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Of whorls and weights

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METAALTIJDEN 8

BIJDRAGEN IN DE STUDIE VAN DE METAALTIJDEN



REDACTIE:

S. ARNOLDUSSEN, M.T.C HENDRIKSEN,
E.H.L.D. NORDE & N. DE VRIES

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Of whorls and weights

Examining archaeological contexts of textile-related ceramics

Hester Kamstra

Keywords: spindle whorls, loom weights, Bronze/Iron Age, textile production

Introduction

Ceramics constitute a prominent find-category in most archaeological excavations. Due to their material properties (fairly durable; relatively good preservation; recognizable as a product of human activity), archaeologists have conducted countless studies into pottery, ranging from detailed technological research to studies into mass-production and societal hierarchy. Not all ceramic artefacts are equally well-studied, however. In this paper a specific category of ceramic artefacts – those associated with the production of textiles (*i.e.* spindle whorls and loom weights¹) – will be highlighted in order to gain insight into the role and function of these objects in Bronze and Iron Age society.

For this period, textile-related ceramics can roughly be placed into one of two broader research traditions: they are either part of research into *prehistoric textile production*, or considered in the context of (*ritual*) *depositions*. In both cases, however, they are not the subject of typological investigation. This is partially due to a lack of datable characteristics: while loom weights can be crudely dated on the basis of their shape (Grömer 2010, 117), spindle whorls are not fit for a typochronology since their form has varied very little over millennia (Grömer 2010, 87; but see Belanova-Štolcová & Grömer 2010 for an indication of chronological variety).

The consideration of Bronze and Iron Age textile production in the Netherlands is often limited to the presence of spindle whorls and loom weights as ceramic indicators

1 It is an ongoing point of debate whether all 'ceramic weights' are indeed loom weights; an alternative function as net weights has been suggested previously, especially in the case of triangular shaped objects (Van Kerckhove 2009, 194-195).

of household textile crafts. The artefacts are also included in research into prehistoric deposition practices: when present in postholes or isolated pits containing large amounts of pottery, spindle whorls and loom weights are sometimes considered to be part of special depositions (Gerritsen 2003, 97; Taayke 1993). Their meaning as part of such deposits is often sought in representing domestic activities (*i.e.* ceramic and textile production), in a practice of deposition that has been related to the ‘house life’-model (Van den Broeke 2002; Gerritsen 2003, 50; De Vries 2015; De Vries 2016).

Spindle whorls and loom weights have been given limited regard otherwise. Why then, should we consider these objects to be of special importance? The Bronze Age and Iron Age are both periods in which significant social change appears to take place. Textile production and its associated artefacts take on an important position within these broader socio-cultural developments. Not only does textile production require considerable time, energy and material investment – it would also have been an intrinsic part of daily life (Bergerbrant 2008). In an attempt to shed light on this part of late prehistoric life, this study will provide an insight into the distribution and treatment of ceramic artefacts related to textile production in the Dutch Bronze and Iron Age. How and why have these artefacts ended up where we find them?

Easily recognized, easily discarded: considering textile-related ceramic artefacts

To understand the contexts the whorls and weights ended up in, it is important to briefly examine the *chaîne opératoire* that preceded their ultimate incorporation into the archaeological record. At the start of the entire production process lies the sourcing and harvesting of raw material needed for making textiles. Both plant fibre (nettle, hemp, flax) as well as animal fibre (wool) was used during the Bronze and Iron Age (Belanová-Štolcová & Grömer 2010; Grömer 2010, 326; 346; Rast-Eicher 2005). Both types of fibre need extensive pre-treatment in the form of washing and combing (wool), or retting and hackling (plant fibre). The fibres are then spun into thread with a spindle, a tool consisting of a stick and a heavier spindle whorl, which uses gravity and centrifugal force to strand the fibres together into string (Bender Jørgensen 2012). One spindle only needs a single spindle whorl, meaning that one expects to find just a single whorl in a functional context.

When the thread has been spun it can be woven into a piece of fabric with the use of a weight-warped loom (Rast-Eicher 2005, Bender Jørgensen 2012). This contraption uses multiple clay loom weights to put tension on vertical threads, while another thread is woven through horizontally. Since one loom needs multiple weights, we would expect to find a series of these artefacts when encountering an *in situ* weaving site, as weaving is most often restricted to one place – the location of the loom. Spinning, on the other hand, can be a highly *mobile* activity (Bender Jørgensen 2012, 129).

Both spinning and weaving are time-consuming processes, and they would have been continuously present among other daily household chores. It should therefore come as no surprise that we encounter remains of these domestic activities in the archaeological record.



