Davy Herremans

Holy vows, worldly manners

Monastic space, consumption practices and social identity
in the Cistercian nunnery of Clairefontaine

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*Monastic space, consumption practices and social identity
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Thesis presented for the degree of
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Johnny De Meulemeester at Clairefontaine during the summer of 2006, instructing his staff-members on site (Davy Herremans)

First and foremost, my thoughts go to the late Johnny De Meulemeester, professor in medieval archaeology at Ghent University who was for me and for many other students much more than an inspiring mentor. He had a great belief and trust in my skills as a

researcher and, as initial promoter of my thesis, he guided me on my first steps into the academic world. I wish to dedicate this thesis to the memory of Johnny, knowing that he would probably agree with me on much of the work, but would certainly have had some objections or critical remarks on other parts.

Just as much I would like to thank my two adoptive promoters, Prof. dr. Jean Bourgeois and Prof. dr. Wim De Clercq. The first was found willing to take up the unexpected role of temporary promoter after the death of Johnny De Meulemeester in 2009. He gave me advice when possible and showed me the way through academic bureaucracy. I'm grateful to Wim De Clercq for many reasons. Despite the advanced stage of the research project, he was thankfully willing to take over promotorship in 2011 shortly after his appointment as professor of Historical Archaeology, which was a duty he performed with much enthusiasm and energy: the inspiring talks we had undoubtedly shaped my views on material culture and contributed fundamentally to the content of this thesis.

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Preface

Of funding and supervisors…

The research project was set up as a close collaboration between the *Musée National d'Histoire et d'Art Luxembourg* (Christina Bis-Worch) and the Department of Archaeology of Ghent University (Johnny De Meulemeester), with the latter providing the role of Host Institution. Research was initiated under the supervision of the late Prof. dr. Johnny De Meulemeester, lecturer in medieval archaeology at Ghent University. After his early and unfortunate death (17/01/2009) the supervision of the research project was taken over temporarily by Prof. dr. Jean Bourgeois, head of the Department of Archaeology. On 01/10/2011, after a long vacancy, Prof. dr. Wim de Clercq was appointed as successor of Johnny De Meulemeester at the Department of Archaeology and was willing to take over the supervision of the on-going research project

The *Département du Patrimoine de la Région walonne* supported research on the Clairefontaine find collection and the Walloon district provided additional funding for the study of the animal and plant remains.

Less is more: transforming research directions

The initial project proposal focussed on the etic analysis and comparative study of the finds of three monastic sites in the Luxembourgian area. Two out of the three monasteries were located in the city centre of Luxembourg (GDL) and were excavated by the *Musée National d'Histoire et d'Art Luxembourg*. The *Heilig-Geist-Kloster*, populated by Clares, was the subject of archaeological research (1996, 2001 and 2003 under the direction of Christiana Bis-Worch), preceding the construction of a new Court of Justice on Plateau Saint-Esprit (Bis-Worch 2011). The Bendedictine male abbey of Neumunster was located in the city quarter of the Grund and partially excavated in the period 1992-1993 when the remaining monastery buildings were transformed into a cultural center. The archaeological follow up was done by Johnny De Meulemeester on behalf of the *Musée National d'Histoire et d'Art Luxembourg* (De Meulemeester 1999b).The third site, the nunnery of Clairefontaine, was located in the Belgian province of Luxembourg, a few kilometers south of the town of Arlon (B) and has been the subject of a series of programmed research excavations between 1997 and 2007. The direction of the project was carried by Johnny De Meulemeester and mainly funded by the *Département du Patrimoine de la Région walonne.*

The material record of Neumunster and Saint-Esprit excavations was explored by the author during a five month stay at the *Musée National d'Histoire et d'Art Luxembourg* (01/04/2007-31/09/2008, funded by the travelling grant scheme of the *Fonds voor wetenschappelijk onderzoek Vlaanderen* - FWO Flanders, reference : V 4/155-6029). Because of less than ideal conservation conditions, the mobile finds of Neumunster abbey could no longer be linked to the excavation archives, stratigraphical sequences, and site chronology, and were therefore of limited value for further research[1]. This was an unforeseen and disappointing finding, since together with the material record of Clairefontaine, the find collection of Neumunster was thought to be the most ample and therefore vital for further comparative study. The material record of the excavations on the plateau of Saint-Esprit was extensive, well-documented and well-preserved. Yet,

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[1] Mobile finds were stored for several months in a container on the site. Rain and humid storage conditions, erased to a large extend all stratigraphical information on the cardboards enclosed to the find assemblages. The few find assemblages of which the stratigraphical position could be restored, belonged to archaeological features which were not related to the monastery (amongst others an 16th century urban quarter, the medieval hospital of Saint-John and its grave yard and an 18th century prison).

because of the destructive character of post-suppression site activity, few archaeological find assemblages related to the habitation phase of the convent could be recovered[2].

These unexpected challenges, sketched here in brief, forced the research project into a new direction, and placed a focus on the case study of Clairefontaine. New research directions were set that aimed on a more holistic and in-depth assessment of female monastic life during the Late Middle Ages and Early Modern Times, through a detailed and cross-disciplinary study of the architectural setting, material culture and consumption practices in the Cistercian community at Clairefontaine.

Structure of the thesis

Conforming with the Ghent University Arts & Philosophy faculty regulations on PhD structure (last adapted version of 23-03-2013), parts of this thesis have been published or are accepted to feature in international peer-reviewed journals. The thesis is divided into three parts and consists of eight chapters in total. Paragraph 1.3.1 of chapter 1 is part of a manuscript accepted for publication in an international peer-reviewed journal included in the ISI Web of Science. The contents of the four other chapters (Chapter 2, 4, 5 and 6) are either fully published or accepted for publication in an international peer-reviewed journal or conference proceeding included in the ISI Web of Science. The content of one chapter is submitted for publication to an international peer-reviewed journal included in the ISI Web of Science (Chapter 7), while the content of another is accepted for publication in an international peer-reviewed journal included on the Flemish VABB- academic journal list (Chapter 3). The content of the published or submitted chapters (or part of chapters) is largely unaltered, except from the update of certain research results as dictated in faculty regulations. The content of Chapter 2 was originally published in French and had to be translated into English. Chapter 6 was originally published in Dutch. Besides these seven chapters, some final thoughts and future research perspectives were added (Chapter 8).

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[2] Illustrative for this finding is the fact that more than 50% of the ceramic collection was recovered from a deep demolition layer that dates after the suppression of the abbey, and can be linked to the building activities of the French military during the late 17th century.

Broader perspective to case in point

The first part, consisting of two chapters, will serve as the introduction and framework for the rest of the thesis.

Chapter 1 (*Introduction*) is the introduction to the thesis. At first a brief introduction into the subject is given, paving the road for the research objectives. Subsequently the researcher's view on material culture, human practice and social identity formation are outlined. Keeping the research objectives and theoretical framework in mind, a research methodology was formulated. Finally the material data set is presented in all its strengths and weaknesses. This final part gives equal attention to the selection of data made and the research focus that resulted from this selection.

Chapter 2 (*Building and rebuilding: an archeo-historical analysis of monastic architecture in Clairefontaine (13th to 18th century*) present the history and building chronology of the site. This chapter discusses the relative chronology of the architectural remains, linked to site history, wider historical events, and the social practices of the communities inhabitants, patrons and lay benefactors. Furthermore, monastic architecture is situated within the broader context of female monastic life in the Low Countries during the Late Middle Ages and Early Modern Times. This article plays a key role in the thesis, serving a dual purpose:

1) The chapter serves as a site-specific chronological framework and consequently as a guide for the other chapters in this thesis.

2) The chapter serves as a broader social and historical framework for interpretation, since the site of Clairefontaine is discussed within the context of female monastic life in the Low Countries.

From etic to emic…

Richard Grassby differentiates between etic and emic analysis of material culture and cultural space. Both can be studied by their objective attributes (etic) or for their significance to those who used them (emic) (Grassby 2005, 592). Before undertaking an emic study, a thorough etic analysis is needed in order to turn raw archaeological data into historical information. A wide gap lies, between the recovering of archaeological finds from the underground and the final interpretation. The four chapters in this second part give an insight into this trajectory.

Chapter 3 (*What's cooking behind the curtain? a cross-disciplinary perspective on the late medieval kitchen complex of the Cistercian nunnery of Clairefontaine*) deals with

aspects of material culture, architecture and consumption practices of the community during the Late Middle Ages and the first half of the 16th century. The excavation campaigns of 2004 to 2007 revealed a well preserved part of the late medieval monastic complex located rather independently west of the conventual buildings. The oldest structures were part of the initial monastic settlement and stayed in use as a kitchen- and reception area until the 16th century when they were rearranged as private quarters for abbes, Cathérine of Berentzheim. The chapter consists of an etic analysis of architecture, material culture, animal bones and plant remains, followed by a brief social interpretation.

Chapter 4 (*Composition and state of alteration of the 18th century glass from the Cistercian nunnery of Clairefontaine*) focuses on one category of material recovered from the 18th century latrine. Through archaeometric analysis the internal structure of the household glass is analysed. Attention is given to raw materials, technology and post-depositional processes and alteration.

Chapter 5 (*All crystal clear: 18th century glass à la façon de Bohème* from the Cistercian nunnery of Clairefontaine) builds on the findings of Chapter 4 and demonstrates how archaeometric analysis can serve for further interpretation. Technology, provenance, quality, and social meaning of a wide range of 18th century colourless glass vessels are discussed through the etic analysis of archaeometric data.

…into the nebulous concept of culture

In this last part the analytical path is left for a more interpretative approach in which the structural patterns between material culture and cultural space are organized into meaningful social relationships (Bakhtin 1981, 262). In the following chapters we try to move beyond the concrete data and grasp the more nebulous concept of culture (Grassby 2005, 592).

Chapter 6 (*The memory remains: Memoria, material culture and monastic space in Clairefontaine*) reveals the cultural biography of monastic architecture in Clairefontaine. The house was founded in the 13th century as a dynastic burial ground of the House of Luxembourg-Limbourg. The foundation served the spiritual goals of the counts of Luxembourg, but was also intend as a political statement. Monastic space and tombs soon became part of the collective memory. They acted as a *lieux de mémoire,* powerful and active symbols for dynastic identity, its territory, and its legal and political practice. Archaeology and history reveal the cultural biography of this place of memory and exhibits how until late in the Modern Times, memory was carefully maintained and managed by various social groups in order to negotiate their own social identities.

Chapter 7 (*A cup of tea in the parlour. Material behaviour, consumer practices and elite identity in the 18th century Cistercian nunnery of Clairefontaine*) examines how the 18th century religious women in Clairefontaine reproduced aspects of a noble and worldly lifestyle within the convent walls. Although they agreed on a religious life, the sisters remained in the first place noble daughters. Through a combination of archaeological and historical data it is argued that they deliberately and actively used patterns of material display and worldly consumption practices exhibited by Luxembourgian nobility to communicate their position in the world.

Chapter 8 (*Final thoughts, further research perspectives and conclusions*) comprises the final conclusions of the research. Methodology and results are concisely discussed in relation to the research objectives. The thesis concludes by expanding our research topic to suggest new perspectives for further research on the material culture and monastic space of religious women (and men).

Table of Contents

Part 1 – Broader perspective to case in point

Chapter 1   Introduction

The content of paragraph 1.3.1 of this chapter is part of a manuscript published in
Post-Medieval Archaeology

[Herremans D. / De Clercq W. 2013, The current state of Post-Medieval archaeology in Flanders, *Post-Medieval Archaeology* 74 – 1, 84-106]

1.1   Situating the research subject

1.1.1   Between heaven and earth

The 13th century is known for a marked spiritual impulse in the female branch of the Cistercian Order, which gave form to the monastic landscape of the Late Middle Ages and Early Modern Times. No less than eighty-five Cistercian nunneries were founded in the ancient Low Countries (Northern France, Belgium, Netherlands and Luxembourg) during the Late Middle Ages (Coomans 2004a; Coomans 2005). Characteristic for this spiritual movement was the strong relationship between lay benefactors or patrons and the female religious communities, a connection that was much more explicit and long-lasting than in the case of male houses. Noble families invested intensively in female monastic life: many communities were newly founded and installed on grounds endowed by the patron (Bonis et al. 2001; Röckelein 2008). But existing communities were also embraced, and thanks to the political support of the patrons they were accepted in the Cistercian Order. This complex interplay of worldly and monastic life must be situated against the broader medieval mentality and the social and spiritual worries of the feudal elite at that time.

Figure 1—1   Medieval Cistercian nunneries in the Low Countries (after Coomans 2004a, updated by Davy Herremans)

The most important trigger for the 13th century spiritual movement was without a doubt the uncertainty concerning afterlife. Death was definitely perceived differently during the Middle Ages. Today we are generally not looking forward to death because we are worried about the pain that comes with dying: physical pain and the emotional pain that comes along when saying goodbye to life, friends and relatives (Ariès 1974, 85-108). During the Middle Ages death was an accepted part of life and a stage in one's way to a final, and in the best case scenario, a heavenly destination. If medieval men and women felt uncomfortable thinking about death, it was because of the uncertainties regarding their final spiritual destinations. The gates of heaven were open only for those who had lived a 'good life' without (too much) sin. Until the 12th century it was believed that Jesus showed the way to heaven to every member of Christianity at the End of Days. From the 12th century onwards however, Final Judgement became more individualized: the soul of the deceased were judged and the good souls were sent to heaven while the bad souls received a ticket to *inferno*. It is important to stress that until the 14th century that the Final Judgement took place at the End of Days and not at the moment of dying (Ariès 1977, 109-124). In other words there was plenty of time between death and the

weighing of the soul. During this period, the souls resided somewhere between heaven (or hell) and earth in the so-called *limbo* (Ariès 1983). This interlude gave opportunities assuring a place in heaven even for those who enjoyed pleasures of earthly life too much: sins could be wiped out through prayers for the soul. The responsibility for these prayers laid mainly with the next of kin. From the Late Middle Ages onwards more and more noble and aristocratic families outsourced this responsibility by 'contracting' a monastic community to take care of the spiritual welfare of the deceased (Lauwers 1996; Lauwers 1997). This meant not only a relief for the next of kin. The deceased also took advantage: they could count on prayers of the highest quality recited by religious men and women. More people were involved and, since prayers were anchored in liturgy, there was a certain regularity in remembrance. Furthermore the names of the deceased were noted in the obituary lists of the community and passed on from generation to generation in order to assure that remembrance was maintained in the long term (*memoria eternalis*)(Trio 2010; Van Bueren 2010).

