museum/find number: 637.

Ref.: Nieuwhof 2008c; Tuin 2008b.

s. Shaft of the *tibia* of an infant in excavated soil.

Spec.: Tuin 2008b: age ca. 9 months (after conception).

Date: MPROM-MA.

Museum/find number: 389.

Ref.: Nieuwhof 2008c; Tuin 2008b.

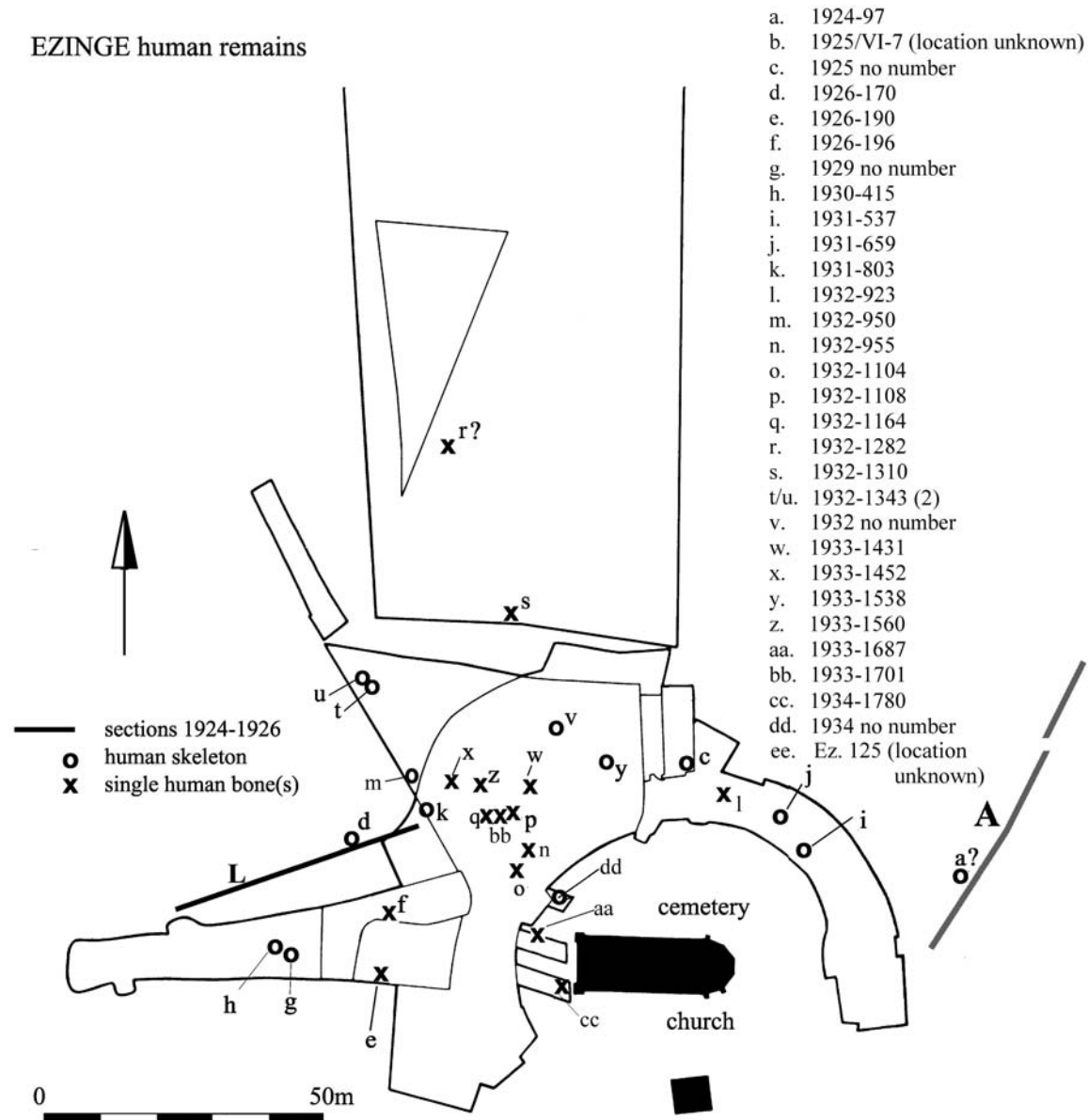


Fig. C.49 Ezinge: Overview of the locations of all human remains from the excavations in the 1920s and 1930s.

110

Enzelens

Municipality: Loppersum
 RD-coordinates: X/Y 247.5/592.9
 CMA-number: 07E-143/144

a. In 1981, during ditching in a levelled part of the terp, a *cranium* was found in the slope of the new ditch.

Spec.: -

Date: LPROM-EMA.

Museum/find number: GM 1988/IV 4.

Ref.: VGM 1985-1989, 65.

111

Ezinge

Village

Municipality: Winsum
 RD-coordinates: X/Y 225.1/592.1

CMA-number: 07A-024/023

During the excavations in this terp by Van Giffen in the 1920s and 1930s, human remains were found regularly. They were usually not collected and probably not always recorded. The finds were described in the second case study (Ch. 11 and Appendix B). For the location of human remains in trenches and sections, see fig. C.49.

a. In 1924, a *skeleton* was recorded in the find book; it had been found while excavating section A (Van Giffen 1926, afb. 8), but its location or depth was not recorded.

Spec.: -

Date: PROM-MA.

Museum/find number: 1924/VI- 97.

Ref.: GIA-archive.

b. During levelling in 1925, a physician from Ezinge found a well-preserved human *skull with mandible*, "north-north-east of the church, under the dung, in the sole of the terp".

It was noted that the incisive teeth were missing. It is well possible that the skull was collected from a complete skeleton. In the draft version of the finds book, a skull found by dr. Peters in 1925 was recorded as no. 148, the last entry of 1926, but this number was also used for another find in the next year.

Spec.: -

Date: Stratigraphic evidence: PROM

Museum/find number: BAI 1925/VI-7.

Ref.: GIA-archive.

c. In 1927, Nyëssen wrote that a large number of skeletons were found in the top stratum, but that only *two skeletons* had been found in the lower layers in the two previous years (1925 and 1926), one of which was mutilated (Nyëssen 1927, 39). There is no record of the mutilated skeleton, but there is a drawing of a skeleton in supine position on the excavation drawing of one of the levels of the trench excavated in 1925 (fig. C.50; almost invisible in Van Giffen 1926, Afb. 6, XIII). It was located under a house dated to the 2nd century BC, with the head oriented to the west (see Appendix B, level RS, house 15). This skeleton does not seem to be mutilated. A burial pit is not represented on the field drawing. The corpse must have been buried in the house platform, or it was covered by the layers of the house platform, before the house was built.

Spec.: -

Date: The skeleton was probably buried not long before the house was built: LPR0M.

Museum/find number: -

Ref.: Nyëssen 1927; Van Giffen 1926.

d. The second skeleton mentioned by Nyëssen (see above) is shown on a photograph from 1926. The skeleton is in supine position, with the hands on the pelvis and the head turned to the left (fig. 11.49). This find and its location are relatively well described and illustrated by Van Giffen (1928a, 44): "It was found directly to the north of the large section L (foot-note: This was the reason that I had the find number of the sherds that were found with it, no. 170, placed in the section concerned. However, it was placed too high by mistake, it should be in or under, rather than above the dung layer. ... section L, above 19.), in the base of the terp, under the primary dung (NB. this was thought to be a standard layer in terps at the time, AN). It was buried in supine position, with the head to the west. Under the skeleton some grass was found, similar to what was observed under other skeletons



Fig. C.51 Ezinge: Left os parietale found in a house from the early Roman Iron Age (find no. 190).



Fig. C.50 Ezinge: Field drawing of an unnumbered skeleton under a house from the late pre-Roman Iron Age. Field drawing: archive RUG/GIA.

that were found in the subsoil of terps (e.g. in Dorkwerd in Groningen and Jislum in Friesland). According to the find circumstances, this skeleton is from one of the first terp inhabitants. Not surprisingly, it is a typical dolichocephalic representative of them."

Spec.: Description GIA-archive: well-preserved, ca. 18-20 years old. B.P. Tuin (ArcheoInzicht), pers. comm.: probably adult female.

Date: Based on the stratigraphy and the stratigraphically consistent association with *streeband*-pottery: LPR0M.

Museum/find number: 1926/VII-170.

Ref.: Nyëssen 1927; Van Giffen 1928a.

e. The find book of 1926 recorded a *cranium*, found in a house (Appendix B, level N, house 11).

Spec.: The left *os parietale* (fig. C.51), which has become detached along the sutures.

Date: pottery nearby: EROM.

Museum/find number: 1926-190.

Ref.: GIA-archive.

f. Potsherds and a *skull* were found in a large, oval feature, possibly a large pit, in the western part of the settlement.

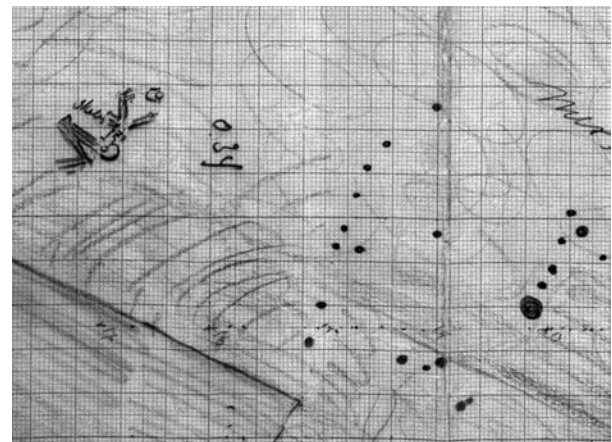


Fig. C.52 Ezinge: Unnumbered, crouched burial from the early Roman Iron Age. Field drawing: archive RUG/GIA.



Fig. C.53 Ezinge: Photo of an inhumation burial in the upper layers of the terp, which belongs to an earlier phase of the present cemetery. Photo RUG/GIA.

The skull was probably not collected; it is not entirely certain that it was human.

Spec.: -

Date: Stratigraphy: 5th century AD.

Museum/find number: 1926-196.

Ref.: GIA-archive.

g. An excavation drawing of 1929 shows a flexed *skeleton* at 0.34 m +NAP, without find number (fig. C.52; see Appendix B, level O). It is not recorded in the finds book. The head is oriented to the northeast; the body is lying on its right side. It was found only some metres from another burial, which was excavated in the following year (see below).

Spec.: -

Date: EROM

Museum/find number: -

Ref.: GIA-archive.

h. A photograph from 1930 shows a *skeleton* in an uncommon position (fig. 11.50). The skeleton was tightly contracted and buried on its side, with the head bent to the back, as if the quadrangular pit was just too small. It is likely that the position of some of the bones changed during digging. E.g., the shoulder blade is placed on the rib cage; the missing left arm was probably taken away during the excavation. The right arm was lying behind the body. On the field drawing, the location of the head is depicted in the south-eastern corner of the pit (see Appendix B, level P). According to the finds book, potsherds and animal bones were found with the skeleton. A small number of sherds and two cattle phalanges have the same find number. A glass bead and a spindle whorl were both numbered 400; this finds number is depicted near the head of the skeleton on the field drawing. The bead, however, is of an early-medieval type. The finds are described as 'potsherds'. Numbers may have been confused, or the bead is an intrusion from a higher layer.

Spec.: -

Date: LPROM/EROM.

Museum/find number: skeleton: 1930-415; spindle whorl: 1929-400.

Ref.: GIA-archive.

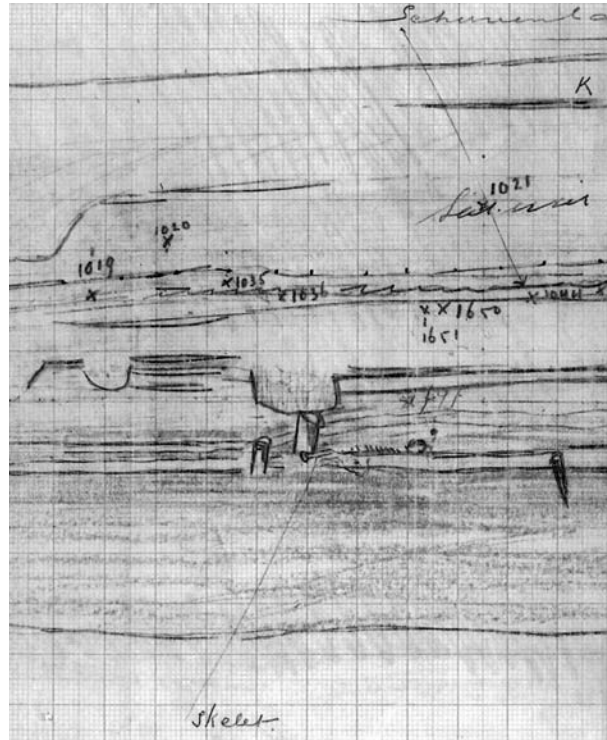


Fig. C.54 Ezinge: Section drawing with a skeleton. It was numbered 803 in the finds book. The skeleton was buried under a house from the late pre-Roman Iron Age. Field drawing: archive RUG/GIA.

i. In 1931, a *cranium* was recorded in the find book, found at 4.34 m +NAP. The height indicates that it belongs to an earlier phase of the present cemetery. Some bones in NAD-Nuis numbered 536 probably belong to this skeleton.

Spec.: -

Date: Post-medieval.

Museum/find number: 1931-537 (Nuis: 536?).

Ref.: GIA-archive; NAD-Nuis.

j. A photo from the same year shows a *skeleton* and the silhouette of the photographer (fig. C.53). The skeleton was found with several others under the path round the cemetery on the terp, c. 1 m. below the surface. These graves must belong to an older phase of the present cemetery. Delvigne (1984, 59-60) thought this grave was preserved *en bloc*, but that is no. 1343 (see below).

Spec.: -

Date: Post-medieval.

Museum/find number: Possibly 1931-659, according to the find book a skeleton, found at 4.03 m +NAP.

Ref.: GIA-archive; Delvigne 1984; Knol 1986b.

k. The last entry of the same year is a *skeleton*, found in a section. An unnumbered skeleton in extended, supine position was depicted in the so-called 'large section' that was made in the same year (fig. C.54). This must be the recorded skeleton. The bones were not collected. The skeleton (found at 1.10 m +NAP, just above a dung platform) was located under one of the houses (see Appendix B, level N, house 22). The body was apparently placed on a layer, and was covered with another heightening layer before the house was built. The head was oriented to the southeast.

Spec.: -

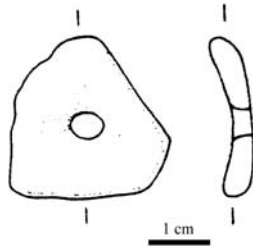


Fig. C.55 Ezinge: Triangular worked skull fragment (find no. 1108). From Miedema 1983, fig. 215.

Date: LPRM.

Museum/find number: 1931-803.

Ref.: GIA-archive.

l. During the analysis of animal bone as part of the Odyssee-project in 2011 (Prummel *et al.* 2014), some cremated bone fragments were found among the animal bone material, which appeared human rather than animal. They were found between two houses (see Appendix B, level Q, near house 15) in an area that was described as a burnt layer. There may have been many more cremated bones in this layer, but only three fragments were collected. Other finds in this area were a complete pot from the late pre-Roman Iron Age and some sherds of the 3rd and 2nd century BC, none of which showed traces of burning. The cremated human bones might have been spread over the area together with the burnt remains of a cremation pyre; they may also have been burnt single bones that were deposited here together with the ashes and charcoal of the fire.

Spec.: Cuijpers: Three fragments, most likely human, one of which is part of the head of a joint.

Date: Pottery and stratigraphy: LPRM.

Museum/find number: 1932-923.

Ref.: GIA-archive; A.G.F.M. Cuijpers (EARTH Integrated Archaeology), unpublished report.

m. On one of the excavation drawings from 1932, the word 'skeletal' (skeleton) was written near a little circle representing a skull (2.77 m +NAP). The find was numbered, but not described. The orientation and position cannot be deduced from the drawing. The skeleton was situated to the west of a house (see Appendix B, level G, house 27).

Spec.: -

Date: The height and finds in the surrounding area suggest: MROM, probably 3rd century AD.

Museum/find number: 1932-950.

Ref.: GIA-archive.

n. On the same drawing as the previous item a *skull* was depicted at 3.56 m +NAP in a layer (see Appendix B, level G). Details were not recorded.

Spec.: no mandible, 4 molars, probably young adult.

Date: stratigraphy: LROM-MP.

Museum/find number: 1932-955.

Ref.: GIA-archive.

o. A worked *humerus*, made into a handle (fig. 11.55), was found in a hearth, together with a handle made of the tibia of a sheep, a cattle metacarpus, a fragment of a baking sheet (fig. 11.26) and a complete pot. The objects were found in a hearth; they do not show traces of burning (see Appendix B, level L, house 27).

Spec.: The handle is made of the shaft of a humerus. Size: 11.6 x 1.8 cm. The handle is well finished and has a shiny surface. Under the shiny surface are gnawing marks, probably made by a dog (pers. comm. W. Prummel, GIA).

Date: The feature is dated by the early V5 pot: MROM (2nd century AD).

Museum/find number: 1932-1104.

Ref.: Miedema 1983, Tekst, 237.

p. A small, more or less triangular disc with a perforation made of a *human skull fragment* (fig. 11.54; C.55) was found (together with a burnt and an unburnt loom weight and two burnt broken pots) in the area outside the east wall of one of the houses, about 2.50 m +NAP (see Appendix B, level L, house 27).

Spec.: 27 x 32 mm. Diameter of the perforation: 6 mm. The surface of both sides of the object is extremely shiny, probably from intensive handling.

Date: The associated pots date: EROM.

Museum/find number: 1932-1108.

Ref.: GIA-archive; Miedema 1983 Tekst, 259-260; fig. 215.4; Knol 1986b.

q. During the excavating campaign of 1932, a *skull fragment and mandible* were recorded, together with a perforated bone (probably animal). The find number now only contains a human mandible (fig. 12.31). The excavation drawing shows that the finds were found near one of the houses, probably in a shallow pit (see Appendix B, level L, house 25).

Spec.: Traces of gnawing, probably by a dog, on the left mandibular condyle (pers. comm. W. Prummel, GIA).

Date: EROM.

Museum/find number: 1932-1164.

Ref.: GIA-archive.

r. In the same year, the *cranium of a child* was recorded. The find number has not been retrieved on any of the excavation drawings, but it may be one of two numbers 1283 on the drawing of the large trench that was excavated in the northern part of the excavated area (see Appendix B, Northern trench).

Spec.: -

Date: PROM-EMA.

Museum/find number: 1932-1282.

Ref.: GIA-archive.

s. Another *cranium* was recorded in the same year. The skull was found in the southern part of the large northern area, with some sherds.

Spec.: -

Date: Associated potsherds: (E)MA.

Museum/find number: 1932-1310.

Ref.: GIA-archive.

t-u. One of the excavation drawings (see Appendix B, level J) as well as a photograph from 1932 (fig. 11.51) show two inhumation graves next to each other, oriented to the northeast. Both bodies are extended and supine. The photograph was made right before the western grave was lifted en bloc (fig. C.56); this skeleton is still kept en bloc and is now in the Museum Wierdenland in Ezinge. The excavation photo shows that the most protruding parts of the bodies, the feet of both bodies and the right hand of

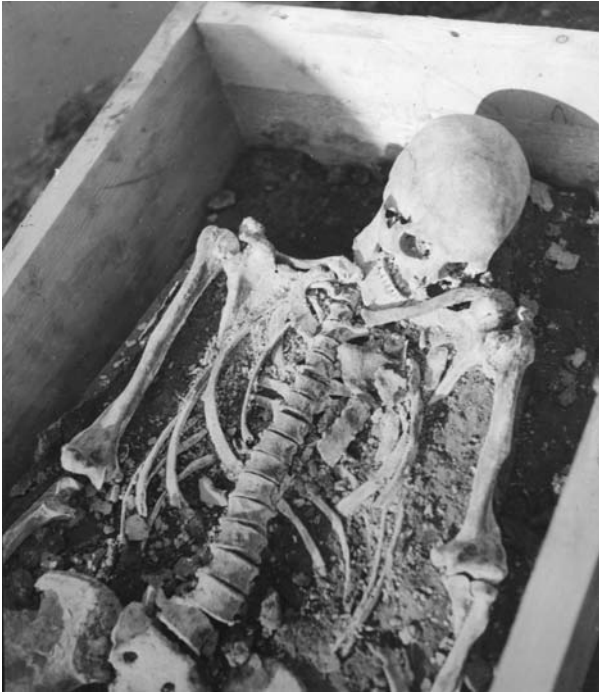


Fig. C.56 Ezinge: One of a pair of graves (find no. 1343) that was lifted en bloc, probably because of the skeletal deformities. Photo:RUG/GIA.

the western skeleton, are missing. Since only protruding parts are missing, it is likely that these parts were dug away before the skeletons were discovered. A find number in the largest, western grave represents, according to the finds book, a 'small pot from a grave' (see fig. 11.20). The find number is depicted near the feet. As the radiocarbon date shows, the pot was considerably older than the grave itself; if the association is correct, it must have been an heirloom of several decades, perhaps a century old.

Spec.: Tuin (unpublished report), on the skeleton from the northwestern grave: male, aged 25-35 years or more. Kneecaps and sternum are missing; the sternum was certainly present during the excavation, the kneecaps are not visible on the photo. The man must have been in severe pain during life: his left shoulder and right hip were extremely damaged by degenerative osteoarthritis. The original shape of the joint had disappeared and was replaced by new, reactive bone growth (fig. C.57). That indicates that this condition was probably not caused by tuberculosis.



Fig. C.57 Ezinge: Right femur and left humerus of the skeleton lifted en bloc (find no. 1343), with deformities. Photo B.P. Tuin, ArcheoInzicht.

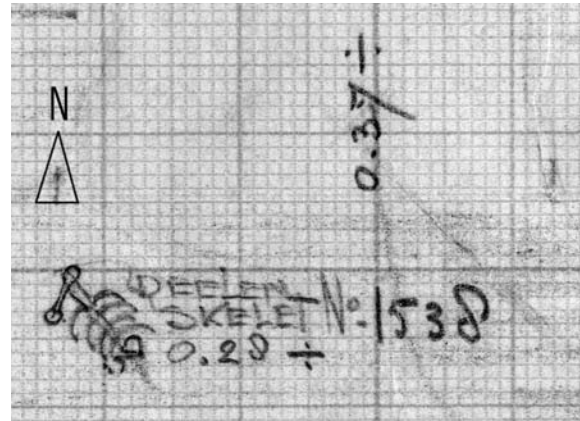


Fig. C.58 Ezinge: Partial skeleton (find no. 1538), dated to the middle pre-Roman Iron Age. Field drawing: archive RUG/GIA.

Date: The pot from the western grave is a small pot of Wierum-style type K3, dated in the 1st or early 2nd century AD. A radiocarbon date of the skeleton in this grave (GrA-47563) proved to be younger, 1740 ± 40 BP, cal AD 211-400 (93.9%). ($\delta^{15}\text{N}$: 10.93; $\delta^{13}\text{C}$:-20.47, there is a possible reservoir effect, see chapter 12). Features in the highest excavation level in which this burial pit was visible (see Appendix B, level I), are dated to the middle Roman Iron Age. The eastern grave seems to be dug in from a slightly lower level and is probably somewhat older: both graves MROM, probably 3rd century AD.

Museum/find number: 1932-1343 (the eastern skeleton); 1932-1176 (pot).

Ref.: GIA-archive; Van Giffen 1936, Beilage 2, Abb. 3 and Beilage 4, Abb. 2; B.P. Tuin (ArcheoInzicht), unpublished report 2011.

v. On one of the excavation drawings from 1932, the word 'skeletal' is written (see Appendix B, level H). It must refer to a human skeleton (otherwise the animal species would have been mentioned). It was found to the west of one of the buildings (house 26).

Spec.: -

Date: MROM, probably 3rd century.

Museum/find number: -

Ref.: GIA-archive.

w. On 11 May 1933, the *fragment of a human cranium* was found in a stall box in the byre of a house (see Appendix B, level RS, house 9).

Spec.: -

Date: LPROM (2nd century BC).

Museum/find number: 1933-1431.

Ref.: GIA-archive.

x. The find book recorded the *upper part of a skull* in 1933. The excavation drawing depicts this find number within the byre of a house (see Appendix B, level RS, house 10).

Spec.: -

Date: M/LPROM.

Museum/find number 1933-1452.

Ref.: GIA-archive.

y. In 1933, the find book recorded '*bones of a skeleton*' (fig. C.58). A number of articulated bones are represented on the

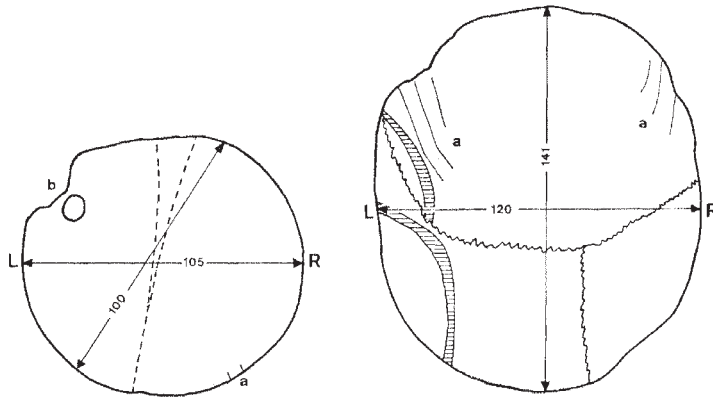


Fig. C.59 Ezinge: Two worked skull fragments; left: find no. 1780; right: find no. 1687. From Brongers 1967.

excavation drawing: an upper arm, the rib cage and the pelvis, with the note: *parts of a skeleton*. An elongated feature, probably the burial pit, is depicted in the level above, but apparently was not recognized as such. It is not clear in how far the skeleton was complete; it was oriented to the northwest (see Appendix B, level UV).

Spec.: -

Date: MPRM.

Museum/find number: 1933-1538.

Ref.: GIA-archive.

z. In the same year, 'sherds and human bones' were recorded. These were found in the middle of the byre of the same house as no. 1452 (see Appendix B, level RS, house 10).

Spec.: -

Date: M/LPROM.

Museum/find number: 1933-1560.

Ref.: GIA-archive.

aa. During the excavation campaign of 1933, a *worked skull fragment* (fig. 11.52) was found deep in a section in one of the small trenches that were dug into the area of the present cemetery (see Appendix B, level O).

Spec.: Brongers 1967, 33: "An oval cup-shaped human skull fragment consisting of larger parts of the *os frontale* and the left *os parietale*, and a minor part of the right *os parietale*". Average thickness 3-8 mm, max. depth ca. 3.5 cm. Other measurements, see fig. C.59. The rim is rounded off. In the *tabula externa*, there are traces of rasping, probably from removing the *periost*.

Date: The find was made in a feature which was covered by a layer containing potsherds from the beginning of the 1st century AD. That dates the find to: LPROM.

Museum/find number: 1933-1687 (Brongers mistakenly writes 1678).

Ref.: GIA-archive; Brongers 1967.

bb. During the analysis of animal bone as part of the Odyssee-project in 2011 by Prummel *et al.* (2014), a human cranium fragment was discovered among the animal bones. It is a small part, probably broken from the *os parietale*. There are no traces of handling or working. The fragment was found under a series of succeeding houses, above the fill of one of the natural creeks of the oldest habitation phase (Appendix B, level UV). The human bone was not identified

at the time; it may have broken off from a larger fragment only during the excavation.

Spec.: -

Date: Stratigraphy and pottery: MPRM (5th century BC).

Museum/find number: 1933-1701.

Ref.: GIA-archive.

cc. During the campaign of 1934, another *worked skull fragment* was found in one of the small trenches that were dug into the area of the present cemetery (fig. 11.53), with a ceramic playing counter and two fitting sherds with traces of deliberate breakage. The find was made in a pit or ditch, which had been dug in from a higher level (see Appendix B, level UV).

Spec.: Brongers 1967, 33: Average thickness 4-7 mm, max. depth ca. 1.8 cm (see also fig. C.59). "A nearly circular cup-shaped human skull fragment consisting of parts of the left and right *os frontale*. ... In the fragment is a hole with a diameter of 9 mm with no distinct traces of wear caused by suspension on a cord. Some flaking of the *tabula externa* indicates that the hole was drilled in one operation from the inside to the outside. The rim does not form an exact plane It was rounded off. A piece of the rim has been broken off relatively recently."

Date: Pottery from the same feature: EROM.

Museum/find number: 1934-1780.

Ref.: GIA-archive; Brongers 1967.

dd. The upper half of a supine *skeleton* was depicted on the excavation drawing of one of the small trenches at the foot of the church that was excavated in 1934 (see Appendix B, level RS). The head was oriented to the south. The lower half was not excavated. A forked branch was drawn left of the body, while a posthole was depicted directly to south of the head (fig. C.60). This posthole may have been driven in from a higher level, without relation to the burial. The burial was situated near several houses, or possibly in a house.

Spec.: -

Date: The depth in the interior of the terp (0.90 m +NAP) compared to nearby features indicates: LPROM.

Museum/find number: -

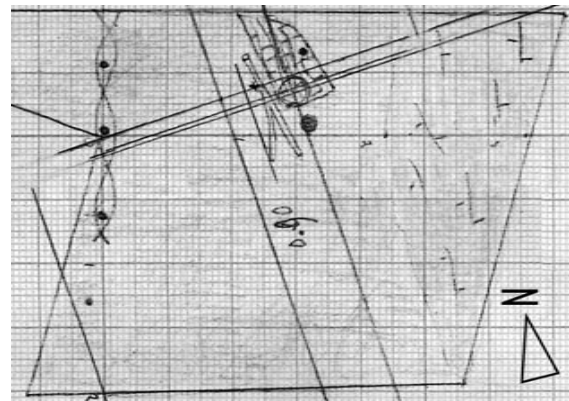


Fig. C.60 Ezinge: Partly excavated, unnumbered skeleton in a small trench from 1934, dated to the late pre-Roman Iron Age. A forked branch is depicted near the body; the posthole near the head probably belongs to a house. Field drawing: archive GIA/RUG.