Figure 1. Left: two examples of loom weights recovered during archaeological evaluation accompanying the Betuwelijn railroad construction (from: Schutte & Vermeer 2002, 34 fig. 39). Right: loom weights hanging from a warp-weighted loom in a reconstructed Iron Age farmstead in Dongen, the Netherlands (picture: Simone Bloo, 2020).

“They just roll around the settlement”, or why context matters

“Spindle weights are often lost as the women follow flocks on rocky trails or visit about the village, which may account for ancient stone and clay whorls being found in the most unexpected places. The simple potato is more easily replaced than the hand-carved wooden whorl.” (Koster 1976, 35).

The treatment of objects is of equal importance to their creation. Cultural tradition is not limited to the production and use of material goods, but also includes the practice of *discarding*, by which an object is essentially taken out of circulation. The recovery context of artefacts is one indicator of this process; we thus need to consider the meaning of context if we want to investigate the way (textile-related) artefacts were treated in the past. In this paper three approaches to the depositional setting are discerned: 1) the material condition of the object, 2) the distinction between wet and dry contexts, and 3) the categorization of refuse/special deposit/functional contexts. Each of these categories is linked to the identification of specific intentional behaviour, which underlies any conclusion we can draw on the meaningful treatment of material culture.

Fragmentation and firing are the most telling indicators of deliberate manipulation of objects, both of which have been considered previously in the context of Bronze and Iron Age society: traces of (secondary) burning on objects without an indication of fire *in situ* are associated with ideas of destruction and ending the life-cycle of an object (De Vries 2015, 79; Fontijn et al. 2013, 296-299), as are indications of deliberate fragmentation. It is, however, extremely difficult (if not impossible) to determine whether fragmentation is the result of deliberate breaking and whether the extent of ceramic re-heating does indeed warrant an interpretation as secondary firing. The presence of

such manipulated finds in pits or postholes is nevertheless one of the criteria by which abandonment deposits are identified (Van den Broeke 2015).

A second distinction that is applied to the treatment of material culture, is that of dry versus wet recovery contexts. De Vries (2015, 77-78) has, for the *Fries-Drents Plateau*, indeed managed to identify patterns in Iron Age depositions that show differences between wet and dry contexts. It is therefore worthwhile to see whether these different life-paths are also reflected when singling out textile-related artefacts specifically. For the current study, the distinction between wet versus dry context is limited to the settlement context, with wells and ditches as typical wet contexts (and postholes and pits as dry contexts). A wet context in this study hence does not pertain to creeks or lakes in the wider landscape.

Finally, we distinguish types of intention behind their deposition: special or ritual deposits (foundation or abandonment deposits), refuse discard, and the strictly 'functional' (*i.e.* the remains of loom weights where a loom used to stand) primary context. A spindle whorl that is found in a posthole, for instance, might be put there deliberately (as part of a ritual deposition) or could have ended up in the feature by accident (as a result of sweeping the floor, or falling from the spindle during the activity of spinning). We may regard the former in some ways as more meaningful interaction with the object, whereas the latter can be considered less telling of the importance of textile-related artefacts.

What we would expect to see archaeologically in each case, however, continues to be a point of contention among specialists. Taking again the example of an object in a posthole, some researchers propose an interpretation of intentional deposition (on the basis of strict criteria; Van den Broeke 2015) whilst others argue in favour of a rubbish-related explanation (and thus against the suggestion of the abandonment deposit, Fokkens (2019); see also the experimental work by Reynolds (1995)). This paper does not aim to solve this discussion, though it is important to take into account the occurrence of (repeated) patterns that might indicate intentional behaviour. So where then do we actually find these textile-related artefacts, and why did they end up there?

Where do whorls and weights end up?

Data selection

To understand patterns in the occurrence of textile-related ceramic artefacts, a selection was made of published sites suitable for further analysis (limited to settlements and urnfields). The sites were selected on the basis of their dating (Bronze Age and/or Iron Age) as well as the presence of one or more listed spindle whorls and/or loom weights. Finds without a documented context were omitted. The appendix to the master's thesis by Karen de Vries (2015) as well as the site catalogue from the dissertation by R. M. van Heeringen (1992) yielded the bulk of the data. In addition, the Dutch national archaeological database Archis 3 was queried for suitable contexts². Overall

2 Archis was queried for the following criteria: keywords 'spinklos' & 'weefgewicht' in combination with the search criterion CHO ('cultuurhistorisch object') for datering 'Bronstijd' and 'Ijzertijd'. Finds from non-archaeological projects (without a clear context) were excluded from the selection.

this has resulted in a list of 121 find contexts from 72 different archaeological sites (see: Appendix 1).