For those who could really afford it, a burial inside the convent walls was chosen. The wealthiest founded or rearranged an abbey as a dynastic burial place. During the 12th century most of the noble and aristocratic families choose to be mentioned on the obituary list of a secular chapter or on the list of one of the large male Benedictine houses. From the end of the 12th century onwards more and more families resorted for their acts of remembrance to monastic communities of the Cistercian Order (Meijns 2010), at that moment a young and rising Order with explicit links with European aristocracy (Bredero 1998). During the early 13th century, historical characters such as Elisabeth of Thüringen brought new life into female monasticism. In this period the belief developed that religious women (*mulieres religiosae*) and especially those of Cîteaux delivered the purest prayers of the highest quality (Coomans 2006; Lauwers 1996; Lauwers 1997). This idea led to an exponential growth in the female branch of the Cistercian Order during the 13th century. European aristocracy and high nobility found in these communities not only a way to deal with their worries about final destination, but equally a welcome ally in their everlasting quest for economic, social and symbolic capital. A vivid reciprocal relationship arose in which nobility offered the community along with their daughters, high dowries consisting of money, land and privileges. In return, the community offered their benefactors prestige, display and a way to preserve the families possessions from fragmentation through marriage (Hills 1999; Johnson 1991). It was highly prestigious to found a house on a well-chosen and symbolic location: a territorial and spiritual claim that embodied the political and social ambitions of the founder (Coomans 2006; Meijns 2010; Thomas 1978).

1.1.2 Between two worlds

Ties with aristocracy and high nobility gave a community prestige and a way to distinguish it from other religious houses. Due to its noble or even aristocratic identity, a convent was able to recruit from the highest levels of feudal society which subsequently further reinforced its prestigious character. Such communities were deliberately kept socially pure by high dowries (Cohn 1996). As such, many of the exclusive houses founded during the Late Middle Ages, were able to maintain their noble or at least elite character late into the Modern Era (Evangelisti 2007; Johnson 1991). Despite physical separation by the convent walls, family ties between relatives inside and outside were strong and actively maintained. Many Cistercian nunneries were filled with daughters from a wealthy background who stepped into convent life well-equipped (Bonis et al. 2001; Johnson 1991). These women were provided by their families with the necessary means to have a comfortable life behind the wall. Along with the women a wide a range of materials and other goods entered the convent through the dowry, but also on more occasional gatherings with family members the sisters received gifts and all kinds of material and financial support (Evangelisti 2004). Furthermore, wealthy families contributed to improving architecture and material culture as part of their strategies of social display (Röckelein 2008).

Scholarship in various disciplines, such as material culture studies and the study of visual arts, literature and music, demonstrate that many aspects of noble life and noble behaviour were reproduced in a monastic environment (Hamburger 1992; Hamburger / Suckale 2008; Mathhews Grieco 1997, 91-110; 139-164; Signori 2008). This noble way of life contrasted sharply with the three solemn vows of poverty, chastity and obedience that lay at the basis of monastic existence (Bonis et al. 2001; Johnson 1991; Mohn 2006; Power 1922). Just as in any other order, the Cistercian sisters were meant to subscribe to a highly disciplined and a cyclical routine of praying, penitence and work (Henneau 2009; Leclercq 1989). Canon laws stated that members of monastic communities should give up all their property rights and secular consumer habits (McCann 1952).

Several reform movements aimed at a return to the primary founding principles of monastic life and at the restriction of (material) excesses (Henneau 2002; Montulet-Henneau 1990). Also the gradual reinforcement of enclosure aimed at the alienation of worldly manners and a more severe monastic discipline through limiting contact with the outside world (Tibbets Schulenberg 1984). In the papal bull *Periculoso* (1298) pope Bonifatius VIII stated that religious women were not allowed to leave the convent at any time (active enclosure), but also regulated contacts with other social groups within the community (laysisters, servants, confessors, …) and visitors from outside (passive enclosure)(Makowski 1997). In reality however, the impact of such regulations upon

religious life was limited. Strict observance of monastic regulations would have made a life within the convent walls less attractive. Less attractive for the women that entered, but more important, less attractive for their families who were as such curtailed in their acts of display. And, for most of the convents the entrance of noble daughters was necessary for its continued existence (Hills 1999; Hills 2003). We already outlined above the surplus in prestige that the entrance of noble ladies meant for a community. There was also the financial side of the story: the nun's dowry that had to be paid to the convent provided a means for the community. Furthermore, occasional personal donations were often accompanied by separate contributions to the convent's budget and material setting. The interaction between noble and spiritual life was therefore often maintained by monastic authorities, instead of challenged (Evangelisti 2007). In 1563, the Council of Trent confirmed all previous ecclesiastical directives: the three solemn vows of poverty, chastity and obedience were put first again. The reform equally wished to cut through the entwinement between female monasticism and the social aspirations of the secular elite, by the reinforcement of religious discipline and strict enclosure. An aim that was never really achieved because of limited enthusiasm at community level (Evangelisti 2004; Hills 1999; Hills 2003; Röckelein 2008).

1.1.3   Studying a classic example

This research aims to contribute to the study of daily life in medieval and early modern Cistercian nunneries. Clairefontaine serves as classic example of a 13th century Cistercian nunnery foundation and serves as a starting point for the research. According to the foundation narrative, this small community of religious women was founded in 1247 by Ermesinde, Countess of Luxembourg and ancestress of the House of Luxembourg-Limburg (Goffinet 1877, 4). The construction of the abbey was the last wish of Ermesinde and, was completed in 1253 by her son Henry the Blond (Goffinet 1877, 14). The community was admitted two years before into the Order of Cîteaux (Goffinet 1877, 29-30). The abbey served as the count's dynastic burial place for more than a century (Margue 1994b, 24). The construction of the abbey was in the first place a political act. Count Henry the Blond was the first male member of the dynasty Luxembourg-Limbourg to rule this extended territory. With the construction of an *abbaye de lignage*, a prestigious dynastic burial ground, he created a *lieux de mémoire,* a powerful symbol for the authority of the new ruling family. As location for this prestigious project he chose a fertile river valley on the border of the old Luxembourgian ancestral grounds and the acquired territories of Arlon-Durby-Laroche (Margue 1993).
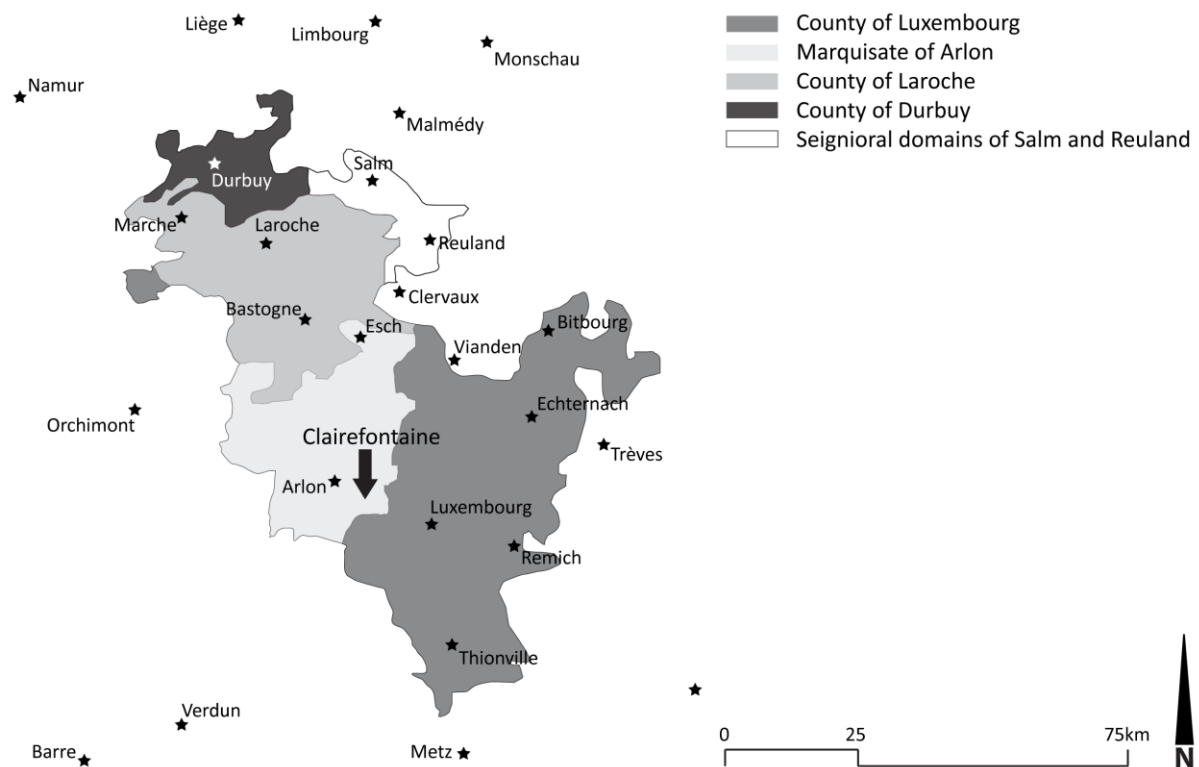
Figure 1—2   Territory of the House of Luxembourg-Limbourg around 1250 with the location of Clairefontaine (after Margue 2003, 119, adopted by Davy Herremans)

For close to a century, several members of the House of Luxembourg-Limbourg selected burial locations inside the convent walls (Joset 1935, 62). The last one was John the Blind who revealed his wish officially to the public by his testament in 1340 (Goffinet 1877, 168-169). Yet, despite his pronounced choice he never found a last resting place in Clairefontaine. The famous Luxembourgian count, also king of Bohemia and emperor of the Holy Roman Empire, died a hero's death on the battlefield of Crécy in 1346. Against John's will and in the interest of his own political goals, his son Charles decided to bury him in the Abbey of Neumunster, the ancient burial ground of the first house of Luxembourg (Luxembourg-Namur)(Margue 1997). This decision was undoubtedly a breaking point in the history of the abbey. Yet, despite this rupture with Luxembourgian aristocracy and several spiritual and economical low points along its way, the religious community of Clairefontaine survived well into the 18th century. 'To survive' could be considered an understatement. The second half of the 14th century and the 15th century was maybe a more difficult time for the abbey, ending abruptly with the replacement of the sisters by a group of Cistercian monks after a scandalous affair between the community's priest and its abbess Sophie de Muel (Goffinet 1877, 228-231). During the early 16th century, thanks to the political and financial support of the successive Luxembourgian governors in service of the House of Habsburg, the community was reinstalled and ushered in a new flourishing era. The presence of the House of Habsburg

is striking on all fronts: successively, Maximilian I, Charles V, Philippe II and Archdukes Albrecht and Isabella all recognised the ancient privileges of the abbey and supported the community both financially and politically (Goffinet 1877, 228-252).

Because of transforming beliefs on dead and afterlife, the practice of the *memoria* lost importance during the 14th century. Yet, investing in religious life and in the prestigious convent of Clairefontaine remained part of the social semiotics of the Luxembourgian nobility. Until the suppression of the abbey in 1796 the community of Clairefontaine was mainly populated with noble daughters and most of the abbesses descended from the most prestigious and influential noble families. Besides, the community, in the person of the abbess, was a large landowner and performed lordly power on several seigniories. On these properties the abbess performed High Justice and therefore the community had an ambassador in the *États de Luxembourg*, a board of noblemen that took part in the government of Luxembourgian territories (Hudemann-Simon 1985, 197-210; Joset 1935). The abbey of Clairefontaine was, from its foundation until its suppression, a node in the social networks of nobility.

1.2 Aims and objectives

Previous scholarship has demonstrated the structuring effects of the interaction between religious and worldly life manifested by the material culture, architecture and consumption patterns of Cistercian nunneries (Coomans 2004b; Evangelisti 2004; Gilchrist 1993; Hamburger / Suckale 2008; Hills 1999; Röckelein 2008). Material culture and monastic space were often shaped by lay benefactors and the communities' patrons, and served as theatre for display and the negotiation of different social identities. On the other hand, despite religious regulations, certain aspects of noble life styles were reproduced inside the convent walls by the religious women themselves, which was both a process continuously structured by the acquired manners and logic of daily practice (*habitus*) of the chiefly noble inhabitants and the agency of the deliberate introduction of patterns of conspicuous consumption that were characteristic for the feudal elite. The sisters actively communicated their religious and noble identity to the outside world through lordly behaviour and the reorganization of cultural space.

In this thesis, material culture, architecture and consuming practices of the sisters at Clairefontaine are examined. Specific focus will be placed on the vivid interplay between material culture, cultural space, and consumption practices on the one hand and the formation process of diverging social identities on the other hand. Three elements of

social dynamics, all related to the process of identity formation, are discussed more in depth:

1) The structuring of material culture, cultural space and consumption practice of the community through intervention from outside-in as part of the social semiotics of the late medieval and early modern Luxembourgian nobility, European aristocracy and the ecclesial elite.

2) The structuring of material culture, cultural space, and consumption practice of the community from inside-out, through the reproduction of aspects of noble life by the Clairefontaine sisters themselves.

3) The way these two processes could co-exist and thrive within the structures of possibility provided by monastic life and religious regulations.