Ref.: GIA-archive.

ee. A skull without upper part belongs to the Ezinge collection of NAD-Nuis, but the context of this skull is unknown. The upper part was apparently cut out of the skull (fig. 12.42). The surface of the skull is strongly eroded, unlike other human bones from Ezinge. This is at least partly due to preservation conditions after the excavation. The skull bowls from Ezinge (nos. 1687 and 1780) do not fit this skull. Spec.: The squamous part of the *os temporale* is very thin and partly perforated on both sides. Whether this is pathological or caused by conditions before or after deposition or after the excavation has not been established.

Date: Probably PROM-ROM.

Museum/find number: Ez.125 (not a regular find number).

Ref.: NAD-archive.

112

Frytum

-

Municipality: Zuidhorn

RD-coordinates: X/Y 221.3/588.8

CMA-number: 07A-048/165

a. During levelling in 1884, a *skeleton* was uncovered, reportedly in sitting position. Near it, a small, perforated bone disk was found, but this object has not been retrieved.

Spec.: Folmer 1885, 81: male, sutures not closed, teeth slightly abraded (young adult).

Date: PROM-EMA.

Museum/find number: -

Ref.: Folmer 1885.

113

Garnwerd

Village

Municipality: Winsum

RD-coordinates: X/Y 228.7/591.5

CMA-number: 07A-097

a. During levelling, a *cranium (skeleton?)* was found in a deep layer of the terp.

Spec.: Folmer 1890, 599-600: probably a man, 'of average age' (30-40?).

Date: MPROM-ROM.

Museum/find number: -

Ref.: Folmer 1890.

b. During levelling, another *cranium (skeleton?)* was found in a deep layer of the terp.

Spec.: Folmer 1890, 599: old man.

Date: MPROM-ROM.

Museum/find number: -

Ref.: Folmer 1890.

c-e. During levelling, *three more crania (skeletons?)* were found in deep layers in the terp.

Spec.: Folmer 1890, 601: female. One was described as 'of average age'.

Date: MPROM-ROM.

Museum/find number: -

Ref.: Folmer 1890.

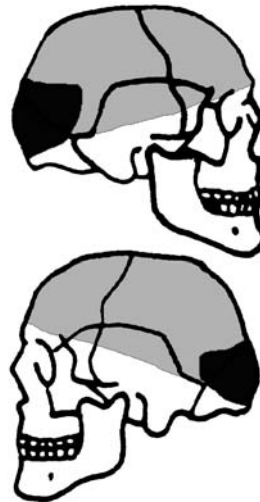


Fig. C.61 Garnwerd: The location of a worked skull part, probably coming from a large bowl, on the skull.

f. During levelling, a worked part of a skull was found. The smooth and shiny edges of the fragment along the break suggest that the fragment has been handled after it was broken from a larger skull bowl, possibly the entire upper part of the skull (fig. C.61 and 12.36). Spec.: Brongers 1968: Average thickness 4 mm. "It consists mainly of a part of the *os occipitale*. It is cut from the skull just along the *sulcus transversus*; the left and the right *fossa occipitalis* are clearly visible. In addition to this part of the *os occipitale*, fragments of the left and right *os parietale* are present. ... the rim of this object follows the *sulcus transversus*, the rim being neatly rounded off."

Date: MPROM-EMA.

Museum/find number: RMO b 1912/2-304.

Ref.: Brongers 1968.

114

Groningen

Beijum

Municipality: Groningen

RD-coordinates: X/Y 235.7/585.3

CMA-number: -

a. In 1981, some potsherds were found in the Groningen-suburb Beijum, 100 m northeast of a small terp. The find consisted of some Wierum-style rims and some other sherds. *Burnt bone fragments* are caked on to the inside of some of the sherds. It is not certain that the finds belong together; if so, they might be the remains of a cremation.

Spec.: -

Date: Pottery partly: EROM.

Museum/find number: 1981/XII 3.

Ref.: NAD-archive.

115

Groningen

Friesestraatweg/Jonge Held

Municipality: Groningen

RD-coordinates: X/Y 230.7/583.8

CMA-number: 07D-054

a. One of the finds of an excavation in 2001 was a *tibia fragment* was found. Information on the context is not available. Spec.: no marks.

Date: The find was made in one of the features from the first occupation phase: LPROM-EROM.
Museum/find number: ?
Ref.: Pers. comm. G. Kortekaas (Groningen municipality).

116**Groot Wetsinge**

-
Municipality: Winsum
RD-coordinates: X/Y 231.2/591.6
CMA-number: 07B-094/170/171

a. During levelling in the 1880s, a *skeleton* as found, several metres below the surface of the terp. Folmer, who was present when the body was found, describes that thin integuments covered the bones on several places, especially where straw adhered to them. He suspected the body to have been buried in straw, which had protected the body against further decay once the soft tissue had perished.

Spec.: Folmer 1890, 601: probably female, still young.

Date: EROM-EMA.

Museum/find number: -

Ref.: Folmer 1890.

117**Heveskesklooster**

-
Municipality: Delfzijl
RD-coordinates: X/Y 260.7/591.6
CMA-number: 08A-025

During the excavations of 1982-1988, a small number of human remains were found. Besides the skeletons from the cemetery of a monastery that were found in 1985, there were some finds from earlier periods. There may be human remains among the animal bones; these have not yet been studied.

a. A cremation pit with *cremation remains*, burnt clay and charcoal of alder (*Alnus*) and oak (*Quercus*) was found at the eastside of a contemporary creek, 70 m from the first platform. The remains of reed indicate that this was a wet area at the time of the cremation. There were no recognizable grave gifts. Green discolouration on some of the bones is possibly indicative of a bronze object that had been burnt with the body.

Spec.: M. van der Wal, in De Jong 2008: Adult, 20-40 years old; the sex could not be determined.

Date: GrN-15540: 2040 ± 30 BP (alder); GrN-15541: 2000 ± 35 BP (oak), 118 cal BC - cal AD 26 and 61cal BC - cal AD 76 respectively (2 σ): LPROM-EROM.

Museum/find number: 2571.

Ref.: GIA-archive; Boersma 1988, 75; Lanting & Van der Plicht 2006, 317; De Jong 2008.

b. During the excavation campaign of 1985, the shaft of a human *tibia* was found.

Spec.: identified by Knol (1986b).

Date: stratigraphy: E/MROM.

Museum/find number: ?

Ref.: Knol 1986b.

118**Leermens****Village**

Municipality: Loppersum
RD-coordinates: X/Y 248.9/596.4
CMA-number: 07E-004/157/158

a. Van Giffen mentions the find of a mixed inhumation-cremation cemetery, possibly from the 7th-8th century. He adds that in the base of the terp, an older cemetery was found in which the *crouched position* was prevailing. He does not mention the number of burials on which this observation is based or whether he had seen it himself. There may not have been more than one such burial.

Spec.: -

Date: LPROM-ROM.

Museum/find number: -

Ref.: Van Giffen 1918, 22; Halbertsma 1954; Knol 1986b.

119**Lellens****Borgweg**

Municipality: Ten Boer
RD-coordinates: X/Y 243.7/591.0
CMA-number: -

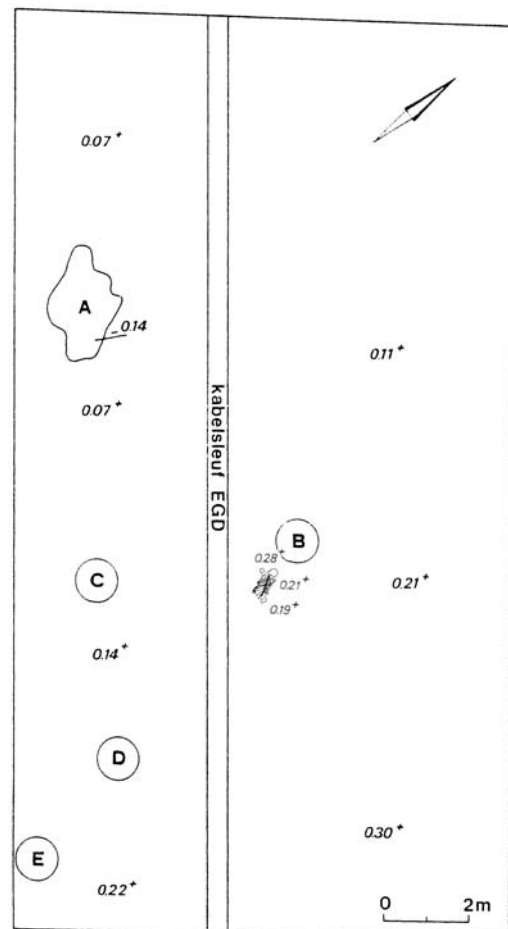


Fig. C.62 Lellens-Borgweg: A small, early medieval cemetery with cremations and an inhumation burial. One of the features is a cremation pit (A), radiocarbon dated to the Roman Iron Age. From Cuijpers *et al.* 1995.

a. In 1994, during the excavation of a small, early-medieval cemetery with a small number of cremations and an inhumation, a large *cremation pit* (1.5 x 2 m) with charcoal and cremated bone fragments came to the light on a somewhat deeper level; this cremation pit was the only one feature that was not disturbed. A radiocarbon date of a fragment of one of the long bones in this burial was surprisingly early: Roman Iron Age. The burials were found in a slightly elevated area. Several terps are situated nearby (fig. C.62). The excavators do not think there has been a terp on the location of the cemetery (pers. comm. H. Groenendijk, province of Groningen).

Groenendijk and Knol (2007) suspect this was the location of a Roman Iron Age cemetery, before it was used for the same purpose again in the early Middle Ages. However, one cremation does not make a cemetery. It may have been an isolated cremation pit near a terp on a natural salt marsh elevation in the Roman Iron Age, if the date is indeed correct. It must have been covered by sediment after the Roman Iron Age. The early-medieval burials were found in and right under the topsoil. The early-medieval inhumation was found only 30 cm below the surface; this is too shallow for a grave, which implies that the area was later eroded or levelled.

Spec.: Cuijpers *et al.* 1995, 110: 191 g of cremated bone fragments were collected. There were fragments of the skull, jaw, spine, epiphyses and diaphyses. The estimated age was 34-47; sex could not be determined. There may be a second individual, possibly an infant.

There were also some fragments of animal bone, probably cattle.

Date: Radiocarbon date early-medieval inhumation: 1260 ± 30 BP (GrA-32908), cal AD 660-830 (91.9% probability). The cremated bone fragment was dated 1900 ± 35 BP (GrA-

33543), cal AD 47-216 (92.1% probability). This date was conspicuous and a second test was planned to verify it. This has not been carried out yet: MROM?

Museum/find number: G2007-I.56 + 2009.III.7-17 (all cremations?).

Ref.: Cuijpers *et al.* 1995; Groenendijk & Knol 2007.

120

Middelstum

Boerdamsterweg

Municipality: Loppersum

RD-coordinates: X/Y 238.1/595.1

CMA-number: -

This settlement was one of the earliest in the Groningen terp area. It was excavated by the BAI from 1970-1973. Three occupation phases were identified; the youngest one is from the 4th-3rd century BC. An area of 5-6 ha was excavated.

a. A small cup with one ear was found during the campaign of 1971. It was burnt and contained small, *burnt bone fragments*, possibly of an infant. The bones have since disappeared. It was found about 1.5 m south of a human skeleton (see below), high in the fill of a ditch (fig. C.63).

Spec.: -

Date: The pot is of type K1: MPRM.

Museum/find number: 125.

Ref.: GIA-archive; Taayke 1996b, 53.

b. Partly above the fill of the ditch that surrounded the settlement of phase 2, (or perhaps on the slope of this ditch) a *partial skeleton* was found, not far from a granary (fig. C.63). It is possible that the missing part was dug away while opening a second excavation level without being noticed. The body was extended and supine, and more or less oriented to

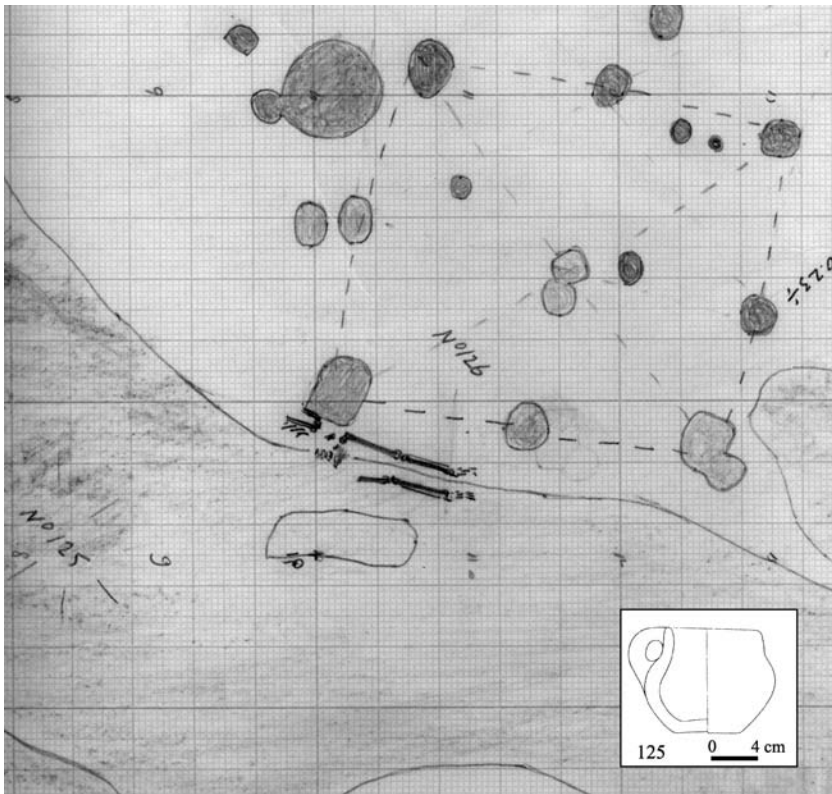


Fig. C.63 Middelstum-Boerdamsterweg: Small cup from the middle pre-Roman Iron Age, found with cremation remains, possibly from an infant, high in the fill of a ditch, and a partial skeleton near a granary. Both finds are from the middle pre-Roman Iron Age. Field drawing: archive RUG/GIA; drawing inset: from Taayke 1996b, Abb. 22.4.

the south. It is not certain that the burial and the granary are from the same period; the body was probably buried here at the end of this occupation phase.

Spec.: -

Date: Radiocarbon date of wood (*Alnus*) from one of the nearby granaries: 2360 ± 35 BP (GrN-6933), 541-376 cal BC. Phase 2 is dated to the 5th century BC: MPROM.

Museum/find number: 126.

Ref.: Boersma 1983; 1988; Van Gelder-Ottway 1988; Lanting & Van der Plicht 2006, 320.

c. In 1972, a human *cranium fragment*, a *femur* 'and others' were found in a pit.

Spec.: -

Date: MPROM.

Museum/find number: 405.

Ref.: GIA-archive.

121

Middelstum

Village

Municipality: Loppersum

RD-coordinates: X/Y 238.5/596.4

CMA-number: 07B-004; 182; 220

Several skeletons were found in this wierde; they probably belong to an early-medieval cemetery. Besides, some human remains possibly belong to earlier occupation phases.

a. During levelling in the 1890's a *skeleton* was found, 7½ feet (ca. 2.5 m) below the surface of the terp. It was reported to be found without hands.

Spec.: -

Date: ROM-EMA.

Museum/find number: ?

Ref.: Kooi 1983, 29.

b. During dredging of the moat of the late-medieval castle Asinga on the terp, a *cranium* was recovered. It may come from deep terp layers.

Spec.: -

Date: EPROM-MA.

Museum/find number: ?

Ref.: Kooi 1983, 29.

122

Onderdendam

'Kleine wierde'

Municipality: Bedum

RD-coordinates: X/Y 234.4/595.2

CMA-number: 07B-044

a. During groundwork in 1988, a *cranium fragment* was found here, and potsherds from all habitation periods.

Spec.: -

Date: PROM-MA.

Museum/find number: 1988-XII.4(1).

Ref.: NAD-archive.

123

Oostum

-

Municipality: Winsum

RD-coordinates: X/Y 229.1/588.7

CMA-number: 07A-042

During levelling in 1909, several finds of human remains were reported by Van Giffen.

Dating from before the early middle ages possibly were:

a. no. 845: a *skeleton* on the margin of the terp in the base, 'in wickerwork';

b. no. 854: a *skull and bones* in the upper part of 'the' dung layer;

c. no. 857: a *femur* in the dung layer;

d. no. 979: *some bones* in the dung layer.

Spec.: -

Date: LPROM-EMA.

Museum/find number: Van Giffen collection 845; 854; 857; 979.

Ref.: Van Giffen-archive RUG.

124

Opwierde

surrounding area

Municipality: Appingedam

RD-coordinates: X/Y 254/593

CMA-number: 07F-042/143 (Opwierde)

a. One of the bog bodies in the inventory by Van der Sanden (1990, 49-50) was allegedly found near Opwierde, according to A. Dieck. At the time, some of the details (in particular a flint knife that is mentioned as an associated find) seemed unlikely. However, since Dieck claimed his information came from personal communication with someone who had read a police report about it, the find could not be discarded. Since then, however, it was discovered that the finds recorded by Dieck are often based on fantasy, especially when he claims personal communication as his source (Van der Sanden & Eisenbeiss 2006). The bog body of Opwierde probably never existed in reality.

Spec.: -

Date: The terp of Opwierde dates from PROM (Miedema 1990). If the find were real and related to this terp: PROM-ROM.

Museum/find number: -

Ref.: Van der Sanden 1990.

125

Paddepoel

II

Municipality: Groningen

RD-coordinates: X/Y 231.8/583.4

CMA-number:

This terp is one of four terp settlements that were excavated in 1964, when the new suburb of Paddepoel was built to the northwest of the city of Groningen (Van Es 1970). Paddepoel II was situated 125 m south of the next one, Paddepoel III.

a. A *fragment of a cranium* was found with a miniature vessel, a granite lapstone and a large fragment of a small Wierum-style pot (fig. C.64), in the fill of a ditch south of one of the platforms.

Spec.: Knol 1983, 173: fragment of right *os parietale*. One side is straight, probably by cutting.

Date: EROM.

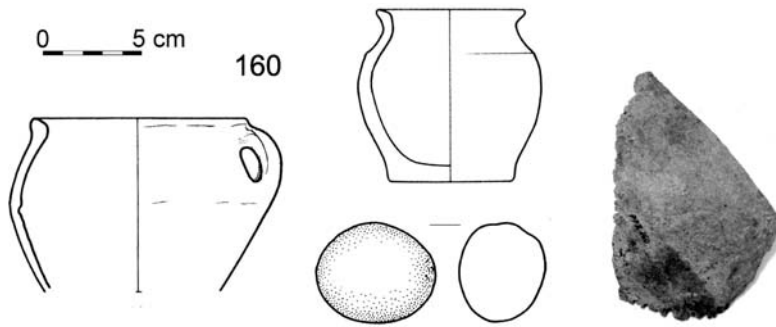


Fig. C.64 Paddepoel II: Human skull fragment with cut edge, small pots and a lapstone, found together in a ditch from the early Roman Iron Age. Drawings from Van Es 1970; photo CFD/RUG, from Knol 1983.

Museum/find number: BAI PP II 160.

Ref.: Van Es 1970; Knol 1983.

126

Paddepoel III

Municipality: Groningen

RD-coordinates: X/Y 231.8/593.55

CMA-number:

This terp is another of four terp settlements that were excavated in 1964 when the new suburb of Paddepoel was built to the northwest of the city of Groningen (Van Es 1970). Paddepoel III was situated around 125 m north of Paddepoel II.

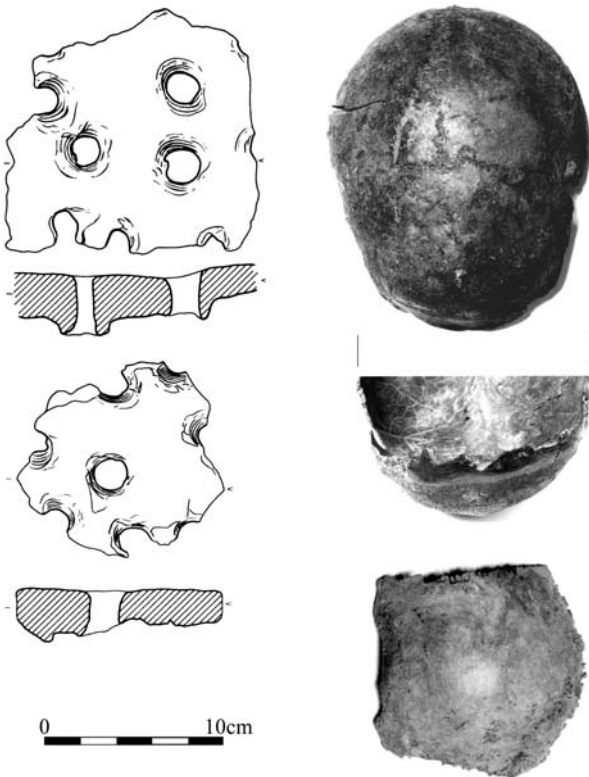


Fig. C.65 Paddepoel III. Right: different sides of the upper part of a skull (top) and an unworked fragment of a second human skull from the same context (bottom). These skull parts were found near a ditch from the late pre-Roman Iron Age, with (left) two fragments of a perforated clay slab (find no.244). Drawings after Van Es 1970; photo CFD/RUG, from Knol 1983.

a. A *mandible* without teeth and a pot (fig. 12.46) were found in the profile of a ditch or pit, belonging to one of the earliest habitation phases (Van Es 1970, Plan XX). The mandible is abraded and has a shiny surface, which was taken as an indication that it has often been handled by Knol (1983, 174). Inspection showed that the entire surface is glimmering, including parts that would not have been touched when holding the mandible. The shiny surface was possibly caused by the chemical composition of the soil it was found in.

Spec.: The mandible is slightly damaged, especially the ramus on both sides.

Date: LPROM-EROM.

Museum/find number: BAI PP III 223.

Ref.: Van Es 1970; Knol 1983.

b. Adjacent to a ditch in the lowest excavation level, in the natural salt marsh subsoil, *two cranial fragments* were found. One of them was the upper part of a skull, forming a round bowl. The other did not show traces of working or use. The skull parts were found with two fragments of a large ceramic clay slab with holes (figs. C.65 and 12.37). Knol noted that the edge of the skull bowl is damaged by fire; almost the entire edge is charred. Spec.: Knol 1983, 173-174: one of the fragments consisted mainly of the left *os parietale*, sutures still unused, of a young person. The large, worked fragment belonged to an elderly person. It consists of the *os frontale* and the left and right *os parietale*, together the upper part of a skull. "In the front the calva had been cut just below the eyebrow bows. At the back the calva had been cut at the upper part of the *sulcus lambdaidea*. Between these two points the calva was cut circular so that a big cup remains. The edge is irregular and damaged by fire. Vaguely some cutting marks can be seen along the edge....It is a large specimen and closely resembles the Garnwerd one."

Date: The finds belong to the earliest phase of the settlement: LPROM.

Museum/find number: BAI PP III 244.

Ref.: Knol 1983.

127

Rasquert Village

Municipality: Winsum

RD-coordinates: X/Y 230.2/598.5

CMA-number: 07B-024/187

a. During commercial levelling, an *early-medieval cemetery* was encountered in the northeastern part of this area. Later digging revealed a second early-medieval cemetery in the southeastern or eastern part of the levelled area. In the levelled part of the terp, human remains were found on later occasions. These were all found in the eastern part of the levelled area and are probably related to one of these cemeteries.

Spec.: -

Date: EMA.

Museum/find number: -
Ref.: GIA-archive.

128

Usquert

Kloosterwiltwerd

Municipality: Eemsmond

RD-coordinates: X/Y 236.5/602.1

CMA-number: 03D-002

As early as 1827, an excavation was executed in this terp (Acker Stratingh 1849). Finds from the terp indicate that its earliest occupation dates from the Roman Iron Age.

a. A *skeleton* without the upper and lower extremities was found 4 m deep. It was situated near a wooden 'shack' made of upright posts with wickerwork (probably the wall of a house), and a 'heap' of about 10 cups of linseed.

Spec.: -

Date: The depth and the wooden structure suggest a pre-medieval date: ROM.

Museum/find number: -

Ref.: Acker Stratingh 1849, II/1, 216-217; Knol 1986b.

b. At a distance of 40 paces from this find, a human *tibia* and *fibula* were found in a clay layer, 2.3 m below the surface.

Spec.: -

Date: ROM-EMA.

Museum/find number: -

Ref.: Acker Stratingh 1849, II/1, 216-217; Knol 1986b.

c. Folmer (1885) described a *cranium* found in a deep layer in 'the terp near Usquert' (probably Kloosterwiltwerd), probably during levelling.

Spec.: Folmer 1885, 79: probably male; adult.

Date: ROM-EMA.

Museum/find number: -

Ref.: Folmer 1885; Knol 1986b.

129

Valcum

-

Municipality: Winsum

RD-coordinates: X/Y 230.7/592.5

CMA-number: 07B-032/190

During levelling, several skeletons were found. Crania were described by Folmer.

a. A *cranium* (*skeleton*?) found in deep terp layers.

Spec.: Folmer 1885, 78: young male.

Date: MPROM-EMA.

Museum/find number: BAI 1952/V206.

Ref.: Folmer 1885; Knol 1986b.

b. A *cranium* (*skeleton*?), found 5 m below the surface.

Spec.: Folmer 1890, 600: male, advanced age.

Date: The great depth suggests an early date: MPROM-ROM.

Museum/find number: Possibly one of the numbers BAI 1952/V212 or 263.

Ref.: Folmer 1890, Knol 1986b.

c. A *cranium* (*skeleton*?) found in deep terp layers.

Spec.: Folmer 1890, 600: male; sutures are fused, teeth are abraded.

Date: MPROM-EMA.

Museum/find number: Possibly one of the numbers BAI 1952/V212 or 263.

Ref.: Folmer 1890, Knol 1986b.

d. A *cranium* (*skeleton*?) found in deep terp layers.

Spec.: Folmer 1890, 600: male, teeth slightly abraded.

Date: MPROM-EMA.

Museum/find number: Possibly one of the numbers BAI 1952/V212 or 263.

Ref.: Folmer 1890, Knol 1986b.

e. A *cranium* (*skeleton*?) found in deep terp layers.

Spec.: Folmer 1890, 601: female, sutures unfused.

Date: MPROM-EMA.

Museum/find number: Possibly one of the numbers BAI 1952/V212 or 263.

Ref.: Folmer 1890, Knol 1986b.

130

Westeremden

Village

Municipality: Loppersum

RD-coordinates: X/Y 243.1/596.0

CMA-number: 07E-174

a. During an early excavation by Acker Stratingh in the 19th century, a *skeleton* was found.

Spec.: Acker Stratingh 1849, II/1, 217: adult.

Date: LPROM-EMA.

Museum/find number: -

Ref.: Acker Stratingh 1849, II/1.

b. During levelling in 1926, a damaged *cranium* without mandible was collected in the area northwest of the church.

Spec.: GIA-archive: dolichocephalous skull.

Date: LPROM-EMA.

Museum/find number: BAI 1926/VI-34.

Ref.: GIA-archive.

131

Westerwiltwerd

Noordoost

Municipality: Loppersum

RD-coordinates: X/Y 238.9/595.2

CMA-number: 07B-110

a. During levelling, ca. 1880, a *skeleton* was found in the deepest layers of this terp. The skull was kept.

Spec.: Folmer 1881, 46-48: ca. 30 years old.

Date: LPROM-ROM.

Museum/find number: ?

Ref.: Folmer 1881.

132

Wierhuizen

-

Municipality: Appingedam

RD-coordinates: X/Y 251.5/595.9

CMA-number: 07F-067

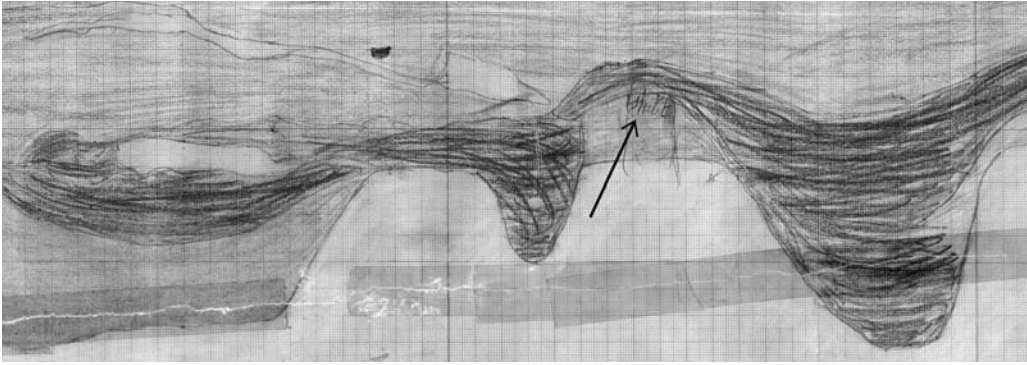


Fig. C.66 Wierhuizen: Section drawing, probably through a series of ditches, with the location of a skeleton; undated. Drawing: archive RUG/GIA.

This terp was levelled in the early 20th century. Van Giffen made observations during levelling and executed an excavation in the northeastern part of the terp in 1916 and 1917 (Van Giffen 1917; 1918).

A number of human remains were found. Dating is difficult because most pots and sherds were not numbered; information on the context of these finds is lost.

a. During levelling in 1910, Van Giffen recorded the find of a *cranium with bones* under a dung layer in the base of the terp.

Spec.: -

Date: LPROM-ROM.

Museum/find number: 4642?

Ref.: Van Giffen-archive RUG.

b. During the excavation of 1917, a flexed *skeleton* was found, lying on its right side on the slope of a large pit (ca. 2 x 2.5 m; local coordinates: M-15) with the head to the east (the head at 0.88 m -NAP; the pelvis at 1.15 m -NAP; the foot 1.27 m -NAP). The skeleton was not complete; the left lower leg and parts of the arms were missing (fig. 12.19).