The site of Oss-Ussen (Schinkel et al. 1998) has moreover been treated as a comparandum, providing a large amount of finds and find contexts that are relatively well dated. In the current analysis this site provides the opportunity to compare the overall variety of archaeological contexts with the occurrence of textile-related artefacts in a single settlement context.

Analysis and results

For each data point the following variables were considered: the presence of material other than textile-related ceramics, the archaeological context (and whether this could be considered wet or dry, outside natural places) and the presence or absence of fragmentation.

The dataset as a whole shows the presence of whorls and weights in a variety of contexts (fig. 2). Artefacts are most often found in pits, frequently in association with other finds. While there appears to be a difference in the amount of studied objects inside and outside (or in association with) house plans, the association of pits to contemporary house plans is difficult to ascertain. Any meaning that would be derived from this supposed association is thus equally uncertain. Interestingly, the variety within the settlement of Oss-Ussen appears to be more limited, not showing the full range of possible contexts.

A second large category consists of finds from postholes (that are part of a structure). In at least eight instances the finds consist of just a single spindle whorl, while in three cases (fragments of) a loom weight is the only find. When combined with other materials such as sherds or even complete storage vessels, these artefacts may reflect intentional deposits. Whether this is also the case for the individual finds, is much harder to infer (*supra*).

A relatively small number of finds is associated with graves or (urnfield) ditches, including two instances of singular spindle whorls in ditches from Someren-Waterdael (Kortlang 1999, 155) and fragments of a loom weight in a ditch surrounding a grave from Lomm-Hoogwatergeul (Gerrets & De Leeuwe 2011, 134). When encountered as part of a broader assemblage of grave goods, spindle whorls and loom weights may be interpreted as being representative of domestic activities during life. The individual whorls from Someren-Waterdael (Kortlang 1999, 155) are more challenging to interpret – would they have been lost while spinning in an urnfield, or is it more likely that the objects were intentionally deposited in the ditches?

Examples of a complete set of loom weights *in situ* are rare: a supposedly complete set of at least 15 weights accompanied by some pottery sherds was found in a pit at Zutphen-Looërenk (Bouwmeester et al. 2008, 231-233), and two similar deposits are known from Zutphen-Voorsterallee (Fermin 2011, 33). Evidence of a location where spinning took place is even harder to come by: a number of spindle whorls found around the hearth area of a farmstead in Rockanje (Van Trierum 1992, 81) might at least point towards the domestic context of spinning. As spinning can be a highly mobile activity, however, finds of individual spindle whorls (without association to other objects) on living surfaces might also fit this interpretation (though such finds were not included in this research).

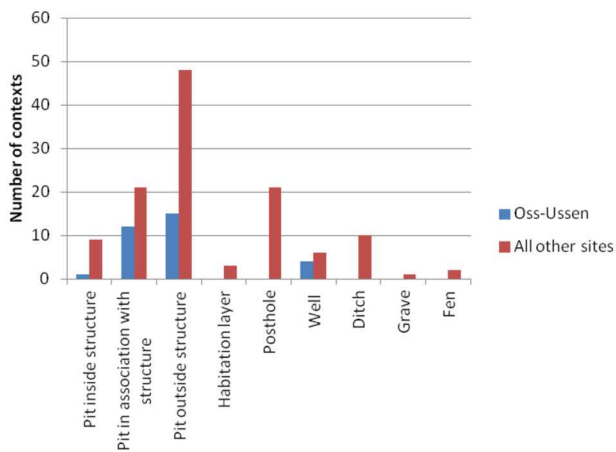


Figure 2. The overall variability of archaeological contexts (N=121) from which spindle whorls and loom weights have been recovered, compared to the range of contexts in which these artefacts were found on the well-documented site of Oss-Ussen.

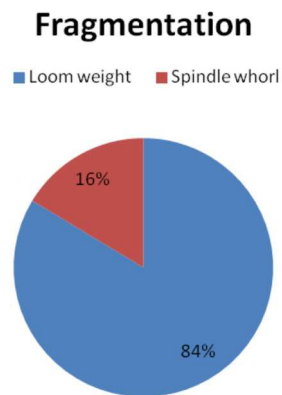


Figure 3. Occurrence of fragmentation (Ntotal=55) in loom weights and spindle whorls.

A clear distinction in material treatment can be seen when looking at the presence of fragmentation: loom weights are found broken much more often than spindle whorls (fig. 3). Rather than being a culturally meaningful distinction, however, this appears to be the result of a difference in material properties. Loom weights, both larger in surface and more fragile than spindle whorls, may be expected to break more easily. In terms of intentionality, the fragmentation of spindle whorls is actually more indicative of a conscious effort to break the object.