This thesis does not wish to present an all-embracing diachronic synthesis. Instead, it will focus more on certain periods of the abbey's history and on specific themes in material culture, cultural space, and consumption practices. A choice in research mainly dictated by the strengths and weaknesses of the dataset (see paragraph 1.5).

1.3 Frame of mind

1.3.1 In between traditions

Since the emergence of the New Archaeology at the end of the 50ties philosophical and theoretical concepts derived from disciplines such as sociology and anthropology have proven their value for the reconstruction of the past and the interpretation and definition of material culture (e.g. Trigger 2006). For many years, a philosophical background and research tradition have not produced a fertile ground for theoretical or socially inspired interpretations in archaeology, meaning that Flemish, Walloon and Luxembourgian archaeologists have suffered from a deep-rooted aversion to theoretical thinking (Courtney 2009; Herremans / De Clercq 2013a; Verhaeghe 1990). The disinterest in theoretical approaches can be seen as a pan-European phenomenon for which a more fundamental reason may be found in the background of European archaeologists. In Europe archaeology is entwined with history. Archaeologists are not trained in an anthropological tradition like, for instance, their North American colleagues. The situation of British archaeology is different. Because of language proficiency and

transatlantic contacts, British archaeologists have been able to absorb and even shape the ideas of American Post-processual Archaeology (Gaimster 2009). Most of continental archaeology, however, has been orientated more towards the French and German academic traditions which rests heavily on analytical and descriptive foundations (Courtney 2009). Because of this, archaeology on the continent has always been very much a methodological activity, excelling in data gathering in the field and systemized data description.

The general disregard towards theoretical thoughts and more interpretative archaeologies has resulted in a marked discrepancy between etic and emic analysis. Frans Verhaeghe was the first to point at the need for more interpretative approaches during the early 90ties (Verhaeghe 1990; Verhaeghe 1996a). However, it is only in the last ten years that fashionable ideas from social archaeology have been espoused by university-based scholars. Theoretical and interpretative writings from American historical archaeology and British Medieval and post-medieval archaeology have influenced the rather traditional way of looking at material culture and landscape. In particular, the inter-disciplinary study of the complex relationship between the physical environment (material culture, landscape and space) and all kinds of social identities has been well explored recently.

Verhaeghe already stressed the social utility of the landscape and demonstrated how, during the Late Middle Ages, people negotiated their social identity by claiming particular parts of public space (Verhaeghe 1998). This finding encouraged other medieval scholars to walk the same path (Tys 2010). The work of British scholars such as Matthew Johnson (Johnson 2000a; Johnson 2002) and Oliver Creighton (Creighton 2002) introduced a new way of thinking about elite architecture. Functionality and military purpose are looked at in a more nuanced light, acknowledging the deliberate reorganisation of architectural space for the construction of social identity. For example, the recent 'vivre noblement' discourse illustrates how since the Burgundian period onwards new social groups tried to link up with traditional nobility. This work demonstrates how theory can bridge the gap between two disciplines with different approaches and research dynamics. For a long time, interdisciplinary contacts with history remained largely superficial. Cooperation in the past was hampered by the limited interest of archaeologists in social interpretation and by mutual underestimation by scholars of both disciplines (Verhaeghe 1990). It is only recently that historians realise that archaeology is more than the "handmaiden of history" (Gaimster 2009). Nevertheless, historical studies on material culture are produced without any actual 'material' input (Blondé 2002; Dibbits 2010). Also, archaeology is to blame as in the past historians were mainly consulted to confirm or refute archaeological chronology. Research on late medieval nobility in Flanders is a nice example of how recently the

theoretical framework of history and the abundant information from the documentary record are starting to become fully exploited for archaeological interpretation and a more holistic study of material life and the consumption of commodities. The 'vivre noblemen discourse' discusses not only archaeological and historical data but also art-historical information within a structuralist and semiotic framework. As such, it is demonstrated how self-made men such as Pieter Bladelin, a high court official in Burgundian service, tried to increase and legitimate their elite status through architectural display and conspicuous consumption (Buylaert et al. 2011; De Clercq et al. 2007b).

Recent advances in monastic archaeology has exhibited the continuous tension between the multiple and layered identities individuals possessed. Human behaviour and agency inside the monastery walls is conditioned by several conflicting social identities. Monastic life and often gender specific restrictions forces the religious in a straitjacket of multiple regulations, transforming the *habitus* of the mainly elite habitants (Gilchrist / Mytum 1993). Material culture shows some repeating particularities contradictive to monastic life drawing an image of women in God's service but well aware of what is going on in the secular world. Scratched marks on pottery and glass vessels from mainly nunneries may reflect personal possession and more individual consumption of goods (De Groote 2005). However, material culture alone is not always a stable referent to assess these layered identities (Grassby 2005). A multidisciplinary approach has proven a more trustworthy and accurate view of social life. Research on the contents of a 16th century brick-lined cesspit from an urban house in Aalst reveals the grinding strain between financial means and social aspirations. Architecture and household goods refer to a rich and wealthy life while archaeozoological evidence shows a totally different image: that of a poor and little varied diet, characteristic of the urban underclass (De Groote 2008; De Groote et al. 2003).

The study of consumption practices may yields powerful insights on varying and transforming identities during the Early Modern and Modern Times. International scholarship on the ideology and material culture of European reformation (Gaimster / Gilchrist 2003) has encouraged Flemish research on daily life during the Eighty Years' War. The on-going study of the late 16th century military occupation of the castle of Middelburg-in-Flanders tries to reconstruct social life in this transitional epoch. As is known from enquiry, changes in belief and religious conviction remains hard to figure out by looking at material culture alone (Insoll 2004). However, the several undamaged *sacrimentillos* (sacramental toys) deliberately thrown into the chute of Middelburg castle might be an indication of transforming religious identities. The ensemble was used by children to play and probably symbolized Catholic ritual practice: a play hard to defend in times of reformation (De Clercq et al. 2007a, 33).

We consider ourselves lucky to be caught in between traditions. Our logic of common practice is undoubtedly structured by a long-lasting tradition in etic analysis and data gathering. On the other hand, our frame of mind is as much shaped by a more interpretative archaeology that is on the advance in academic scholarship. Social theory can guide archaeological interpretation into more potentially productive avenues, by offering a valuable philosophical framework to discuss things and review results of secure data analysis. Therefore, this thesis aims to push back the (at least in our eyes) artificial boundary between data-driven and theory-driven archaeology by choosing an approach where both methodology and social theory are adopted, and the reciprocal and dialectical relationship between both is continuously fostered. And as such, we see ourselves as members of an new generation of academic scholars that attempts to reconstruct the past through a multi-disciplinary approach assessing historical, art-historical, archaeological and more cognitive matters from a theoretical perspective.

1.3.2 Identity

This thesis draws upon and deals with the concept of social identity and the way it is expressed through material culture, and more specifically the (re)reorganization of cultural space and consumption practices. Social identity refers to the process by which we define ourselves in terms and categories that we share with some people, but not with others. It considers the individual's knowledge that he / she belongs to certain groups and the fact that this group membership is of social significance for the individual (Tajfel 1972, 292; Turner 2006, 6). Social identities are multi-faceted however, and can refer to issues of power, class, and status. They can equally be based on race, ethnicity or cultural parameters such as religion. Also, physical and biological difference can lead to social categorization, for example age and various gender identities (Insoll 2007; Meskell / Preucel 2007).

Identity is not always stable, as it is the product of social action and can only be fully understood within a broader social, cultural, and historical context (Insoll 2007; Jones 1997, 123; Meskell / Preucel 2007). Aspects of identity can be hybrid and multiple (Diaz-Andreu / Lucy 2006, 1-2). Identity can be chosen by free will but it can equally be ascribed, for example the straightjacket of certain gender roles or strictly regulated monastic life into which many medieval women were forced into (Downs 2010, 165-179; Insoll 2007, 4). Some identities are inherent (e.g. ethnicity or class) others are sought after and are acquired during life time (e.g. transforming identities through social mobility or career choices) and are hence influenced by the agency of the individuals or groups. Thus, identity is in action: it is a continuous process that exists through constant

interaction between people and is therefore manifested in everyday practice and its product, the material world.

1.3.3   Material culture as product of practice

Epistemological and ontological concepts operational for understanding the material world and assessing social identities through materiality can be found in structuralism and semiotics. These sociological schools present material culture as a meaningful social structure or network of signs that should be read as a text (Barthes 1965; Baudrillard 2005; Foucault 1970). The material world, as a product of human practice, is part of the social world and mediated social relationships. Consequently, the message within materiality allows us to understand human interaction and broader social order (Hodder / Hutson 2003, 45-74; Tilley 1989, 185).

Of particular relevance for archaeological interpretation are the writings of Pierre Bourdieu (Bourdieu 1977; Bourdieu 1990) and Anthony Giddens (Giddens 1984). These scholars were the first to spotlight the individual as an agent and highlight the individuals' role in the active structuring process of social order and the material world. Both scholars have put forward that things are meaningful and significant because they provide individuals and groups with a fundamental non-discursive mode of communication: they reproduce and transform social relationships and mediate differential interests and values (Tilley 2006). Social identities and interpersonal relations are expressed and enacted within the arena of practice (Hoffman / Dobres 1999). As products of that practice, material goods inform us on the nature of social interaction and the negotiation of social identity.

More than traditional structuralism, semiotics acknowledges the influence of historical and cultural specificity on the structural meaning of things. Sign systems were to be investigated and understood as historically and culturally variable, with homologies and transformations traced between them (Tilley 2006). Objects and other material manifestations have, just as people, a social life and cultural biography (Appadurai 1986; Holtorf 2002; Kopytoff 1986). Their (symbolic) value can devaluate or accumulate, and as such, their meaning can change over time. Artefacts are more than a product, they can play an active role themselves, structuring life and social relationships of the people who use or own them (Wobst 2000).

These theoretical perspectives offer a valuable framework for those who wish to reconstruct vanished social structures of the past by means of material data. But, this frame of mind is not only valuable in considering material culture in the most restricted sense, but can equally serve to grasp the significance of all material remains that are the

products of human practices within the unique contexts of specific social spaces. Therefore, in this thesis, material culture, cultural space and archaeological remains, which through their specific relative proportions reveal patterns of food consumption (such as animal bones and plant remains), are treated equally and 'read' from a structuralist or semiotic point of view.

1.3.4 Habitus and agency

Inspiring for our thinking is the way Bourdieu brings the structuring and dialectical relationship between the material world and everyday practice into words. Bourdieu's work acknowledges that all human practice, materialized or not, is meaningful and mediates social relationships and as such, mirrors aspects of social identity. As most human practice involves the structuring of the material world, these social dynamics can be grasped through the study of their material manifestations. Yet, to get a hold of the structuring of the material world it is necessary to understand or at least consider the structuring of the social world and the social structures that pervade human practice. Therefore, in this paragraph we focus on the dynamic interplay between the durable principles that give direction to human practice and the social actor that intentionally and unintentionally make those principles into being.

In his book *Outline of a Theory of Practice* (1977), Bourdieu outlines the way the practice of everyday life is shaped by non-discursive principles of regeneration and reproduction of social practice, which contributes to the continued existence of social structures that are conceptualized as tradition (Bourdieu 1977). Bourdieu refers to these principles as habitus, which he defines as,

> …*systems of durable transposable dispositions, structured structures predisposed to function of structuring structures, that is, as principles which generate and organize practices and representations that can be objectively adapted to their outcomes without presupposing a conscious aiming at ends or an express mastery of operations necessary to attain them* (Bourdieu 1990, 53)

Habitus refers to one's dispositions, subconsciously shaped by upbringing and life experience and reflected in a wide range of subliminal and conditioned practices. A recurring but unjust critique on the work of Bourdieu is the fact the author denies the existence of agency (King 2000). Although the concept is called only seldom by name, Bourdieu's 'logic of common practice' gives place to agency. Habitus captures how we carry within us our history, how we bring this history into our present circumstances, but

also how we then make choices to act in certain ways and not others (Maton 2012). As such, habitus gives direction to the way we act, feel, think and are. Nevertheless habitus is merely a conditioning factor and does not exclude agency, as at certain moments and in certain conditions people can decide to act 'otherwise' and write their own histories (Hindess 1986, 115). It is through those decisions and individual performance that agency is actualised (Pearson 2006; Pearson 2010).

Before situating agency in Bourdieu's theory more precisely we will try to define the concept of agency. An interesting attempt of definition can be found in Giddens structuration theory presented in his main work *The Construction of Society: Outline of a Theory of Construction* (1984):

> *agency refers not to the intentions people have in doing things but to their capability of doing those things in the first place* (Giddens 1984, 9)

As such, unconscious and unintentional acts are just as much as deliberate action and non-action, all aspects of agency and potent forces for the transformation and maintenance of social structures (Barrett / Fewster 2000, 27). Furthermore, certain durable and internalized structures can be managed or reproduced deliberately or not, in a systematic way across varying spans of time and place since,

> *every social actor knows a great deal about the conditions of reproduction of society of which he or she is a member* (Giddens 1979)

Important in the definition of Giddens is the shift from 'intentionality' towards capability. A similar and even more concrete definition is offered by William Sewell (Sewell 1992). He defines agency as the capability of exerting some degree of control on social relations and the capability of transforming those relationships: agents have knowledge of the schemas that inform social life and they have access to sufficient resources to apply them to new contexts. The definition of agency by Sewell links up perfectly with the 'logic of common practice' of Bourdieu who summarizes human action with the equation:

> *[(habitus) (capital)] + field = practice* (Bourdieu 2002, 101)

In this equation human action (practice) is structured not only by habitus, but also by circumstances. Circumstances that are determined by both field and capital. The concept of field refers to the social arena of action, while the concept of capital refers to the tools for defining one self's position in that arena. The field is a subset of the social order, finding coherence in the shared interests, activities, and dispositions of the players on the field (Cheryl 2012, 231). They compete for profits and capital, which are unequally shared. Bourdieu acknowledges three fundamental types of capital: economic capital,

including money and other forms of direct property; cultural capital, comprising knowledge, taste, cultural goods and educational qualifications; social capital, comprising relationships, social networks and membership of groups (Bourdieu 1986). These forms of capital, may be apprehend as a fourth category of capital: symbolic capital which may refer to less tangible possessions such as prestige, honour and reputation. The actors position on the field is determined by the capital they own. In other words, the capital people owe determines their position in society and therefore reflects their social identity. Bourdieu's concept of capital we may equate with Sewell's (and in fact also Giddens') concept of resources. The non-discursive principles of regeneration and reproduction referred to as habitus, provides the actor in the notion to manage capital or what Bourdieu calls 'the feel for the game' (Bourdieu 1994, 63). In this light it's important to realise that a dialectic relationship exist between agency and social structures. It is only through agency that practices are brought into being while it's the availability of capital and the existence of a practical logic of acting that human agency is enabled. Human agency that only becomes meaningful within wider the social order and the context of everyday practice (Giddens 1976).