In the same pit, two complete pots, both with two handles, were found. According to the description in the finds book, at least one of them was standing upright.

Spec.: Van Giffen 1918, 21: female.

Date: Van Giffen (1918, 22) thought the pots were from the 'pre-Karolingian Migration Period', but his knowledge of pottery was limited at the time. Some potsherds from this feature that could be recovered in the archaeological depot (most pottery was not numbered so it cannot be related to features anymore) consist of Roman Iron Age material: ROM.

Museum/find number: 355 (skeleton); 354 and 359 (complete pots); 310, 311 and 371/1917 VIII/371 (potsherds).

Ref.: GIA-archive; NAD-archive; Van Giffen 1918; Halbertsma 1954, 46.

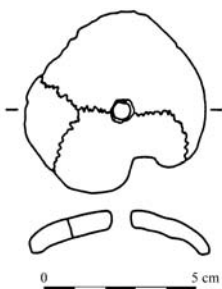


Fig. C.67 Wierhuizen: Worked skull fragment with perforation; undated. Drawing: from Miedema 1989, fig. 50.7

c. A flexed or crouched *skeleton* with about the same orientation as the previous one was found in the same year, in the part of the terp that was quarried at the time (Van Giffen 1918, 22). It was described in the finds book as being found just "above and in the dung" in the excavated area, together with sheep bones.

Spec.: -

Date: LPROM-EMA.

Museum/find number: 332.

Ref.: GIA-archive; Van Giffen 1918.

d. The location of a skeleton is depicted on one of the section drawings, at 52.20 m (fig. C.66); the location of the section itself is not clear. The skeleton was found 0.75 m under the surface, possibly in a part of the terp that had been levelled before.

Spec.: -

Date: LPROM-EMA.

Museum/find number: -

Ref.: GIA-archive.

e. While studying the find material in the 1980's, a small, perforated disc, a *worked skull fragment* (figs. C.67 and 12.38) was discovered among the potsherds.

Spec.: Slightly protruding parts on both sides are shiny, suggestive of handling.

Date: LPROM-EMA.

Museum/find number: 1975/X-88.

Ref.: Miedema 1989, 107/108; fig. 50.7, type 2.3.1.9.4.

f. The documentation of private collections of the Groningen Museum contains the description and picture of a small handmade pot (fig. C.68), which contained corroded iron with some *burnt bone fragments* attached to it.

Spec.: -

Date: The small pot is chaff tempered; temper and shape: EROM.

Museum/find number: -

Ref.: Knol 1986b.

Fig. C.68 Wierhuizen: Small, chaff-tempered pot from around the 1st century AD, in which cremation remains and corroded iron were found. Photo CFD/RUG.



References

Abbreviations

AK	Archäologisches Korrespondenzblatt
BAR	British Archaeological Reports
BBS	Behavioral and Brain Sciences
BKNOB	Bulletin Koninklijke Nederlandse Oudheidkundige Bond
BROB	Berichten van de Rijksdienst voor het Oudheidkundig Bodemonderzoek
GAS	Groningen Archaeological Studies
JALC	Journal of Archaeology in the Low Countries
JAS	Journal of Archaeological Science
JCC	Journal of Cognition and Culture
JVT	Jaarverslagen van de Vereniging voor Terpenonderzoek
NAR	Nederlandse Archeologische Rapporten
NDV	Nieuwe Drentse Volksalmanak
NTG	Nederlandsch Tijdschrift voor Geneeskunde
PK	Probleme der Küstenforschung im südlichen Nordseegebiet
PPC	Proceedings of the Prehistoric Society
RGA	Reallexikon der Germanischen Altertumskunde
SKN	Siedlungs- und Küstenforschung im südlichen Nordseegebiet
VF	De Vrije Fries

Historical sources

- Bible: Books of Genesis; Exodus; 2 Samuel; Matthew.
- Cassius Dio: *Historia Romana*. 1914-1927: Dio's Roman history, in nine volumes, with an English transl. by Earnest Cary, Cambridge Mass./London.
- Julius Caesar: *Commentarii de bello Gallico*. 1996: Seven commentaries on the Gallic War. Translated by Carolyn Hammond, Oxford.
- Plinius Secundus maior: *Naturalis Historia*. 1952: Pliny's Natural history Vol. IV, with an English translation in ten volumes by H. Rackham, London/Cambridge Mass.
- Ptolemaeus: *Geographia* (translation in Galestin 2008a).
- Tacitus: *Historiae*. 1991: Tacitus - Historiën, vertaald, ingeleid en van aantekeningen voorzien door dr. J.W. Meijer, Baarn.
- Tacitus: *Ab excessu divi augusti annales* (Annales). 1955: Publius Cornelius Tacitus: Kronieken - Ab excessu divi augusti annales, in de vertaling van Dr. J.W. Meijer, Haarlem.
- Tacitus: *De origine et situ Germanorum* (Germania). 1999: Tacitus Germania. Translated with introduction and commentary by J.B. Rives, Oxford.

Velleius Paterculus: *Historia Romana*. 1924: Compendium of Roman history, Velleius Paterculus, *Res gestae divi Augusti*, with an English transl. by Frederick W. Shipley, London/Cambridge Mass.

Other

- Abbink, A.A., 1999: *Make it and break it: the cycles of pottery. A study of the technology, form, function, and use of pottery from the settlements at Uitgeest-Groot-Dorreegeest and Schagen-Muggenburg 1, Roman period, North-Holland, the Netherlands* (= Archaeological Studies Leiden University 5), Leiden.
- Acker Stratingh, G., 1847-1852: *Aloude staat en geschiedenis des vaderlands*, Groningen.
- Aldhouse-Green, M., 2001: *Dying for the Gods. Human Sacrifice in Iron Age and Roman Europe*, Stroud.
- Anderson, T., 1995: The human skeletons, in K. Parfitt (ed.), *Iron Age burials from Mill Hill, Deal, Kent*, London, 114-144.
- Andrews, P. & J. Cook, 1985: Natural modifications to bones in a temperate setting, *Man* 20, 675-691.
- Arjaans, J., 1991: Terpafgravingen in Friesland, *JVT* 75, 45-55.
- Armit, I., 2006: Inside Kurtz's compound: Headhunting and the human body in prehistoric Europe, in M. Bonogofsky (ed.), *Skull collection, modification and decoration* (= BAR Int. Ser. 1539), Oxford, 1-14.
- Armit, I. & V. Ginn, 2007: Beyond the grave: human remains from domestic contexts in Iron Age Atlantic Scotland, *PPS* 73, 113-134.
- Arnoldussen, S. & R. Visser, 2014: More than a point on the map: the Leeuwarden Late Bronze Age spearhead, in E.M. Theunissen & S. Arnoldussen (eds.), *Metaaltijden 1. Bijdragen in de studie van de metaaltijden*, Leiden, 97-108.
- Arnoldussen, S. & K.M. de Vries, 2014: Of farms and fields: the Bronze Age and Iron Age settlement and Celtic field at Hijken-Hijkerveld, *Palaeohistoria* 55/56, 85-104.
- Åström, P., 1987: Inverted vases in old world religion, *Journal of Prehistoric Religion* 1, 7-16.
- Backe, M., B. Edgren & F. Herschend, 1993: Bones thrown into a water-hole, *Pact* 38, 327-342.
- Baetsen, S., 2006: Fysisch-antropologisch onderzoek, in S. Heeren (ed.), *Opgravingen bij Tiel-Passewaaij 1. De nederzetting aan de Passewaaijse Hogeweg* (= Zuidnederlandse Archeologische Rapporten 29), Amsterdam, 172-180.

- Bakx, J.P.L. (ed.), 2013: *Met rituelen omsloten. Opgraving van een inheems Romeinse nederzetting langs de Woudselaan in de Harnaschpolder, gemeente Midden-Delfland* (= Delftse Archeologische Rapporten 107), Delft.
- Balla, M.K., S. Chaudhary & T.B. Karkee, 1991: *Wood energy flows, RRA study in Pokhara, Nepal* (= Wood fuel flows, Field document 26, Part II).
- Bantelmann, A., 1955: *Tofting, eine vorgeschichtliche Warft an der Eidermündung* (= Offa-Bücher 12), Neumünster.
- Bärenfänger, R., 2001: Befunde einer frühmittelalterlichen Siedlung bei Esens, Ldkr. Wittmund (Ostfriesland), *PK* 27, 249-300.
- Bärenfänger, R., H.C. Küchelmann & H. Prison, 2008: Der Hund aus dem Klei, *Archäologie in Niedersachsen* 11, 45-47.
- Barrett, J.L., 2002a: Dumb gods, petitionary prayer and the cognitive science of religion, in I. Pyysiäinen & V. Anttonen (eds.), *Current approaches in the cognitive science of religion*, London/New York, 93-109.
- Barrett, J.L., 2002b: Smart gods, dumb gods, and the role of social cognition in structuring ritual intuitions, *JCC* 2, 183-193.
- Barrett, J.L., 2004: Bringing data to mind: empirical claims of Lawson and McCauley's theory of religious ritual, in T. Light & B.C. Wilson (eds.), *Religion as a human capacity. A Festschrift in honor of E. Thomas Lawson*, Leiden/Boston, 265-288.
- Barrett, J.L. & E.T. Lawson, 2001: Ritual intuitions: cognitive contributions to judgments of ritual efficacy, *JCC* 1, 183-201.
- Barrett, J.L. & B. Malley, 2007: A cognitive typology of religious actions, *JCC* 7, 201-211.
- Bazelmans, J., 1991: Conceptualising early Germanic political structure: a review of the use of the concept of *Gefolgschaft*, in N. Roymans & F. Theuvs (eds.), *Images of the past. Studies on ancient societies in North-Western Europe* (= Studies in Prae- en Protohistorie 7), Amsterdam, 91-129.
- Bazelmans, J., 1999: *By weapons made worthy. Lords, retainers and their relationship in Beowulf* (= Amsterdam Archaeological Studies 5), Amsterdam.
- Bazelmans, J., 2000: Een laat-Romeins bewoningshaat in het Nederlandse kustgebied en het voortbestaan van de Friezenaam, *JVT* 76-82, 14-75.
- Bazelmans, J., 2002: Die spätrömerzeitliche Besiedlungslücke im niederländischen Küstengebiet und das Fortbestehen des Friesennamens, *Emder Jahrbuch für historische Landeskunde Ostfrieslands* 81, 7-61.
- Bazelmans, J., 2003: *De Romeinse muntvondsten uit de drie noordelijke provincies. Methodische kanttekeningen bij een nieuwe periodisering der relaties* (= Tweede Van Gelderlezing), Leiden.
- Bazelmans, J., 2005: Die Wurten von Dongjum-Heringa, Peins-Oost und Wijnaldum-Tjitsma: kleinmaßstäblicher Deichbau in ur- und frugeschichtlicher Zeit des nördlichen Westergo, in M. Fansa (ed.), *Kulturlandschaft Marsch. Natur-Geschichte-Gegenwart* (= Schriftenreihe des Landesmuseums für Natur und Mensch 33), Oldenburg, 68-84.
- Bazelmans, J., 2009: The early-medieval use of ethnic names from classical antiquity. The case of the Frisians, in T. Derks & N. Roymans (eds.), *Ethnic constructs in Antiquity. The role of power and tradition* (= Amsterdam Archaeological Studies 13), Amsterdam, 321-337.
- Bazelmans, J., 2012: Erf-goed: waarde in meervoud, *Vitruvius* 20, 14-20.
- Bazelmans, J., D.A. Gerrets, J. de Koning & P.C. Vos, 1999: Zoden aan de dijk. Kleinschalige dijkbouw in de late prehistorie en protohistorie van noordelijk Westergo, *VF* 79, 7-73.
- Bazelmans, J., D.A. Gerrets & A. Pol, 2002: Metal detection and the Frisian kingdom. Questions about the central place of northern Westergo in the early Middle Ages, *BROB* 45, 219-241.
- Bazelmans, J., M.F.P. Dijkstra & J. de Koning, 2004: Holland during the first millennium, in M. Lodewijckx (ed.), *Bruc ealles well. Archaeological essays concerning the peoples of north-west Europe in the first millennium AD* (= Acta archaeologica Lovaniensia monographiae 15), Leuven, 3-36.
- Bazelmans, J., H.A. Groenendijk, G.J. de Langen, J.A.W. Nicolay & A. Nieuwhof, 2009: *De late prehistorie en protohistorie van holoceen Noord-Nederland* (= Nationale Onderzoeksagenda Archeologie 12), Amersfoort.
- Beck, H., 1970: Germanische Menschenopfer in der literarischen Überlieferung, in H. Jankuhn (ed.), *Vorgeschichtliche Heiligtümer und Opferplätze in Mittel- und Nordeuropa* (= Abhandlungen der Akademie der Wissenschaften. Philol.-hist. Klasse; 3, Folge, nr. 74), Göttingen, 240-258.
- Becker, C.J., 1970: Zur Frage der eisenzeitlichen Moorgefäße in Dänemark, in H. Jankuhn (ed.), *Vorgeschichtliche Heiligtümer und Opferplätze in Mittel- und Nordeuropa* (= Abhandlungen der Akademie der Wissenschaften. Philol.-hist. Klasse; 3, Folge, nr. 74), Göttingen, 120-166.
- Beer, R., 1999: *The encyclopedia of Tibetan symbols and motifs*, London.
- Beilke-Voigt, I., 2001: Kritische Bemerkungen zu den sogenannten Bauopfern in frühgeschichtlichen Siedlungen Norddeutschlands und Dänemarks, in M. Meyer (ed.), *... trans albam fluvium. Forschungen zur vorrömischen, kaiserzeitlichen und mittelalterlichen Archäologie*. (= Internationale Archäologie. Studia honoraria Band 10), Rahden/Westf., 177-191.
- Beilke-Voigt, I., 2004: Kinderdefizite und Kinderfriedhöfe. Zur Sonderstellung des Kindes im Bestattungsritual anhand archäologischer und ethnologischer Quellen, *Ethnographisches-Archäologische Zeitschrift* 45, 271-295.
- Beilke-Voigt, I., 2007: *Das "Opfer" im archäologischen Befund. Studien zu den sog. Bauopfern, kultischen Niederlegungen und Bestattungen in ur- und frühgeschichtlichen Siedlungen Norddeutschlands und Dänemarks* (= Berliner Archäologische Forschungen 4), Rahden/Westf.

- Bekaert, S., 1998: Multiple levels of meaning and the tension of consciousness. How to interpret iron technology in Bantu Africa, *Archaeological Dialogues* 5, 6-29.
- Bell, C., 1992: *Ritual theory, ritual practice*, New York/Oxford.
- Bell, C., 1997: *Ritual: perspectives and dimensions*, New York [etc.].
- Bell, C., 1998: Performance, in M.C. Taylor (ed.), *Critical terms for religious studies*, Chicago and London, 205-224.
- Bendezu-Sarmiento, J., H.-P. Francfort, A. Ismagulova & Z. Samashev, 2008: Post-mortem mutilations of human bodies in Early Iron Age Kazakhstan and their possible meaning for rites of burial, *Antiquity* 82, 73-86.
- Bergsma, G.M.A., 2010: Menselijk botmateriaal, in S.J. Tuinstra & N. van Malssen (eds.), *Een archeologische opgraving op de locatie van twee archeologische monumenten aan het Oude Diep tussen Goutum en Wirdum, gemeente Leeuwarden (Fr.)* (= ARC-Publicaties 210), Groningen, 87-93.
- Bering, J.M., 2006: The folk psychology of souls, *BBS* 29, 453-498.
- Berke, S., M. Zelle, N. Tatter, K. Winter & E. Treude (eds.), 2009: *2000 Jahre Varusschlacht. Mythos*, Stuttgart.
- Besteman, J.C., J.M. Bos, D.A. Gerrets, H.A. Heidinga & J. de Koning, 1999: *The excavations at Wijnaldum. Reports on Frisia in Roman and Medieval times. Volume I*, Rotterdam/Brookfield.
- Bienert, H.D., 1991: Skull cult in the prehistoric Near East, *Journal of Prehistoric Religion* 5, 9-23.
- Binford, L.R., 1981: *Bones. Ancient men and modern myths*, New York etc.
- Birkhan, H., 1997: *Kelten: Versuch einer Gesamtdarstellung ihrer Kultur*, Wien.
- Blaupot ten Cate, D.H.S., 1916: In het land der wierden, *Mooi Groningen, stad en provincie in beeld* 1, 56-66.
- Bloch, M. & J. Parry, 1982: Introduction: death and the regeneration of life, in M. Bloch & J. Parry (eds.), *Death and the regeneration of life*, Cambridge, 1-44.
- Bloemers, J.H.F., 1980: Engels drop. Een poging tot ontleding van het romanisatieproces in Nederland, *Westerheem* 29, 152-173.
- Bocherens, H. & D. Drucker, 2003: Trophic level isotopic enrichment of carbon and nitrogen in bone collagen: case studies from recent and ancient terrestrial ecosystems, *International Journal of Osteoarchaeology* 13, 46-53.
- Boeles, P.C.J.A., 1900: Belangrijk skelet en armband, *Bulletin van de Koninklijke Nederlandse Oudheidkundige Bond* 2, 36-36.
- Boeles, P.C.J.A., 1901: De baron Alfred de Loë over de Friesche terpen, *BKNOB* 4, 68-71.
- Boeles, P.C.J.A., 1906: De opgravingen in de terp Hoogebeintum, *VF* 20, 391-430.
- Boeles, P.C.J.A., 1908: *Het Friesch museum te Leeuwarden. Catalogus der meest belangrijke voorwerpen met uitzondering der schilderijen*, Leeuwarden.
- Boeles, P.C.J.A., 1919: Angelen en Saksen op de Friesche terpen, *De Gids* 83, 485-502.
- Boeles, P.C.J.A., 1922: Naschrift, *JVT* 6, 35-37.
- Boeles, P.C.J.A., 1927: *Friesland tot de elfde eeuw. Zijn oudste beschaving en geschiedenis*, 's-Gravenhage.
- Boeles, P.C.J.A., 1943: Schedelnapjes uit terpen te Stiens en Marrum, *VF* 37, 81-83.
- Boeles, P.C.J.A., 1949: De terpencultuur tot omstreeks 400, in J.A. van Houtte, J.F. Niermeyer, J. Presser, J. Romein & H. van Werveke (eds.), *Algemene geschiedenis der Nederlanden, deel I*, Utrecht/Antwerpen, Brussel, Gent en Leuven, 179-214.
- Boeles, P.C.J.A., 1951: *Friesland tot de elfde eeuw. Zijn vóór-en vroege geschiedenis. Tweede druk*, 's-Gravenhage.
- Boersma, J.W., 1969: De vondst van een bijl uit de Trechterbekercultuur in een middeleeuwse omgeving, *Groningse Volksalmanak* 1968-1969, 230-239.
- Boersma, J.W., 1970: Het terpengebied in protohistorische tijd, in J.W. Boersma (ed.), *Terpen - mens en milieu*, Haren, 43-64.
- Boersma, J.W., 1983: De opgraving Middelstum-Boerdamsterweg in een notedop (In: P.B. Kooi, Leven langs de Fivel, van Helwerd tot Zwart Lap), in O.G. Reiders, A. Elema, J.G. Klugkist, G. de Boer & M.A. Holtman (eds.), *Middelstum-Kantens. Bijdragen tot de plattelandsgeschiedenis, met een beschrijving van de boerderijen en hun bewoners*, Kantens, 31-35.
- Boersma, J.W., 1988: Een voorlopig overzicht van het archeologisch onderzoek van de wierde Heveskesklooster (Gr.), in M. Bierma, A.T. Clason, E. Kramer & G.J. de Langen (eds.), *Terpen en wierden in het Fries-Groningse kustgebied*, Groningen, 61-87.
- Boersma, J.W., 1999: Back to the roots of Ezinge, in H. Sarfatij, W.J.H. Verwers & P.J. Woltering (eds.), *In discussion with the past. Archaeological studies presented to W.A. van Es*, Zwolle, 87-96.
- Boersma, J.W., 2005: Colonists on the clay. The occupation of the northern coastal region, in L. Louwe Kooymans, P.W. van den Broeke, H. Fokkens & A.L. van Gijn (eds.), *The prehistory of the Netherlands*, Amsterdam, 561-576.
- Bos, J.M., 1995a: *Archeologie van Friesland*, Utrecht.
- Bos, J.M., 1995b: Terpzolen, *Paleo-aktueel* 6, 64-66.
- Bos, J.M., 2006: Medieval brooches from the Dutch province of Friesland (Frisia): a regional perspective on the Wijnladum brooches. Part I: small equal-armed brooches, *Palaeohistoria* 47/48, 455-478.
- Bos, J.M., M.J.L.T. Niekus, J. Scheffer & T.B. Volkers, 1998: Opgraving Winsum-Bruggeburen: Romeinen in Friesland, *Paleo-aktueel* 9, 65-69.
- Bos, J.M., H.T. Waterbolk, J. van der Plicht & E. Taayke, 2002: Sporen van IJzertijdbewoning in de terpzool van Wommels-Stapert (Friesland), *Palaeohistoria* 41/42, 177-223.
- Bos, J.M. & E.W. Brouwer, 2005: De kruisvormige fibulae van Friesland, *VF* 85, 9-36.
- Bosman, A.V.A.J., 1997: *Het culturele vondstmateriaal van de vroeg-Romeinse versterking Velsen 1*, Dissertation University of Amsterdam.

- Bottema, S., T.C. van Hoorn, H. Woldring & W.H.E. Gremmen, 1980: An agricultural experiment in the unprotected salt marsh. Part II, *Palaeohistoria* 22, 128-140.
- Bottema-McGillavry, J.N., 2008: Hout, in A. Nieuwhof (ed.), *De Leege Wier van Englum. Archeologisch onderzoek in het Reitdiepgebied* (= JVT 91), Groningen, 177-186.
- Boulestin, B., 1999: *Approche taphonomique des restes humains. Le cas des Mésolithiques de la grotte des Perrats et le problème du cannibalisme en préhistoire récente européenne* (= BAR Int. Ser. 776), Oxford.
- Boulestin, B., A. Zeeb-Lanz, C. Jeunesse, F. Haack, R.-M. Arbogast & A. Denaire, 2009: Mass cannibalism in the Linear Pottery Culture at Herxheim (Palatinate, Germany), *Antiquity* 83, 968-982.
- Bowman, A.K. & R.S.O. Tomlin, 2009: The 'Frisian ox sale'. A writing-tablet from Tolsum, *It Beaken* 71, 211-236.
- Boyer, P., 2001: *Religion explained. The evolutionary origins of religious thought*, New York.
- Boyer, P., 2002: Why do gods and spirits matter at all?, in I. Pyysiäinen & V. Anttonen (eds.), *Current approaches in the cognitive science of religion*, London/New York, 68-92.
- Boyer, P., 2003: Religious thought and behaviour as by-products of brain function, *TRENDS in Cognitive Sciences* 7, 119-124.
- Boyer, P., 2004: Religion, Evolution, and Cognition (Review), *Current anthropology* 45, 430-433.
- Boyer, P., 2005: A reductionist model of distinct modes of religious transmission, in H. Whitehouse & R. McCauley (eds.), *Mind and religion. Psychological and cognitive foundations of religiosity*, Walnut Creek etc., 3-30.
- Boyer, P., 2006: Prosocial aspects of afterlife beliefs: maybe another by-product, *BBS* 29, 466.
- Boyer, P., 2013: Explaining religious concepts. Lévi-Strauss the brilliant and problematic ancestor, in D. Xygalatas & L. McCorkle (eds.), *Mental Culture, classical social theory and the cognitive science of religion*, Durham, 164-175.
- Boyer, P. & P. Liénard, 2006: Why ritualized behavior? Precaution systems and action parsing in developmental, pathological and cultural rituals, *BBS* 29, 595-650.
- Bradley, R., 1984: *The social foundations of prehistoric Britain. Themes and variations in the archaeology of power*, London/New York.
- Bradley, R., 1990: *The passage of arms. An archaeological analysis of prehistoric hoards and votive deposits*, Cambridge etc.
- Bradley, R., 2003: A Life Less Ordinary: the Ritualization of the Domestic Sphere in Later Prehistoric Europe, *Cambridge Archaeological Journal* 13, 5-23.
- Bradley, R., 2005: *Ritual and domestic life in prehistoric Europe*, London/New York.
- Brinkhuizen, D.C., 1988: Vis en visvangst bij de terpbewoners, in M. Bierma, A.T. Clason, E. Kramer & G.J. de Langen (eds.), *Terpen en wierden in het Fries-Groningse kustgebied*, Groningen, 226-233.
- Britton, K., G. Müldner & M. Bell, 2008: Stable isotope evidence for salt-marsh grazing in the Bronze Age Severn Estuary, UK: implications for palaeodietary analysis at coastal sites, *JAS* 35, 2111-2118.
- Brongers, J.A., 1966: Evidence for trepanning practice in the Netherlands during Pre- and Protohistoric times, *BROB* 15-16, 221-226.
- Brongers, J.A., 1967: Protohistoric worked human skull bone in the Netherlands, *BROB* 17, 29-34.
- Brongers, J.A., 1968: Another rondelle from the Netherlands: Garnwerd, Groningen, *BROB* 18, 263-265.
- Brück, J., 1995: A place for the dead: the role of human remains in Late Bronze Age Britain, *PPS* 61, 245-277.
- Brück, J., 1999a: Ritual and rationality: some problems of interpretation in European archaeology, *European Journal of Archaeology* 2, 313-344.
- Brück, J., 1999b: Houses, lifecycles and deposition on Middle Bronze Age settlements in southern England, *PPS* 65, 145-166.
- Burman, J.T., 2012: The misunderstanding of memes: biography of an unscientific object, 1976-1999, *Perspectives on Science* 20, 75-104.
- Burmeister, S., 2007: Moorleichen als Opfer. Deutungsmuster einer problematische Fundgruppe, in S. Burmeister (ed.), *Zweiundvierzig. Festschrift für Michael Gebühr zum 65. Geburtstag*, Rahden/Westf., 91-106.
- Byvanck, A.W., 1931: *Excerpta Romana: de bronnen der Romeinsche geschiedenis van Nederland 1* (= Rijksgeschiedkundige publicatiën 73), 's-Gravenhage.
- Campbell, L., 2012: Modifying material: Social biographies of Roman material culture, in B. Jervis & A. Kyle (eds.), *Make-do and mend: Archaeologies of compromise, repair and reuse* (= BAR Int. Ser. 2408), Oxford, 13-26.
- Cappers, R.T.J., 1994: An ecological characterization of plant macroremains of Heveskesklooster (The Netherlands). A methodological approach, *Palaeohistoria* 35/36, 107-168.
- Cappers, R.T.J. & W. Prummel, 2005: Planten en dieren in het kwelderlandschap, in E. Knol, A.C. Bardet & W. Prummel (eds.), *Professor van Giffen en het geheim van de wierden*, Veendam/Groningen, 136-151.
- Carlie, A., 1998: Käringsjön. A fertility sacrificial site from the late Roman Iron Age in South-west Sweden, *Current Swedish Archaeology* 6, 17-37.
- Carr, G. & C. Knüsel, 1997: The ritual framework of excarnation by exposure as the mortuary practice of the early and middle Iron Ages of central southern Britain, in A. Gwilt & C. Haselgrove (eds.), *Reconstructing Iron Age societies. New approaches to the symbolic meaning of metalworking in Iron Age Britain* (= Oxbow Monograph 71), Oxford, 167-173.
- Chapman, J., 2000: *Fragmentation in archaeology. People, places and broken objects in the prehistory of South Eastern Europe*, London/New York.
- Chapman, J. & B. Gaydarska, 2007: *Parts and wholes. Fragmentation in prehistoric context*, Oxford.