Accounting for the significant difference between the amount of dry and wet contexts in our dataset (the latter being much more sparse), the deposition of loom weights and spindle whorls does not appear to be confined to either type of context (fig. 4). However, this has not taken into account the association with other objects; in the extensive analysis of De Vries (2015, 77-78) this association turned out to be essential to reveal subtle patterns in deposition choices.

A wide-ranging role for small artefacts: creating room for new interpretations

While most often discussed in the light of prehistoric textile production, this paper has focused on loom weights and spindle whorls as tentative indicators of (a) textile production, (b) discard behaviour and (c) agency in special deposits, by examining the variety of archaeological contexts they are found in. Using the framework of existing ideas on Bronze and Iron Age deposition and the treatment of material culture, 121 archaeological contexts from the Netherlands containing spindle whorls and/or loom weights were analysed. Two main patterns can be observed: first of all there is seemingly no avoidance or preference of certain deposition locations when it comes to textile-related artefacts. Secondly, the large variety of contexts that the artefacts are found in cannot be explained solely by their role in textile-production nor as (indicators of)

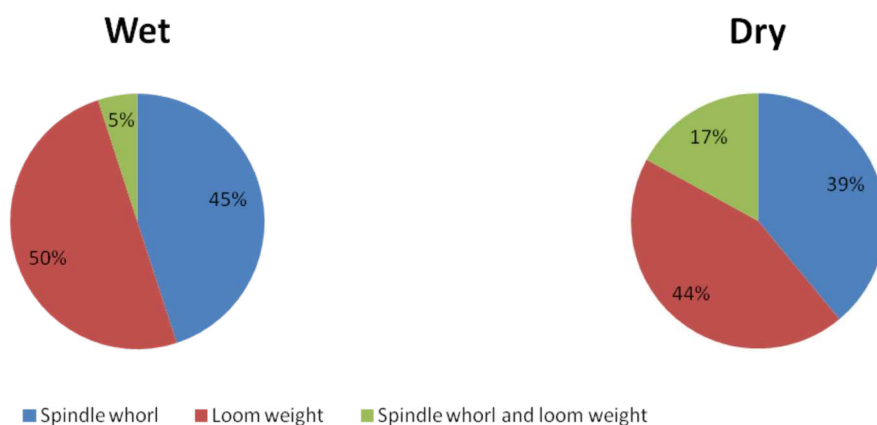


Figure 4. The ratio of dry (N=100) versus wet (N=20) (settlement) contexts from which spindle whorls, loom weights or both artefact types were recovered.

structural depositions. In addition, evidence for *in situ* textile production with clay objects is actually quite sparse.

What do these patterns tell us? Starting with the second observation, the absence of *in situ* remains of textile production might well be the result of the physical and portable nature of the artefacts; loom weights often remain unfired and thus may have disintegrated over time. Moreover, since the abandonment of a settlement would often not have been sudden (*i.e.* not catastrophic), there would have been little reason to leave a fully equipped loom behind. In the Bronze and Iron Age context of the deliberate treatment of artefacts it certainly makes sense for a loom to be carefully dismantled.

The broad variety of find contexts may be the result of the artefacts taking on a different role depending on their context. While we now see no apparent difference between a spindle whorl on a spindle and one in a posthole, they may in the past have been considered two different object(type)s. There would have been no need for the avoidance of contexts, then, due to the context-specific ‘identity’ of an object. This may also explain part of the occurrence of fragmentation: if the identity of an artefact is reliant on its context, its material ‘form’ may be equally context-dependent. Half of a spindle whorl or a single loom weight could be more than sufficient (or even essential) to represent the original household in an intentional deposition. Perhaps breaking the object would have been a prerequisite to obtain its new role.

This paper has aimed to be a starting point for further research – the full range of approaches to this topic has clearly not been exhausted. Quantitative analysis overlooks the subtle variation sometimes present among the different contexts. It is certainly worthwhile to take a closer look at some of the more ‘unique’ observations, for instance the contexts which have been interpreted as *in situ* evidence of textile production (*i.e.* Colmschate-Holterweg (Hermsen & Haveman 2009) and Zutphen-Looërenk (Bouwmeester et al. 2008)). Additional well-documented sites like Oss-Ussen should moreover be compared to single-context observations, to get a better grip on the full variation of object-treatment in one settlement context. In addition, spindle whorls

made from perforated sherds, so-called ‘*spinschijfjes*’, can be added as a third category of artefacts.