The game played on the field is competitive and dynamic, with various social agents using different strategies to gain capital and as such maintain or improve their position. This structuring of the social world reflects in the material world since the physical environment is not merely an immutable theatre for human action. On the contrary, the material world is a product of social interaction and is continuously modelled and transformed by agency and human practice. And what's more, materiality can be deployed in constructing social relationships and negotiating social identities (Johnson 2000a; Johnson 2000b). As such, the material manifestations of the staging of agency may serve as symbolic markers for the social identity of the social actors (Jones 2007, 49; Kus 2000).

According to classic semiotics, the negotiation of social identity can take place in a process of *semiosis* or the shouldering of signs with meaning. In the linguistic studies of Ferdinand de Saussure, a sign is defined as a combination of a signifier (a sound pattern) and a signified (the concept communicated with that sound pattern) (De Saussure 2000, 65-96). The concept of the signifier however can be lifted out its linguistic context and expanded to a wide plethora of communicative concepts and actions, but also aspects of material culture. The communicative tools we may refer to as 'lifestyle' (van Leeuwen 2005). Lifestyle may be considered as a set of practical metaphors provided by habitus that become meaningful through social interaction:

> *Life-styles are thus the systematic products of habitus, which, perceived in*
> *their mutual relations through the schemes of the habitus, become signs*

systems that are socially qualified (as 'distinguished', 'vulgar', etc..)(Bourdieu 2002)

As such, late medieval and early modern feudal elite maintained a particular style of life in which considerable efforts was put in the articulation and communication of noble identity through the staging of agency. A system of social communication persisted, encompassing specific patterns of noble behaviour and conspicuous consumption. As such, the display of heraldic symbols, displayed through material culture and architecture, gift exchange (on gift exchange as social signifier more in particular see Carrier 1995, 4-8 and 21), landownership and the conspicuous performance of lordship, keeping pigeons, hunting and eating game or other exquisite foodstuff were all elements considered typically noble. Also, religious or monastic charity and a burial inside the convent walls were elements of the social semiotics of the feudal elite (for in-depth scholarship on the noble way of life and noble semiotics see Buylaert et al. 2011, 416; De Clercq et al. 2007b; Kaminsky 1993). These habits were undoubtedly well-known to the noble sisters in Clairefontaine and so it needs little effort to realize that 'the noble way of life' gave direction to everyday life in Clairefontaine. But then again flexibility and creativity in practice was needed, since the sisters were curtailed in action by monastic regulations and a religious role pattern.

1.3.5 Social mobility and identity

Agency and structure have, potentially, mutually shaping influences one upon another (Barrett / Fewster 2000, 28). This implies a certain flexibility of durable structures on one side and a certain creativity in action on the other side. In regard to the flexible and situated nature of habitus, Bourdieu states:

habitus is not the fate that some people read into it. Being the product of history, it is an open system of dispositions that is constantly subjected to experiences, and therefore constantly affected by them in a way that either reinforces or modifies its structures. It is durable but not eternal! (Bourdieu / Wacquant 1992, 133)

He highlights the fact that social structures are not a-historical, they come into being in certain particular historical and contextual conditions (Barrett / Fewster 2000, 28). Considering Bourdieu's equation, practice is thus not only conditioned by one's habitus, but rather by relations between one's habitus and one's current circumstances (determined by capital and field) (Maton 2012, 51-54). When circumstances transform,

the common way of being and acting can be put under pressure and is often adapted accordingly (Kus 2000, 159). Most radical transformations occur when:

> …*the environment with which they were confronted is too distant from that*
> *to which they are objectively fitted* (Bourdieu 1977, 77-78)

When entering the convent, medieval and early modern women were moved from one social structure (secular family life) into another (religious community life). Once past the convent gate, they were faced with a completely different normative framework and unaccustomed social expectations. This radical change in social and material setting meant an traumatic experience with impact on acting and being. Despite religious regulations, certain aspects of secular practice (and the materialization of that practice) are reproduced deliberately inside the convent walls. As such, practices (and their material manifestations) are exposed to a new social and cultural environment and as a consequence challenged, modelled or internalised. A wide range of non-discursive habits becomes suddenly discursive and delicate tools for agency and the negotiation of social identity (Jones 2007, 50). Hereby, the sisters secular' habits and the opposed religious regulations interacted in a dialectic relationship. The enduring interaction between both, finally creates a new social order laying in between the habitus of noble family life and the social structures provided by monastic regulations. Anthony Giddens refers to these dynamics as 'social integration': the involving reciprocity of face-to-face interaction between actors or groups, whose practice is structured by a divergent habitus. Consequently, processes occur of selective 'information filtering' whereby actors seek reflexively to regulate the overall conditions of structure reproduction (Giddens 1984, 27-28).

This 'information filtering' does not only come about in cases of traumatic experience or forced changes in social circumstances. In many contexts of social life strategically placed actors seek a way to deliberately move from one social structure to another or, to modify structure reproduction trough agency. Of particular relevance for understanding these processes are Bourdieu's notions of field and capital and the interaction that thrives between them (Bourdieu 1977). In his work 'Distinction. A Social Critique of the Judgement of Taste', Bourdieu states:

> *The dialectic of conditions and habitus is the basis of an alchemy which*
> *transforms the distribution of capital, the balance-sheet of a power relation,*
> *into a system of perceived differences, distinctive properties, that is, a*
> *distribution of symbolic capital* (Bourdieu 2002)

Thus the distribution of capital is an expression of power relationships. It can be part of social strategies and as such serve the negotiation and articulation of social identity.

Capital may be seen as a sign in a semiotic sign system that derives its precise meaning from the social position of the person who deploys the capital and the power relations with the other actors in the field (Hodge / Kress 1988; Thibault 1997). The theory of Bourdieu comes to reality when applied on the historical phenomenon of female monasticism and its role in the social semiotics of the feudal elite. The field we play on is medieval and early modern society. The chalk lines on the field reflect the social boundaries of feudal society. We zoom in on one specific group of people on the field: the feudal elite. With the help of various forms of capital, they try to improve their position on the field. Playing this game they do not only distinguish themselves from other members of their group, but also from other players on the field. The foundation of an abbey and investment in the material setting of a community brought display and prestige: a symbolic act that stressed the noble identity of the benefactor (Röckelein 2008). In other words, economic (donations of money, properties and seigniorial rights) and social capital (political support to the community) was converted into symbolic capital and more economic capital. Furthermore, convent life offered an honourable alternative to store daughters for whom no prestigious candidate of high birth was found (Hills 1999; Hills 2003). Forcing one or more daughters into convent life prevented fragmentation of property and estates through marriage. Although the sum of money required for an entry in the most prestigious convents was high, it was often cheaper than the cost for the arrangement of a marriage. Social capital was also generated: as nunneries maintained links with public life and local ecclesiastical power that were valuable for maintaining family networks and broader social contacts, as well as the promotion of individual political careers (Evangelisti 2004). For the women entering the convent, religious life was a way to gain cultural capital by avoiding the discomforts and confinements that marriage brought along. Instead they were offered a stable and educated life in relative freedom and with career prospects to a certain extent (Evangelisti 2007, 15-33).

Thus, social mobility in one way or another urges agency and the negotiation of social identities. The material expression of these actions reveals the dynamic and reciprocal relationship between the sisters living inside the convent walls and their relatives on the other side.

1.4 From dirt to discussion: methods and approaches

1.4.1 The archaeological context as starting point

Before moving beyond the concrete data and entering the more interpretative level, a thorough etic analysis of the archaeological finds remains indispensable (Cochran / Beaudry 2006). More than other historical sources (such as texts that were meant to be read), archaeological material remains 'mute' without a series of appropriate and often time consuming methodological steps (Galloway 2006). Therefore, both objects and structural remains need to be identified, classified and described meticulously (Verhaeghe 1990).

The meaning of archaeological objects can best be gauged from numbers and relative proportions between different categories, forms and types. This information can be retrieved through quantification (Poulain 2013). The starting point for quantification is the assemblage, which has to be well-selected, by taking several parameters into account (Orton et al. 1993, 28; 166-181):

1) The position of the assemblage in the stratigraphical sequence: the undisputed stratigraphical position properly recorded. Besides the assemblage has to be linked to the site history and building-chronology.

2) The composition of the assemblage: the assemblage cannot contain too much material which is not related to its formation or use. There must be a certain variability in materials (De Groote 2008, 29; Rice 1989).

3) The dimensions of the assemblage: the assemblage must contain a quantity of finds worth quantifying.

The success of the quantification process and the value for social interpretation afterwards depends, apart from the skills of the researcher, largely on the quality of the find assemblage determined by the parameters listed above (De Groote 2008, 22).

Equally important is the nature of a find assemblage and its deposition and also post-depositional processes. To grasp the habits of everyday life, find assemblages are preferably the product of daily practice and related to a habitation stage, and most importantly, they need to be free of any post-depositional distortion. Most relevant are undisturbed primary deposition such as floors and refuse deposits. Through discard as refuse or through accidental deposition as loss, they enter the archaeological record during habitation at, or in clear relation with, their location of use or consumption (LaMotta / Schiffer 1999, 21-22). Equally interesting are *de facto* refuse deposits that

enter the archaeological record in times of abandonment. They are especially of interest when they are the result of a deliberate transfer of a coherent (in chronology and origin) assemblage of consumption debris from one place to another, such as the dump of household goods in a cesspit or in another archaeological structure of feature (Schiffer 1996, 89-97).

1.4.2   Broadening the view

Material culture and architectural space are not independent and stable referents for assessing cultural history and the formation of social identities. They cannot reveal underlying cultural values without other evidence (Grassby 2005, 599). The layered meanings of things and space can only be understood in a cross-disciplinary environment. Additional information can be gathered from archaeology's nearest proxies such as archaeozoology and archeobotany. Ideally, archaeological remains are interpreted together with supporting (or confronting) data from other historical disciplines. Only through a wide and varied dataset the tone and texture of past life can be replicated truthfully. Consumption goods and cultural space have to be studied as multifaceted creations that perpetually communicate with the social environment . In other words, their meaning varies according to time and place, and can only be fully understood within the broader social order and specific cultural and historical context (De Clercq et al. 2007b, 1).

Furthermore, when carefully interpreted, archaeological remains can contribute to writing narrative history (Hodder 1993). In the words of Grassby:

> *artefacts provide the depth of image that artists create through linear and tonal perspective* (Grassby 2005, 594)

Material culture and cultural space can serve as link between the large concepts that historians constantly mobilize to understand the past (e.g. of importance for this study: monastic life, monastic enclosure, nobility, Reformation, Counter Reformation, Consumer Revolution, Industrious Revolution, etc…) and the people living and modelling these concepts (Riello 2009).

1.4.3   Operationalizing in a three step approach

As argued in the theoretical framework, we look at material culture and cultural space as a product of human practice. We acknowledge the fact that, as human practice itself, material culture, cultural space and consumption practices are structured both by

habitus and agency. They have an active role an can be used to restructure the social order (Bourdieu 1977). They are managed and conspicuously used to negotiate and develop social identity and as such, material culture, cultural space and consumption practices shed light on how people understood themselves (Grassby 2005).

With these premises in mind, we fully agree with Sam Lucy who states the following concerning on identity and material culture:

> *identities are aspects of social practices, which have to be continually constructed and generated, and are most effective when this is done through the use of shared ways of doing things. Studying those identities therefore, involves paying attention to the use of material culture in social interactions* (Lucy 2006)

As such, being material manifestations of such past social interactions, archaeological remains can help us to recognise and reconstruct identity formation processes of past times. Realising that, since the meaning of material culture, cultural space and consumption practices are historical and situated, those remains has to be studied in their specific archaeological, cultural, and historical contexts (Jones 1997; Jones 2007).

These theoretical insights are brought into practice by operationalizing them by a three step approach in which:

1) the processes of social identity formation in Clairefontaine is examined through an thorough analysis of its material manifestations. Both mobile finds and structural remains revealed during archaeological fieldwork were put through an in-depth etic analysis before being used for further social interpretation. Assemblages for quantification were carefully selected according to their quality and nature of deposition. Glass and ceramics were quantified by counting the number of fragments per category (shard count) and counting the number of rims (rim-based Minimum Number of Individuals)(De Groote 2008, 29; Orton et al. 1993, 166-181) .

2) material culture and cultural space in Clairefontaine are discussed together with information derived from the extensive documentary record of the abbey, archeo-metric analysis of certain groups of material, and analysis of food consumption debris, mainly animal and plant remains.

3) material culture and cultural space in Clairefontaine are discussed diachronically and within their specific social, cultural and historical context.