- Clason, A.T., 1967: Animal and man in Holland's past. An investigation of the animal world surrounding man in prehistory and early historical times in the provinces of North and South Holland, *Palaeohistoria* 13a, 1-247.
- Cloern, J.E., E.A. Canuel & D. Harris, 2002: Stable carbon and nitrogen isotope composition of aquatic and terrestrial plants of the San Francisco Bay estuarine system, *Limnology and Oceanography* 47, 713-729.
- Conkey, M.W. & J.D. Spector, 1984: Archaeology and the study of gender, *Advances in archaeological method and theory* 7, 1-38.
- Cooper, C., 2008: Kriegsverletzungen an historischen Skeletten aus der Schweiz, in J. Piek & T. Terberger (eds.), *Traumatologische und pathologische Veränderungen an prähistorischen und historischen Skelettresten - Diagnose, Ursachen und Kontext*, Rahden/Westf., 113-123.
- Corbey, R., 2005: *The metaphysics of apes. Negotiating the animal-human boundary*, Cambridge.
- Corbey, R., 2006: Laying aside the spear: Hobbesian Warre and the Maussian gift, in T. Otto, H. Thrane & H. Vandkilde (eds.), *Warfare and society. Archaeological and social anthropological perspectives*, Aarhus, 29-36.
- Craig, C.R., C.J. Knüsel & G.C. Carr, 2005: Fragmentation, mutilation and dismemberment: an interpretation of human remains on Iron Age sites, in M. Parker Pearson & I.J.N. Thorpe (eds.), *Warfare, violence and slavery in prehistory: proceedings of a Prehistoric Society conference at Sheffield University* (= BAR Int. Ser. 1374), Oxford, 165-180.
- Cruz-Inigo, A.E., B. Ladizinski & A. Sethi, 2011: Albinism in Africa: Stigma, Slaughter and Awareness Campaigns, *Dermatologic Clinics* 29, 79-87.
- Cuijpers, A.G.F.M., 1995: Fysisch-antropologisch onderzoek van de crematieresten uit Wijnaldum (Fr.), *Paleo-aktueel* 6, 106-108
- Cuijpers, A.G.F.M. & J. Robb, 1999: Onderzoek van menselijk botmateriaal, in J.-K.A. Hagers & M.M. Sier (eds.), *Castricum-Oosterbuurt, bewoningssporen uit de Romeinse tijd en middeleeuwen* (= Rapportage Archeologische Monumentenzorg 53), Amersfoort, 153-160.
- Cuijpers, A.G.F.M., H.A. Groenendijk & P.B. Kooi, 1995: Een grafveld uit de vroege Middeleeuwen bij Lellens (Gr.), *Paleo-aktueel* 6, 109-111.
- Cuijpers, A.G.F.M., C.M. Haverkort, J.M. Pasveer & W. Prummel, 1999: The human burials, in J.C. Besteman, J.M. Bos, D.A. Gerrets, H.A. Heidinga & J. de Koning (eds.), *The Excavations at Wijnaldum. Reports on Frisia in Roman and Medieval times. Volume I*, Rotterdam/Brookfield, 305-322.
- Danforth, L.M. & A. Tsaras, 1982: *The death rituals of rural Greece*, Princeton.
- Dawkins, R., 1976: *The selfish gene*, Oxford.
- de Clercq, W. & E. Taayke, 2004: Handgemaakte Keramiek der späten Kaiserzeit und des frühen Mittelalters in Flandern (Belgien). Das Beispiel der Funde friesischer Keramiek in Zele (O-Flandern), in M. Lodewijckx (ed.), *Bruc ealles well. Archaeological essays concerning the peoples of north-west Europe in the first millennium AD* (= Acta archaeologica Lovaniensia monographiae 15), Leuven, 57-72.
- Deforce, K. & K. Haneca, 2011: Ashes to ashes. Fuelwood selection in Roman cremation rituals in northern Gaul, *JAS* 39, 1338-1348.
- de Jong, M., 2008: *Heveskesklooster. 1ste-eeuws aardewerk in context* (= Masterthesis University of Groningen).
- de Koning, J., 2000: *Uitgeest-Dorreegeest en De Dog* (= Intern rapport), Amsterdam.
- de Koning, J., 2003: Why did they leave? Why did they stay? On continuity versus discontinuity from Roman times to the Early Middle Ages in the western coastal area of the Netherlands, in T. Grünewald & S. Seibel (eds.), *Kontinuität und Diskontinuität. Germania inferior am Beginn und am Ende der römischen Herrschaft* (= Beiträge des deutsch-niederländischen Kolloquiums in der Katholieke Universiteit Nijmegen (27. bis 30.06.2001)), Berlin/New York, 53-82.
- de Langen, G.J., 1992: *Middeleeuws Friesland. De economische ontwikkeling van het gewest Oostergo in de vroege en volle Middeleeuwen*, Groningen.
- de Langen, G.J., 2011: De gang naar een ander landschap. De ontginning van de (klei-op-)veen-gebieden in Fryslân gedurende de late ijzertijd, Romeinse tijd en middeleeuwen (van ca. 200 v. Chr. tot ca. 1200 n. Chr.), in M.J.L.Th. Niekus, S. van der Zee, T. Looijenga & F. Kiestra (eds.), *Gevormd en omgevormd landschap van prehistorie tot middeleeuwen*, Drents Prehistorische Vereniging, 70-97.
- de Langen, G.J. & H.T. Waterbolk, 1989: De archeologie van Ezinge. De nederzettingen- en onderzoeksgeschiedenis van een Gronings terpdorp, *JVT* 66-72, 78-111.
- Delvigne, J.J., 1984: *De wierde van Ezinge op de schop*, Ezinge.
- de Libero, L., 2009: Vae victis! Das Schicksal der Besiegten in der römischen Antike, in S. Burmeister & H. Derks (eds.), *2000 Jahre Varusschlacht - Konflikt*, Stuttgart, 280-284.
- Derks, T., 1998: *Gods, Temples and Ritual Practices. The transformation of religious ideas and values in Roman Gaul* (= Amsterdam archaeological studies 2), Amsterdam.
- Descola, P., 2006: Beyond nature and culture, *Proceedings of the British Academy* 139, 137-155.
- de Vries, J., 1956: *Altgermanische Religionsgeschichte I*, Berlin.
- de Waal, F., 1996: *Good natured. The origin of right and wrong in humans and other animals*, Cambridge MA.
- de Waal, F., 2005: *Our inner ape*, New York.
- de Waal, F., 2009: *The age of empathy : nature's lessons for a kinder society*, New York.

- de Wit, M.J.M., 1998: Elite in Drenthe? Een analyse van twaalf opmerkelijke Drentse grafinventarissen uit de vroege en het begin van de midden-ijzertijd, *Palaeohistoria* 39/40, 323-373.
- Diederik, F., 2002: 'Schervengericht'. Een onderzoek naar inheems aardewerk uit de late derde en de vierde eeuw in de Kop van Noord-Holland (= AWN-reeks no. 3), Amsterdam.
- Dietler, M., 1990: Driven by drink: The role of drinking in the political economy and the case of Early Iron Age France, *Journal of Anthropological Archaeology* 9, 352-406.
- Dietler, M., 1996: Feasts and commensal politics in the political economy. Food, power and status in prehistoric Europe, in P. Wiessner & W. Schiefenhövel (eds.), *Food and the status quest. An interdisciplinary perspective*, Oxford, 87-125.
- Dietler, M., 2001: Theorizing the feast. Rituals of consumption, commensal politics, and power in African contexts, in M. Dietler & B. Hayden (eds.), *Feasts. Archaeological and ethnographic perspectives on food, politics, and power*, Washington/London, 65-114.
- Dijkstra, J. & J.A.W. Nicolay (eds.), 2008: *Een terp op de schop. Archeologisch onderzoek op het Oldehoofsterkerkhof te Leeuwarden* (= ADC Monografie 3), Amersfoort.
- Dijkstra, J., D.A. Gerrets & J.A.W. Nicolay, 2008: Synthesis: origin and development of the Oldehove terp at Leeuwarden, in J. Dijkstra & J.A.W. Nicolay (eds.), *Een terp op de schop. Archeologisch onderzoek op het Oldehoofsterkerkhof te Leeuwarden* (= ADC Monografie 3), Amersfoort, 307-342.
- Douglas, M., 1966: *Purity and danger. An analysis of concepts of pollution and taboo*, London/Henly.
- Douglas, M., 1970: *Natural symbols. Explorations in cosmology*, London.
- Duday, H., 2006: Archaeoethnology or the archaeology of death, in R.L. Gowland & C. Knüsel (eds.), *Social archaeology of funerary remains*, Oxford, 30-56.
- Eekhoff, W., 1859: *Nieuwe atlas van de provincie Friesland: bevattende kaarten van de dertig grietenijen of gemeenten met de daarin gelegene elf steden en haar grondgebied, alsmede van de eilanden Ameland en Schiermonnikoog*, Leeuwarden.
- Effros, B., 2004: Dressing conservatively: women's brooches as markers of ethnic identity?, in L. Brubaker & J.M.H. Smith (eds.), *Gender in the early medieval world*, Cambridge, 165-184.
- Elema, J.O. & J. Elema, 1907: Beschouwing der wierde van Toornwerd, *Bijdragen tot de kennis van de provincie Groningen II*, Groningen.
- Ellison, A. & P. Drewett, 1971: Pits and post-holes in the British early Iron Age: some alternative explanations, *PPS* 37, 183-194.
- Elzinga, G., 1960: Hennaarderadeel, *BKNOB* 6/13, 130.
- Elzinga, G., 1961: Franekeradeel, *BKNOB* 6/14, 217-218.
- Elzinga, G., 1962: Nederzettingssporen van rond het begin onzer jaartelling bij Sneek, *VF* 45, 68-99.
- Elzinga, G., 1968: Tietjerksteradeel, *BKNOB* 67, 134-135.
- Elzinga, G., 1975: Rondom de "Vikingschat van Winsum", *VF* 55, 82-122.
- Elzinga, G., 1984: Archeologische afdeling, *VF* 64, 126-135.
- Erdrich, M., 1998: Terra Nigra-Fußschalen wie Chenet 342 oder Gellep 273: eine salisch-fränkische Keramikgattung, *Germania* 76, 875-884.
- Erdrich, M., 2001a: Wirtschaftsbeziehungen zwischen der Germania inferior und dem germanischen Vorland - ein Wunschbild, in T. Grünwald (ed.), *Germania inferior. Besiedlung, Gesellschaft und Wirtschaft an der Grenze der römisch-germanische Welt* (= Ergänzungsbände zum RGA 28), Berlin/New York, 306-335.
- Erdrich, M., 2001b: *Rom und die Barbaren. Das Verhältnis zwischen dem Imperium Romanum und den germanischen Stämmen vor seiner Nordwestgrenze von der späten römischen Republik bis zum Gallischen Sonderreich* (= Römisch-Germanische Forschungen 58), Mainz am Rhein.
- Erdrich, M., 2004: Eine reich ausgestattete Bestattung des Lübsow-Typs aus Tzum (Gem. Franekeradeel, Provinz Friesland, Niederlande), in H. Heftner & K. Tomaschitz (eds.), *Ad fontes! Festschrift für Gerhard Dobesch zum fünfundsechzigsten Geburtstag am 15. September 2004*, Wien, 791-798.
- Evans-Pritchard, E.E., 1965: *Theories of Primitive Religion*, Oxford.
- Exaltus, R.P., 2002: Wonen aan het water in de late IJzertijd. Landschap en bewoning van het centrale deel van het Sudertrimdiel rond het begin van de jaartelling, in G. Jelsma, N. Beetstra, S. Grijpstra, D.J. Heddema, T. Sandijck & B. van der Veen (eds.), *Tusken Potmarge en Jokse. Bydragen ta de Skiednis fan it Sudertrimdiel V*, Wurdum, 101-114.
- Fabech, C., 1989: Booty sacrifices in Southern Scandinavia: A reassessment, in P. Garwood, D. Jennings, R. Skeates & J. Toms (eds.), *Sacred and Profane. Proceedings of a Conference on Archaeology, Ritual and Religion* (= Oxford University Committee for Archaeology, Monograph no. 32), Oxford, 88-99.
- Fazekas, I.G. & F. Kósa, 1978: *Forensic Fetal Osteology*, Budapest.
- Feiken, H. & E. Knol, 2006: Stenen bijlen uit de Groninger klei, *Paleo-aktueel* 17, 75-81.
- Finucane, R.C., 1981: Death in the later Middle Ages, in J. Whaley (ed.), *Mirrors of mortality* (= Europa social history of human experience 3), London, 40-60.
- Fiske, A.P. & N. Haslam, 1997: Is Obsessive-Compulsive Disorder a pathology of the human disposition to perform socially meaningful rituals? Evidence of similar content, *The Journal of Nervous and Mental Disease* 185, 211-222.
- Fitzpatrick, A.P., 1997: Everyday life in Iron Age Wessex, in A. Gwilt & C. Haselgrove (eds.), *Reconstructing Iron Age societies. New approaches to the symbolic meaning of metalworking in Iron Age Britain* (= Oxbow Monograph 71), Oxford, 73-86.

- Flyvbjerg, B., 2006: Five misunderstandings about case-study research, *Qualitative inquiry* 12, 219-245.
- Fogelin, L., 2007: The archaeology of religious ritual, *Annual Review of Anthropology* 36, 55-71.
- Fokkens, H., 1998: *Drowned landscape. The occupation of the western part of the Frisian-Drentian plateau, 4400 BC-AD 500*, Assen/Amersfoort.
- Folmer, A., 1881: *Beschrijving van eenige crania uit verschillende tijdvakken*, Groningen.
- Folmer, A., 1883: De voormalige en hedendaagsche schedelvorm in Hunsingo, *NTG* 19 dl.1, 325-335.
- Folmer, A., 1885: Twee groepen terpschedels, *NTG* 21 dl. 2, 77-96.
- Folmer, A., 1887: Eene bijdrage tot de ethnologie van Friesland, *NTG* 23 dl. 1, 401-439.
- Folmer, A., 1890: De Groninger en Friesche terpschedels in de laatste drie jaren verzameld, *NTG* 26 dl. 1, 597-610.
- Folmer, A., 1892: Nederlandsche schedels, *NTG* 28 dl. 1, 225-259.
- Folmer, H.C., 1900: Die ersten Bewohner der Nordseeküste in anthropologischer Hinsicht, verglichen mit den gleichzeitig lebenden Germanen in Mitteldeutschland, *Archiv für Anthropologie* 26, 747-763.
- Fontijn, D., 2002: *Sacrificial landscapes. Cultural biographies of persons, objects and 'natural' places in the bronze age of the southern Netherlands, c. 2300-600 BC* (= *Analecta praehistorica Leidensia* 33/34), Leiden.
- Fuller, B.T., J.L. Fuller, D.A. Harris & R.E.M. Hedges, 2006: Detection of breastfeeding and weaning in modern human infants with carbon and nitrogen stable isotope ratios, *American Journal of Physical Anthropology* 129, 279-293.
- Gabriel, I. & D. Heinrich, 1976: Spendegefäß und Brandopfer der älteren vorrömischen Eisenzeit aus Oldenburg in Holstein, *Offa* 33, 123-131.
- Galestin, M.C., 1990: Een soldaat uit Ezinge in Romeinse dienst, *Groningse Volksalmanak* 146-152.
- Galestin, M.C., 1991: De opgravingen door Van Giffen in Hatsum, bij Dronrijp (1920-'22), *JVT* 75, 86-93.
- Galestin, M.C., 1999: Roman wheelthrown pottery, terra nigra-like bowls and tiles, in J.C. Besteman, J.M. Bos, D.A. Gerrets, H.A. Heidinga & J. de Koning (eds.), *The Excavations at Wijnaldum. Reports on Frisia in Roman and Medieval times. Volume I*, Rotterdam/Brookfield, 157-170.
- Galestin, M.C., 2000: Winsum-Bruggeburen, first report on the excavation. An early Roman outpost among the Frisians? Part one: the Roman coins, *Palaeohistoria* 41/42, 225-236.
- Galestin, M.C., 2001: The interpretation of Roman coin hoards, *Caeculus* 4, 81-99.
- Galestin, M.C., 2002a: Winsum-Bruggeburen, second report on the excavation. The Roman pottery, *Palaeohistoria* 43/44, 435-468.
- Galestin, M.C., 2002b: Winsum-Bruggeburen, third report on the excavation. Bronze and other Roman finds, *Palaeohistoria* 43/44, 469-482.
- Galestin, M.C., 2008a: *Frisii and Frisiavones, Palaeohistoria* 49/50, 687-708.
- Galestin, M.C., 2008b: Importaardewerk uit de eerste eeuwen na Christus: aanwijzingen voor contacten met het Romeinse Rijk, in J.A.W. Nicolay (ed.), *Opgravingen bij Midlaren. 5000 jaar wonen tussen Hondsrug en Hunzedal*, Groningen, 325-346.
- Galestin, M.C., 2010: Roman artefacts beyond the northern frontier: Interpreting the evidence from The Netherlands, *European Journal of Archaeology* 13, 64-88.
- Galestin, M.C. & T.B. Volkers, 1992: *Terpen en terpvondsten. Deel 1 Bewoningsgeschiedenis en concordantie op de terpenboeken*, Groningen.
- Garrow, D., 2012: Odd deposits and average practice. A critical history of the concept of structured deposition, *Archaeological Dialogues* 19, 85-115.
- Genrich, A., 1941: Bericht über die Untersuchungen auf der Barward (Gemarkung Imsum, Kreis Wesermünde), *PK* 2, 157-170.
- Gerrets, D.A., 1995: The Anglo-Frisian relationship seen from an archaeological point of view, in V.F. Faltings, A.G.H. Walker & O. Wilts (eds.), *Friesische Studien II. Beiträge des Führer Symposiums zur Friesischen Philologie vom 7.-8. April 1994*, Odense, 119-128.
- Gerrets, D.A., 1996: Continuity and change in house construction and the lay-out of rural settlements during the early middle ages in the Netherlands, *Ruralia* 1, 33-46.
- Gerrets, D.A., 1999: Evidence of political centralization in Westergo: the excavations at Wijnaldum in a (supra-) regional perspective, in T. Dickinson & D. Griffiths (eds.), *The Making of Kingdoms* (= *Anglo-Saxon Studies in Archaeology and History* 10), Oxford, 121-126.
- Gerrets, D.A., 2010: *Op de grens van land en water. Dynamiek van landschap en samenleving in Frisia gedurende de Romeinse tijd en de volksverhuizingstijd* (= *GAS* 13), Groningen.
- Gerrets, D.A. & J. de Koning, 1999: Settlement development on the Wijnaldum-Tjistma terp, in J.C. Besteman, J.M. Bos, D.A. Gerrets, H.A. Heidinga & J. de Koning (eds.), *The excavations at Wijnaldum. Reports on Frisia in Roman and Medieval times. Volume I*, Rotterdam/Brookfield, 73-124.
- Gerrets, D.A. & N.M. Prangma, 2003: *Lutjelollum 'Welsrijperweg/terrein 5G-W en 5G-119' Gemeente Franekeradeel, tracé N384* (= *ADC Rapport 170*), Bunschoten.
- Gerritsen, F., 1999: The cultural biography of Iron Age houses and the long-term transformation of settlement patterns in the southern Netherlands, in Ch. Fabeck & J. Ringtved (eds.), *Settlement and landscape. Proceedings of a conference in Århus, Denmark, May 4-7 1998*, Højbjerg, 139-148.
- Gerritsen, F., 2000: To build and to abandon. The cultural biography of late prehistoric houses and farmsteads in the southern Netherlands, *Archaeological Dialogues* 6, 78-97.

- Gerritsen, F., 2003: *Local identities. Landscape and community in the late prehistoric Meuse-Demer-Scheldt region* (= Amsterdam Archaeological Studies 9), Amsterdam.
- Glasbergen, W., 1944: Terra sigillata uit de provincie Groningen, bijdrage tot de geschiedenis van den handel in den Romeinschen tijd, *JVT* 25-28, 317-368.
- Goodman, A.H. & T.L. Leatherman, 1998: Traversing the chasm between biology and culture: an introduction, in A.H. Goodman & T.L. Leatherman (eds.), *Building a newbiocultural synthesis: political-economic perspectives on human biology*, Ann Arbor MI, 3-43.
- Gowland, R.L. & A.T. Chamberlain, 2002: A Bayesian approach to ageing perinatal skeletal material from archaeological sites: Implications for the evidence for infanticide in Roman-Britain, *JAS* 29, 677-685.
- Gowland, R.L. & A.G. Western, 2012: Morbidity in the marshes: Using spatial epidemiology to investigate skeletal evidence for malaria in Anglo-Saxon England (AD 410-1050), *American Journal of Physical Anthropology* 147, 301-311.
- Gragg, D.L., 2004: Old and new in Roman religion. A cognitive account, in H. Whitehouse & L.H. Martin (eds.), *Theorizing religions past. Archaeology, history, and cognition*, Walnut Creek etc., 69-86.
- Green, M.J., 1998: Humans as ritual victims in the later prehistory of Western Europe, *Oxford Journal of Archaeology* 17, 169-189.
- Greenfield, H.J., 1988: Bone consumption by pigs in a contemporary Serbian village: implications for the interpretation of prehistoric faunal assemblages, *Journal of Field Archaeology* 15, 473-479.
- Groenendijk, H.A. & E. Knol, 2007: Marum-Oude Diep en Lellens-Borgweg (Gr.). Aanzet tot nieuwe inzichten in grafbestel door ¹⁴C dateringen, *Paleo-aktueel* 18, 100-106.
- Grönbech, W., 1987 [1909-1912]: *Kultur und Religion der Germanen*, Darmstadt.
- Groot, M., 2008: *Animals in ritual and economy in a Roman frontier community. Excavations in Tiel-Passewaaij* (= Amsterdam Archaeological Studies 12), Amsterdam.
- Groot, M., 2009: Searching for patterns among spacial animal deposits in the Dutch river area during the Roman period, *JALC* 1, 49-81.
- Haarnagel, W., 1979: *Die Grabung Feddersen Wierde. Methode, Hausbau, Siedlungs- und Wirtschaftsformen sowie Sozialstruktur* (= Feddersen Wierde Bd. 2), Wiesbaden.
- Hagers, J.-K.A. & M.M. Sier, 1999: *Castricum-Oosterbuurt, bewoningssporen uit de Romeinse tijd en middeleeuwen* (= ROB Rapportage Archeologische Monumentenzorg 53), Amersfoort.
- Haglund, W.D., 1997a: Dogs and coyotes: postmortem involvement with human remains, in W.D. Haglund & M.H. Sorg (eds.), *Forensic taphonomy. The postmortem fate of human remains*, Boca Raton etc., 367-381.
- Haglund, W.D., 1997b: Scattered skeletal human remains: search strategy considerations for locating missing teeth, in W.D. Haglund & M.H. Sorg (eds.), *Forensic taphonomy. The postmortem fate of human remains*, Boca Raton etc., 383-394.
- Haglund, W.D., D.T. Reay & D.R. Swindler, 1988: Tooth mark artifacts and survival of bones in animal scavenged human skeletons, *Journal of Forensic Sciences* 33, 985-997.
- Haglund, W.D., D.T. Reay & D.R. Swindler, 1989: Canid scavenging/disarticulation sequence of human remains in the Pacific Northwest, *Journal of Forensic Sciences* 34, 587-606.
- Halbertsma, H., 1953: Enkele aantekeningen bij een verzameling oudheden, afkomstig uit een terpje bij Deinum, *JVT* 33-37, 239-256.
- Halbertsma, H., 1954: Enkele oudheidkundige aantekeningen bij de oudste menselijke skeletten in de Friese terpen gevonden, *BROB* 5, 45-49.
- Halbertsma, H., [1957]: *Baarderadeels oudste historie*, [Drachten].
- Halbertsma, H., 1963: *Terpen tussen Vlie en Eems. Een geografisch-historische benadering*, Groningen.
- Halbertsma, H., 1982: *Frieslands oudheid*, Groningen.
- Harsema, O.H., 1967: Geïmporteerde basaltlava maalstenen uit de Romeinse tijd uit Groninger wierden, *Groningse Volksalmanak* 139-158.
- Harsema, O.H., 1979: *Maalstenen en handmolens in Drenthe van het neolithicum tot ca. 1300 A.D.* (= Museumfonds Publicatie 5), Assen.
- Haverkort, C.M., M. Hopman, J.M. Pasveer & W. Prummel, 1993: De jongste bewoners van Wijncaldum (Fr.), *Paleo-aktueel* 4, 123-126.
- Hayen, H., 1973: Räder und Wagenteile aus nordwestdeutschen Mooren, *Nachrichten aus Niedersachsens Urgeschichte* 42, 129-176.
- Hänninen, K., 2008: Het hout uit de waterputten en andere contexten, in J.A.W. Nicolay (ed.), *Opgravingen bij Midlaren. 5000 jaar wonen tussen Hondsrug en Hunzedal* (= GAS 7), Groningen, 423-456.
- Hedges, R.E.M., J.G. Clement, C.D.L. Thomas & T.C. O'Connell, 2007: Collagen turnover in the adult femoral mid-shaft: Modeled from anthropogenic radiocarbon tracer measurements, *American Journal of Physical Anthropology* 133, 808-816.
- Heessels, M., 2008: Mam, ik heb je thuisgebracht. Rituelen rondom asverstrooiing in Nederland, in E. Venbrux, M. Heessels & S. Bolt (eds.), *Rituele creativiteit. Actuele veranderingen in de uitvaart- en rouwcultuur in Nederland*, Zoetermeer, 17-29.
- Heidinga, H.A., 1997: *Frisia in the first millennium. An outline*, Utrecht.
- Hermsen, I., 2003: De Victoria van Colmschate-Skibaan: een Romeins godenbeeldje als bouwoffer, *Overijssels Erfgoed*, Zwolle, 65-71.
- Hertz, R., 1960: *Death and the right hand*, Aberdeen.

- Hessing, W.A.M., 1993: Ondeugende Bataven en verdwaalde Friezinnen? Enkele gedachten over de onverbrande menselijke resten uit de ijzertijd en de Romeinse Tijd in West- en Noord-Nederland, in E. Drenth, W.A.M. Hessing & E. Knol (eds.), *Het tweede leven van onze doden* (= NAR 15), Amersfoort, 17-40.
- Hessing, W.A.M., 1994: Tien eeuwen grafritueel, in W.A. van Es & W.A.M. Hessing (eds.), *Romeinen, Friezen en Franken in het hart van Nederland: van Traiectum tot Dorestad (50 v.Chr.-950 na Chr.)*, Utrecht/Amersfoort, 130-137.
- Hessing, W.A.M. & P.B. Kooi, 2005: Urnenvelden en brandheuvels. Begraving en grafritueel in late bronstijd en ijzertijd, in L.P. Louwe Kooymans, P.W. van den Broeke, H. Fokkens & A.L. van Gijn (eds.), *Nederland in de prehistorie*, Amsterdam, 631-654.
- Hiddink, H.A., 1999: *Germaanse samenlevingen tussen Rijn en Weser, 1ste eeuw voor - 4de eeuw na Chr.*, Dissertation University of Amsterdam.
- Hielkema, J.B., 2003: *Archeologisch onderzoek te Dronrijp, gemeente Menaldumadeel (Fr.)* (= ARC-Publicatie 78), Groningen.
- Hill, J.D., 1995: *Ritual and Rubbish in the Iron Age of Wessex* (= BAR Brit. Ser. 242), Oxford.
- Hodder, I., 1982: *The present past: an introduction to anthropology for archaeologists*, London.
- Hopman, E.C., 2013: IJzertijd handmolens in de noordelijke provincies: een ritueel gebruik?, *Paleo-aktueel* 24, 77-82.
- Høgh-Oleson, H., 2006: The sacrifice and the reciprocity-programme in religious rituals and in man's everyday interactions, *JCC* 6, 499-519.
- Huijbers, A.M.J.H., 2007: *Metaforisering in beweging. Boeren in hun gebouwde omgeving in de volle middeleeuwen in het Maas-Demer-Scheldegebied*, dissertation University of Amsterdam.
- Huizinga, J., 1954: Anthropologische beschouwing naar aanleiding van enige skeletvondsten uit het begin der jaartelling in Westergo (Fr.), *BROB* 5, 50-56.
- Huizinga, J., 1955: Friezen uit het begin der jaartelling, *NTG* 99, 3396-3397.
- Hullegie, A., 2012: The scurred cattle of the Roman period in the Netherlands, in D.C.M. Raemaekers, E. Esser, R.C.G.M. Lauwerier & J.T. Zeiler (eds.), *A bouquet of archaeozoological studies. Essays in honour of Wietske Prummel* (= GAS 21), Groningen, 122-127.
- Hummel, S., 2003: *Ancient DNA typing*, Berlin/Heidelberg/New York.
- Humphrey, C. & J. Laidlaw, 1994: *The archetypal actions of ritual. A theory of ritual illustrated by the Jain rite of worship*, Oxford.
- Humphrey, C. & J. Laidlaw, 2007: Sacrifice and ritualization, in E. Kyriakidis (ed.), *The archaeology of ritual*, Los Angeles, 255-276.
- Hunink, V., 1997: *Aanvulling op Caesars Oorlog in Gallië*, Amsterdam.
- Insoll, T., 2004: *Archaeology, ritual, religion*, London and New York.
- Ireland, S., 1996: *Roman Britain. A sourcebook*, London/New York.
- Jacobi, F., 1895: *Quellen zur Geschichte der Chauken und Friesen in der Römerzeit, chronologisch geordnet und übersetzt.* (= Beilage zu dem Jahresbericht des königlichen Wilhelms-Gymnasiums zu Emden über das Schuljahr 1894-1895), Emden.
- James, R. & R. Nasmyth-Jones, 1992: The occurrence of cervical fractures in victims of judicial hanging, *Forensic Science International* 54, 81-91.
- Jankuhn, H., 1967: *Archäologische Beobachtungen zu Tier- und Menschenopfern bei den Germanen in der römischen Kaiserzeit* (= Nachrichten der Akademie der Wissenschaften I, phil.-hist.Klasse 1967, 6), Göttingen.
- Jensma, G., 2003: Uit een dodenboom te Lutjelollum. Enkele opmerkingen over het culturele verschil tussen Groningen en Friesland en over de manier waarop dat in de negentiende eeuw werd geconstrueerd, in M.G.J. Duijvendak (ed.), *Regionaal besef in het noorden*, Assen, 6-29.
- Jensma, G. & E. Knol, 2005: Op zoek naar de juiste methode, wierdenarcheologie in de negentiende eeuw, in E. Knol, A.C. Bardet & W. Prummel (eds.), *Professor van Giffen en het geheim van de wierden*, Veendam/Groningen, 34-49.
- Jobey, I., 1979: Housesteads ware - A Frisian tradition on Hadrians Wall, *Archaeologia Aeliana* 5th series, 7, 127-143.
- Jongma, S., 2008: Sporen en structuren, in A. Nieuwhof (ed.), *De Leege Wier van Englum. Archeologisch onderzoek in het Reitdiepgebied* (= JVT 91), Groningen, 31-46.
- Jöns, H., A. Nieuwhof, A. Siegmüller, E. Strahl & W.A.B. van der Sanden, 2013: Von Reichen un Armen. Eliten im archäologische Befund/Over rijken en armen. Elites in het archeologisch onderzoek, in J.F. Kegler, A. Nieuwhof, K. Nowak-Klimscha & H. Reimann (eds.), *Land der Entdeckungen. Die Archäologie des friesischen Küstenraums/Land van ontdekkingen. De archeologie van het Friese kustgebied*, Aurich, 218-233.
- Jørgensen, L., B. Storgaard & L. Gebauer Thomsen (eds.), 2003: *The spoils of victory. The North in the shadow of the Roman Empire*, Copenhagen.
- Kent, S., 1981: The dog: an archaeologist's best friend or worst enemy - the spatial distribution of faunal remains, *Journal of Field Archaeology* 8, 367-372.
- Kiden, P., L. Denys & P. Johnston, 2002: Late Quaternary sea-level change and isostatic and tectonic land movements along the Belgian-Dutch North Sea coast: geological data and model results, *Journal of Quaternary Science* 17, 535-546.
- Kirsch, J., 2004: *God against the gods. The history of the war between monotheism and polytheism*, New York etc.
- Kleemann, J., 2009: Der Krieger im Grab. Germanische Gräber mit Waffen, in S. Burmeister & H. Derks (eds.), *2000 Jahre Varusschlacht Konflikt*, Stuttgart, 89-96.
- Klok, R.H.J., 1979: Terps: who cares?, *BROB* 29, 459-489.