For now it is safe to say that whorls and weights occupied places and carried meaning other than placed on the spindle, or the loom. When encountering these artefacts, we are not just looking at the remains of prehistoric textile production – we are instead confronted with the range of ways in which a single object could be treated. Their role was not limited to the production of textile, but comprises a noteworthy variety of context-specific functions.

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Appendix 1

Site	Finds			Context	Dating	Fragmentation	Dry or wet context	Reference
	Spindle whorl	Loom weight	Other					
Arnhem-Schuytgraaf		x		From pit	MIA-LIA	Yes	Dry	Delaruelle et al. 2007
Bergerden	x			From posthole	EIA		Dry	Hermesen 2008
Borger-Daalkampen II	x		At least 7 different storage vessels	From posthole in a group of non-associated postholes	MIA-LIA		Dry	De Wit et al. 2009
Borger-Daalkampen II	x			From posthole associated with granary	IA		Dry	De Wit et al. 2009
Borger-Daalkampen II	x		1 bowl, 1 small vessel, at least 1 storage vessel	From isolated pit	EIA		Dry	De Wit et al. 2009
Borger-N34	x		1 bowl, at least 2 storage vessels	From isolated pit	EIA-MIA		Dry	Kooij & De Wit 2003
Boxmeer-Sterckwijck		x	319 sherds, stone fragments	From storage pit next to farmstead	MIA	Yes	Dry	Blom & Van der Velde 2015
Boxmeer-Sterckwijck	x	x	165 sherds, a bronze bracelet	From pit next to farmstead	MIA	Yes	Dry	Blom & Van der Velde 2015
Boxmeer-Sterckwijck	x	x	Charred barley, more than 300 sherds	From storage pit next to farmstead	MIA	Yes	Dry	Blom & Van der Velde 2015
Boxmeer-Sterckwijck		x	Charcoal, 275 sherds	From pit	MBA	Yes	Dry	Blom & Van der Velde 2015
Breda-West	x	x	Burnt loam, sherds	From waste pit	EIA-MIA		Dry	Koot & Berkvens 2004
Breda-West	x		Sherds, flint fragments, fragments of quern	From 'basement pit'	EIA		Dry	Koot & Berkvens 2004
Breda-West	x	x	Sherds	From waste pit	EIA-MIA		Dry	Koot & Berkvens 2004
Catsop-Hoogenbosch		x	Pottery, loam	From deep pit	MIA		Dry	Van Hoof 2000
Catsop-Hoogenbosch		x	1 (upside-down) vessel, large amount of loam, sherds	From pit surrounded by a ring of heavy stones	EIA-MIA		Dry	Van Hoof 2000
Colmschate	x	x	776 sherds, 3.7 kg of burnt loam, 6.8 kg of stones (many fire-cracked), bronze spiral hair-ring	From pit next to farmstead	EIA	Yes	Dry	Groenewoudt & Verlinde 1989
Colmschate-Holterweg	x		More than 100 sherds	From storage pit	EIA	Yes	Dry	Hermesen & Haveman 2009

Site	Finds			Context	Dating	Fragmentation	Dry or wet context	Reference
	Spindle whorl	Loom weight	Other					
Colmschate-Holterweg		x	Sherds	From storage pit	EIA	Yes	Dry	Hermesen & Haveman 2009
Colmschate-Holterweg	x	x	Three fragments of burnt loam, sherds, bog iron/slag	From pit (interpreted as warp-weighted loom pit)	EIA		Dry	Hermesen & Haveman 2009
Colmschate-Holterweg		x	More than 2000 sherds	From well	EIA	Yes	Wet	Hermesen & Haveman 2009
Colmschate-Holterweg		x	More than 300 sherds	From well	EIA		Wet	Hermesen & Haveman 2009
Colmschate-Swormink		x	One large rim sherd	From pit	EIA		Dry	Bosch et al. 1997
Culemborg-Hoge Prijs		x		From pit	EIA-MIA		Dry	Verhelst et al. 2017
Culemborg-Hoge Prijs	x			From posthole	LBA-EIA		Dry	Verhelst et al. 2017
Culemborg-Hoge Prijs		x		From posthole	EIA/MIA	Yes	Dry	Verhelst et al. 2017
Dalen-Aardgasleiding I	x		At least 8 storage vessels, fragments of quern	From isolated well	EIA-MIA		Wet	Krist 1988
Dalen-Aardgasleiding II	x		At least 7 storage vessels, fragments of 2 querns	From isolated pit	MIA-LIA		Dry	Krist 1988
Den Haag-Oude Waalsdorperweg Hubertustunnel		x		From pit	BA	Yes	Dry	Bulten 2007
Den Haag-Oude Waalsdorperweg Hubertustunnel		x	70 sherds, 48 stones, 6 pieces of flint, one amber bead (+ small amounts of loam, charcoal and bone)	From pit	LBA-EIA	Yes	Dry	Bulten 2007
Doetinchem		x		From (hearth) pit	IA	Yes	Dry	Archis2020239100
Doetinchem-Veemarkt		x	15 small sherds	From central posthole of a hexagonal structure	IA	Yes	Dry	Pronk 2011
Driebergen-Lange Dreef		x		From entry ditch of farmstead	MIA-LIA	Yes	Wet	Schurmans & Beurden 2011
Ede-De Vallei		x		From pit next to farmstead	IA		Dry	Archis2076268100
Ede-Park Reehorst		x	193 burnt sherds	From posthole	LIA	Yes	Dry	Norde 2018
Elspeet-Uddelerweg	x			From posthole	MIA-LIA	Yes	Dry	Jager & Pronk 2011