1.5 The material dataset

1.5.1 History of the field work

The excavations in Clairefontaine began in 1997, within the framework of a European research project recalling the 750th birthday of the foundation of the nunnery. The initial project aimed on cross-border collaboration between the Walloon area, the Grand-Duchy of Luxembourg, and the Rhineland. The international research group that gave rise to the project gathered members of the *Département du Patrimoine de la Région walonne* (André Matthys / Johnny De Meulemeester/ Philippe Mignot / Denis Henrotay), *Service des Sites et Monuments nationaux du Grand-Duché* (Georges Calteux), *Römisch-Germanisches Zentralmuseum de Mayence* (Konrad Weidemann), CLUDEM, C*entre d'étude du Moyen Âge luxembourgeois* (Michel Margue) and the *Séminaire d'Histoire médiévale de l'Université libre* de Bruxelles (Michel Margue) (Mignot 2010).

Figure 1—3   Students at work in Clairefontaine during the summer of 2007 (Johnny De Meulemeester ©SPW-Dpat)

Over the years, under the direction of Johnny De Meulemeester the project became a long-term annual research excavation at the expense of the *Département du Patrimoine*

de la Région wallonne with a final season in 2007. During this period the site equally served as field school for students of various European countries, amongst others Belgium (Ghent University), France (UMR5648, Lyon II/ EHESS), Ireland (Trinity College Dublin) and Spain (Universidad de Murcia) (De Meulemeester 1998a; Herremans / De Meulemeester 2010). Eleven campaigns of fieldwork (between 1997 and 2007) revealed a major part of the medieval and early modern monastic complex of Clairefontaine and by a large and an extensive mobile finds collection.

1.5.2   The material record of Clairefontaine abbey

The material record is undoubtedly rich and of high scientific value but also has its deficiencies. For certain periods significant find assemblages that meet the conditions for quantifying analysis [see 1.4.1] are lacking. For example the 16th century and the 17th century have left behind little or no such find assemblages. Also the late medieval period is little represented except in certain areas of the convent. The explanation is probably twofold and has to be examined in both archaeological reality and the reality of a long-term research project.

   The site of Clairefontaine can be considered a palimpsest. During its history the monastery has been under construction almost continuously. Archaeological fieldwork revealed four main building phases (13th, 14th, 16th and 18th century) and several minor rearrangements in between (15th-17th century). The destructive character of these historical building activities and also post-suppression human presence on the site means that, except from architectural remains, little assemblages which were formed during habitation stages remained free from post-depositional distortion. It needs no explanation that post-excavation research suffered from the unfortunate and early death of Johnny De Meulemeester, director of the excavations and only person present on all archaeological campaigns in Clairefontaine. The fact that during the period of fieldwork more than one field archaeologist had the actual lead on the site made it difficult for long-term excavation strategies and the consistency, accuracy and completeness of the Clairefontaine excavation archive. The many partners and institutes involved, resulted in a dispersed and fragmented excavation archive and associative find collection. Furthermore during excavations there was a certain focus on architectural remains and building chronology rather than on material culture which is clearly reflected in the way finds were recorded. Because of these problems a relatively high proportion of find assemblages could not be related with stratigraphical sequences, building chronology and site history. Some finds disappeared somewhere in the post-excavation process (before this research was initiated) and are still missing today.

Various smaller assemblages from various periods, enabled relative site chronology and the dating of the monastic architecture, but were to restricted in number, dimension and significance for contribute substantially to social interpretations of everyday life. Exceptional attention is given to the numerous 15th and 16th century stove tiles abundantly present in construction and destruction layers. Despite their presence in mainly secondary depositions and thanks to their explicit decoration and well-known chrono-typology, they played an important role in writing the building-chronology of the site and in understanding the social identities thriving inside the convent walls during the 15th and the 16th century.

Figure 1—4   Two find assemblages were considered for a quantified and in-depth analysis of material culture and consumption practices of the religious community. Left a view on the medieval kitchen facilities of the abbey. At the right the 18th century latrines (Johnny De Meulemeester ©SPW-Dpat)

Two find assemblages were considered for a quantified and in-depth analysis of material culture and consumption practices of the religious community.

1) A cluster of several restricted but significant find assemblage allows for an assessment of the period between the 13th and the first half of the 16th century. These habitation assemblages, recovered from the old medieval kitchen quarters, were covered during the first half of the 16th century by a thick layer deposited as levelling before the construction of new abbess lodging.

2) The filling of a latrine allows to a fine-scale view on daily life and consumption habits in the convent during the late 18th century and the final days of the community.

Both assemblages contained sufficient amounts of ceramics and glass for a quantified analysis of material culture. Furthermore, findings related to consumption practices derived from material remains could be supported and confronted by results of the study of animal bones and plant remains. For the 18th century a rich documentary record was available by means of the fragmentary preserved receipts of the community.
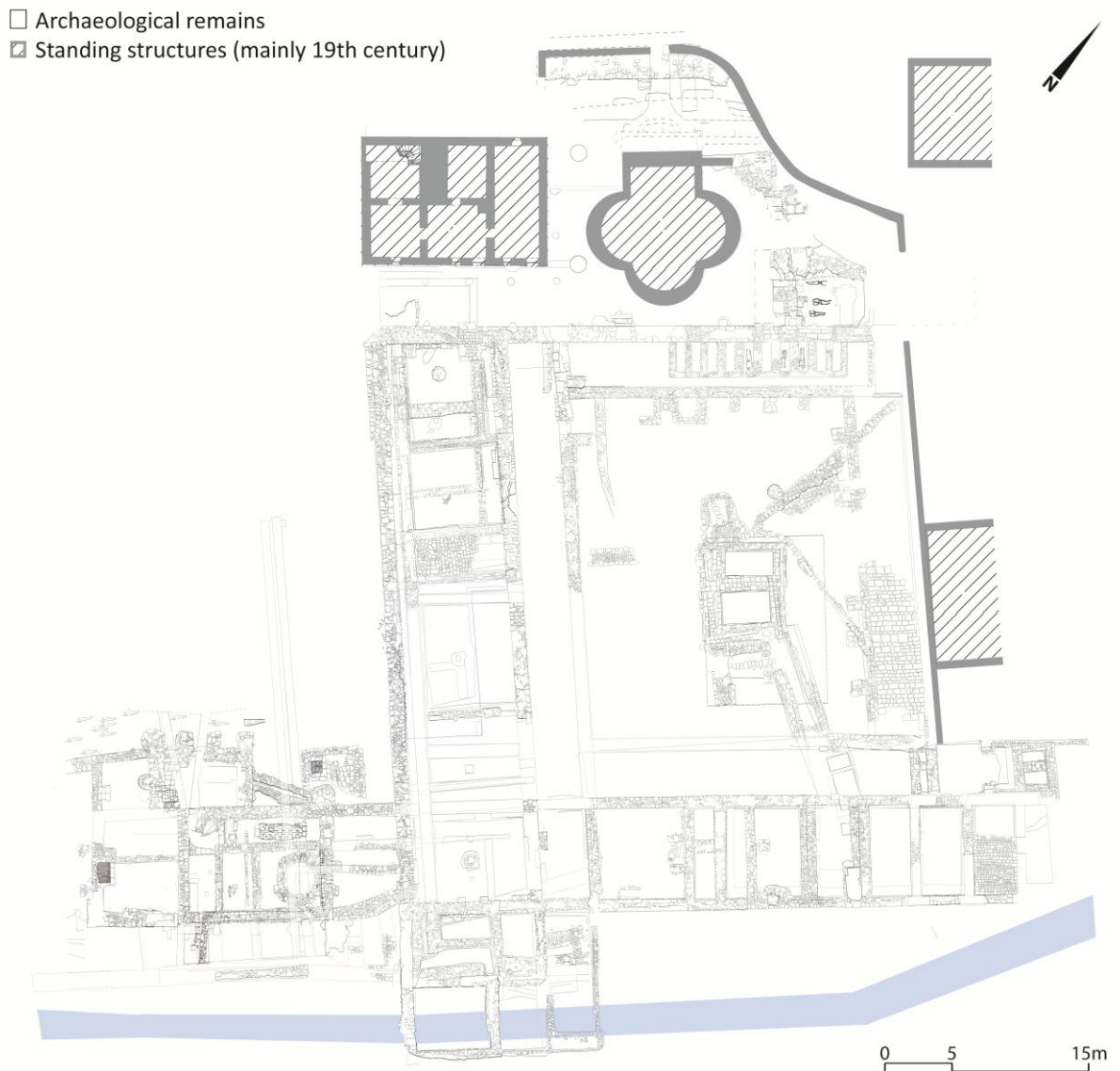
Figure 1—5   Overview of the architectural remains revealed during eleven years of fieldwork in Clairefontaine (Davy Herremans, topography Dominique Bossicard, ©SPW-Dpat)

For the study of material culture, the author had to enter virgin territory. The architecture on the other hand was focussed on in the successive intermediary reports regularly presented in workshops organised by *Archaeologia mediaevalis* (Budd et al. 2003b; Budd et al. 2004b; Butler et al. 2006; Butler et al. 2007b; Coomans et al. 2001; De Meulemeester 1998b; De Meulemeester 1999c; De Meulemeester 2000; De

Meulemeester et al. 2002b; Dhagalet et al. 2005) and published in *Chronique de l'archéologie wallonne* (Budd et al. 2003a; Budd et al. 2004a; Butler et al. 2007a; De Meulemeester 1998a; De Meulemeester 1999a; De Meulemeester et al. 2002a; De Meulemeester / Coomans 2000; De Meulemeester et al. 2006; De Meulemeester et al. 2001; Herremans et al. 2008). These writings must be read as preliminary reflections during an on-going excavation. Building-chronology was specified in each annual paper, and interpretations were revised several times. Relative chronology was only occasionally linked to material culture and the documentary record. Despite the preliminary nature of the published reports, they were proven useful as a basis for further interpretation and synthesis.

Chapter 2   Building and rebuilding. an archeo-historical analysis of monastic architecture in Clairefontaine (13th to 18th century)

2.1 Introduction

The Cistercian nunnery of Clairefontaine was founded during the mid-13th century in the isolated and wooded valley of the River Durbach. Less than a kilometre further, this stream joins the River Eisch, which forms the frontier between Belgium and the Grand Duchy of Luxembourg (Fig. 2-1)[3]. The topography of this site – the abbey's name refers to purity, water and its aristocratic foundation, makes Clairefontaine a typical example of a 13th century Cistercian nunnery. The story behind its foundation places the installation of the sisters in Clairefontaine in the hands of the famous Luxembourgian Countess Ermesinde, the last descendant of the House of Luxembourg-Namur. Historical scholarship, however, has demonstrated in particular that Henry V of Luxembourg, son

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[3] The site is located in Autelbas, which has been part of the commune of Arlon since 1977: (Anonymous 1994)

of Ermesinde and the first male member of the House of Luxembourg-Limbourg was responsible for the construction of the abbey. For around one hundred years, the abbey would serve as the dynastic burial ground of the House of Luxembourg-Limbourg which, before its decline in the 15th century, played an important role in European politics, especially during the 14th century. Members received not only the ducal rank but also acquired the royal crown of Bohemia and delivered no less than four emperors of the Holy Roman Empire (Margue 2003). As a *lieu de mémoire* of this powerful and influential dynasty, the Clairefontaine monastery lived a glorious first century. Despite several spiritual and material low points, the community – largely populated by noble daughters bearing the title of dames – maintained its prestigious character until its suppression by the French in 1796 (Goffinet 1877). After the suppression, the abbey was rased to the ground and only the 18th century farm and mill are still standing today. In 1874, the Jesuits acquired the site. In order to restore the ancient Marian cult in Clairefontaine, they disinterred the remains of Ermesinde and placed them in a new commemorative chapel dedicated to the memory of the countess and to Our Lady of Clairefontaine.

Figure 2—1   Clairefontaine: archaeological site and Jesuit chapel seen from the south (Davy Herremans)

In 1997, on the 750th anniversary of the founding of the abbey, large-scale archaeological excavations began within the framework of a European research project. Fieldwork was directed by the late Johnny De Meulemeester, funded by the Direction de l'Archéologie du Service public de Wallonie. Eleven annual campaigns revealed the almost complete architectural layout of the abbey, shedding new light on our knowledge of the architecture of Cistercian nunneries during the *Ancien Régime.* Intermediary results were regularly presented in workshops organised by Archaeologia mediaevalis (Budd et al. 2003b; Budd et al. 2004b; Butler et al. 2006; Butler et al. 2007b; Coomans et al. 2001; De Meulemeester 1998b; De Meulemeester 1999c; De Meulemeester 2000; De Meulemeester et al. 2002b; Dhagalet et al. 2005) and published in *Chronique de l'archéologie wallonne* (Budd et al. 2003a; Budd et al. 2004a; Butler et al. 2007a; De Meulemeester 1998a; De Meulemeester 1999a; De Meulemeester et al. 2002a; De Meulemeester / Coomans 2000; De Meulemeester et al. 2006; De Meulemeester et al. 2001; Herremans et al. 2008). Unfortunately, because of his early death, Johnny De Meulemeester never achieved the synthesis he had in mind.

The authors would like to present such a synthesis by reviewing the director's notes in relation to new results from an inquiry into the documentary record and material culture of the community. The article is certainly intended to go further than just a descriptive analysis of the architectural structures and a recapitulation of the preliminary results published in the short notes cited above. Building chronology is linked to historical events and human intervention, as reported in the historical sources and material culture. Furthermore, the results are related to the wider phenomenon of female monasticism and Cistercian architecture in the Low Countries. The architectural narrative of Clairefontaine is characterised by four main construction phases[4]: from Clairefontaine I in the middle of the 13th century to Clairefontaine IV in the late 17th to early 18th century, including Clairefontaine II in the 14th century and Clairefontaine III in the 16th century. Architectural remains and building chronology are illustrated by a general plan depicting all excavated structures and the present state of the site (Fig. 2-2). Four other plans, all to the same scale, illustrate the architectural evolution and the successive construction stages (Fig. 2-4,2- 8, 2-13 and 2-15).