- Knol, E., 1983: Farming on the banks of the river Aa. The faunal remains and bone objects of Paddepoel 200 BC-250 AD, *Palaeohistoria* 25, 145-182.
- Knol, E., 1986a: Bij het portret van dr. Arend Folmer, *Groningse Volksalmanak* (1986), 139-144.
- Knol, E., 1986b: *Het dodenbestel in de Noord-Nederlandse kuststreken tot de elfde eeuw. Een inventarisatie*, Masterthesis University of Groningen.
- Knol, E., 1987: Knucklebones in urns: playful grave-goods in early medieval Friesland, *Helinium* 26, 280-288.
- Knol, E., 1991: Het kustland in de donkere eeuwen, *JVT* 75, 118-133.
- Knol, E., 1993: *De Noordnederlandse kustlanden in de vroege Middeleeuwen*, Dissertation VU University Amsterdam.
- Knol, E., 2005: Rijke en aantrekkelijke kustlanden. Noord-Nederland in de vroege middeleeuwen, in E. Knol, A.C. Bardet & W. Prummel (eds.), *Professor van Giffen en het geheim van de wierden*, Veendam/Groningen, 183-193.
- Knol, E., 2007: Het Karolingische grafveld De Bouwerd bij Ezinge, *JVT* 83-90, 62-89.
- Knol, E., 2008: Het wierdenvraagstuk, Dorkwerd en de jonge Van Giffen, in W.A. van Es, E. Knol, G.L.G.A. Kortekaas & A. Nieuwhof (eds.), *Om een profiel der afgraving te bezien. Na 100 jaar terug naar Dorkwerd* (= *JVT* 92), Groningen, 17-33.
- Knol, E., 2009: Anglo-Saxon migration reflected in cemeteries in the Northern Netherlands, in D. Quast (ed.), *Foreigners in early medieval Europe. Thirteen international studies on early medieval mobility* (= *Monographien des Römisch-Germanischen Zentralmuseums* 78), Mainz, 113-129.
- Knol, E., 2011: The first early medieval cemeteries along the northern Dutch coasts and their significance for Anglo-Saxon migration, in T.A.S.M. Panhuysen (ed.), *Transformations in North-Western Europe (AD 300-1000). Proceedings of the 60th Sachsensymposium 19.-23. September 2009 Maastricht* (= *Neue Studien zur Sachsenforschung* 3), Hannover, 218-227.
- Knol, E., 2014: Ezinge: metaal uit een opgraving zonder detector, in A. Nieuwhof (ed.), *En dan in hun geheel. De vondsten uit de opgravingen in de wierde Ezinge* (= *JVT* 96), Groningen, 187-206.
- Knol, E. & W. Prummel, 1994: Onderzoek Oosterbeintum nadert voltooiing, *Mededelingen van de Vereniging voor Terpenonderzoek* 1994/1, 5-6.
- Knol, E., W. Prummel, H.T. Uytterschaut, M.L.P. Hoogland, W.A. Casparie, G.J. de Langen, E. Kramer & J. Schelvis, 1996: The early medieval cemetery of Oosterbeintum (Friesland), *Palaeohistoria* 37/38, 245-416.
- Knol, E. & X. Bardet, 1999: Carolingian Weapons from the Cemetery of Godlinze, the Netherlands, in H. Sarfatij, W.J.H. Verwers & P.J. Woltering (eds.), *In Discussion with the Past. Archaeological studies presented to W.A. van Es*, Zwolle, 213-226.
- Knol, E., G.L.G.A. Kortekaas & A. Nieuwhof, 2008: Het aantekenboekje van Dorkwerd, in W.A. van Es, E. Knol, G.L.G.A. Kortekaas & A. Nieuwhof (eds.), *Om een profiel der afgraving te bezien. Na 100 jaar terug naar Dorkwerd* (= *JVT* 92), Groningen, 50-124.
- Knol, E. & H.T. Uytterschaut, 2010: 'Grijnzende tronies van onze voorvaderen'. Schedels van het Fries Museum, *JVT* 93, 85-133.
- Knol, E., W. Prummel, A. Nieuwhof & J. van der Plicht, 2014: Een oude merrie uit een Friese terp, *Paleo-aktueel* 25, 49-56.
- Knottnerus, O.S., 1999: Malaria in de Nordseemarschen. Gedanken über Menschen und Umwelt, in M. Jakubowski-Tiessen & K.-J. Lorenzen-Schmidt (eds.), *Dünger und Dynamit. Beiträge zur Umweltgeschichte Schleswig-Holsteins und Dänemarks* (= *Studien zur Wirtschafts- und Sozialgeschichte Schleswig-Holsteins* 31), Neumünster, 25-39.
- Knottnerus, O.S., 2002: Malaria around the North Sea: a survey, in G. Wefer, W. Berger, K.E. Behre & E. Jansen (eds.), *Climate development and history of the North Atlantic realm*, Berlin/Heidelberg, 339-353.
- Knüsel, C.J. & A.K. Outram, 2006: Fragmentation of the body: comestibles, compost, or customary rite?, in R.L. Gowland & C. Knüsel (eds.), *Social archaeology of funerary remains*, Oxford, 253-278.
- Kok, M.S.M., 2008: *The homecoming of religious practice. An analysis of offering sites in the wet low-lying parts of the landscape in the oer-IJ area (2500 BC-AD 450)*, Dissertation University of Amsterdam.
- Kolen, J., 2005: *De biografie van het landschap. Drie essays over landschap, geschiedenis en erfgoed*, Dissertation VU University Amsterdam.
- Kooi, P.B., 1979: *Pre-roman urnfields in the north of the Netherlands*, Groningen.
- Kooi, P.B., 1983: Leven langs de Fivel, van Helwerd tot Zwart Lap, in O.G. Reiders, A. Elema, J.G. Klugkist, G. de Boer & M.A. Holtman (eds.), *Middelstum-Kantens. Bijdragen tot de plattelandsgeschiedenis, met een beschrijving van de boerderijen en hun bewoners*, Kantens, 9-35.
- Kooi, P. & K. van der Ploeg, 2014: *Ezinge. IJkpunt in de archeologie*, Groningen.
- Kopytoff, I., 1986: The cultural biography of things: commoditization as process, in A. Appadurai (ed.), *The social life of things. Commodities in cultural perspective*, Cambridge etc., 64-91.
- Körber-Grohne, U., 1967: *Geobotanische Untersuchungen auf der Feddersen Wierde* (= *Feddersen Wierde* Bd. 2), Wiesbaden.
- Kramer, E., 1984: Finds from the pre-Roman Iron Age near Kimsward, *Helinium* 24, 221-239.
- Kramer, E., 1989: Midden-ijzertijd aardewerk uit een terpzool bij Kimsward, *JVT* 66-72, 45-68.
- Lame Deer, J. & R. Erdoes, 1972: *Lame Deer. Seeker of visions*, New York etc.

- Lanting, J.N. & J. van der Plicht, 1996: Wat hebben Floris V, skelet Swifterbant S2 en visotters gemeen?, *Palaeohistoria* 37/38, 491-519.
- Lanting, J.N. & J. van der Plicht, 2002: De ¹⁴C-chronologie van de Nederlandse pre- en protohistorie, IV: bronstijd en vroege ijzertijd, *Palaeohistoria* 43/44, 117-262.
- Lanting, J.N. & J. van der Plicht, 2006: De ¹⁴C-chronologie van de Nederlandse pre- en protohistorie V: midden- en late ijzertijd, *Palaeohistoria* 47/48, 241-428.
- Lanting, J.N. & J. van der Plicht, 2010: De ¹⁴C-chronologie van de Nederlandse pre- en protohistorie VI: Romeinse tijd en Merovingische periode, deel A: historische bronnen en chronologische thema's, *Palaeohistoria* 51/52, 27-168.
- Lanting, J.N. & J. van der Plicht, 2012: De ¹⁴C-chronologie van de Nederlandse pre- en protohistorie VI: Romeinse tijd en Merovingische periode, deel B: aanvullingen, toelichtingen en ¹⁴C-dateringen, *Palaeohistoria* 53/54, 283-391.
- Lanting, J.N., A. Aerts-Bijma & J. van der Plicht, 2001: Dating cremated bones, *Radiocarbon* 43, 249-254.
- Lauwerier, R.C.G.M., 2002: Animals as food for the soul, in K. Dobney & T. O'Connor (eds.), *Bones and the man. Studies in honour of Don Brothwell*, Oxford, 63-71.
- Lauwerier, R.C.G.M., B.J. Groenewoudt, O. Brinkkemper & F.J. Laarman, 1999: Between ritual and economics: animals and plants in a fourth-century native settlement at Heeten, the Netherlands, *BROB* 43, 155-198.
- Lawson, E.T. & R.N. McCauley, 1990: *Rethinking religion: connecting cognition and culture*, Cambridge.
- Leach, E.R., 1968: Ritual, in D.L. Sills (ed.), *International encyclopedia of the social sciences*, New York, 520-526.
- Lévi-Strauss, C., 1966: *The savage mind*, Chicago.
- Liénard, P. & P. Boyer, 2006: Whence collective rituals? A cultural selection model of ritualized behavior, *American Anthropologist* 108, 814-827.
- Livingstone, F.B., 1962: On the non-existence of human races, *Current anthropology* 3, 279-281.
- Maat, G.J.R. & R.W. Mastwijk, 2005: *Manual for the physical anthropological report* (= Barge's Anthropologica 6), Leiden.
- Margry, P.J., 2008: Politiek rouwen in het publieke domein. Rouwmonumenten en stille tochten, in E. Venbrux, M. Heessels & S. Bolt (eds.), *Rituele creativiteit. Actuele veranderingen in de uitvaart- en rouwcultuur in Nederland*, Zoetermeer, 101-120.
- Martens, J., 2009: Vor den Römern. Eliten in den vorrömischen Eisenzeit, in S. Burmeister & H. Derks (eds.), *2000 Jahre Varusschlacht. Konflikt*, Stuttgart, 334-341.
- Mater, B., 2008: *Het terracotta leger van Xi'an. Schatten van de eerste keizers van China*, Assen/Zwolle.
- Mauss, M., 1970 [1925]: *The gift. Forms and functions of exchange in archaic societies*, London.
- Mays, S., 2000: New directions in the analysis of stable isotopes in excavated bones and teeth, in M. Cox & S. Mays (eds.), *Human osteology in archaeology and forensic science*, London, 425-438.
- McCauley, R.N. & E.T. Lawson, 2002: *Bringing ritual to mind: psychological foundations of cultural forms*, Cambridge.
- McGowan, D., 2006: Is that a human skull? All in the name of art!, in E. Burns Coleman & K. White (eds.), *Negotiating the sacred. Blasphemy and sacrilege in a multicultural society*, Canberra, 89-98.
- McKinley, J.I., 2006: Cremation ... the cheap option?, in R.L. Gowland & C. Knüsel (eds.), *Social archaeology of funerary remains*, Oxford, 81-88.
- McManus, E., J. Montgomery, J. Evans, A. Lamb, R. Brettell & J. Jelsma, 2013: "To the land or to the sea": Diet and mobility in early medieval Frisia, *Journal of Island & Coastal Archaeology* 8, 255-277.
- Merrifield, R., 1987: *The archaeology of ritual and magic*, London.
- Metcalfe, P. & R. Huntington, 1991: *Celebrations of death. The anthropology of mortuary ritual*, Cambridge.
- Meyer-Orlac, R., 1982: *Mensch und Tod: archäologischer Befund - Grenzen der Interpretation* (= Inaugural-Dissertation Albert-Ludwigs-Universität Freiburg i.Br.), Hohenschäftlarn.
- Miedema, M., 1983: *Vijfentwintig eeuwen bewoning in het terpenland ten noordwesten van Groningen*, Dissertation VU University Amsterdam.
- Miedema, M., 1989: Het archeologisch materiaal uit de terp Wierhuizen, *Groningse Volksalmanak* 77-164.
- Miedema, M., 1990: Oost-Fivelingo 250 v.C.-1850 n.C. Archeologische kartering en beschrijving van 2100 jaar bewoning in Noordoost-Groningen, *Palaeohistoria* 32, 111-245.
- Miedema, M., 2000: West-Fivelingo 600 v.Chr.-1900 n.Chr. Archeologische kartering en beschrijving van 2500 jaar bewoning in Midden-Groningen, *Palaeohistoria* 41/42, 237-443.
- Miller, G., 2000: *The mating mind. How sexual choice shaped human nature*, London.
- Milojkovic, J. & D.C. Brinkhuizen, 1984: Bones from a terp remnant near Kimsward, *Helinium* 24, 240-246.
- Milojkovic, J. & D.C. Brinkhuizen, 1989: Botten uit een tepzool bij Kimsward, *JVT* 66-72, 69-77.
- Mithen, S.J., 1996: *The prehistory of the mind. A search for the origins of art, religion and science*, London.
- Mithen, S.J., 1998: The supernatural beings of prehistory and the external storage of religious ideas, in C. Renfrew & C. Scarre (eds.), *Cognition and material culture: the archaeology of symbolic storage*, Oxford, 97-106.
- Molema, J. & T. Perger, 2001: *Provincie Fryslan: Archeologie van het kleigebied, gemeente Leeuwarderadeel; waarderend archeologisch onderzoek* (= RAAP-rapport 425), Amsterdam.
- Morris, J. & B. Jervis, 2011: What's so special? A reinterpretation of Anglo-Saxon 'special deposits', *Medieval archaeology* 55, 66-81.
- Mückenberger, K. & E. Strahl, 2009: Ein Brandgrab des frühen 4. Jahrhunderts n. Chr. mit reichem römischen Import aus Bentumersiel, Lkr. Leer (Ostfriesland), *Archäologisches Korrespondenzblatt* 39, 547-558.

- Nicolay, J.A.W., 2005: Nieuwe bewoners van het terpengebied en hun rol bij de opkomst van Fries koningschap, *VF* 85, 37-103.
- Nicolay, J.A.W., 2006a: Een koninklijk machtscentrum in vroegmiddeleeuws Friesland? De interpretatie van goudvondsten uit de late zesde en vroege zevende eeuw na Chr., *VF* 86, 33-94.
- Nicolay, J.A.W., 2006b: Nieuw licht op de late ijzertijd: twee vermoedelijke sierknoppen van gordelhaken uit het Friese terpengebied, *Paleo-aktueel* 17, 130-134.
- Nicolay, J.A.W., 2007: *Armed Batavians. Use and significance of weaponry and horse gear from non-military contexts in the Rhine delta (50 BC to AD 450)* (= Amsterdam Archaeological Studies 11), Amsterdam.
- Nicolay, J.A.W., 2008a: Sporen van gebouwen en woonerven uit de Romeinse tijd, de volksverhuizingstijd en de vroege middeleeuwen, in J. Dijkstra & J.A.W. Nicolay (eds.), *Een terp op de schop. Archeologisch onderzoek op het Oldehoofsterkerkhof te Leeuwarden* (= ADC Monografie 3), Amersfoort, 43-98.
- Nicolay, J.A.W., 2008b: Begravingen op De Bloemert: aanwijzingen voor het grafritueel van de late bronstijd tot in de volksverhuizingstijd, in J.A.W. Nicolay (ed.), *Opgravingen bij Midlaren. 5000 jaar wonen tussen Hondsrug en Hunzedal* (= GAS 7), Groningen, 191-203.
- Nicolay, J.A.W., 2009: Bürger Roms. Germanische Heimkehrer aus dem römische Militärdienst, in S. Burmeister & H. Derks (eds.), *2000 Jahre Varusschlacht - Konflikt*, Stuttgart, 258-269.
- Nicolay, J.A.W., 2010a: Settlement research and material culture in the northern Netherlands: Herrenhöfe and other evidence of socio-political differentiation, *SKN* 33, 119-132.
- Nicolay, J.A.W., 2010b: Response to the case study 1: Power formation and the rise of central places in the Elbe-Weser region and the coastal area of the northern Netherlands - a comparison, in B. Ludowici, H. Jöns, S. Kleingärtner, J. Scheschkewitz & M. Hardt (eds.), *Trade and communication networks of the first Millennium AD in the northern part of Central Europe: Central places, beach markets, landing places, trading centres* (= Neue Studien zur Sachsenforschung 1), Hannover, 90-100.
- Nicolay, J.A.W. (ed.), 2010c: *Terpbewoning in oostelijk Friesland. Twee opgravingen in het voormalige kweldergebied van Oostergo* (= GAS 10), Groningen.
- Nicolay, J.A.W., 2014a: Terp excavation in the Netherlands, in C. Smith (ed.), *Encyclopedia of global archaeology*, New York, 7271-7273.
- Nicolay, J.A.W., 2014b: *The splendour of power. Early medieval kingship and the use of gold and silver in the southern North Sea area (5th to 7th century AD)* (= GAS 28), Groningen.
- Nicolay, J.A.W. (ed.), forthcoming: *Graven aan de voet van de Achlumer dorpsterp. Archeologische sporen rondom een terpnedersetting*.
- Nicolay, J.A.W. & H.T. Waterbolk, 2008: Huisplattegronden: de ontwikkeling van de bronstijd tot de middeleeuwen, in J.A.W. Nicolay (ed.), *Opgravingen bij Midlaren. 5000 jaar wonen tussen Hondsrug en Hunzedal* (= GAS 7), Groningen, 91-126.
- Niekus, M.J.L.T., 2000: Twee Muntendammers in Drenthe, *NDV* 117, 160-168.
- Nielsen, J.N., 2002: Flammernes bytte, *Skalk* 6, 5-10.
- Nieuwhof, A., 2006a: Changing landscape and grazing: macroremains from the terp Peins-east, province of Friesland, the Netherlands, *Vegetation History and Archaeobotany* 15, 125-136.
- Nieuwhof, A. (ed.), 2006b: *De wierde Wierum (provincie Groningen). Een archeologisch steilkantonderzoek* (= GAS 3), Groningen.
- Nieuwhof, A. (ed.), 2008a: *De leege Wier van Englum. Archeologisch onderzoek in het Reitdiepgebied* (= JVT 91), Groningen.
- Nieuwhof, A., 2008b: Aardewerk, in A. Nieuwhof (ed.), *De Leege Wier van Englum. Archeologisch onderzoek in het Reitdiepgebied* (= JVT 91), Groningen, 47-75.
- Nieuwhof, A., 2008c: Restanten van rituelen, in A. Nieuwhof (ed.), *De Leege Wier van Englum. Archeologisch onderzoek in het Reitdiepgebied* (= JVT 91), Groningen, 187-248.
- Nieuwhof, A., 2008d: ¹⁴C-dateringen en stabiele isotopen, in A. Nieuwhof (ed.), *De Leege Wier van Englum. Archeologisch onderzoek in het Reitdiepgebied* (= JVT 91), Groningen, 249-254.
- Nieuwhof, A., 2008e: Het handgemaakte aardewerk, ijzertijd tot vroege middeleeuwen, in J.A.W. Nicolay (ed.), *Opgravingen bij Midlaren. 5000 jaar wonen tussen Hondsrug en Hunzedal* (= GAS 7), Groningen, 261-304.
- Nieuwhof, A., 2008f: Crematieresten uit Dronrijp-Noord, in K. Huisman, K. Bekkema, J.M. Bos, H. de Jong, E. Kramer & R. Salverda (eds.), *Diggelgoud. 25 jaar Argeologisch Werkferbân: archeologisch onderzoek in Fryslân*, Leeuwarden, 127-131.
- Nieuwhof, A., 2011: Discontinuity in the Northern-Netherlands coastal area at the end of the Roman Period, in T.A.S.M. Panhuysen (ed.), *Transformations in North-Western Europe (AD 300-1000). Proceedings of the 60th Sachsensymposium 19.-23. September 2009 Maastricht* (= Neue Studien zur Sachsenforschung 3), Hannover, 55-66.
- Nieuwhof, A., 2012a: *Macrobotanische resten in de terp Peins-Oost. Een onderzoek naar natuurlijke en antropogene vegetaties en vroege landbouw* (= Grondsporen 11), Groningen.
- Nieuwhof, A., 2012b: Of dogs and man. Finds from the terp region of the northern Netherlands in the pre-Roman and Roman Iron Age, in D.C.M. Raemaekers, E. Esser, R.C.G.M. Lauwerier & J.T. Zeiler (eds.), *A bouquet of archaeozoological studies. Essays in honour of Wietske Prummel* (= GAS 21), Groningen, 110-120.
- Nieuwhof, A., 2013a: Anglo-Saxon immigration or continuity? Ezinge and the coastal area of the northern Netherlands in the Migration Period, *JALC* 5, 53-83.

- Nieuwhof, A., 2013b: New research on the finds from Ezinge - an inventory of the human remains, *SKN* 36, 209-233.
- Nieuwhof, A. (ed.), 2014a: *En dan in hun geheel. De vondsten uit de opgravingen in de wierde Ezinge* (= JVT 96), Groningen.
- Nieuwhof, A., 2014b: De geschiedenis van Ezinge in scherven. Handgevormd aardewerk van 500 v.C. tot 1500 n.C., in A. Nieuwhof (ed.), *En dan in hun geheel. De vondsten uit de opgravingen in de wierde Ezinge* (= JVT 96), Groningen, 30-128.
- Nieuwhof, A., 2014c: Graven en botten. Menselijke resten in Ezinge, in A. Nieuwhof (ed.), *En dan in hun geheel. De vondsten uit de opgravingen in de wierde Ezinge* (= JVT 96), Groningen, 238-255.
- Nieuwhof, A. & W. Prummel, 2007: Terpsporen in Hoxwier (gemeente Littenseradiel, prov. Friesland), *JVT* 83-90, 9-41.
- Nieuwhof, A. & H. Woldring, 2008: Botanische resten, in A. Nieuwhof (ed.), *De Leege Wier van Englum. Archeologisch onderzoek in het Reitdiepgebied* (= JVT 91), Groningen, 160-176.
- Nieuwhof, A. & P.C. Vos, 2008: Landschap en bewoningsgeschiedenis, in A. Nieuwhof (ed.), *De Leege Wier van Englum. Archeologisch onderzoek in het Reitdiepgebied* (= JVT 91), Groningen, 19-30.
- Nieuwhof, A. & W. van Bommel-van der Sluijs, 2014: Ezinge - Kralen van glas, barnsteen en smaragd, in A. Nieuwhof (ed.), *En dan in hun geheel. De vondsten uit de opgravingen in de wierde Ezinge* (= JVT 96), Groningen, 163-168.
- Nieuwhof, A., H. Huisman, L. Johansen, D. Stapert & I. Woltinge, 2014: Van dichtbij en van ver. Het gebruik van natuursteen in Ezinge, in A. Nieuwhof (ed.), *En dan in hun geheel. De vondsten uit de opgravingen in de wierde Ezinge* (= JVT 96), Groningen, 169-186.
- Nortmann, H., 1983: *Die vorrömische Eisenzeit zwischen unterer Weser und Elbe* (= Römisch-Germanische Forschungen 41), Mainz a.Rh.
- Nyëssen, J.H., 1927: *The passing of the Frisians. Anthropography of Terpia*, The Hague.
- Okumura, M. & Y.Y. Siew, 2013: An osteological study of trophy heads: unveiling the headhunting practice in Borneo, *International Journal of Osteoarchaeology* 23, 685-697.
- Olofsson, J. & E. Josefson, 2007: The frontier of archaeological reconstruction. Horse sacrifice at Eketorp Fort, Sweden, *Expedition* 49, 28-34.
- Olsen, J., J. Heinemeier, P. Bennike, C. Krause, K.M. Hornstrup & H. Thrane, 2008: Characterisation and blind testing of radiocarbon dating of cremated bone, *JAS* 35, 791-800.
- Olsen, J., J. Heinemeier, K.M. Hornstrup, P. Bennike & H. Thrane, 2013: 'Old wood' effect in radiocarbon dating of prehistoric cremated bones?, *JAS* 40, 30-34.
- Orme, B., 1981: *Anthropology for archaeologists: an introduction*, London.
- Otto, R., 1917: *Das Heilige. Über das Irrationale in der Idee des Göttlichen und sein Verhältnis zum Rationalen*, München.
- Palsetia, J.S., 2001: *The Parsis of India. Preservation of identity in Bombay City* (= Brill's Indological Library 17), Leiden/Boston/Köln.
- Parker Pearson, M., 2003 [1999]: *The Archaeology of Death and Burial*, College Station.
- Parker Pearson, M., 2005: Warfare, violence and slavery: an introduction, in M. Parker Pearson & I.J.N. Thorpe (eds.), *Warfare, violence and slavery in prehistory: proceedings of a Prehistoric Society conference at Sheffield University* (= BAR Int. Ser. 1374), Oxford, 19-34.
- Parker Pearson, M., A.T. Chamberlain, O. Craig, P. Marshall, J. Mulville, H. Smith, C. Chenery, M. Collins, G. Cook, G. Craig, J. Evans, J. Hiller, J. Montgomery, J.-L. Schwenninger, G. Taylor & T. Wess, 2005: Evidence for mummification in Bronze Age Britain, *Antiquity* 79, 529-546.
- Perry, G., 2012: A hole for the soul? Possible functions of post-firing perforations and lead plugs in early Anglo-Saxon cremation urns, in B. Jervis & A. Kyle (eds.), *Make-do and mend: Archaeologies of compromise, repair and reuse* (= BAR Int. Ser. 2408), Oxford, 43-52.
- Peter-Rocher, H., 1997: Menschliche Skeletreste in Siedlungen und Höhlen. Kritische Anmerkungen zu herkömmlichen Deutungen, *Ethnographisch-archäologische Zeitschrift* 38, 315-324.
- Petrasch, J., 2008: Zur Kulturgeschichte der Trepanation unter besonderer Berücksichtigung neolithischer Gemeinschaften, in J. Piek & T. Terberger (eds.), *Traumatologische und pathologische Veränderungen an prähistorischen und historischen Skelettresten - Diagnose, Ursachen und Kontext*, Rahden/Westf., 67-87.
- Pfaffenberger, B., 2001: Symbols do not create meanings - activities do: or, why symbolic anthropology needs the anthropology of technology, in M.B. Schiffer (ed.), *Anthropological perspectives on technology*, Dragon/Albuquerque, 77-86.
- Plettke, A., 1940: *Der Urnenfriedhof Dingen, Kr. Wesermünde*, Hildesheim.
- Pleyte, W., 1877-1880: *Nederlandsche Oudheden van de vroegste tijden tot op Karel den Groote*, Leiden.
- Pleyte, W., 1888: Schedelvereering in Friesland, *Friesche Volksalmanak* 1888, 1-10.
- Plotkin, H.C., 2002: *The imagined world made real: towards a natural science of culture*, London.
- Prummel, W., 1992: Early medieval dog burials among the germanic tribes, *Helinium* 32, 132-194.
- Prummel, W., 1993: Birds from four coastal sites in the Netherlands, *Archaeofauna* 2, 97-105.
- Prummel, W., 1998: Dieren als grafgiften op vroegmiddeleeuwse brandstapels in de terpen, *Paleo-aktueel* 9, 77-80.