Site	Finds			Context	Dating	Fragmentation	Dry or wet context	Reference
	Spindle whorl	Loom weight	Other					
Elspeet-Uddelerweg		x		From pit inside structure	MBA	Yes	Dry	Jager & Pronk 2011
Elspeet-Uddelerweg	x		127 sherds, 2 fragments of burnt loam	From 'basement pit'	MBA	Yes	Dry	Jager & Pronk 2011
Elst-De Merm	x		174 sherds, 1 'odd' ceramic artefact	From pit	EIA	Yes	Dry	Knippenberg & Heirbaut 2006
Emmen-Angelsloo	x		At least 1 Henkeltasse, at least 1 storage vessel	From pit	east of EIA house		Dry	De Vries 2015
Ermelo-Oude Arnhemsekarweg		x	48 sherds	From posthole	IA	Yes	Dry	Brouwer 2012
Gees	x		2 bowls, at least 7 storage vessels, large quantity of charred grain	From isolated pit	EIA-MIA		Dry	Waterbolk 1990
Geldermalsen-Hondsgemet	x			From ditch	LIA-RP	Yes	Wet	Van Kerckhove 2009
Geldermalsen-Hondsgemet	x			From ditch-layer	LIA	No	Wet	Van Kerckhove 2009
Geldermalsen-Hondsgemet		x		From posthole	LIA	Yes	Dry	Van Kerckhove 2009
Geldrop-Luchen		x	Numerous sherds, grain remains	From hearth pit	LBA		Dry	Leeuwe 2010
Geleen	x		1266 sherds, iron slag, burnt loam, 7.5 of burnt stone	From pit	late EIA		Dry	Van den Broeke 1980
Geleen-Krawinkel	x		Pottery, stone, tephrite, loam, charcoal	From pit on settlement terrain	EIA		Dry	Van Hoof 2000
Geleen-Krawinkel		x	Pottery, stone, charcoal	From pit on settlement terrain	EIA		Dry	Van Hoof 2000
Goirle-Huzarenwei	x	x	Many sherds, stone, burnt loam, charcoal	From pit	EIA	Yes	Dry	Dyselinck 2006
Groningen-De Linie	x		Storage vessels	From isolated pit	EIA		Dry	Daleman 2007
Groningen-De Linie	x		Storage vessels, wood that was part of a construction, ard share	From pit nearby a granary	MIA		Wet	Daleman 2007
Groningen-De Linie	x		At least 1 storage vessel	From pit nearby a granary	LBA-EIA		Dry	Daleman 2007
Helden-Plangebied Keup	x			From posthole	IA		Dry	Kimenai & De Winter 2010