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[4] Numbered with capitals and Roman numerals as is conventional for the study of Cistercian architecture: Herremans D. / De Meulemeester J. / Butler H. / Eiroa J. / Poisson J.-M. 2008a, Arlon/Autelbas: l'abbaye cistercienne de moniales de Clairefontaine, *Chronique de l'Archéologie wallonne* 15, 176-178.

Figure 2—2   Plan with all excavated structures and standing structures: 1. road and access to the site, 2. chapel de Notre-Dame du Bel-Amour, 3. 19th century house , 4. 19th century farm (Davy Herremans, topography Dominique Bossicard, ©SPW-Dpat)

2.2 Clairefontaine I – typically atypical: the open cloister of the 13th century

While staying in her private residence – the Bardenbourg near Arlon – Ermesinde decided to take a walk in the woods. When the countess stopped at a source for a rest she fell asleep and dreamt about a young woman carrying a little child in her arms and

being followed by 12 sheep, all marked with a black cross. Hoping to find an explanation for the true meaning behind this vision, Ermesinde decided to consult a hermit in the neighbourhood. According to him, the Virgin Mary was expecting Ermesinde to build a Cistercian abbey at the site of her apparition (Mandy 2000). This rather legendary view of the abbey's foundation was written down in the community's foundation narrative which dates no earlier than the early 17th century which, not coincidentally, was an era when Marian pilgrimages and visits to the source and abbey were promoted in the context of the Counter Reformation.

Historical studies by Michel Margue demonstrated that the founding of Clairefontaine served both the political and spiritual goals of Henry V, also called the Blond, count of Luxembourg from 1247 until 1281 (Margue 1993; Margue 1995). In a document dated 1252, Henry and his wife Marguerite de Bar confirmed the donations made by Ermesinde. This text is also the oldest trustworthy document testifying to the abbey's founding (Goffinet 1877, 14). Ermesinde's reign, between 1197 and 1247, marked the end of the House of Namur-Luxembourg and the birth of the House of Luxembourg-Limbourg. Ermesinde was the only daughter and heiress to Henry IV, count of Namur and Luxembourg, also known as Henry the Blind. After Henry's death in 1197, the 11-year-old Ermesinde and her inheritance became prey to various feudal lords willing to annex Luxembourgian territory to their own personal possessions. Yet, through successive marriages, the countess not only succeeded in consolidating the major part of her ancestral lands, but also in acquiring the marquisate of Arlon and the former counties of Laroche and Durbuy. Her last marriage, to Waleran of Limbourg, gave name to the House of Luxembourg-Limbourg which would reign over this territory for several centuries (Margue 1994a; Parisse 1993).

Henry the Blond was the son of Ermesinde and Waleran III of Limbourg. As Ermesinde's heir and the first male descendant of the House of Luxembourg-Limbourg he realised the need for a symbolic act legitimising the power of the young Luxembourgian dynasty. The count founded an abbey right on the border between the old county of Luxembourg and the recently acquired territories of Arlon-La Roche-Durbuy, honouring the memory of his mother Ermesinde and depicting her as ancestress of the House of Luxembourg-Limbourg and architect of an enlarged Luxembourgian territory. The abbey served as a burial ground and place of remembrance for deceased family members. Yet, the monastery was also meant as a physical reminder, denoting the power and identity of the new Luxembourgian dynasty and its territory (Herremans / De Clercq 2013b; Margue 1993; Margue 1995).

Nevertheless, realising the political intention behind its foundation, the settlement of a community of Cistercian sisters in Clairefontaine can only be understood by taking into account the spiritual concerns and religious habits of European aristocracy during the

13th century. In particular, the uncertainty around the 'final judgement', which was assumed to take place at the 'end of one's days', dominated thoughts of death. A positive judgement could be achieved through an act of *memoria* or commemoration of the deceased and by praying for his or her soul. The foundation of an abbey and a burial within its walls ensured a long-term *memoria*. Thus, in the 13th century, aristocracy in the Low Countries often chose to be buried in a Cistercian nunnery. Because of their virginity and ascetic way of life, it was thought that Cistercian nuns delivered the most effective prayers for the soul[5]. A lot of these communities were not Cistercian at their foundation, but were accepted by an order of Cîteaux after the founder's political intervention – in general, these were powerful territorial princes with connections to the highest ecclesiastical levels (Coomans 2004a; Coomans 2005; Coomans 2006). Clairefontaine was no exception. Three *statuta* from the General Chapter of Cîteaux mention the presence of a community of religious women in Clairefontaine from 1247 onwards (Joset 1935, 42-43). However, the community was not accepted before 1251 following several inspections of the site (Canivez 1934, statuta 1247:39; 1250:41; 1251: 31).

The House of Luxembourg-Limbourg provided the community with the necessary land and means to construct a monastic settlement, while political support, privileges and additional donations assured contemplative life during the first years after its foundation. Medieval nunneries were often constructed near a settlement or habitation, and the communities were frequently offered existing buildings to occupy during the first years after foundation (Jäggi / Lobbedey 2008). Archaeological fieldwork also revealed that the Clairefontaine sisters did not settle in a desolate area. Several protohistorical, Roman and early medieval ceramic finds show that there were signs of human presence at the site before the arrival of the sisters. More strikingly, however, are the building remains of massive foundations integrated in south-western Clairefontaine I (Fig. 2-3). Its morphology and in particular the four large remaining buttresses on its northern side, is reminiscent of a fortified tower house.

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[5] For the social concept of memoria also see the webpage of the project Medieval Memoria Online. Commemoration of the Dead in the Netherlands until 1580: http://memo.hum.uu.nl/pages/products.html (consulted 2/11/2012).

Figure 2—3   Remains of structure with large buttresses, probably dating before the arrival of the Cistercian community. The structure was integrated in the 13th century kitchen and overbuild by a 16th century enclosure wall (Johnny De Meulemeester, ©SPW-Dpat)

In Clairefontaine, the initial endowment was part of the ancestral lands of the House of Luxembourg-Limbourg. In 13th century documents the monastery is often referred to as Bardenbourg. According to the foundation narrative and other historical documents dating back to the 17th and 18th centuries, the name Bardenbourg refers to an old manor belonging to the counts of Luxembourg and a favourite residence of Ermesinde. Today, the toponym of Bardenbourg is related to a fortified hill top, some hundreds of metres south of the monastic site, overlooking the valley of Clairefontaine. But this fortification was abandoned long before the reign of Ermesinde, and therefore it is tempting to look for a connection between the remnants of the tower house and the illustrious legendary manor. Yet, it must be said that the charter of 1252, in which Henri V and his wife Marguerite de Bar ratified and recounted the donations made by Ermesinde, does not mention the existence of any manorial construction (Goffinet 1877, 13). What is more, identification of Bardenbourg as the manor and private residence of Ermesinde was recorded for the first time in the 17th century foundation narrative; therefore, the idea may have originated in the coloured historiography of the Counter Reformation and the manor of Ermesinde may just as good be considered a legend.

Figure 2—4   Clairefontaine I, ground level of the 13th century abbey : 1. church with tribune, 2. Saint Bernard's fountain, 3. gallery, 4. chapter room, 5. working space, 6. refectory, 7. latrines, 8. small kitchen, 9. main kitchen, 10. fortified towerhouse (Davy Herremans, topography Dominique Bossicard, ©SPW-Dpat)

In 1252, construction of the first monastery was under way[6].Excavations have revealed no traces of wooden constructions that mostly characterise the early stages of

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[6] *Nos Henricus, comes Luccenburgensis, Rupensis, et marchio de Arlunensis ; et nos Margaretha, comitissa Luccenburgensis et marchionissa Arlunenensis, tenore presentium memorie committimus futurorum quod, - cum felicis memorie Ermensendis, comitissa Luccenburgensis, mater nostra, ob remedium anime sue et suorum, claustrum quod Clarusfons appellatur, situm prope Arlunum, duwerit construendum, idemque hereditate sua dotaverit, super hoc nostro accedente consensu (…).*
In memory of the pious Ermesinde, our mother and countess of Luxembourg, we Henry, Count of Luxembourg and La Roche and Marquis of Arlon, and his wife Marguerite acknowledge the donations done by her (Ermesinde) to initiate the construction of the convent in Clairefontaine (…).(Goffinet 1877)

Cistercian foundations (Coppack 2004). Archaeology has shown that the first buildings at Clairefontaine, or at least their foundations, were made directly from stone. The community enjoyed the patronage of both the counts of Luxembourg and the pope. The abbey was one of the area's more prestigious houses and therefore the local nobility also tended to invest in religious life. In exchange for intercessory prayers, they donated land and money to the community. In addition, many of their daughters entered the convent with a substantial dowry. This constant flow of resources meant that the Clairefontaine community achieved a level of *stabilitas* rather rapidly, as reflected in the high-quality architecture (Coppack 1998, 319-336).

Figure 2—5   Chapter of Clairefontaine I revealed during excavation in the church (Johnny De Meulemeester, adapted by the author, ©SPW-Dpat)

The first abbey church had a single nave measuring 10.5 metres wide which was subdivided in two separate parts (Fig. 2-4). In the east there was the sanctuary. To date, its dimensions and exact layout remain unclear since the remains were largely rased in 1875 during the construction of the commemorative chapel by the Jesuits (Joset 1935, 59-70). In the western part of the church there was a gallery supported by vaults. Based on the position of the remaining pillar's bases, the lower room of around 10.5 metres wide and 14.5 metres long was divided in three naves of four bays each, giving 12 square modules measuring approximately 3.5 metres and vaulted with ribs or ogives. According to traces of the vaults on a side wall, the space was barely higher than 3 metres. Excavations have revealed several architectural fragments, twin columns and "late romanesque" capitals of the church and the first stone cloister (Fig. 2-5). Decorated with acanthus leaves, the capitals indicate the influence of Rhenish romanesque architecture

and reveal the imperial influence the counts of Luxembourg had on architectural projects in the mid-13th century (Kosch 2001, 25).

Figure 2—6   Abbey church of Sankt-Thomas-an-der-Kyll. View on the raised tribune in the western part of the church (Davy Herremans).

It was not unusual for nuns' churches to be designed with two storeys (Johnson 1991, 150-163; Tibbets Schulenberg 1984, 201-203): the lower space, similar to a crypt, provided room for laypeople attending Mass, while the tribune above was occupied by the nuns' choir. This architectural layout allowed the religious to overview the sanctuary and the high altar while remaining separated from the officiating priest and hidden from the laity seated below (Coester 1984, 8-23; Dimier 1974; Hamburger 1992, 111-114; Kosch 2001, 19-39; Mohn 2006, 28-32; Untermann 2003, 53-68). The space beneath the western tribune may also have accommodated the tombs of members of the *familia*, mainly the most important benefactors of the community. The exact organisation of the tombs in 13th and 14th century Clairefontaine is still under discussion, due to the transformations made to the church and the relocation of several tombs during the 16th century. In general, the founders' tombs are located in a more prominent place in the church's sanctuary. Yet, masonry between the pillars in the south-western corner of the crypt might indicate the presence of separate burial chambers for the founding family. At approximately 60 kilometres from Clairefontaine, in the Eifel, lies the Cistercian nunnery of Sankt-Thomas an der Kyll (Fig. 2-6). The convent also dates back to the 13th century

and has one of the best-preserved examples of a church with a single nave and a western tribune (*Nonnenchorempore)* (Coester 1984, 30-38). The disposition of the church is reminiscent to that of Clairefontaine and even today, many 13th century tombstones cover the floor of the area under the tribune.

The first stone monastery was not characterised by the typical layout of Cistercian architecture with all the space arranged around a cloister with a central garth. Instead, the monastery consisted of a single conventual wing, measuring 42 metres by 10 metres. To the south-west there were several more isolated functional buildings among which was a large monastic kitchen (Fig. 2-4). The conventual wing was connected to the church in the north and bordered by the river in the south. Along its eastern outer wall there was gallery enabling passage between the different rooms. The ground level comprised three rooms. At the northernmost point there was the chapter room, measuring approximately 17 metres by 10 metres and with two passages to the gallery. This spacious room was subdivided into two naves by a row of pillars. A second room, measuring approximately 15 metres by 10 metres, had a chimney built into the southern wall and probably served as multipurpose heated area. At the southern end, close to the kitchen, there was the refectory. South of the refectory, some poorly preserved walls suggest the existence of a lavatory complex connected to the river and accessible from the gallery. Comfort seems to have been a major concern of the noble nuns as fieldwork clearly showed several minor architectural adaptations of the ground floor during the late 13th and early 14th century (Evangelisti 2007, 53-54; Gilchrist 1993, 27). The subdivision of domestic areas was suggested by varying floor levels and the foundations of several partition walls. The first floor of the convent building undoubtedly housed the dormitory, which must have been accessible from one of two stairways that also served the *dames* choir in the western part of the church.

An isolated architectural entity, located south-west of the conventual wing, housed the 13th century kitchen facilities. Although the kitchen complex was isolated from the other monastic buildings, it was clearly orientated perpendicularly to the conventual wing. The kitchen, measuring approximately 10 metres by 7 metres, had a central fireplace surrounded by four pillars supporting a hood (Fig. 2-7). This type of kitchen was common in 13th century Cistercian abbeys (Coomans 2000, 373-376 and 389-390; De Meulemeester / Coomans 2000; De Meulemeester et al. 2001). The main space was supplemented by several annex buildings: in the north, there was a smaller kitchen with a chimney lined with refractory schist; in the south-west, the fortified tower house was transformed into a cellar and integrated into the kitchen complex. Along the northern wall of the ancient tower house, 11 tombs of servants or lay sisters have been revealed.