- Prummel, W., 1999: Animals as grave gifts in the early medieval cremation ritual in the north of the Netherlands, in H. Sarfatij, W.J.H. Verwers & P.J. Woltering (eds.), *In Discussion with the Past. Archaeological studies presented to W.A. van Es*, Zwolle, 205-212.
- Prummel, W., 2006: Dierlijk bot, in A. Nieuwhof (ed.), *De wierde Wierum (provincie Groningen). Een archeologisch steilkantonderzoek (= GAS 3)*, Groningen, 31-46.
- Prummel, W., 2008: Dieren op de wierde Englum, in A. Nieuwhof (ed.), *De Leege Wier van Englum. Archeologisch onderzoek in het Reitdiepgebied (= JVT 91)*, Groningen, 116-159.
- Prummel, W. & E. Knol, 1991: Strandlopers op de brandstapel, *Paleo-aktueel* 2, 92-96.
- Prummel, W. & W.A.B. van der Sanden, 1995: Runderhoorns uit de Drentse venen, *NDV* 112, 84-131.
- Prummel, W. & D. Heinrich, 2005: Archaeological evidence of former occurrence and changes in fishes, amphibians, birds, mammals and molluscs in the Wadden Sea area, *Helgoland Marine Research* 59, 55-70.
- Prummel, W., J. Holl, J.E.A. Jans, N. Huisman & J.G.M. Thilderqvist, 2008: Het dierlijk botmateriaal: voedselvoorziening en rituele praktijken, in J.A.W. Nicolay (ed.), *Opgravingen bij Midlaren. 5000 jaar wonen tussen Hondsrug en Hunzedal (= GAS 7)*, Groningen, 235-259.
- Prummel, W., J.T. van Gent & E.J.O. Kompanje, 2012: Walvisbotten uit Friese en Groninger terpen, *Paleo-aktueel* 23, 41-48.
- Prummel, W., S.C.J. Manuel & M. Post, 2014: De dieren uit de opgravingen van Van Giffen in Ezinge, in A. Nieuwhof (ed.), *En dan in hun geheel. De vondsten uit de opgravingen in de wierde Ezinge (= JVT 96)*, Groningen, 207-237.
- Prummel, W. & A.G.J. Hullege, forthc.: Dieren op en rond de Achlumer terp, in J.A.W. Nicolay (ed.), *Graven aan de voet van de Achlumer dorps terp. Archeologische sporen rondom een terpnederzetting*.
- Pyysiäinen, I., 2001: *How religion works. Towards a new cognitive science of religion (= Cognition and culture book series, volume 1)*, Leiden/Boston/Köln.
- Pyysiäinen, I., 2006: No evidence of a specific adaptation, *BBS* 29, 483-484.
- Rausing, G., 1991: Bears, boars and burials, *Fornvännen* 86, 73-77.
- Rebay-Salisbury, K., 2010: Inhumation and cremation: how burial practices are linked to beliefs, in K. Rebay-Salisbury, M.L. Stig Sørensen & J. Hughes (eds.), *Body parts and body whole. Changing relations and meanings*, Oxford/Oakville, 15-26.
- Redfern, R. & H. Bonney, 2014: Headhunting and amphitheatre combat in Roman London, England: new evidence from the Walbrook Valley, *JAS* 43, 214-226.
- Reinders, R., 2001: Acker Stratingh en Westerhoff. Pioniers van het wierdenonderzoek in Groningen, *Paleo-aktueel* 12, 122-128.
- Renfrew, C., 1985: *The archaeology of cult. The sanctuary at Phlykopi*, Athens/London.
- Renfrew, C., 1994: Towards a cognitive archaeology, in C. Renfrew & E.B.W. Zubrow (eds.), *The ancient mind*, Cambridge, 3-12.
- Rice, P.M., 1987: *Pottery analysis. A sourcebook*, Chicago and London.
- Richards, C. & J. Thomas, 1984: Ritual activity and structured deposition in Later Neolithic Wessex, in R. Bradley & J. Gardiner (eds.), *Neolithic studies. A review of some current research (= BAR Brit. Ser. 133)*, Oxford, 189-218.
- Richards, M.B., I.B. Colson, J.F. Bailey, R.E.M. Hedges & B.C. Sykes, 1999: DNA analysis of the human remains, in J.C. Besteman, J.M. Bos, D.A. Gerrets, H.A. Heidinga & J. de Koning (eds.), *The excavations at Wijnladam; Reports on Frisia in Roman and Medieval times. Volume I.*, Rotterdam/Brookfield, 323-330.
- Rieckhoff, S., 2002: Fromme Druiden-barbarische Rituale, *Archäologie in Deutschland* 5, 20-25.
- ROB, 1985: *De terpen (= Archeologische Cahiers 2)*, Amersfoort.
- Risen, J.L. & T. Gilovich, 2008: Why people are reluctant to tempt fate, *Journal of Personality and Social Psychology* 95, 293-307.
- Rives, J.B., 1999: *Tacitus Germania. Translated with introduction and commentary by J.B. Rives*, Oxford.
- Roes, A., 1963: *Bone and antler objects from the Frisian terpmounds*, Haarlem.
- Ross, A., 1967: *Pagan Celtic Britain*, London.
- Roymans, N., 1990: *Tribal societies in northern Gaul. An anthropological perspective (= Cingula 12)*, Amsterdam.
- Roymans, N., 1999: Man, cattle and the supernatural in the Northwest European plain, in Ch. Fabech & J. Ringtved (eds.), *Settlement and landscape. Proceedings of a conference in Århus, Denmark, May 4-7 1998*, Højbjerg, 291-300.
- Roymans, N., 2004: *Ethnic identity and imperial power. The Batavians in the early Roman empire (= Amsterdam Archaeological Studies 10)*, Amsterdam.
- Ruttner, F., 1981: Ein Bienenkorb von der Nordseeküste aus prähistorischer Zeit, in H. Hayen (ed.), *Einzeluntersuchungen zur Feddersen Wierde: Wagen, Textil- und Lederfunde, Bienenkorb, Schlackenanalysen (= Feddersen Wierde ; Bd. 3)*, Wiesbaden, 163-168.
- Sahlins, M., 1972: *Stone age economics*, London.
- Schepers, M., R.T.J. Cappers & R.M. Bekker, 2013: A review of prehistoric and early historic mainland salt marsh vegetation in the northern-Netherlands based on the analysis of plant macrofossils, *Journal of Coastal Conservation* 17, 755-773.
- Schiffer, M.B., 1976: *Behavioral archaeology*, London.
- Schlabow, K., 1974: Vor- und frühgeschichtliche Textilfunde aus den nördlichen Niederlanden, *Palaeohistoria* 16, 169-221.
- Schlerath, B., 1958: Der Hund bei den Indogermanen, *Paideuma* VI, 25-40.
- Schmid, P., 1965: Die Keramik des 1. bis 3. Jahrhunderts nach Chr. im Küstengebiet der südlichen Nordsee, *PK* 8, 9-46.

- Schmid, P., 2006: *Die Keramikfunde der Grabung Feddersen Wierde (1. Jh. v. bis 5 Jh. n. Chr.)* (= PK 29/Feddersen Wierde Bd. 5), Oldenburg.
- Schön, M.D., 1999: *Feddersen Wierde, Fallward, Flögelh: Archäologie im Museum Burg Bederkesa, Landkreis Cuxhaven*, Bad Bederkesa.
- Schön, M.D., 2003: Sachsen - Nachbarn der frühe Franken. Überlegungen zu Bestattungssitten im 4./5. Jh., in E. Taayke, J.H. Looijenga, O.H. Harsema & H.R. Reinders (eds.), *Essays on the early Franks* (= GAS 1), Groningen, 35-61.
- Schoneveld, J. & J. Zijlstra, 1999: The Wijnaldum brooch, in J.C. Besteman, J.M. Bos, D.A. Gerrets, H.A. Heidinga & J. de Koning (eds.), *The excavations at Wijnaldum. Reports on Frisia in Roman and Medieval Times. Volume I*, Rotterdam/Brookfield, 191-202.
- Schoor, W.K.J., 1885: le sépulchre de Lutke-Lollum, *Etudes archéologiques, linguistiques et historiques dédiées à Mr. le Dr. C. Leemans, à l'occasion du cinquantième anniversaire de sa nomination aux fonctions de directeur du Musée archéologique des Pays-Bas*, Leiden, 256-259.
- Schutzowski, H., S. Hummel, K.-H. Nitsch & B. Herrmann, 1987: Struktur- und Elementanalysen sogenannter Clinker aus Brandgräbern, *Archäologisches Korrespondenzblatt* 17, 401-404.
- Schwartz, J.H., F.D. Houghton, L. Bondioli & R. Macchiarelli, 2012: Bones, teeth, and estimating age of perinates: Carthaginian infant sacrifice revisited, *Antiquity* 86, 738-745.
- Sellevold, B.J., 1996: The skeletal remains of the inhumation graves, in B.M. Rasmussen, S.H. Andersen & P. Kjærsum (eds.), *Slusegårdgravpladsen IV* (= Jysk Arkæologisk Selskabs Skrifter XIV,4), Højbjerg, 159-188.
- Siegmüller, A., 2009: Begraben im Schoße der Familie. Eine Säuglingsbestattung aus der frühmittelalterlichen Wurt Hessens in Wilhelmshaven, *Archäologie in Niedersachsen* 12, 78-80.
- Simek, R., 2003: *Religion und Mythologie der Germanen*, Darmstadt.
- Sinopoli, C.M., 1991: *Approaches to archaeological ceramics*, New York/London.
- Smith, J.Z., 1982: *Imagining religion. From Babylon to Jonestown*, Chicago and London.
- Smith, J.Z., 1998: Religion, religions, religious, in M.C. Taylor (ed.), *Critical terms for religious studies*, Chicago and London, 269-284.
- Smith, M., 2006: Bones chewed by canids as evidence for human excarnation: a British case study, *Antiquity* 80, 671-685.
- Smits, E., 1993: Het fysisch-anthropologisch onderzoek van het Romeinse grafveld te Valkenburg (ZH), in E. Drenth, W.A.M. Hessing & E. Knol (eds.), *Het tweede leven van onze doden* (= NAR 15), Amersfoort, 11-16.
- Smits, E., 2006: *Leven en sterven langs de Limes. Het fysisch-anthropologisch onderzoek van vier grafveldpopulaties uit de noordelijke grenszone van Germania inferior in de vroeg- en midden-Romeinse tijd*, Dissertation University of Amsterdam.
- Smits, E. & J. van der Plicht, 2009: Mesolithic and Neolithic human remains in the Netherlands: physical anthropological and stable isotope investigations, *JALC* 1-1, 62-65.
- Snoeck, C., F. Brock & R.J. Schulting, 2014: Carbon exchanges between bone apatite and fuels during cremation: impact on radiocarbon dates, *Radiocarbon* 56, 591-602.
- Speidel, M.A., 2009: "Franke bin ich..." Germanische Verbände im römischer Heer, in S. Burmeister & H. Derks (eds.), *2000 Jahre Varusschlacht. Konflikt*, Stuttgart, 241-247.
- Spek, Th., 2004: *Het Drentse esdorpenlandschap. Een historisch-geografische studie*, Utrecht.
- Sperber, D., 1975: *Rethinking symbolism*, Cambridge etc.
- Staal, F., 1989: *Rules without meaning. Ritual, mantras and the human sciences* (= Toronto Studies in Religion 4), New York etc.
- Stager, L.E., 1980: The rite of child sacrifice at Carthage, in J.G. Pedley (ed.), *New light on ancient Carthage*, Ann Arbor, 1-11.
- Stake, R.E., 1995: *The art of case study research*, Thousands Oaks etc.
- Steuer, H., 2006: Warrior bands, war lords, and the birth of tribes and states in the first Millennium AD in middle Europe, in T. Otto, H. Thrane & H. Vandkilde (eds.), *Warfare and society. Archaeological and social anthropological perspectives*, Aarhus, 227-236.
- Steuer, H., 2009: Archäologie der Gefolgschaft, in S. Burmeister & H. Derks (eds.), *2000 Jahre Varusschlacht - Konflikt*, Stuttgart, 309-319.
- Strahl, E., 2003: Reiderland, in H. Beck, D. Geuenich & H. Steuer (eds.), *RGA 24*, Berlin/New York, 348-361.
- Strahl, E., 2009: Die Dame von Bentumersiel an der Ems. Römischer Luxus für das Jenseits, *Archäologie in Niedersachsen* 12, 63-66.
- Stuart, P. & J.E. Bogaers, 2001: *Nehalennia. Römische Steindenkmäler aus der Oosterschelde bei Colijnsplaat, I und II* (= Collections of the National Museum of Antiquities at Leiden, Volume XI), Leiden.
- Sypkens Smit, J.H., 1943: Een te Winsum (Fr.) gevonden getrepaneerde schedel, *VF* 37, 66-80.
- Taayke, E., 1990: Die einheimische Keramik der nördlichen Niederlande 600 v. Chr. bis 300 n. Chr. Teil I: Westergo (Friesland), *BROB* 40, 109-222.
- Taayke, E., 1993: Een kuil uit de vroege ijzertijd, gevonden in Roden (Dr.), *Paleo-aktueel* 4, 52-56.
- Taayke, E., 1996a: *Die einheimische Keramik der nördlichen Niederlande. 600 v. Chr. bis 300 n. Chr.*, Dissertation University of Groningen.
- Taayke, E., 1996b: Die einheimische Keramik der nördlichen Niederlande 600 v. Chr. bis 300 n. Chr. Teil III: Mittel-Groningen, *BROB* 42, 9-85.
- Taayke, E., 1996c: Die einheimische Keramik der nördlichen Niederlande, 600 v.Chr. bis 300 n.Chr., Teil IV: Oostergo, *BROB* 42, 87-161.
- Taayke, E., 1996d: Die einheimische Keramik der nördlichen Niederlande 600 v. Chr. bis 300 n. Chr. Teil V: Übersicht und Schlußfolgerungen, *BROB* 42, 163-208.

- Taayke, E., 1999: The Smell of Higher Nectar, in H. Sarfatij, W.J.H. Verwers & P.J. Woltering (eds.), *In Discussion with the Past. Archaeological studies presented to W.A. van Es*, Zwolle, 195-204.
- Taayke, E., 2000: Onder Franken en Saksen. Friesland in de laat-Romeinse tijd, *VF* 80, 9-28.
- Taayke, E., 2003: Wir nennen sie Franken und sie lebten nördlich des Rheins, 2.-5.Jh., in E. Taayke, J.H. Looijenga, O.H. Harsema & H.R. Reinders (eds.), *Essays on the early Franks* (= GAS 1), Groningen, 1-23.
- Taayke, E., 2007: Tritsum, in H. Beck, D. Geuenich & H. Steuer (eds.), *RGA* 35, Berlin/New York, 264-267.
- Taayke, E., 2005: Het noordelijk kustgebied in de ijzertijd en Romeinse tijd, in E. Knol, A.C. Bardet & W. Prummel (eds.), *Professor van Giffen en het geheim van de wierden*, Veendam/Groningen, 153-165.
- Taayke, E., 2007: Tritsum, in H. Beck, D. Geuenich & H. Steuer (eds.), *RGA* 35, Berlin/New York, 264-267.
- Taayke, E., 2008: In het spoor van Wijnaldum. De *Vrije Fries* als eigentijds platform voor archeologische interpretaties, *VF* 88, 189-211.
- Taayke, E., H. van Westing & B. Wubbels, 1978: Een akkerlandje uit de voorromeinse ijzertijd te Uffelte, gem. Havelte, *NDV* 95, 259-278.
- Taayke, E., C. Peen, M. van der Harst-van Domburg & W. Vos, 2012: *Ede vol erven. Germaanse bewoning op de rand van een wereldrijk (500 voor Chr. tot 500 na Chr.)*, Leiden.
- ter Schegget, M.E., 1999: Late Iron Age human skeletal remains from the river Meuse at Kessel: a river cult place?, in F. Theuws & N. Roymans (eds.), *Land and ancestors. Cultural dynamics in the urnfield period and the middle ages in the southern Netherlands*, Amsterdam, 199-240.
- ter Wal, A., 1998: Twee graven met Romeins bronzen vaatwerk uit Drenthe, *Palaeohistoria* 39/40, 513-527.
- Thasing, S. & A. Nieuwhof, 2014: Importaardewerk in Ezinge. Uitwisseling en sociaal-politieke structuur in de Romeinse tijd en de vroege middeleeuwen, in A. Nieuwhof (ed.), *En dan in hun geheel. De vondsten uit de opgravingen in de wierde Ezinge* (= JVT 96), Groningen, 129-146.
- Therkorn, L.L., 1987: The inter-relationships of materials and meanings: some suggestions on housing concerns within Iron Age Noord-Holland, in I. Hodder (ed.), *The archaeology of contextual meanings*, Cambridge etc., 102-110.
- Therkorn, L.L., 2004: *Landscaping the powers of darkness and light. 600 BC-350 AD settlement concerns of Noord-Holland in wider perspective*, Dissertation University of Amsterdam.
- Therkorn, L.L., E. Besselsen, M. Diepeveen-Jansen, S. Gerritsen, J. Kaarsemaker, M. Kok, L. Kubiak-Martens, J. Slopsma & P. Vos, 2009: *Landscapes in the Broekpolder. Excavations around a monument with aspects of the Bronze Age to the Modern (Beverwijk & Heemskerk, Noord-Holland)* (= Themata 2), Amsterdam.
- Theuws, F. & M. Alkemade, 2000: A kind of mirror for men: Sword depositions in late antique northern Gaul, in F. Theuws & J.L. Nelson (eds.), *Rituals of power. From Late Antiquity to the Early Middle Ages*, Leiden/Boston /Köln, 401-476.
- Thilderkvist, J.G.M., 2013: *Ritual bones or common waste. A study of Early Medieval bone deposits in Northern Europe* (= GAS 24), Groningen.
- Thorpe, I.J.N., 2005: The ancient origins of warfare and violence, in M. Parker Pearson & I.J.N. Thorpe (eds.), *Warfare, violence and slavery in prehistory: proceedings of a Prehistoric Society conference at Sheffield University* (= BAR Int. Ser. 1374), Oxford, 1-18.
- Timpe, D., 1988: Zur politischen Charakter der Germanen des Tacitus, in P. Kneissl & V. Losemann (eds.), *Alte Geschichte und Wissenschaftsgeschichte. Festschrift für Karl Christ zum 65. Geburtstag*, Darmstadt, 502-525.
- Timpe, D., 1991: Die Söhne des Mannus, *Chiron* 21, 69-125.
- Timpe, D., 1992: Tacitus' Germania als religionsgeschichtliche Quelle, in H. Beck, D. Ellmers & K. Schier (eds.), *Germanische Religionsgeschichte. Quellen und Quellenprobleme* (= RGA Ergänzungsbd. 5), Berlin etc., 434-485.
- Toots, H., 1965: Sequence of disarticulation in mammalian skeletons, *University of Wyoming Contributions in Geology* 4, 37-39.
- Tuin, B., 2008a: Graven aan de rand. Onderzoek van de akkers grenzend aan De Bloemert, in J.A.W. Nicolay (ed.), *Opgravingen bij Midlaren. 5000 jaar wonen tussen Hondsrug en Hunzedal* (= GAS 7), Groningen, 521-543.
- Tuin, B., 2008b: Menselijke resten, in A. Nieuwhof (ed.), *De Leege Wier van Englum. Archeologisch onderzoek in het Reitdiepgebied* (= JVT 91), Groningen, 97-115.
- Tuin, B., 2009: *Organic residues in domestic and ritually used pottery of pre-Roman Iron Age Englum (prov. Groningen, Netherlands)* (= Masterthesis University of Groningen).
- Tuin, B., forthc.: Menselijke resten, in J.A.W. Nicolay (ed.), *Graven aan de voet van de Achlumer dorps terp. Archeologische sporen rondom een terpnederzetting*.
- Tuinstra, S.J. & N. van Malssen, 2010: *Een archeologische opgraving op de locatie van twee archeologische monumenten aan het Oude Diep tussen Goutum en Wirdum, gemeente Leeuwarden (Fr.)* (= ARC-Publicaties 210), Groningen.
- Tulp, C., 2008: Metaal, in A. Nieuwhof (ed.), *De Leege Wier van Englum. Archeologisch onderzoek in het Reitdiepgebied* (= JVT 91), Groningen, 76-83.
- Turner, V., 1967: *The forest of symbols. Aspects of Ndembu ritual*, Ithaca/New York.
- Turner, V., 1969: *The ritual process. Structure and anti-structure*, London.
- Ucko, P.J., 1969: Ethnography and archaeological interpretation of funerary remains, *World Archaeology* 1, 262-280.
- Ulbert, G., 1977: Die römischen Funde von Bentumersiel, *PK* 12, 33-65.
- van Baal, J., 1976: Offering, sacrifice and gift, *Numen* 23, 161-178.
- van Beek, J., 2001: *Het menselijk botmateriaal van Englum* (= intern rapport GIA/ARC), Groningen.

- van Beek, R., 2006: Het grafritueel in Oost-Nederland tussen de vroege ijzertijd en de tweede eeuw AD, *Lunula. Archaeologica protohistorica* XIV, 61-69.
- van Bommel-van der Sluijs, W.A., 2011: Kralen uit de ijzertijd in Noord-Nederland, *JVT* 94, 9-63.
- van den Broeke, P.W., 2002: Een vurig afscheid? Aanwijzingen voor verlatingsrituelen in ijzertijd nederzettingen, in H. Fokkens & R. Jansen (eds.), *2000 jaar bewoningsdynamiek. Brons- en ijzertijdbewoning in het Maas-Demer-Scheldegebied*, Leiden, 45-61.
- van den Broeke, P.W., 2014: Inhumation burials: New elements in Iron Age funerary ritual in the southern Netherlands, in A. Cahen-Delhayé & G. De Mulder (eds.), *Des espaces aux esprits. L'organisation de la mort aux âges des Métaux dans la nord-ouest de l'Europe. Actes du Colloque de la C.A.M. et de la S.B.E.C., Moulins de Beez à Namur, les 24 et 25 février 2012* (= Études et Documents Archéologie 32), Namur, 161-184.
- van den Broeke, P.W. & W.A.M. Hessing, 2005: De brandstapel gemeden. Inhumatiegraven uit de ijzertijd, in L.P. Louwe Kooymans, P.W. van den Broeke, H. Fokkens & A.L. van Gijn (eds.), *Nederland in de prehistorie*, Amsterdam, 655-658.
- van der Plicht, J., 2001: Isotopenonderzoek in de archeologie. You are what you eat, *Archeobrief* 5, 3-7.
- van der Plicht, J., 2005: De ¹⁴C-methode (= *Nationale Onderzoeksagenda Archeologie* 4), Amersfoort.
- van der Sanden, W.A.B., 1990: Mens en moeras; veenlijken in Nederland van de bronstijd tot en met de Romeinse tijd, Assen,
- van der Sanden, W.A.B., 1995: Haarvondsten uit de Drentse venen (met een bijdrage van S.Y. Comis), *NDV* 112, 187-194.
- van der Sanden, W.A.B., 1996: *Through Nature to Eternity. The bog bodies of northwest Europe*, Amsterdam.
- van der Sanden, W.A.B., 1997a: Wagens, wielen en wieldelen uit de Drentse venen: de late ijzertijd en de Romeinse tijd, *NDV* 114, 180-201.
- van der Sanden, W.A.B., 1997b: Het kerkhof onder de autoweg - menselijke resten uit de Drentsche Aa (met een bijdrage van J. Pasveer), *NDV* 114, 171-179.
- van der Sanden, W.A.B., 1998: Wolkluwens uit de Drentse venen (met een bijdrage van S.Y. Comis), *NDV* 115, 131-141.
- van der Sanden, W.A.B., 1999: Wetland archaeology in the province of Drenthe, the Netherlands, in M. Schou Jørgensen, B. Coles & J. Coles (eds.), *Bog bodies, sacred sites and wetland archaeology*, Exeter,
- van der Sanden, W.A.B., 2001: From stone pavement to temple - Ritual structures from wet contexts in the province of Drenthe, The Netherlands, in B.A. Purdy (ed.), *Enduring records. The environmental and cultural heritage of wetlands*, Oxford, 132-147.
- van der Sanden, W.A.B., 2002: Mens en moeras 3: nieuwe veenlijk-vondsten in Noord-Nederland, *NDV* 119, 168-185.
- van der Sanden, W.A.B., 2004a: Terug naar Fluitenberg - over een maliënkolder uit de ijzertijd, *Palaeohistoria* 45/46, 363-375.
- van der Sanden, W.A.B., 2004b: Een vroeg-Romeins ruitergraf uit Zuidoost-Drenthe, *Palaeohistoria* 45/46, 347-362.
- van der Sanden, W.A.B., 2005: Een vroeg-Romeinse mantelspeld uit het Holtveen bij Spier en andere fibulae uit natte contexten in Noord-Nederland, *NDV* 122, 131-139.
- van der Sanden, W.A.B. & E. Taayke, 1995: Aardewerk uit natte context in Drenthe: 1100 v. Chr. tot 500 na Chr., *NDV* 112, 149-186.
- van der Sanden, W.A.B. & T. Capelle, 2002: *Götter, Götzen, Holzmenschen*, Oldenburg.
- van der Sanden, W.A.B. & S. Eisenbeiss, 2006: Imaginary people - Alfred Dieck and the bog bodies of northwest Europe, *Archäologisches Korrespondenzblatt* 36, 111-122.
- van der Vin, J.P.A., 1999: Roman coins from Wijnaldum, in J.C. Besteman, J.M. Bos, D.A. Gerrets, H.A. Heidinga & J. de Koning (eds.), *The Excavations at Wijnaldum. Reports on Frisia in Roman and Medieval times. Volume I*, Rotterdam/Brookfield, 185-189.
- van der Waals, J.D., 1964: *Prehistoric disc wheels in the Netherlands*, Groningen.
- van der Waals, J.D., 1965: Early ceramics in the Netherlands: two problems, in F.R. Matson (ed.), *Ceramics and man*, Chicago, 124-139.
- van der Wal, M., 2012: Het urnenveld: het menselijke en dierlijke botmateriaal, in I. Hermsen & M. van der Wal (eds.), *Afscheid in de ijzertijd. Archeologisch onderzoek van het grafveld uit de vroege-ijzertijd op de locatie Olthof-Noord in Epse-Noord* (= Rapportage archeologie Deventer 35), Deventer, 70-87.
- van Dongen, A., 1995: *One man's trash is another man's treasure. The metamorphosis of the European utensil in the New World*, Rotterdam/Williamsburg Virginia.
- van Driel-Murray, C., 1994: A question of gender in a military context, *Helinium* 34, 342-362.
- van Es, W.A., 1960: *De Romeinse muntvondsten uit de drie noordelijke provincies; een periodisering der relaties* (= Scripta academica Groningiana/Varia bio-archaeologica 13), Groningen.
- van Es, W.A., 1966: Friesland in Roman Times, *BROB* 15-16, 37-68.
- van Es, W.A., 1967: Wijster, a native village beyond the Imperial Frontier 150-425 A.D., *Palaeohistoria* 11, 1-595.
- van Es, W.A., 1970: Paddepoel, excavations of frustrated terps, 200 BC - 250 AD, *Palaeohistoria* 14, 187-352.
- van Es, W.A., 1981³: *De Romeinen in Nederland*, Haarlem.
- van Es, W.A., 1991: De Mercurius van Dalfsen feliciteert professor A.N. Zadoks-Josephus Jitta alsnog met haar 85ste verjaardag, *Westerheem* 40, 98-102.
- van Es, W.A., 2001: Wijnaldum en de koningen van Friesland, *VF* 81, 79-96.

- van Es, W.A., 2005: Romeinse importen in de wierden van Groningen en Friesland, in E. Knol, A.C. Bardet & W. Prummel (eds.), *Professor van Giffen en het geheim van de wierden*, Veendam/Groningen, 167-181.
- van Es, W.A., 2012: *Van Wijster naar Ede en over de Rijn* (= C.J.C. Reuvenlezing 24), Leiden.
- van Gelder-Ottway, S., 1988: Animal bones from a pre-Roman Iron Age coastal marsh site near Middelstum (Province of Groningen, The Netherlands), *Palaeohistoria* 30, 125-144.
- van Gennep, A., 1977 [1909]: *The rites of passage*, London/Henley.
- van Giffen, A.E., 1910: Het dalingsvraagstuk der Alluviale Noordzeekusten, in verband met bestudeering der terpen, *Tijdschrift voor Geschiedenis, Land- en Volkenkunde* 25, 258-294.
- van Giffen, A.E., 1913: *Die Fauna der Wurten*, Groningen.
- van Giffen, A.E., 1917: Voorlopig verslag van het proefonderzoek der wierde, "de Wierhuizen" te Jukwerd bij Appingedam in 1916, *JVT* 1, 7-31.
- van Giffen, A.E., 1918: Verkort verslag. Opgraving te Wierhuizen 1917, *JVT* 2, 4-22.
- van Giffen, A.E., 1920: Een Karolingisch grafveld bij Godlinze, *JVT* 3/4, 39-96.
- van Giffen, A.E., 1922: Proefonderzoek in de terp te Hatsum bij Dronrijp, met een naschrift door Mr. P.C.J.A. Boeles, *JVT* 6, 23-37.
- van Giffen, A.E., 1924: Voortgezet onderzoek in de terp te Hatsum bij Dronrijp, *JVT* 7-8, 9-47.
- van Giffen, A.E., 1926: Resumé van de in de laatste vereenigingsjaren verrichte werkzaamheden ten behoeve van de terpenvereniging, *JVT* 9-10, 9-35.
- van Giffen, A.E., 1928a: Mededeeling omtrent de systematische onderzoekingen, verricht in de jaren 1926 en 1927, ten behoeve van de terpenvereniging, in Friesland en Groningen, *JVT* 11-12, 30-44.
- van Giffen, A.E., 1928b: "De Parel" bij Tzum, *JVT* 11-12, 49-51.
- van Giffen, A.E., 1931: Mededeeling omtrent het systematisch onderzoek, verricht in de jaren 1928, 1929 en 1930, *JVT* 13-15, 16-46.
- van Giffen, A.E., 1936: Der Warf in Ezinge, Provinz Groningen, Holland, und seine westgermanische Häuser, *Germania* 20, 40-47.
- van Giffen, A.E., 1950: De nederzettingsoverblijfselen in het Bolleveen en de versterking, de zgn. "legerplaats" aan het Witteveen op het Noordse Veld, beide bij Zeijen, Gem. Vries, *NDV* 68, 89-123.
- van Giffen, A.E., 1963: Het bouwoffer uit de oudste hoeve te Ezinge (Gr.), *Helinium* 3, 246-253.
- van Gijn, A.L. & H.T. Waterbolk, 1984: The colonization of the salt marshes of Friesland and Groningen. The possibility of a transhumant prelude, *Palaeohistoria* 26, 101-122.
- van Haperen, M., 2010: Rest in pieces: an interpretative model of early medieval 'grave robbery', *Medieval and Modern Matters* 1, 1-36.
- van Heeringen, R.M., 1992: *The Iron Age in the Western Netherlands* (= Proefschrift VU University Amsterdam), Amersfoort.
- van Kruining, M.E., in prep.: *De skeletten van Winsum-Bruggeburen (Friesland)*.
- van Strydonck, M., M. Boudin & G. de Mulder, 2009: ¹⁴C dating of cremated boens: the issue of sample contamination, *Radiocarbon* 51, 553-568.
- van Strydonck, M., M. Boudin & G. de Mulder, 2010: The carbon origin of structural carbonate in bone apatite of cremated bones, *Radiocarbon* 578.
- van Vilsteren, V.T., 1989: Heilige huisjes. Over de interpretatie van vierpalige structuren bij grafvelden, *Westerheem* 38, 2-10.
- van Vilsteren, V.T., 1996: Pars pro toto; over offers, wagenwielen, haarvlechten en nog zo wat, *NDV* 113, 130-345.
- van Zeist, W., 1974: Palaeobotanical studies of settlement sites in the coastal area of the Netherlands, *Palaeohistoria* 16, 223-371.
- van Zeist, W., 1989: Plant remains from a Middle Iron Age coastal-marsh site near Middelstum. An intriguing cereal grain find, *Helinium* 28, 103-116.
- van Zeist, W., T.C. van Hoorn, S. Bottema & H. Woldring, 1976: An agricultural experiment in the unprotected salt marsh, *Palaeohistoria* 18, 111-153.
- van Zoolingen, R.J., 2011: Rural cult places in the *civitas Cananefatum*, *JALC* 3, 5-30.
- Verhart, L.B.M., 2000: *Times fade away: the neolithization of the southern Netherlands in an anthropological and geographical perspective* (= Archeological studies Leiden University 6), Leiden.
- Verhart, L., 2006: *Op zoek naar de Kelten. Nieuwe archeologische ontdekkingen tussen Noordzee en Rijn* (= Catalogus Limburgs Museum Venlo), Utrecht.
- Verhart, L., 2012: Terug in het land van herkomst. Over archeologen, terpen, ruzies en lege handen, *VF* 92, 9-36.
- Verhart, L., 2013: Terug naar het land van herkomst. Over archeologen, terpen, ruzies en lege handen (2), *VF* 93, 27-52.
- Versnel, H.S., 1989: Wijnvat is honingpot, wijn is melk. Een paradigmatisch voorbeeld van 'Myth and ritual' in Rome, in P.W. de Neeve & H. Sancisi-Weerdenburg (eds.), *Kaleidoskoop van de Oudheid. Opstellen van Nederlandse oud-historici*, Groningen, 48-64.
- Volkers, T.B., 1999: The terra sigillata from Wijnaldum-Tjitsma in regional perspective, in J.C. Besteman, J.M. Bos, D.A. Gerrets, H.A. Heidinga & J. de Koning (eds.), *The Excavations at Wijnaldum. Reports on Frisia in Roman and Medieval times. Volume I*, Rotterdam/Brookfield, 151-156.
- Volkers, T.B., 2014: Ezinge - Het Romeins aardewerk, in A. Nieuwhof (ed.), *En dan in hun geheel. De vondsten uit de opgravingen in de wierde Ezinge* (= JVT 96), Groningen, 147-162.