Site	Finds			Context	Dating	Fragmentation	Dry or wet context	Reference
	Spindle whorl	Loom weight	Other					
Hijken-Hijkerveld	x		At least 6 storage vessels	From pit next to farmstead	EIA-MIA		Dry	Arnoldussen & De Vries 2014
Hijken-Hijkerveld	x		At least 5 storage vessels	From pit next to outbuilding	EIA-MIA		Dry	Arnoldussen & De Vries 2014
Hijken-Hijkerveld	x			From posthole	EIA-MIA		Dry	Arnoldussen & De Vries 2014
Hijken-Hijkerveld	x		At least 1 storage vessel	From posthole	MIA-LIA		Dry	Arnoldussen & De Vries 2014
Hijken-Hijkerveld	x		4 bowls, 5 small cups, at least 32 storage vessels	From pit next to farmstead	EIA-MIA		Dry	Arnoldussen & De Vries 2014
Hijken-Hijkerveld	x		4 bowls, 1 Henkeltasse, at least 46 storage vessels	From pit next to farmstead	EIA-MIA		Dry	Arnoldussen & De Vries 2014
Houten-Castellum		x	53 sherds, 68 bone fragments, a metal object, 4 stone fragments, burnt loam	From ditch	MIA	No	Wet	Van Renswoude & Habermehl 2017
Houten-Castellum		x	Partial pig skeleton, 1 complete vessel	From pit	MIA	No	Dry	Van Renswoude & Habermehl 2017
Houten-Castellum		x	2 metal objects, 247 sherds, 114 bone fragments, 6 stone fragments, 7 pieces of burnt loam	From ditch	MIA	Yes	Wet	Van Renswoude & Habermehl 2017
Houten-Castellum		x	1150 sherds, 593 bone fragments, 2 pieces of glass, 2 metal objects, 49 stone fragments	From ditch	LIA	Yes	Wet	Van Renswoude & Habermehl 2017
Houten-Castellum	x		273 sherds, a human skull, a sheep/goat skeleton	From pit	MIA-LIA	No	Dry	Van Renswoude & Habermehl 2017
Ingen	x		Locally made pottery	From ditch	LIA	Yes	Wet	Archis2327002100
Leersum-Middelweggebied		x		From spieker	MIA	Yes	Dry	Tump 2014
Leggeloo	x		1 bowl, at least 14 storage vessels	From isolated pit	EIA-MIA		Dry	Van Giffen 1935
Lent-Dijkteruglegging	x	x		See publication	EIA, LIA, ERP			Heirbaut & Koot 2016
Lienden		x	1 kg of pottery	From posthole	EBA-MBA	Yes	Dry	Ufkes 2002
Liessel-Willige Laagt	x	x		From pit inside structure	EIA	Yes	Dry	Witte 2012

Site	Finds			Context	Dating	Fragmentation	Dry or wet context	Reference
	Spindle whorl	Loom weight	Other					
Lochem	x		1 sherd	From posthole	IA		Dry	Archis2325829100
Lochem	x			From well	EIA-MIA	Yes	Wet	Archis2325829100
Lochem		x	Sherds	From well	MIA-LIA	Yes	Wet	Archis2325829100
Lomm-Hoogwatergeul		x	Several sherds	From inner ditch belonging to grave	EIA-MIA	Yes	Wet	Gerrets & De Leeuwe 2011
Maastricht	x		1871 sherds, copper ring, 'countless' fragments of burnt loam	From pit	MIA		Dry	Dijkman 1989
Maastricht-Heukelstraat		x		From pit	IA		Dry	Hendrikk & Torremans 2007
Malden-Broeksingel		x	Sherds and 73 sling bullets	From pit inside structure	MIA	Yes	Dry	Schurmans 2011
Malden-Broeksingel	x		119 sherds, complete quern, fragment of a glass bracelet	From pit	MIA-LIA		Dry	Schurmans 2011
Malden-Broeksingel		x	Burnt sherds, perforated vessel bottom	From posthole	IA	Yes	Dry	Schurmans 2011
Malden-Broeksingel		x	Burnt sherds	From 'excavation pit' of posthole	IA	Yes	Dry	Schurmans 2011
Meteren-De Bogen		x		From pit, cross-cut by house plan	MBA	Yes	Dry	Hielkema et al. 2002
Meteren-De Bogen		x		From post-pipe in posthole	MBA	Yes	Dry	Hielkema et al. 2002
Molenaarsgraaf		x	Lump of potting clay	From pit on settlement terrain	LNEO-EBA	Yes	Dry	Louwe Kooijmans 1974
Neer		x	Hundreds of sherds, charcoal	From pit	EIA/MIA		Dry	Stoepker 1987; Smeets 1987
Nijmegen-Lent		x	All finds in large storage jar: broken quern, bronze ring, fragment of flint sickle	From pit	EIA		Dry	Van den Broeke 1999
Nijmegen-Noord		x	Remains of other ceramic objects	From drinking pit	EIA	Yes	Wet	Daniël & Van den Broeke 2012
Nijmegen-Noord	x		Some sherds	From posthole	EIA		Dry	Daniël & Van den Broeke 2012
Ooijen-Wanssum-Vindplaats 11	x		40 kg of pottery belonging to 19 vessels	From pit	MIA	No	Dry	Bloo 2019