Figure 2—7   Medieval kitchen area: A. two of the four pillars supporting the hood of the 13th century fireplace, B. base of wooden partition wall of the 14th century kitchen. All other walls belong to later construction phases (Johnny De Meulemeester, adapted by the Davy Herremans, ©SPW-Dpat)

The exact number of inhabitants during the 13th century remains unknown, but the community must have comprised about 12 *dames* and five or six lay sisters[7]. The nuns were not the only ones to live in Clairefontaine. For religious services to be held, the presence of a priest was required. A monk from Himmerod or Orval sojourned to celebrate Mass and to administer the sacraments. Enclosure was reinforced by *Periculoso*, the bull issued in 1299 by Boniface VIII (Hamburger 1992, 108-134; Tibbets Schulenberg 1984, 201-203). Before, enclosure had been a rather symbolic matter and the Clairefontaine sisters enjoyed a certain liberty to leave the convent if necessary, as stated in an act of 1292 relating to a business trip some nuns took to Metz (Goffinet

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[7] Exact numbers known from 1507 onwards – see later in this article.

1877, 86-87). After 1299, a representative, often a male magistrate, was appointed to look after the nuns' external affairs (Goffinet 1877, 98). While the housekeeping within the cloister was done by lay sisters and lay brothers, hired laymen were responsible for the work in the outer court and on the monastic estate. According to a charter by Marguerite de Bar, Countess of Luxembourg, dated 1302, the farmyard was either downstream in the valley or adjacent to the monastery in the east, in the same place as the 18th century outer court (Goffinet 1877, 103).

To summarise, Clairefontaine I consisted of three main buildings: a church, a conventual wing and a kitchen complex, all arranged in the shape of an 'S', starting in the north with the church and ending with the kitchen alongside the river. The superposition of the lay space and sisters' choir allowed for the strict separation of the different social groups using the church, despite the rather restricted architectural space. There was no square cloister with ambulatory south of the church. Instead, the conventual wing, with its living quarters on the ground floor (chapter room, heated room and refectory), was connected to the church by a single gallery. The dormitory on the first floor led to the nuns' choir in the church tribune. A stairway, close to the church, connected the dormitory to the gallery. The kitchen facilities were, in general, separated from the main building to avoid the spread of fire.

The Cistercian order *statuta* contained no explicit rules for the construction of nunneries. But this was not the case for male abbeys. Undoubtedly, the few architectural prescriptions in Saint Benedict's Rule, concerning the porter's lodge, the mill and the farmyard, were also implemented on the architecture of nunneries (Vandenheede / Coomans 2003). Most male Cistercian abbeys have a standardised architectural layout, with the church and all other areas grouped around a cloister comprising a central garth with a surrounding ambulatory (Untermann 2001). Comparative studies in France (Chauvin et al. 2001), Germany (Eydoux 1952; Mersch 2004; Mohn 2006), England (Gilchrist 1993), Swiss (Bolly et al. 1990) and the Netherlands (Coomans 2004a; Coomans 2005) show that nunneries, on the other hand, were rarely built, from the founding on, according to this standardised monastic plan (Jäggi / Lobbedey 2008). In general, the architecture there was more modest and rather irregular (Aubert / de Maillé 1943; Vandenheede / Coomans 2003). Thus, we can assume that the configuration of Clairefontaine I, for little common as it appears to be, was rather customary within the early building phases of Cistercian nunneries.

The monks' choir was always located in the eastern part of the church. When building nunneries, Cistercian architects were faced with additional prescriptions on enclosure and seclusion. Therefore, the sisters' position in the church was more flexible: different locations were tolerated for the sisters' choir as long as regulation of the interaction between the different social groups circulating in the nunnery church could be

guaranteed. As the example of Clairefontaine demonstrates, the choir could be relocated more than once during the abbey's building history. This often ties in with rearrangement of the monastery. The overall plan of Clairefontaine I was clearly shaped by the positioning of the nuns' choir in the western part of the 13th century church, while later in this article it will be shown that a complete makeover of the monastery building during the 14th century (Clairefontaine II) was linked to relocation of the sisters' choir. This recurring phenomenon often remains unnoticed. The main reason for this is the fact that most excavations focus mainly on the abbey church rather than on the surrounding conventual buildings which are often much more indicative.

To understand the difference between male and female architecture it is important to acknowledge the particular social background of nunnery foundations during the 12th and 13th centuries. Since the nuns' everyday activities were limited to spiritual work and praying for the souls of their benefactors they had little need for a monumental abbey (Lauwers 1996, 37-78; Röckelein 2008, 211). Nunneries generally housed small communities, installed and maintained by a patron and his family. Material culture and architecture was shaped much more by the taste, means and generosity of the benefactors. Male abbeys, on the other hand, often housed larger groups of monks and lay monks. Usually these foundations were directed by the order or by a local lord in the light of land-reclamation or -exploitation strategies (Verhulst 1995). Standardised Cistercian architecture was particularly suited for housing these larger and strictly organised communities for the fulfilment of their economic activities.

2.3 Clairefontaine II – the 14th century: a monastery *in forma ordinis*

In 1340, John the Blind, King of Bohemia and Count of Luxembourg, officially expressed his wish by testament to be buried at Clairefontaine[8]. To prepare for his prestigious burial, the abbey was completely reconstructed during the first half of the 14th century

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[8] *Primo videlicet sepulturam corporis nostri eligimus in monasterio monialium de Clarofonte, ordinis Cisterciensis, Treverensis diocesis prope Arlunum, ad quod monasterium corpus nostrum ubicumque mori nos contingeret, ordinamus et volumus apportari, ibidem sepeleri*
We (John the Blind) chose to be buried in the Cistercian monastery of Clairefontaine, situated in the diocese of trier near Arlon and we command that our body is brought to this place from wherever we come to die. (Goffinet 1877, 168-169; Kurth 1880, 43-48)

(Clairefontaine II). Likewise, John's predecessors, Henry VI, Count of Luxembourg (✝1288), and Henry VII, Count of Luxembourg and Emperor of the Holy Roman Empire (✝1313), expressed the will to be buried in Clairefontaine. Unfortunately, they never came to rest in their beloved Clairefontaine since their bodies were lost in the battlefields of Worringen and Buonconvento (Margue 2006, 295-296). John's decision was probably made shortly after he accessed the throne in 1310, since his explicit support for the abbey began from this moment on. Having confirmed the privileges of the abbey and the donations made by his ancestors, he provided the community continuously with the necessary means until his death during the battle of Crécy in 1346 (Goffinet 1877, 122-173). His example was followed by the Luxembourgian nobility (Goffinet 1877, 122-169). More than likely the building works were initiated around 1315, a year marked by the beginning of a long dispute between the religious community and the inhabitants of the neighbouring village of Eischen, a few kilometres north of the abbey. This conflict over the felling of timber ended in favour of the nuns. In 1328, John the Blind declared that the community could log all the wood necessary for heating and for the construction of their buildings (Goffinet 1877, 141-142 and 155-156).

Clairefontaine II was marked by a conceptual change in architecture. The project had a more monumental abbey in mind, with a closed four-square cloister (Fig. 2-8). The first stage of the work concentrated on the church which was completely reconstructed in preparation for the burial of John the Blind. The first monastic church with Nonnenchorempore was dismantled and the floor level was raised by approximately 20 centimetres (Fig. 2-9). The width of the nave remained unaltered but the church sanctuary was extended to the east, bringing the total length of the edifice to around 25 metres. There is uncertainty about the dimensions and configuration of the apse[9]. South of the sanctuary, a side chapel was raised to provide space for at least three tombs.

The southern wall of the church was partly rebuilt and supported the northern gallery of the new cloister. A door leading from the church to the western gallery of the cloister was decorated on each side with a fascicle consisting of four small pillars. Together with the reconstruction of the church, a new monastery was built. East of the 13th century convent wing and alongside the church's extension, a closed cloister of approximately 20 metres by 25 metres appeared, characterised by a slightly trapezoid plan. The galleries were paved with large stones and, as revealed by the exposed buttresses, they were vaulted. A new wing, housing the most important conventual and domestic quarters, such as the chapter room and nuns' dormitory, was built east of this cloister.

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[9] The presence of the remains of slightly curved foundation walls suggest the presence of a round or polygonal apse.

Unfortunately, this part of the abbey was not accessible for further research since it was covered over by 19th-century farm buildings.

Figure 2—8   Clairefontaine II, ground level of the 14th century abbey: 1. church, 2. Saint Bernard's fountain, 3. Cloister garth, 4. Water basin, 5. ambulatory, 6. laysisters' wing, 7. pass way, 8. refectory, 9. latrines, 10. small kitchen, 11. fortified towerhouse, 12. kitchen, 13. annex of the kitchen with water basin, 14. annex of the kitchen (Davy Herremans, topography Dominique Bossicard, ©SPW-Dpat)
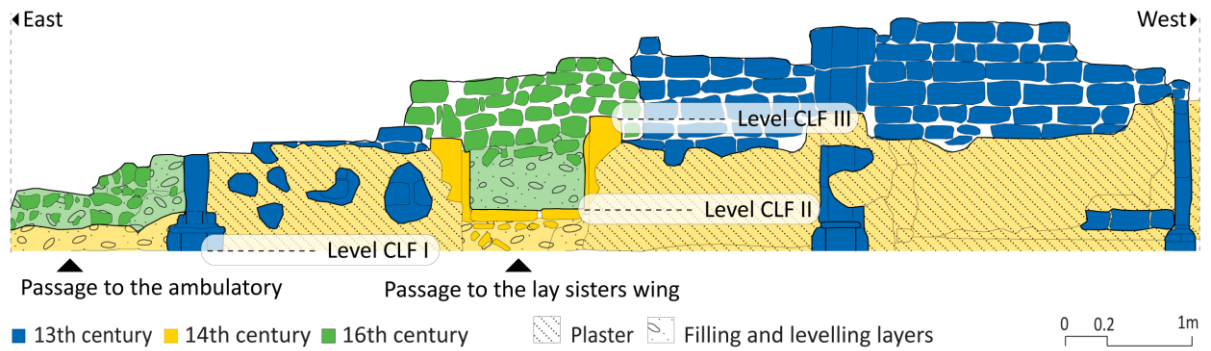
Figure 2—9   Southern wall (interior) of the church reconstructed successively in the 14th
(CLFII) and 16th century (CLFIII) (Davy Herremans ©SPW-Dpat)

The old conventual west wing was rearranged and organised as living quarters for the lay sisters. Several inner walls were pulled down and others erected, resulting in a complete reorganisation of the rooms. The building retained its dimensions (40 metres x 10 metres). A new door opening was created so that the living quarters could be entered from the church without passing through the cloister. Adjacent to the church, there was a small vaulted room measuring 5 metre by 10 metre with a floor covered with lime. The walls of the room were plastered and decorated with a *trompe l'oeil*, displaying thin white lines on an ochre background imitating masonry. The whole is decorated with little red crosses[10]. The two rooms to the south, both measuring about 7.5 metres by 10 metres, were separated by a paved passageway which connected the cloister to the functional buildings west of the monastery. A slightly off-centre pillar indicated the presence of a stairway in the south-western corner of the southern room. The fourth and final room in the west wing of the cloister had a monumental chimney anchored in the western outer wall. This room, almost 15 metres long, was divided by a line of pillars forming two vaulted naves. Adjacent to the kitchen in the west, this space certainly served as the nuns refectory.

The real reason behind the complete shift in concept is hard to determine. It is not impossible that *Periculoso*, the pontifical bull of 1299 which reinforced the enclosure restrictions for nuns, was a supporting factor in the setting up of a closed cloister. Or it might have been that the growing number of nuns forced the community to adopt a new architectural layout. Or, maybe it was simply the social aspirations of the community's benefactors that lead to the total makeover as the social capital the local nobility acquired when a family member entered the community was related to its prestige and material culture. Perhaps John the Blind himself wanted to be buried in a prestigious and

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[10] Apparently, the builders used wood from the first church or convent buildings as C-14 dates the plaster in the mid-13th century (950-1280 AD with 99.7% certainty).

monumental monastery *in forma ordinis*, like many other European rulers during the 14th century.

Fieldwork has shown that the ambitious project was never finished. The south wing of the cloister remained unfinished until the 16th century and the building work of Clairefontaine III. An explanation can be found in the sudden death of John the Blind during the battle of Crécy in 1346. His son, Charles IV, ignored his father's wish to be buried in Clairefontaine, and choosing instead the abbey of Neumünster (Margue 1997, 79-96) for the burial. As the abbey cartulary shows, this decision also meant an abrupt end to the inflow of money. A charter dated 1385 points at a growing debt, cleared only later by Count Wenceslaus I (Goffinet 1877, 188-189). In a document dated 1386, the abbess of Clairefontaine referred to unreimbursed expenses which were incurred during building work carried out in preparation of the abbey church for the burial of John the Blind (Goffinet 1877, 190-191). These financial problems reveal the fragile economic basis of a community without proper revenues and largely dependent on the generosity of its benefactors.

The decision of Charles IV marked the beginning of a less-prosperous period. The abbey never retrieved its status of dynastical burial ground. Charles IV, King of Bohemia and Emperor of the Holy Roman Empire (✝1378), opted for a burial in Prague, the capital of Bohemia and political heart of the vast territories of the House of Luxembourg (Péporté 2006). A monumental Gothic cathedral, under construction within the precinct of the prestigious Palatine Palace of Prague, well exceeded the symbolic value of a small Cistercian nunnery somewhere in a Luxembourg valley and was thus considered to be a more suitable burial place for the kings of Bohemia. Yet, despite the rupture with Luxembourgian aristocracy, in the centuries which followed the abbey of Clairefontaine remained a material marker for the cultural and political identity of Luxembourgian territory.