- Vollmer, M., M. Guldborg, M. Maluck, D. van Marrewijk & G. Schlicksbier, 2001: *Lancewad. Landscape and cultural heritage in the Wadden Sea Region - Project report* (= Wadden Sea Ecosystem No. 12), Wilhelmshaven.
- Vons, P. & A.V.A.J. Bosman, 1988: Inheemse boeren bezochten de verlaten Romeinse versterkingen Velsen I en II, *Westerheem* 37, 1-16.
- von See, K., 1972: *Kontinuitätstheorie und Sakraltheorie in der Germanenforschung. Antwort an Otto Höfler*, Frankfurt/Main.
- von Uslar, R., 1938: *Westgermanische Bodenfunde des ersten bis dritten Jahrhunderts nach Christus aus Mittel- und Westdeutschlands* (= Germanische Denkmäler des Frühzeit 3), Berlin.
- Vos, P.C., 1999: The Subatlantic evolution of the coastal area around the Wijnaldum-Tjitsma terp. With a contribution by B.A.M. Baardman, in J.C. Besteman, J.M. Bos, D.A. Gerrets, H.A. Heidinga & J. de Koning (eds.), *The excavations at Wijnaldum. Reports on Frisia in Roman and Medieval times. Volume I*, Rotterdam/Brookfield, 33-72.
- Vos, P.C. & W.P. van Kesteren, 2000: The long-term evolution of intertidal mudflats in the northern Netherlands during the Holocene; natural and anthropogenic processes, *Continental Shelf Research* 20, 1687-1710.
- Vos, P.C. & D.A. Gerrets, 2005: Archaeology: a major tool in the reconstruction of the coastal evolution of Westergo (northern Netherlands), *Quaternary International* 133-134, 61-75.
- Vos, P.C. & E. Knol, 2005: Wierden ontstaan in een dynamisch getijdenlandschap, in E. Knol, A.C. Bardet & W. Prummel (eds.), *Professor van Giffen en het geheim van de wierden*, Veendam/Groningen, 118-135.
- Vos, P.C., J. Bazelmans, H. Weerts & M.J. van der Meulen (eds.), 2011: *Atlas van Nederland in het Holoceen. Landschap en bewoning vanaf de laatste ijstijd tot nu*, Amsterdam.
- Wait, G., 1985: *Ritual and religion in Iron Age Britain* (= BAR. Brit. Ser. 149), Oxford.
- Wait, G.A., 1995: Burial and the otherworld, in M.J. Green (ed.), *The Celtic world*, London/New York, 489-511.
- Waterbolk, E.H., 1969: Brieven over de aanloop tot de oprichting der Vereniging voor Terpenonderzoek, *JVT* 51, 36-96.
- Waterbolk, H.T., 1959: Nieuwe gegevens over de herkomst van de oudste bewoners der kleistreken, *Akademiedagen* 11, 16-37.
- Waterbolk, H.T., 1961: Beschouwingen naar aanleiding van de opgravingen te Tritsum, *Offa* 19, 9-46.
- Waterbolk, H.T., 1962: Hauptzüge der eisenzeitlichen Besiedlung der nördlichen Niederlande, *Offa* 19, 9-46.
- Waterbolk, H.T., 1970: Die Deutung der Wurten in historischer Sicht, *PK* 9, 1-12.
- Waterbolk, H.T., 1975: Evidence of cattle stalling in excavated pre- and protohistoric houses, in A.T. Clason (ed.), *Archaeozoological Studies. Papers of the archaeozoological conference 1974, held at the Biologisch-Archaeologisch Instituut of the State University of Groningen*, Amsterdam/Oxford/New York, 383-394.
- Waterbolk, H.T., 1988: Zomerbewoning in het terpengebied?, in M. Bierma, A.T. Clason & E. Kramer (eds.), *Terpen en wierden in het Fries-Groningse kustgebied*, Groningen, 1-19.
- Waterbolk, H.T., 1991: Ezinge, in H. Beck, H. Jankuhn, H. Steuer & R. Wenskus (eds.), *RGA*, Berlin, 60-76.
- Waterbolk, H.T., 1995: Patterns of the peasant landscape, *PPS* 61, 1-36.
- Waterbolk, H.T., 2001: Nogmaals Wierhuizen, in H. Buitenhuis & W. Prummel (eds.), *Animals and man in the past, essays in honour of Dr. A.T. Clason, emeritus professor of archaeozoology, Rijksuniversiteit Groningen, The Netherlands*, Groningen, 317-322.
- Waterbolk, H.T., 2009: *Getimmerd verleden. Sporen van voor- en vroeghistorische houtbouw op de zand- en kleigronden tussen Eems en IJssel* (= GAS 10), Groningen.
- Waterbolk, H.T. & J.W. Boersma, 1976: Bewoning in vóór- en vroeghistorische tijd, in W.J. Formsma et al. (ed.), *Historie van Groningen. Stad en land*, Groningen, 13-74.
- Weeda, E.J., R. Westra, Ch. Westra & T. Westra, 1994: *Nederlandse oecologische flora. Wilde planten en hun relaties* 5, Amsterdam.
- Weiner, A.B., 1985: Inalienable wealth, *American Ethnologist* 12, 210-227.
- Weiner, A.B., 1992: *Inalienable possessions. The paradox of keeping-while-giving*, Berkeley/Los Angeles/Oxford.
- Weiss-Krejci, E., 2011: The formation of mortuary deposits. Implications for understanding mortuary behavior of past populations, in S.C. Agarwal & B.A. Glencross (eds.), *Social bioarchaeology*, Chichester, 68-106.
- Wenskus, R., 1981: Chauken. II. Historisches, in H. Beck, H. Jankuhn, K. Ranke & R. Wenskus (eds.), *RGA* 4, Berlin/New York, 394-398.
- Whitehouse, H., 2000: *Arguments and icons. Divergent modes of religiosity*, Oxford.
- Whitehouse, H., 2004a: Why do we need cognitive theories of religion?, in T. Light & B.C. Wilson (eds.), *Religion as a human capacity. A Festschrift in honor of E. Thomas Lawson*, Leiden/Boston, 65-88.
- Whitehouse, H., 2004b: *Modes of religiosity. Towards a cognitive explanation of religious transmission*, Walnut Creek, California.
- Whitehouse, H., 2004c: Toward a comparative anthropology of religion, in H. Whitehouse & J. Laidlaw (eds.), *Ritual and memory. Toward a comparative anthropology of religion*, Walnut Creek etc., 187-205.
- Whitley, J., 2002: Too many ancestors, *Antiquity* 76, 119-126.
- Wittgenstein, L., 1922 [1955]: *Tractatus logico-philosophicus*, London.
- Woltering, P.J., 2001: Occupation history of Texel, IV. Middle Bronze Age-Late Iron Age, *BROB* 44, 9-396.
- Woltinge, I., 2003: *Wommels-Stapert. Het botmateriaal uit de vroege ijzertijd en midden-ijzertijd*, Subsidiary thesis University of Groningen.

- Woltinge, I. & W. Prummel, 2005: Wommels-Stapert (Fr.): botmateriaal uit de vroege en midden-ijzertijd, *Paleo-aktueel* 14/15, 134-138.
- Woodward, A., 1993: The cult of relics in prehistoric Britain, in M. Carver (ed.), *In search of cult. Archaeological investigations in honour of Philip Rahtz*, Woodbridge, 1-7.
- Workshop of European Anthropologists, 1980: Recommendations for age and sex diagnoses of skeletons, *Journal of Human Evolution* 9, 517-549.
- Wylie, T., 1965: Mortuary customs at Sa-skya, Tibet, *Harvard Journal of Asiatic Studies* 25, 229-242.
- Zadoks-Josephus Jitta, A.N., W.J.T. Peters & W.A. van Es, 1967: *Roman bronze statuettes from the Netherlands, I. Statuettes found north of the Limes*, Groningen.
- Zandboer, S., 2009: *Een terp en akkers langs het Oude Diep te Goutum/Wirdum. Een Inventariserend Veldonderzoek in de vorm van proefsleuven* (= ADC Rapport 1728), Amersfoort.
- Zavadil, V., 2007: Funde von menschlichen Knochen in urnenfelderzeitlichen Siedlungen: Bestattungen oder Abfall?, in J. Bemann, U. Brosseder & H.-E. Joachim (eds.), *Vom Steinbeil zum Latènegehöft. Vier Arbeiten aus dem Bonner Institut* (= Bonner Beiträge zur Vor- und Frühgeschichtlichen Archäologie 6), Bonn, 149-190.
- Zeeb-Lanz, A., 2010: Conveying archaeology to the public. The experience "Herxheim goes National Geographic TV", *The European Archaeologist* 34, 8-15.
- Zeiler, J.T., 2009: *Wat aten de honden van Englum? Archeozoologisch onderzoek van botmateriaal uit coprolieten van de terp Englum, prov. Groningen (400 BC-250 AD): een eerste indruk* (= ArchaeoBone rapport 72), Leeuwarden.
- Zimmermann, W.H., 1970: Urgeschichtliche Opferfunde aus Flüssen, Mooren, Quellen und Brunnen Südwestdeutschlands, *Neue Ausgrabungen und Forschungen in Niedersachsen* 6, 53-92.
- Zimmermann, W.H., 1999: Why was cattle-stalling introduced in prehistory? The significance of byre and stable and of outwintering, in Ch. Fabeck & J. Ringtved (eds.), *Settlement and landscape. Proceedings of a conference in Århus, Denmark, May 4-7 1998*, Højbjerg, 301-318.

Samenvatting (Dutch summary)

Acht menselijke schedels in een mesthoop en andere vondsten. Rituelen in het Noord-Nederlandse terpen- en wierdengebied, van 600 voor Chr. tot 300 na Chr.

Inleiding

In het jaar 2000 werd tijdens archeologisch onderzoek in de wierde Englum, in het Groninger Reitdiepgebied, een vondstcomplex opgegraven dat bestond uit acht menselijke schedels en schedelfragmenten, een stapeltje koeienpoten, andere botfragmenten, as, en drie gebroken potten met doorboorde bodems; de vondsten vormden een cirkel en bevonden zich in een dik mestpakket uit de midden-ijzertijd. Het vondstcomplex kan worden geïnterpreteerd als het overblijfsel van een ritueel dat werd uitgevoerd tijdens de uitbreiding van een van de woonpodia waaruit later de wierde van Englum ontstond. Mest was een veelgebruikt materiaal in woonpodia.

Deze intrigerende vondst vormde de aanleiding tot dit onderzoek naar de restanten van rituelen in het terpen- en wierdengebied. Englum werd een casestudy in dit onderzoek (hoofdstuk 10). De vondsten uit deze wierde riepen tal van vragen op, die leidend zijn geworden in dit onderzoek naar de resten van rituelen in het bodemarchief van terpen- en wierdengebied: Kunnen we verschillende soorten ritueel onderscheiden op basis van bodemvondsten? Welke rol speelden rituelen in het dagelijks leven? Wat was het normale grafritueel in dit gebied, en welke rol speelden menselijke resten in rituelen? Is het mogelijk om iets te weten te komen over geloof of religie of het wereldbeeld dat men indertijd had? En kunnen we veranderingen in ritueel handelen herkennen en in verband brengen met andere, sociale, culturele of politieke veranderingen, of met veranderingen in de natuurlijke omgeving?

In 2011 deed zich de kans voor om ook Ezinge in dit onderzoek te betrekken. Dankzij de steun van de Rijksuniversiteit Groningen en van de Nederlandse Organisatie voor Wetenschappelijk Onderzoek (NWO) kon een begin worden gemaakt met de uitwerking van de opgravingen die hier in de jaren 1920 en 1930 werden uitgevoerd door dr. A.E. van Giffen. Ezinge ligt op slechts 2 kilometer afstand van Englum en heeft een vergelijkbare bewoningsgeschiedenis. Vóór de commerciële afgraving van deze wierden in het begin van de twintigste eeuw waren Englum en Ezinge ongeveer even groot, maar van Ezinge is een veel groter deel wetenschappelijk

opgegraven. Ezinge werd een tweede casestudy in dit onderzoek (hoofdstuk 11). Het resultaat van deze beide casestudies is een overzicht van de rituele praktijk in een terp- of wierdenederzetting tijdens de ijzertijd en de Romeinse tijd, althans van dat deel van het ritueel handelen dat sporen nalaat in de bodem.

In dit onderzoek naar ritueel handelen spelen het grafritueel en het gebruik van menselijke resten een belangrijke rol. Het gangbare grafritueel in het Noord-Nederlandse terpen- en wierdengebied tijdens de ijzertijd en de Romeinse tijd was bij de aanvang van dit onderzoek nog grotendeels onbekend. Een inventarisatie van de menselijke resten uit de onderzoeksperiode vormt de basis voor de derde deelstudie in dit boek, naast de beide casestudies (hoofdstuk 12).

Het onderzoek is noodzakelijkerwijs beperkt tot een bepaald gebied en een bepaalde periode. De keuze voor het terpen- en wierdengebied als onderzoeksterrein is niet willekeurig. De landschappelijke situatie en de structuur van de nederzettingen zijn kenmerkend voor dit gebied en wijken af van die in het hogere binnenland, waar zand en veen het beeld bepalen. Ook de conserveringsomstandigheden zijn er heel anders. De uitstekende conservering van organische resten maakt het terpen- en wierdengebied bij uitstek geschikt voor het onderzoek naar ritueel handelen in het verleden. Het begin van de onderzoeksperiode wordt bepaald door het begin van de bewoning van het kwelderlandschap, ongeveer in de zesde eeuw voor Chr. Rond 300 na Chr. werd het kustgebied vermoedelijk grotendeels verlaten. Dit bewoningshiaat, dat duurde tot ongeveer 400 na Chr., vormt een natuurlijke begrenzing van de onderzoeksperiode.

De analyse en interpretatie van de resten van rituelen in Deel 3 (de beide casestudies en de analyse van menselijke resten) is niet alleen gebaseerd op de vondsten zelf. Interpretatie is onmogelijk zonder, in de eerste plaats, kennis van de onderzoeksgeschiedenis, het landschap, de bestaansmogelijkheden, de samenleving en de bewoningsgeschiedenis van het onderzoeksgebied, en, in de tweede plaats, een theorie van ritueel die is toegesneden op de archeologie. Daaraan zijn respectievelijk Deel 1 en Deel 2 van dit boek gewijd.

De theorie van het ritueel handelen

Ritueel kan worden gedefinieerd als een soort voorstelling (een *performance*), die persoonlijke, sociale, economische, religieuze of politieke aspecten van het menselijk bestaan kan benadrukken en waarin verschillende elementen een rol kunnen spelen, bijvoorbeeld geritualiseerde, symbolische, magische en technische handelingen, allerlei voorwerpen, taal, muziek, maaltijden, en natuurlijke en bovennatuurlijke deelnemers. Onder deze definitie vallen alle soorten ritueel, van onopvallende persoonlijke gebaren tot grootschalige, openbare ceremonies.

Hoewel ritueel vaak wordt beschouwd als een onderdeel van religie, is het een zelfstandig verschijnsel dat geen religieuze betekenis hoeft te hebben. Wel zijn religieuze voorstellingen vaak nauw verbonden met ritueel handelen; daarom vormen die een belangrijk tweede aandachtsgebied in dit onderzoek. Het begrip *religie*, zoals hier gebruikt, verwijst naar voorstellingen over het bovennatuurlijke en de relatie die mensen daarmee onderhouden.

Zowel ritueel als religie komen op een natuurlijke en voorspelbare manier voort uit het menselijke brein, als bijproducten van eigenschappen die evolutionair voordeel opleveren.¹ Die eigenschappen zijn onder meer: het vermogen om dingen en wezens te ordenen in categorieën, het vermogen om handelende wezens te herkennen in aanwijzingen uit onze omgeving, het vermogen om potentiële en reële gevaren te herkennen en voorzorgsmaatregelen te treffen, en morele en andere capaciteiten die ons sociale leven mogelijk maken. Vanwege deze eigenschappen kunnen wij reageren op en ons aanpassen aan onze natuurlijke en sociale omgeving, maar ze hebben bijwerkingen. We zijn geneigd om niet alleen werkelijke, maar ook onzichtbare actoren te herkennen in onze omgeving; we classificeren zulke actoren intuïtief als personen die denken en reageren zoals wijzelf, al hebben ze ook tegennatuurlijke trekjes. Dat zijn onze religieuze voorstellingen. We weten hoe we goede, wederkerige relaties moeten onderhouden met deze bovennatuurlijke wezens, want de wereld van het bovennatuurlijke is een uitbreiding van onze sociale wereld. Ons sociale leven, inclusief onze relatie met het bovennatuurlijke, is ondenkbaar zonder rituelen. Door rituelen kunnen we ons handhaven en ons thuis voelen in onze sociale omgeving en voelen we ons minder hulpeloos in een potentieel bedreigende wereld. Zowel religieuze voorstellingen als rituelen gaan gepaard met een gevoel van noodzakelijkheid, van urgentie, waardoor ze niet zomaar terzijde kunnen worden geschoven (hoofdstuk 6).

Ritueel handelen kent een grote variatie aan verschijningsvormen (hoofdstuk 7). De vruchtbaarheidsoffers, bouwoffers en offers op liminale plaatsen die vaak genoemd worden in de archeologische literatuur, vormen

maar een heel klein deel van de mogelijkheden. Rituelen kunnen op allerlei manieren verbonden zijn met het menselijk bestaan. Hoewel definities van ritueel vaak de herhaling en uniformiteit benadrukken, worden lang niet alle rituelen steeds op dezelfde manier uitgevoerd. De meesten rituelen zijn veranderlijk en kunnen worden aangepast aan nieuwe omstandigheden.

Een belangrijk onderscheid kan worden gemaakt tussen rituelen waarin de verbeelding een belangrijk rol speelt, en rituelen waarin doctrine belangrijk is, respectievelijk de *imagistic* en *doctrinal modes*.² Rituelen in de *imagistic mode* worden onregelmatig uitgevoerd en steeds opnieuw vormgegeven. Rituelen in de *doctrinal mode* zijn uniforme rituelen die worden overgedragen door onderwijs en herhaling. Hoewel de beide modi binnen dezelfde samenleving kunnen voorkomen, zijn deze verschillende soorten ritueel primair verbonden met verschillende vormen van sociale organisatie: de *imagistic mode* met kleinschalige samenlevingen die niet strak zijn georganiseerd, de *doctrinal mode* met grootschalige, gecentraliseerde samenlevingen. Eén van beide is meestal dominant. Dit onderscheid maakt het mogelijk om, via de rituelen, iets te weten te komen over veranderingen in de sociale organisatie van een samenleving

De uitwisseling van geschenken speelt een belangrijke rol in rituelen (hoofdstuk 8). Het is een effectieve manier om goede relaties te onderhouden, zowel met mensen als met het bovennatuurlijke. Het principe van geschenkenuitwisseling ligt aan de basis van het offeren aan bovennatuurlijke wezens en speelt een belangrijke rol in, bijvoorbeeld, ceremoniële maaltijden. Vrijwel alle soorten objecten, fragmenten van voorwerpen met een bepaalde betekenis, voedsel, mensen, eerbetoon, diensten, en zelfs goed gedrag kunnen dienen als geschenken of offers. Uitgezonderd van geschenkenuitwisseling zijn de zogenaamde onvervreembare voorwerpen.³ Dergelijke objecten zijn niet noodzakelijk economisch waardevol, maar ze worden gekoesterd omdat ze zijn verbonden met de identiteit van mensen of groepen.

De betekenis van ritueel kan niet worden gevat onder één noemer. Voor de uitvoerders van een ritueel zijn ze vaak functioneel en noodzakelijk. Rituelen hebben symbolische, sociale, religieuze en emotionele betekenis, maar die betekenis ligt niet vast. Rituelen en symbolen hebben geen inherente ('eigenlijke' of 'echte') betekenis. Betekenis komt voort uit de menselijke geest en wordt door de deelnemers van rituelen (en door onderzoekers) afgeleid uit allerlei bewuste en onbewuste associaties. Dat betekent dat standaardverklaringen van rituelen en van symbolen moeten worden gewantrouwd. Betekenis hangt af van context en situatie (hoofdstuk 9).

1 Boyer 2001.

2 Whitehouse 2004b.

3 Weiner 1985; 1992.

De herkenning en interpretatie van de restanten van rituelen in het bodemarchief

Rituelen horen bij het menselijk bestaan, maar slechts weinig rituelen laten sporen achter in de bodem. Van deze sporen is maar een klein deel als zodanig herkenbaar. Dat betekent dat de rituelen die we kunnen herkennen in het bodemarchief niet als representatief kunnen worden beschouwd voor het geheel van ritueel handelen in een voorbije samenleving.

Voor het herkennen en onderzoeken van de overblijfselen van rituelen in de bodem is het noodzakelijk dat we begrijpen wat rituelen en rituele deposities zijn. We hebben bovendien criteria nodig, op basis waarvan de resten van rituele handelingen kunnen worden onderscheiden van sporen die het resultaat zijn van andere activiteiten en processen.

Onder *rituele depositie* wordt verstaan: het plaatsen van een voorwerp of van voorwerpen, in de bodem of in water, als onderdeel van een ritueel. Er kan onderscheid worden gemaakt tussen primaire en secundaire deposities. Primaire deposities bestaan uit voorwerpen en materialen die opzettelijk zijn gedeponerd als hoofdbestanddeel van een ritueel. Secundaire deposities bestaan uit de resten van rituelen die bovengronds werden uitgevoerd en die na afloop zijn gedeponerd. Daarnaast kunnen objecten die een rol hebben gespeeld in een ritueel onopzettelijk in de grond terecht zijn gekomen.

De resten van rituelen in het bodemarchief worden meestal geïdentificeerd op basis van negatieve criteria, als een laatste optie als alle praktische verklaringen zijn uitgeput. Aangezien voor de meeste vondsten wel een praktische verklaring kan worden bedacht, worden gewoonlijk alleen opvallend 'rare' vondstcomplexen geïdentificeerd als rituele depositie. Die benadering doet geen recht aan de rol die rituelen speelden in het dagelijks leven en zij verhindert een beter begrip van het ritueel handelen, en van het menselijk bestaan in het algemeen, in het verleden. Voor dit onderzoek is daarom geprobeerd positieve criteria te formuleren en toe te passen (hoofdstuk 9).

Er bestaat geen algemeen toepasbaar criterium dat het mogelijk maakt om de restanten van rituelen in het bodemarchief te herkennen. Het is echter wel mogelijk om een 'gereedschapskist', een set van criteria en benaderingen samen te stellen, die op verschillende manieren en in combinatie kunnen helpen om ze te herkennen. Het uitgangspunt van deze criteria en benaderingen is dat menselijke activiteiten doorgaans niet toevallig zijn. Mensen handelen meestal doelgericht en rationeel, binnen de grenzen van hun wereldbeeld. Opvallende vondsten en vondstcomplexen zijn dus veel vaker de restanten van bewuste handelingen dan, bijvoorbeeld, verloren of vergeten voorwerpen.

De gereedschapskist met criteria en benaderingen is noodzakelijkerwijs aangepast aan lokale en regionale

archeologische omstandigheden. Herkenning van het rituele begint met een beschrijving van het niet-rituele, het onbedoelde of het toevallige in de archeologie van het betreffende gebied en de betreffende onderzoeksperiode.

Het tweede stuk 'gereedschap' is een contextuele benadering⁴: het begrijpen en beschrijven van de handelingen en processen die ten grondslag liggen aan de vondsten en hun context. Verschillende criteria richten de aandacht vervolgens op aspecten van het ritueel deponeren, zoals selectie, associatie, structuur, locatie, compleetheid, opzettelijke verandering van voorwerpen, of de aanwezigheid van voedsel. Uit de theorie van ritueel kunnen belangrijke, aanvullende kenmerken worden afgeleid. Daartoe behoren aanwijzingen voor geritualiseerd gedrag, zoals het gebruik van bepaalde getallen, kleuren en vormen, of van symmetrie. Daarnaast kunnen vondsten worden vergeleken met de resten van rituelen die door andere onderzoekers elders zijn herkend, in het bijzonder in aangrenzende gebieden.

Deze gecombineerde benaderingen en criteria kunnen leiden tot een veel groter aantal herkende rituele deposities dan gebruikelijk is in de archeologie. Zo konden in de vondsten en documentatie uit Ezinge op deze manier maar liefst 350 rituele deposities worden geïdentificeerd. Dergelijke aantallen vragen om een kwantitatieve analyse. Het doel van de analyse van gegevens, kwantitatief zoals in de casestudy Ezinge of kwalitatief zoals in de casestudy Englum, is een interpretatie van de vondsten en inzicht in het ritueel handelen in een voorbije samenleving. Interpretatie volgt echter niet automatisch uit de gegevens; bewuste en onbewuste vooronderstellingen van onderzoekers spelen mee in alle stadia van een onderzoek en kunnen leiden tot uiteenlopende conclusies. Interpretatie is persoonlijk. Om het effect van mijn eigen, onbewuste vooronderstellingen zoveel mogelijk teniet te doen, heb ik in deze studie geprobeerd om mijn argumenten zo helder mogelijk te maken en mijn interpretaties te baseren op alle gegevens die voorhanden zijn. Omwille van de transparantie zijn die gegevens opgenomen in de bijlagen.

Hieronder worden de resultaten van de kwantitatieve en kwalitatieve analyses van de onderzoeksgegevens gecombineerd met inzichten uit de theorie van ritueel en uit de archeologie van het onderzoeksgebied bij de beantwoording van de onderzoeksvragen. Het resultaat is een overzicht van, of eigenlijk: mijn visie op, het ritueel handelen in de voorbije samenleving van het terpen- en wierdengebied.

Rituelen in het dagelijkse leven en in sociale contacten

In een terpnederzetting woonden vrouwen, mannen en kinderen samen in huizen die ze deelden met hun vee. Ze onderhielden de terp, weidden het vee op de kwelder,

⁴ Hill 1995, 30-31.

verbouwd gewassen, bereidden maaltijden, maakten aardewerk, kleding en gebruiksvoorwerpen, bouwden en sloopten huizen, onderhandelden over territoria, haalden stenen en hout in het binnenland, gingen af en toe uit vissen of jagen, ontvingen gasten en gingen op bezoek, trouwden, kregen kinderen, werden soms ziek, en stierven.

Mensen maakten deel uit van families en huishoudens, die op hun beurt deel uitmaakten van dorpen. Dorpsgemeenschappen participeerden in uitgebreide sociale en culturele netwerken. Op al deze niveaus werden relaties onderhouden. De bewoners van het terpen- en wierdengebied hadden familie en vrienden, zowel dichtbij als veraf. Er waren ongetwijfeld ook af en toe conflicten, maar ze zochten die niet op en probeerden de vrede te bewaren (par. 4.3.3).

Vele van de handelingen en gebeurtenissen in het dagelijks leven gingen gepaard met rituelen en ritueel gedrag. We hebben aanwijzingen voor rituelen op het niveau van individuele personen, van huishoudens en van de nederzetting. Veranderingen in het leven van mensen gingen gepaard met overgangsrituelen (*rites de passage*). Rituelen op het niveau van de nederzetting hadden te maken met de relaties tussen huishoudens, met het vaststellen van erfgronden, en met de onderlinge rangorde van huishoudens binnen de samenleving. Een groot deel van de geïdentificeerde rituelen was gericht op huishoudens. Vele van de kleine deposities in huizen waren waarschijnlijk offers voor de voorouders, bedoeld om hun hulp te vragen tijdens potentiële crisissituaties. Huishoudens werden niet alleen beschermd door de voorouders, maar ook door gelukbrengende of onheilafwerende voorwerpen die in of bij huizen werden begraven. Als huizen werden verlaten, werd ook een deel van het huisraad en de gebruiksvoorwerpen ontmanteld, gebroken of verbrand, en achtergelaten in het huis, op de vloer of in een kuil, misschien samen met al eerder afgedankte en kapotte gebruiksvoorwerpen. De resten van het huis werden vervolgens afgedekt door een nieuwe ophogingslaag.

Families of huishoudens bezaten collecties van voorwerpen die iets voor ze betekenden, zoals memorabilia die verbonden waren met bepaalde mensen of gebeurtenissen, erfstukken en onvervreembare voorwerpen, die waren verbonden met de identiteit van de familie (par. 10.3.2 en 11.5.3). Tot die collecties behoorden scherven en kleine potjes die waren uitgewisseld tijdens bijzondere gebeurtenissen en ontmoetingen, bijzondere voorwerpen zoals antieke stenen werktuigen en fossielen, en beenderen van overleden familieleden. Dergelijke verzamelingen fungeerden als familiearchief, dat de familieleden met hun afkomst verbond en hen herinnerde aan belangrijke gebeurtenissen in het verleden. De uitgewisselde fragmenten en objecten in de collecties verbonden de familieleden ook met de mensen van wie de voor-

werpen afkomstig waren; ze symboliseerden de sociale netwerken waarin de familieleden participeerden.