Site	Finds			Context	Dating	Fragmentation	Dry or wet context	Reference
	Spindle whorl	Loom weight	Other					
Oss-Horzak	x	x	35 kg of highly fragmented pottery, several complete (broken) pots, wooden lid, wooden handle	From pit	EIA/MIA		Dry	Jansen & Fokkens 1999
Pesse-Eursinge	x		1 bowl, at least 1 storage vessel	From isolated pit	EIA-MIA		Dry	Lanting 1977
Pesse-Fluitenberg	x			From posthole not associated with structure	IA		Dry	Schrijer & De Neef 2008
Ravenstein	x	x	All finds in large vessel: hundreds of sherds	From pit	EIA		Dry	Verwers 1990
Riethoven	x	x	Whetstone, pottery, charred wood and charcoal	From large pits inside and next to two farmhouses	EIA		Dry	Slofstra 1991
Rockanje	x	x		Distributed throughout house plan, mainly in the half occupied by the hearth			Dry	Van Trierum 1992
Rosmalen	x	x	1 tephrite loom weight	From two postholes opposite each other ('middenstaanders')	MIA		Dry	Koning & Vaars 2003
Schipperskerk		x		From pit	IA		Dry	Geraeds 2012
Someren-Waterdael	x	x	1 complete vessel, over 1500 sherds belonging to more than 100 vessels	From pit inside structure			Dry	Kortlang 1999
Someren-Waterdael	x			From circular ditch on urnfield	IA		Wet	Kortlang 1999
Someren-Waterdael	x			From circular ditch on urnfield	IA	Yes	Wet	Kortlang 1999
St.-Oedenrode-'Haagakkers'	x		Pottery	From a grave	LBA		Dry	Van der Sanden 1981
Tynaarlo		x	1 fragmented quern, at least 1 storage vessel	From isolated pit	MIA		Dry	Van der Sanden 1994
Udenhout-Schoorstraat		x	201 sherds	From fen	IA	Yes	Wet	Archis2341072100
Udenhout-Schoorstraat		x	16 sherds	From well	MIA	Yes	Wet	Archis2341072100
Vlaardingen-Vergulde Hand	x	x		From farmstead house plans	MIA-LIA	Yes	Dry	Eijskoot et al. 2012

Site	Finds			Context	Dating	Fragmentation	Dry or wet context	Reference
	Spindle whorl	Loom weight	Other					
Weerselo-Rondweg		x	Sherds, burnt stone	From hearth pit	MIA		Dry	Huisman 2008
Weert-Kampershoek		x	1461 sherds (some burnt), 17 stone fragments	From pit	EIA-MIA	Yes	Dry	De Boer & Hiddink 2015
Weert-Kampershoek	x		96 sherds, fragment of burnt loam	From pit	EIA		Dry	De Boer & Hiddink 2015
Weert-Kampershoek		x	One hammer stone, 33 sherds (some burnt)	From pit	EIA-MIA	Yes	Dry	De Boer & Hiddink 2015
Weert-Kampershoek		x	40 sherds belonging to 1 vessel	From pit	EIA-MIA	Yes	Dry	De Boer & Hiddink 2015
Weert-Kampershoek		x	286 sherds	From pit	EIA-MIA	Yes	Dry	De Boer & Hiddink 2015
Wijchen-Bijsterhuizen	x		817 sherds, quern fragments	From pit inside structure	MIA	Yes	Dry	Schurmans 2017
Wijndaelerplantsoen	x		2 (almost) complete vessels, two mandible fragments sheep/goat, charred cereal grains	From pit	LIA		Dry	Stokkel 2012
Zeijen-Es	x		1 hammer stone, 3 bowls, half of a barely used quern, at least 12 storage vessels	From isolated pit	EIA-MIA		Dry	Waterbolk 1961
Zutphen-Looërenk		x		From pit next to farmstead	Second half MBA (1515-1437)	Yes	Dry	Bouwmeester et al. 2008
Zutphen-Meijerink	x	x	Pottery, quern fragments	From fen next to urnfield (at distance from settlement)	MIA-LIA	Yes	Wet	Van Straten & Fermin 2012
Zutphen-Voorsterallee		x	Granite tempered sherds, fragments of tephrite quern	From pit near house entrance	EIA	Yes	Dry	Archis2286099100
Zutphen-Voorsterallee		x	Iron-tempered sherds	From pit	IA	Yes	Dry	Archis2286099100
Zutphen-Voorsterallee		x	1 burnt sherd	In front of house entrance	EIA	Yes	Dry	Archis2286099100
Zutphen-Voorsterallee		x		From pit near house entrance	EIA	Yes	Dry	Archis2286099100
Zutphen-Voorsterallee		x	WKD pottery	From pit near house entrance	EBA	Yes	Dry	Archis2286099100