De identiteit en het aanzien van de familie bepaalden de rol die zij speelde binnen de gemeenschap. Het was dus noodzakelijk om die identiteit bij elke mogelijke gelegenheid te benadrukken. Voorwerpen uit de familiecollecties werden begraven tijdens rituelen waarin de identiteit van de familie een rol speelde, in of bij huizen, in land dat de familie tot haar bezit rekende, of in sloten die dat land begrensd. De depositie van menselijke resten en van bijzondere voorwerpen onderstreepte de band tussen de leden van een huishouden en hun land.

Vee was belangrijk in het leven van de terpbewoners, niet alleen economisch maar ook in rituelen (par. 11.2.2). Alleen varkens speelden in rituelen vermoedelijk geen rol. Koeien, schapen en paarden werden geofferd en gegeten tijdens rituele maaltijden. Zowel koeien als schapen zijn vertegenwoordigd door deelskeletten, schedels en hoorns. Paarden werden ook wel gegeten, maar deposities van paardenhaar met touw en een paardengraf doen vermoeden dat paarden als individuele personen werden beschouwd; er werden soms overgangsrituelen voor hen uitgevoerd, net als voor mensen. Honden speelden waarschijnlijk een bijzondere rol vanwege hun band met de doden (zie hieronder). Wilde dieren zijn zeldzaam in het gewone nederzettingmateriaal; de schaarse resten maken meestal deel uit van rituele deposities.

In sociaal-politieke relaties waren feesten en rituele maaltijden een belangrijk middel om goede relaties te creëren en te onderhouden, zowel binnen de gemeenschap als met bezoekers van elders. Tijdens feesten werd voedsel en bier geserveerd. De participatie van een bovennatuurlijk wezen, aan wie een deel van het voedsel werd geofferd, kon het tafelservies, de kookpotten en de voedselresten ongeschikt maken voor verder gebruik; de resten van de maaltijd en het serviesgoed werden dan na afloop verzameld, soms gebroken, en begraven (par. 10.3.2). Het breken en deponeren van aardewerk dat was gebruikt tijdens een gezamenlijke maaltijd diende soms ook om overeenkomsten tussen burens over erfgronden te bevestigen.

Grafituelen en het gebruik van menselijke resten

De aanwijzingen voor het grafitueel in het terpen- en wierdengebied gedurende de onderzoeksperiode bestaan uit een gering aantal losse inhumatiegraven, een zeer klein aantal crematiegraven en losse menselijke botten in allerlei contexten (hoofdstuk 12). Wat het 'gewone' grafitueel was, is niet zeker. Verschillende vormen bestonden naast elkaar.

Buiten het terpen- en wierdengebied was crematie waarschijnlijk algemeen. Daarom wordt er vaak van uitgegaan dat crematie ook in het terpen- en wierdengebied gebruikelijk was tijdens de ijzertijd en de Romeinse tijd (par. 4.4.1). Het ontbreken van crematiegraven wordt in

die visie veroorzaakt door latere sedimentatie en door de kleine kans om crematieresten te vinden die zonder urn op de kwelder zijn begraven of uitgestrooid. Het is echter de vraag of dat juist is. De weinige crematiegraven die bekend zijn uit het terpen- en wierdengebied waren niet moeilijk herkenbaar; het gaat om kuilen met crematieresten en kleine potjes met gecremeerde botfragmenten (par. 12.5.4). Als deze vondsten de gangbare vorm van crematie in het onderzoeksgebied vertegenwoordigen, dan toont hun geringe aantal aan dat crematie buitengewoon zeldzaam was. Het is mogelijk dat de schaarste aan brandhout de voornaamste reden was dat crematie tijdens de onderzoeksperiode niet gangbaar was in het terpen- en wierdengebied, ook al was dat wel het geval in het binnenland.

Er zijn veel meer inhumatiegraven bekend dan crematiegraven. Toch was inhumatie niet het gangbare grafritueel in de onderzoeksperiode, daarvoor is het aantal graven te klein. De meest algemene manier om met de doden om te gaan was mogelijk excarnatie of ontvlezing. Er zijn aanwijzingen dat lijken werden blootgesteld aan aaseters, met name honden (par. 12.6.5). Excarnatie met behulp van honden verklaart de aanwezigheid van vooral schedels en delen van schedels met daarnaast een klein aantal andere, postcraniale botten. Koppensnellen of het wegnemen van schedels uit graven kunnen de samenstelling van het losse botmateriaal niet verklaren. Verstoorde graven, die de aanwezigheid van losse botten in deze samenstelling zouden kunnen verklaren, zijn onbekend. Vanwege hun rol in het excarnatieproces waren honden verbonden met de doden en met de wereld van de voorouders. Ze werden misschien beschouwd als leden van de familie, zoals kan worden afgeleid uit gelijksoortige deposities van de resten van mensen en honden.

Het is niet duidelijk waarom er verschillen waren in de behandeling van de doden. De leeftijd en sekse van de begraven doden komt overeen met die in grafvelden elders in deze periode. In het kleine aantal gevallen dat er aanwijzingen zijn voor een doodsoorzaak gaat het om ziektes; er zijn geen aanwijzingen voor een gewelddadige dood. Mensen die werden begraven, waren waarschijnlijk gewone leden van de gemeenschap die stierven door een natuurlijke oorzaak.

Bij de keuze voor inhumatie, crematie of excarnatie speelde de persoonlijke voorkeur van de overledene, misschien gebaseerd op grafgebruiken in het gebied van herkomst, mogelijk een rol. Dat wordt vermoed voor afwijkende graven elders in Nederland en het zou ook een rol kunnen spelen bij de keuze voor crematie in het terpen- en wierdengebied (par. 12.5.4). Het moment van overlijden in relatie tot de levenscyclus van het huis of van structuren op het erf speelde mogelijk een rol bij de keuze voor inhumatie. Overlijden tijdens de aanleg van een terppodium of het bouwen van een huis, of omstreeks het moment dat een sloot of kuil werd dichtgegooid, zou

de aanleiding kunnen vormen tot het begraven van de overledene in of bij het huis of in de vulling van een sloot of kuil, in plaats van een andere behandeling.

Nadat het excarnatieproces was voltooid, werden de overgebleven botten verzameld en als onvervreembare voorwerpen opgeslagen in familiecollecties. Soms werden ze bewerkt, met name aan het einde van de ijzertijd en het begin van de Romeinse tijd. De overblijfselen van de doden, of dat nu inhumatie- of crematiegraven of begraven losse botten waren, speelden een rol in het benadrukken van de identiteit en het prestige van de familie. Door de resten te begraven in of bij huizen of in land van de familie, werd voorouderlijke grond gecreëerd. Dat was ook een geschikte plaats om de overledenen te eren in hun hoedanigheid als bovennatuurlijke voorouders, zoals kan worden afgeleid uit de offers die zijn gevonden in de nabijheid van menselijke resten (par. 10.2.7).

Deze interpretatie van de menselijke resten in het onderzoeksgebied is van toepassing op resten die in, of in de directe omgeving van, nederzettingen zijn gevonden. Ze biedt een alternatief voor de verklaring die in de archeologische literatuur soms wordt gegeven aan de losse graven in nederzettingen: omdat ze afwijken van het 'normale' grafritueel, namelijk crematie, zouden dat mensenoffers zijn. De veenlijken die zijn gevonden in Drenthe en elders, en die waarschijnlijk geïnterpreteerd moeten worden als mensenoffers, laten zien dat dat niet ondenkbaar is. Ook in het terpengebied, bij het Friese Westergeest, zijn veenlijken gevonden, zij het mogelijk uit een vroegere periode (par. 12.5.3). Het is dus heel goed mogelijk dat er ook in het terpen- en wierdengebied soms mensen werden geofferd. De slachtoffers daarvan zijn echter niet te verwachten binnen nederzettingen, maar, net als in het binnenland, in natte contexten of andere marginale plaatsen op enige afstand van de bewoonde wereld.

Grafvelden uit de onderzoeksperiode zijn onbekend in het terpen- en wierdengebied. Een paar graven uit de midden-Romeinse tijd in Ezinge kan worden beschouwd als een voorbode van de grafvelden met inhumatie- en crematiegraven die aan het einde van de Romeinse tijd hun intrede deden in Noord-Nederland en Nedersaksen (par. 5.5). Dit nieuwe grafbestel was ongetwijfeld verbonden met veranderingen in de sociale positie van de familie en in de betekenis van de voorouders.

Geloof en religieuze voorstellingen

Schriftelijke bronnen maken duidelijk dat er gedurende de Romeinse tijd een enorme variatie aan religieuze voorstellingen bestond in Europa. Die voorstellingen omvatten algemene goden, goden en geesten met bepaalde functies of territoria, vergoddelijkte mensen (de keizers) en bovennatuurlijke voorouders. Romeinen, Galliërs en Germanen herkenden eigenschappen van hun eigen goden in de goden van andere volken. We kunnen er van

uitgaan dat de bewoners van het Noord-Nederlandse kustgebied in dat opzicht geen uitzondering vormden, maar daarmee is nog niet duidelijk welke religieuze voorstellingen zij hadden. De beschikbare schriftelijke bronnen geven daar geen uitsluitel over (par. 4.4.2).

Zonder betrouwbare schriftelijke bronnen kunnen we alleen iets te weten kunnen komen over geloofs- en andere voorstellingen aan de hand van de tastbare overblijfselen van handelingen, met name van rituele handelingen. De analyse van de restanten van rituelen die zijn herkend in Englum en Ezinge geeft uiteraard geen volledig beeld van de geloofswereld van de bewoners van het Noord-Nederlandse kustgebied, maar iets kan daar toch wel over worden gezegd.

In de eerste plaats geloofde men waarschijnlijk dat bepaalde objecten, zoals stukken vuursteen, botten van bijzondere dieren of bijzondere delen van huisdieren, fossielen, terra sigillata scherven of speelschijfsjes, een speciale, intrinsieke kracht bezaten. Het bovennatuurlijke speelt daarbij een instrumentele rol; het zijn, in gangbaar taalgebruik, magische objecten.

In de tweede plaats geloofde men in een god of in verschillende goden. Dat kan worden afgeleid uit deposities die als offers kunnen worden geïnterpreteerd en die zijn gevonden in krekken en andere plaatsen met een liminaal karakter. Die plaatsen werden kennelijk beschouwd als contactzones met het bovennatuurlijke of, specifieker, met een bepaald bovennatuurlijk wezen. Zo werd in Englum een groot deel van een paardenskelet gevonden in een uitloper van een kreek die indertijd buiten de nederzetting zelf lag. Het deelskelet is waarschijnlijk het geofferde deel van een paard dat werd gegeten tijdens een rituele maaltijd. Het is opvallend groot, vergeleken met andere dieroffers; dat zijn vaak kleine of grotere oneetbare stukken van het dier. Uit de grootte kan worden afgeleid dat men van de betreffende godheid verwachtte dat deze niet tevreden zou zijn met slechts een symbolisch deel van het geofferde dier. Dat zegt iets over het karakter van deze godheid; die was kennelijk niet van het type dat beschikt over strategische kennis (de gedachten van mensen kent) en hen naar hun goede bedoelingen beoordeelt (par. 6.4; 8.4.1). Het moet een god zijn geweest die dat vermogen niet bezat, en die dus alleen een offer kon waarderen dat waardevol was. Deze god had misschien een bepaalde functie of territorium en werd alleen vereerd bij gelegenheden die verband hielden met die functie of dat territorium (par. 8.4.1). Het aantal deposities dat in verband kan worden gebracht met liminaliteit is klein, zowel in Englum en Ezinge; daarbij moet echter bedacht worden dat locaties die kunnen worden beschouwd als liminale plaatsen in de regel buiten de opgegraven nederzettingen zullen liggen.

Naast deze godheid of godheden en het gebruik van voorwerpen met intrinsieke waarde kan er nog een derde type religieuze voorstelling worden afgeleid uit de ge-

gevens: het geloof in bovennatuurlijke voorouders. Rituele deposities die kunnen worden geïnterpreteerd als offers, bevinden zich vaak niet ver van gedeponeerde menselijke resten, in en bij de huizen (par. 10.2.7; 11.3.3). Die offers zijn talrijk, maar relatief klein. Dat duidt erop dat de voorouders werden beschouwd als bovennatuurlijke wezens die de bedoelingen van de mensen die de offers brachten konden beoordelen omdat ze beschikten over strategische kennis. Van de voorouders werd verwacht dat ze het huishouden beschermden en zo nodig hulp gaven. De voorouders waren waarschijnlijk belangrijker voor mensen in hun persoonlijke en dagelijkse leven dan de goden waaraan soms een offer werd gebracht in liminale zones in het landschap. Voorouderverering moet verbonden zijn geweest met voorstellingen over het leven na de dood. De gevonden resten van mannen en vrouwen van verschillende leeftijden, die de voorouders representeerden, doen vermoeden dat overleden familieleden hun persoonlijke identiteit verloren na hun dood. Alle overleden leden van een familie, niet alleen degenen die zelf kinderen hadden, werden onderdeel van een vooroudercollectief met het vermogen om het leven van de levende familieleden te beïnvloeden.

Buiten deze religieuze voorstellingen, die kunnen worden afgeleid uit de vondsten, waren er misschien nog andere goden of geesten in het pantheon van de bewoners van het noordelijke kustgebied. Ook moeten er ideeën hebben bestaan over de oorsprong en de ordening van de wereld. Misschien bestond er een animistische of een pantheïstische wereldbeschouwing (par. 8.4.1). Daarover geven de vondsten echter geen uitsluitel.

Veranderingen

Hierboven kwamen algemene aspecten van het ritueel handelen in het onderzoeksgebied aan de orde. Rituelen zijn echter niet statisch en onveranderlijk; in de loop van de tijd veranderden rituelen in het terpen- en wierdengebied. Herkenbare veranderingen traden op in de deposities die met huizen waren verbonden, in de depositie van menselijke resten, van aardewerk, van persoonlijke voorwerpen en van 'magische' voorwerpen. Deze veranderingen gingen gepaard met en weerspiegelen sociale, politieke en culturele ontwikkelingen en invloeden. Enkele van die veranderingen worden hieronder uitgelicht.

De bewoningsgeschiedenis van het Noord-Nederlandse kweldergebied begint in de vroege ijzertijd, rond 600 voor Chr., toen de eerste kolonisten zich in het gebied vestigden (par. 3.2.1). In de eeuwen daarna volgden nieuwe kolonisten en zowel de bevolking als het bewoonbare en bewoonde areaal breidden zich uit. De bewoners pasten zich aan het nieuwe land aan, niet alleen door technische maatregelen zoals het opwerpen van huispodia, maar ook door middel van rituelen. De stoffelijke resten van de overledenen werden begraven in het nieuwe land, compleet in graven of als losse been-

deren. Daardoor ging men zich er thuis voelen; het land werd op symbolische wijze getransformeerd tot voorouderlijke grond en de identiteit van de kolonisten en hun families kreeg wortels. Op deze manier werd ook een plek gecreëerd waar de voorouders konden worden vereerd. Hun bijstand kon worden gevraagd door offers in te graven in de voorouderlijke grond. Het gebruik van menselijke resten en de rol van de voorouders als bovennatuurlijke wezens bleef belangrijk gedurende het grootste deel van de onderzoeksperiode, maar er traden wel veranderingen op.

Het bekende bouwoffer, dat is gevonden in het oudste opgegraven huis in Ezinge en dat gedateerd wordt in de 5e eeuw v. Chr., bestaat uit grote delen van een rund, een paard en een schaap (paragrafen 4.4.3; 11.2.2). Het is duidelijk een offer, maar er is geen aanleiding om te veronderstellen dat het bestemd was voor de voorouders. Menselijke resten zijn in dit huis niet gevonden. De grootte van het offer doet vermoeden dat het betreffende bovennatuurlijke wezen niet van het alwetende type was, dus niet nauw betrokken was bij het dagelijkse leven. Als het de voorouders waren, dan speelden die nog geen belangrijke rol als bovennatuurlijke wezens. De depositie van menselijke schedels twee eeuwen later in een huispodium in Englum verschilt van dit vroege bouwoffer in verschillende opzichten. Het was duidelijk een depositie naar aanleiding van de aanleg van een woonpodium en de daaropvolgende bouw van een huis, net als in Ezinge, maar de depositie als geheel was geen offer. De beide deposities gingen gepaard met een dieroffer en een rituele maaltijd, maar de geofferde koeienpoten in Englum zijn aanzienlijk kleiner dan de deelskeletten in Ezinge. Ook is er in Englum een directe relatie tussen de menselijke resten en het geofferde (par. 10.2.7). De rol van de voorouders was kennelijk veranderd: hun betekenis als bovennatuurlijke wezens was belangrijker geworden.

De rol en de verering van de voorouders werden vooral belangrijk toen de bevolking groeide en een radiale nederzettingsstructuur ontstond, in de late ijzertijd (par. 11.2.3). Voormalig gemeenschappelijk land op en in de omgeving van de wierde werd in deze periode verdeeld over de afzonderlijke huishoudens; ieder huishouden kreeg een eigen territorium. Inhumatiegraven uit deze periode bevinden zich dicht bij of zelfs in de huizen. Een groot aantal deposities van persoonlijke voorwerpen in en bij huizen verbinden individuele personen duidelijk met het huis en zijn onmiddellijke omgeving. In Ezinge worden dergelijke deposities het meest aangetroffen in huizen waarin ook inhumatiegraven zijn gevonden (par. 11.2.3); kennelijk hadden de leden van deze huishoudens een bovengemiddeld sterke band met hun grond, of wilden ze die creëren.

Het toenemende belang van voorouderverering in de late ijzertijd kan worden afgeleid uit vele kleine offers in huizen, vooral van kleine potten die als container

moeten hebben gediend. Het gebruik van voorwerpen met intrinsieke kracht, dat in de midden-ijzertijd een belangrijk element van de rituele praktijk was geweest, nam gedurende deze periode sterk af. Men voelde zich kennelijk afhankelijker van bovennatuurlijke wezens en was minder geneigd om het welzijn van het huishouden te forceren door het gebruik van dergelijke objecten (par. 11.4.2).

Rond het begin van de jaartelling bereikte de bevolking haar grootste omvang (par. 10.3.2; 11.4.3). Menselijke botten werden in deze periode soms bewerkt, waardoor hun waarde als onvervreemdbaar voorwerp nog toenam. Het gebruik van deze objecten in familierituelen, als amuletten of misschien voor praktische doeleinden, was een voortdurende herinnering aan de identiteit van de familie en haar afkomst. De bevolkingsdruk had gevolgen voor de sociale verhoudingen. Zo moest er worden onderhandeld over nieuwe territoriale grenzen; vaak gebeurde dat tijdens rituele maaltijden. Het aardewerk dat werd gebruikt tijdens deze maaltijden, werd gebroken en gedeponereerd tijdens het dichtgooien van de oude grenssloten. Aanspraken op rechten en land gingen gepaard met claims op afkomst van voorouders in een ver verleden. De vele deposities buiten huizen in deze periode, met name van aardewerk en van bewerkte en onbewerkte menselijke beenderen, tonen aan dat de openbare ruimte een strijdperk was geworden waarin aanspraken op rechten en land werden uitgevochten door het benadrukken van de eigen identiteit van de familie. Deze openbare rituelen moeten een competitief karakter hebben gehad. Het extraverte karakter van veel van de rituelen van deze periode ging gepaard met een toename in het gebruik van voorwerpen met een beschermende werking. Kennelijk werd de hulp van de voorouders niet langer als toereikend beschouwd.

Het gebruik van menselijke resten veranderde in de loop van de Romeinse tijd. Er werden nog af en toe mensen bij huizen begraven, maar deposities van losse botten werden minder algemeen. De openbare ruimte was niet langer een strijdperk waar huishoudens zich door middel van rituelen met elkaar maten. Toen het stof was neergedaald, keerde het ritueel handelen weer naar binnen, naar het huishouden zelf. Deposities werden kleiner, maar hun frequentie nam tegelijkertijd sterk toe. De voorouders werden kennelijk nog steeds vereerd, maar de afname van deposities van menselijk botten doet vermoeden dat de voorouders abstracter werden. Hun karakter lijkt te zijn veranderd, van voorouders die van nature altijd aan de kant van de levenden stonden maar het waardeerden als ze af en toe bedacht werden met een offer, naar bovennatuurlijke wezens met een meer algemeen, beschermend karakter die er eerst van overtuigd moesten worden hulp te bieden als die nodig was. Bescherming werd ook afgedwongen door het gebruik van voorwerpen met intrinsieke kracht, in het bijzonder *terra*

sigillata-scherven. In deze periode maakten dergelijke instrumentele objecten ook deel uit van deposities van persoonlijke voorwerpen tijdens overgangsrutuelen, iets wat eerder niet voorkwam.

Aan het einde van de Romeinse tijd begint men de doden te begraven in grafvelden met inhumatie- en crematiegraven. Twee naast elkaar liggende graven in Ezinge uit de 3e eeuw na Chr. kunnen worden beschouwd als een voorbode van dit gebruik (par. 11.2.2). Evenals de kleine groepjes graven in nederzettingen in Drenthe en Noord-Holland (par. 5.5) laten deze graven zien dat de nieuwe grafveldjes aanvankelijk nog bij huizen lagen. Latere grafvelden horen niet meer bij afzonderlijke huishoudens, maar bij nederzettingen. Deze breuk in de relatie tussen de doden en het huis van hun familie moet verband houden met veranderingen in de rol die de afzonderlijke huishoudens speelden in de gemeenschap en ook in de rol van de voorouders, in de loop van de Romeinse tijd. Vermoedelijk bestond een gemeenschap niet langer uit onafhankelijke huishoudens waaruit leiders werden gekozen op grond van verdienste. In plaats daarvan was de gemeenschap ondergeschikt geworden aan een vooraanstaande familie, die de leider van de gemeenschap leverde. Leiderschap werd mogelijk erfelijk in de Romeinse tijd.

De vermoede opkomst van een leidende elite gedurende de Romeinse tijd had verschillende oorzaken (par. 4.3). Een van die oorzaken is ongetwijfeld de invloed van en contacten met de Romeinen, die lokale elites bevoordeelden. Dat is echter niet de enige oorzaak. Deze ontwikkeling was ook een gevolg van de concurrentie om territoria en rechten in de vroeg-Romeinse tijd. Sommige families zullen daar beter uit tevoorschijn zijn gekomen dan andere; dat waren de vanzelfsprekende kandidaten voor een opkomende elite. Ze konden voortbouwen op bestaande sociale structuren die waren gebaseerd op verdienste, afkomst en familie-identiteit, ten koste van huishoudens die daar in mindere mate op konden bogen. De Romeinse diplomatie zal dit proces nog hebben versterkt.

De geleidelijke verandering in de sociale organisatie, die afgeleid kan worden uit de subtiele veranderingen in de uitvoering van rituelen die hierboven is beschreven, wordt bevestigd door een ontwikkeling die in de case-study Ezinge kan worden gevolgd: de uitgevoerde rituelen veranderden geleidelijk van overwegend rituelen in de *imagistic mode* naar rituelen in de *doctrinal mode*. Tijdens de midden-ijzertijd waren rituelen en de elementen waaruit ze bestonden nog zeer divers; kennelijk werden rituelen in deze periode steeds opnieuw vormgegeven. Geleidelijk aan trad een zekere mate van standaardisatie op. Zo zijn er uit de midden-Romeinse tijd veel deposities waarin grote, kleine of miniatuurpotten zijn gecombineerd met ceramische artefacten en/of met een 'magisch' object zoals een speelschijfje of een scherp *terra sigillata*. Die deposities zijn niet volledig uniform,

maar ze lijken zoveel op elkaar dat vermoed kan worden dat er regels en tradities aan ten grondslag lagen, kenmerken van de *doctrinal mode*.

Het is veelzeggend dat deze veranderingen in de sociale organisatie gepaard gingen met een vermindering in het secundaire gebruik van menselijke resten. De familievoorouders moeten geleidelijk aan naar de achtergrond zijn verdwenen gedurende dit proces. Hun plaats werd wellicht ingenomen door bovennatuurlijke wezens met een algemener karakter, waarmee de gehele gemeenschap zich verbonden voelde. Mogelijk waren het de voorouders van de elite die deze positie gingen bekleden. De *Alaisiagea*, die we kennen uit inscripties in Housesteads (par. 4.4.2), waren misschien geen godinnen maar zulke algemene voorouders, net als de *matres* en *matronae* in het beneden Rijngebied (par. 8.4.2).⁵ Het is mogelijk dat de verering van deze voormoeders ontstond uit een oudere vooroudercultus, van het type dat in Ezinge en Englum kan worden herkend.

Epiloog

Deze studie is gebaseerd op een verre van volledige verzameling archeologische gegevens, waarvan ik vermoed dat ze aanwijzingen vormen voor ritueel handelen in het verleden. De resultaten van dit onderzoek zijn noodzakelijkerwijs hypothetisch. Toekomstig onderzoek zal deze resultaten en conclusies moeten toetsen aan nieuwe gegevens. Er is nog veel onbekend. Kunnen we, bijvoorbeeld, de rituelen die in Englum en Ezinge werden uitgevoerd ook elders herkennen? Zijn er meer aanwijzingen te vinden voor excarnatie, met of zonder de hulp van honden en andere aaseters, of zullen er toch nog crematies worden ontdekt in de kwelder rond de nederzettingen? Is het gebruik van relikwieën in de middeleeuwen een lijnrechte voortzetting van het secundaire gebruik van menselijke resten in de ijzertijd en de Romeinse tijd? Is er bewijs te vinden voor de hypothese dat fragmenten zoals scherven werden uitgewisseld? En zijn er rituele deposities te vinden buiten terpen en wierden?

Een ding is zeker: de veranderingen in de rituele gebruiken gedurende de onderzoeksperiode laten zien dat de levenscyclus van het individu, de voorspoed van de familie en het huishouden, de voorouders, het territorium van de familie en de gemeenschap, en de huizen, dieren, voorwerpen en rituelen die daarmee waren verbonden, niet los van elkaar kunnen worden begrepen. Ze vormen een continuüm, waarbinnen de betekenis van de verschillende elementen verschuift in de loop van de tijd. Dat betekent dat de betekenis van de afzonderlijke elementen alleen op een zinvolle manier kan worden onderzocht en beoordeeld tegen de achtergrond van dat continuüm: een zo volledig mogelijk beeld van alle aspecten van het bestaan.

⁵ Zie Derks 1998, 127-130.

Acknowledgments

The PhD-project that is at the basis of this book started in 2004. Completing it was far from simple, as can be inferred from the eleven years it took. Several other projects and diversions of many different kinds came on my way. The PhD-project thus, unwittingly, became a form of Slow Science, comparable to slow cooking. Ingredients from different cuisines kept being added. Oven temperatures and slow simmering alternated; there were even periods that the whole meal was stored in the freezer.

One of the reasons it took such a long time to complete this study is that I took the opportunity not only to answer archaeological questions that arose from an odd deposit in a terp, but also to deal with some unfinished business from the past. Questions on the role of religion in human existence, on human nature, and on the human condition in general once made me study theology, but I could not find answers there. Studying the remains of rituals gave me the opportunity to delve into these questions again, now from a different angle and with a far more satisfying result. But it took me quite a long time to digest ideas and compose a theory that helps to understand ritual and religion in the past as well as in the present.

Over the years, many people have supported me, by supplying books and information, by discussing my ideas, by reading texts, or by being friends when I needed them. The Groningen Institute of Archaeology became my second home. I saw fellow PhD-students come and go and have fond memories of nice discussions and lunches with them and with other GIA-colleagues. I want to thank them all.

Without my supervisors, Daan Raemaekers, Jos Bazelmans, Ernst Taayke and Sofia Voutsaki, this book would certainly have become less thorough. Daan in particular I want to thank for giving me all the freedom I needed. Several others also read the text or parts of it at some stage, and helped me with their comments: Wim van Es, Egge Knol, Johan Nicolay, Hans van der Plicht, Wietske Prummel, Warner Immink (who corrected my English) and Rutger Immink.

This research project would not have been possible without the financial support of several organisations. The university *Promotie- en Postdoc Centrum* gave me the opportunity to use its facilities when I started. Later, the Groningen Institute of Archaeology (University of Groningen) funded my PhD-project and housed other projects I was occupied with. The Netherlands Organisation of Scientific Research (NWO) financed the Odyssey-research project on the finds of Ezinge, which made it possible to include Ezinge in this book. The *Stichting Nederlands Museum voor Anthropologie en Praehistorie* (SNMAP) financed a series of radiocarbon dates. Both the SNMAP and the *Vereniging voor Terpenonderzoek* generously subsidized the publication of this book.

Three years ago, we, as terp researchers, started the Terp Research Group. Our lively weekly gatherings are highly inspiring and stimulating. When we, Johan Nicolay (my friend and GIA-roommate for eleven years) and I, set out to revitalize terp research in 2004, we could not dream that such an energetic group of researchers would be one of the outcomes of the path we took. I thank them all for their support.

Finally, if I had not been brought up on a farm in a Christian family, I would not be where I am now. I am grateful to my courageous parents, who infected me with their love of animals and plants and soil, and who casually taught me a critical attitude towards any established truth.

I thank my closest loved ones, my mother, Anko, Rosa and Rutger, who always seemed to accept that writing this book was my way of life, even when I worked weekends and holidays. To you, Rutger, who spent so many hours discussing a multitude of philosophical issues with me, I dedicate this book.

Illustrations

The author would like to thank the following institutions and individuals for permission to reproduce illustrations and for supplying photographs :

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About the author

Annet Nieuwhof (1956) studied Theology and religious studies (1979-1988) at the University of Groningen, and Archaeology (1997-2001), first at the VU University Amsterdam and then at the University of Groningen.

As an archaeologist she has been occupied with the archaeology of the terp region of the Northern Netherlands: its landscape and ecology, its habitation history and its material culture (especially hand built pottery), besides the aspects of ritual and religion that are the subject of this book.

She is currently working as a researcher at the Groningen Institute of Archaeology of the University of Groningen.