2.4 Clairefontaine during the 15th century: between Burgundy and Bohemia

The counts of Luxembourg, promoted to the rank of dukes in 1354, became more and more occupied by the higher politics of Bohemia and the Holy Roman Empire. Consequently, they lost interest in the lands of their forefathers far away from the Bohemian capital of Prague. Wenceslaus I, brother of Charles IV, was the last to play a role in the politics of the Low Countries. As Duke of Luxembourg, Brabant and Limbourg he wanted to widen the area of influence of the House of Luxembourg throughout north-west Europe. An early death without an heir ended the territorial unification movement which he had initiated in Brussels (Coomans 2009). In 1384, Wenceslaus died of pestilence in Luxembourg. He opted for a grave in the choir of the Cistercian abbey of Orval, the burial ground of the counts of Chiny, a title which Wenceslaus had acquired along with territories of Chiny in 1364 (Coomans 2004b, 130-131). In 1388, his successor, Wenceslaus II, gave the Duchy of Luxembourg in pledge, creating a slightly unusual situation with a duke by title but also a pledgee who had the actual power over the region. Philip the Good, Duke of Burgundy, took advantage of this situation and managed to buy off the pledged Duchy in 1441, finally adding it to the Burgundian Low Countries in 1457 (Trausch 2003).

Only a few documentary sources inform us about the situation in Clairefontaine during this period (Goffinet 1877; Goffinet 1907; Joset 1935, 220-223). However, it is obvious that the political instability in the Luxembourgian region, the persisting religious crisis in the West, a decreasing number of those obeying the call (Bonis et al. 2001) and the successive hostilities in the neighbouring village of Eischen[11] made the late 14th and 15th centuries a low point in the abbey's history. In 1497, the abbey counted just four nuns, was facing serious financial difficulties and had undergone a moral crisis. Except for some adaptations and renovations to the 13th century kitchen facilities, there was no building activity between Clairefontaine II, mid-14th century and the reconstruction of Clairefontaine III during the 16th century (Fig. 2-10). The rearrangement of the old monastic kitchen was a make-shift solution since the construction of a new kitchen in the cloister's south wing had been started but never finished due to the sudden death of John the Blind.

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[11] Continuing disputes on the use of the wood: (Goffinet 1877).
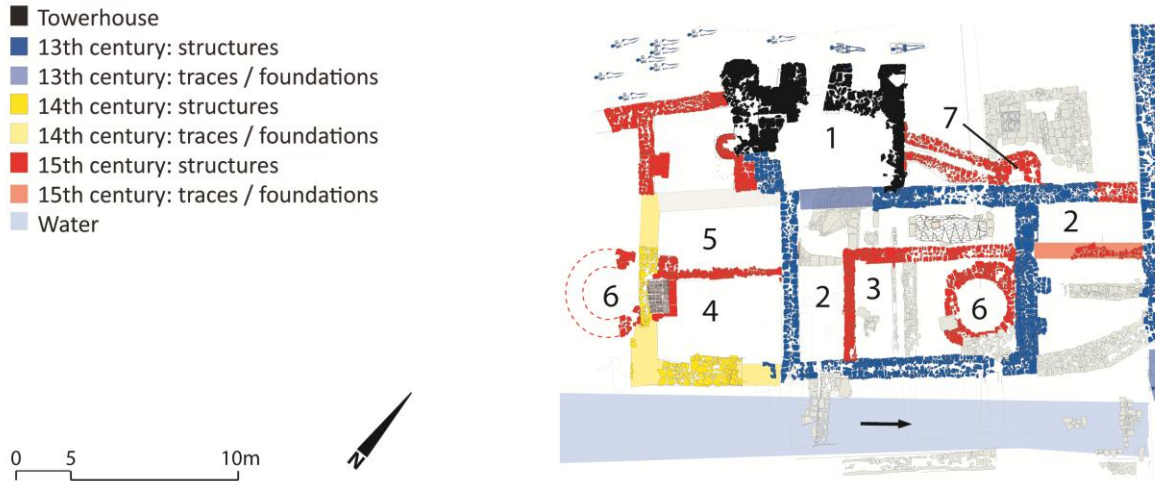
Figure 2—10 Ground floor of the kitchen of Clairefontaine II, after the 15th century reconstructions (CLFIIb): 1. fortified towerhouse, 2. passway, 3. bakery, 4. kitchen, 5. parlour / reception room, 6. oven, 7. water reservoir (Davy Herremans, topography Dominique Bossicard, ©SPW-Dpat)

The first renovations date back to the first half of the 14th century, probably shortly after 1346. The large square central fireplace was replaced by a 4-metre wide chimney set against the kitchen's northern outer wall. A large basin was installed behind a wooden partition wall, and a new annex building was constructed to the west of the kitchen. The floor of the small kitchen in the north-east was paved with architectural fragments recuperated from Clairefontaine I. In a second stage dating back to the mid-15th century and which will be discussed chronologically later in this paper, a further, more deep-seated reorganisation took place. The little kitchen was dismantled to make place for a basin[12]. The fireplace in the large kitchen and the water basin in its south-west corner were both abandoned. Instead, a large bread oven measuring 2 metres across was erected. The 14th century western annex building was extended by 4 metres to the north and the new space was divided in two by a wooden partition wall (Fig. 2-11). The southern room, approximately 4 metres by 6 metres, was equipped as a kitchen with a wooden floor and an external oven which could be loaded through an opening in the back of a massive new chimney (fig 2-10, 6). The heat produced was conducted into a tiled stove in the neighbouring room, which apparently served as both a parlour and a reception room.

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[12] Collecting water from the roof of the ancient tower house through a channel.

Figure 2—11   15th century kitchen: A. 14th century floorlevel, B. beams of 15th century wooden floor, C. base of wooden partition wall, D. base of tile stove, E. hearth, F. oven (Johnny De Meulemeester, adapted by Davy Herremans, ©SPW-Dpat)

The abbey cartulary suggests building activity around the middle of the 15th century. A document from 1457 pointed to a persisting conflict with the villagers of Eischen, who blamed the community for over-exploiting the surrounding forests through the unrestrained felling of wood for building (Goffinet 1877, 212). Historical chronology and iconography on some of the stove's 15th-century tiles has enabled us to pinpoint the reconstruction work between 1441 and 1457, under the direction of abbess Elisabeth de Autel (Kelecom / Muller 2010).

The oldest tiles found in the abbey bear the image of an Hungarian king, illustrated by a globe, a sceptre and a crown decorated with the Anjou lily (Fig 2-12, 1) (Marosi 2006). Stove tiles decorated with portraits and heraldic signs were exchanged as gifts in late medieval times. They were a material testimony to the bonds and social networks among the late-medieval elite and therefore articulated the social identity of both the donor and the receiver. This custom probably originated in the royal courts of Central Europe, the birthplace of stove tile ceramics, and was adapted later in the 15th century by elite groups elsewhere in Europe (De Clercq et al. 2007b; Frantz 1981; Ostkamp 2002; Sabjan 2007). Without doubt, the Kings of Hungary loved to donate such tiles to their political allies. Their portraits and heraldry appear on stoves in castles, abbeys and burgher houses all over Central Europe and abroad. Excavations revealed tiles of the emperor of

the Holy Roman Empire and Count of Luxembourg, Sigismund (1385-1437), his grandson Ladislas of Habsburg – also known as Ladislas Posthumus (1444-1457)[13] – and Matthias Corivinus (1458-1490). The latter had his own production in the outer court of his residence in Budapest (Minne 1977; Voit / Holl 1963).

Figure 2—12   Stove tiles found in Clairefontaine: 1. Ladislas Posthumus, King of Hungary and Bohemia, 2. Elisabeth de Frantz, abbess in Clairefontaine, 3. Eagle of the Dukes of Bohemia, 4. Maximilian I of Austria, Duke of Habsburg and emperor of the Holy Roman Empire, 5. Pierre-Ernest, count of Mansfeld and Governor of Luxembourg, and Marguerite de Bréderode, his first wife, 6. Charles V, imperial eagle and chain of the Order of the Golden Fleece, 7. Eleonora of Habsburg, 8. Armoury of the County of Luxembourg. (Davy Herremans and Joris Angenon)

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[13] A tile depicting Ladislas was also found in Strasbourg. It is very tempting to link this to the diplomatic mission dispatched by Ladislas in 1457 to Charles VII of France. The prestigious delegation loaded with gifts stopped in Strasbourg on their way to Tours, where the king resided and where the emissaries had to court the French royal princess, Magdalena of Valois, by order of the Bohemian king. (De Barante 1835, 108)

The Hungarian king depicted on the Clairefontaine tiles was supposedly Ladislas Posthumus. The death of Emperor Sigismund in 1437 ended the male line of the House Luxembourg-Limbourg. His niece, Elisabeth of Görlitz, and her husband Anthony, Duke of Brabant and Limburg and the oldest son of Philip the Bold, Duke of Burgundy, became pledgee of the Duchy in 1411. Anthony was killed in the Battle of Agincourt in 1415. Serious debts made Elisabeth turn to her Burgundian nephew, Philip the Good, who was willing to buy off the Duchy of Luxembourg. The acquisition of Luxembourg and the Lorraine was one of Philip's priorities in order to unite the Burgundian homeland and the Burgundian Low Countries. The transaction was arranged by the Treaty of Hesdin (1441). In this way, Philip became *mambour* and governor of Luxembourg while the hereditary title of Duke of Luxembourg remained in the hands of Ladislas, grandson of Sigismund on his mother's side. This situation lead to a conflict between them both, which apparently emerged after the death of Elisabeth of Görlitz in 1451 and ended in 1457 with the early death of Ladislas (Trausch 2003, 150-154).

To summarise, the Clairefontaine tiles suggest a date between 1441 and 1457, the era in which Ladislas faced Philip the Good. During his struggle, Ladislas found support among members of the Luxemburg nobility who had difficulties with the centralist politics of the Dukes of Burgundy (Trausch 2003, 73). Despite its problems, Clairefontaine remained a symbol of Luxembourgian nobility: members of the religious community as well as their benefactors all belonged to the Luxembourg elite. Elisabeth, Abbess of Clairefontaine during this period, belonged to the Autel family who were traditional allies of the Bohemian kings. Her father, Huart II, served Wenceslaus and was Governor of Luxembourg under his reign. He was set against the interference by the Dukes of Burgundy and in 1412 part of his land was confiscated by Anthony of Burgundy, while his castle, situated three kilometres from Clairefontaine, was burnt to the ground (Würth-Pacquet 1877; Wymans 1963). Huart III of Autel, one of Elisabeth's brothers, lead a rising against Philip the Good in the fourthies of the 15th century (Péporté 2006, 26). Following the death of Elisabeth of Görlitz, Ladislas wanted his Luxembourgian vassals to renew their oath of fidelity. He assembled the 'États de Luxembourg', the council of Luxembourgian nobility on 20 December 1452. However, threatened by Philip the Good, Ladislas' ambassadors did not dare to enter Luxembourgian territories. The Duke of Luxembourg set up a new assembly in Trèves, with Archbishop Jacob of Sierck and ally of the Hungarian crown. The deputies of Thionville and at least 20 noblemen were present at the meeting. Their names remain unclear, but some Luxembourgian noblemen were richly rewarded afterwards by Ladislas. For example, Jean Studigel de Bitche received several privileges…

...pour les bons services rendus à lui et au duché de Luxembourg (Würth-Pacquet 1877)

Also, George de la Rochette, Gérard de Wiltz and Jean de Raville received substantial donations. In 1455, Ladislas, Duke of Luxembourg, loaned the signory of Koerich to Gilles d'Autel, brother of Elisabeth (Würth-Pacquet 1877). The effigy of Ladislas on the stove in the parlour or reception room may indicate the position of the community in this political struggle.

In 1462, five years after the death of Ladislas, Philip the Good was recognised by the Etats de Luxembourg. From then on, all of his successors, the Dukes of Burgundy and later the Dukes of Habsburg, were considered to be the legitimate sovereigns of Luxembourg (Yante 1993). The Duchy was the largest but, at the same time, the poorest province in the Low Countries and was mainly of interest for its geo-strategical position. Being a little urbanised and largely rural area, the Duchy maintained a typical feudal structure in which family ties were the most important element of social bonding[14]. As the history sketched out above has already demonstrated, the feudal elite were hard to force into the straightjacket of central authority. Apparently, as part of their propaganda strategies, the Habsburgian princes tended to invest in the persistent symbols of the seigniorial past and traditional power. Thus, the Luxembourg abbeys in particular could count on the princes' protection and support. During the 16th century, such propaganda strategies resulted in renovation on several abbeys and old aristocratic burial churches all over the Low Countries, a topic that is discussed later in this article. In 1480, Maximilian of Austria and his wife Mary of Burgundy confirmed the privileges of Clairefontaine abbey. In this document, the new sovereigns presented themselves as the natural successors of the founders[15]: Maximilian of Austria was also present in the abbey's material culture[16]. Several fragments of stove tile bear his emblem (Fig. 2-12, 4), while others bear the family emblem of Élisabeth de Frantz (Fig. 2-12, 2), Abbess of Clairefontaine in 1480 (Joset 1935, 281). Her emblem can also be found on a reused stone bricked in the façade of the 18th century parlour (Fig. 7-6) what may suggests that the confirmation of the abbey's privileges came along with certain architectural

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[14] " (…) *Un bourg dominant les villages des alentours, plusieurs bourg formant une région (…)"*
" (…) a castle dominates the surrounding villages. Several of these entities make a region (…)" (Trausch 2003, 149-200)
[15] (…) *monasterium fuisse et esse fundatum a praedecessoribus nostris, comitibus et ducibus Lucemburgiae* (…) the abbey founded by our predecessors, the counts and dukes of Luxembourg (Goffinet 1877, 226-228)""
[16] The fragments definitely date to after 1477 and Maximilian's marriage to Mary of Burgundy, shown on the chain of the Order of the Golden Fleece.

adaptations. At least, the confirmation came with a donation of stove tiles and as such Maximilian's emblem replaced Ladislas' effigy.

2.5 Clairefontaine III – a new start in the 16th century

 Following the death of abbess Sophie de Muel in 1497, the General Chapter of Cîteaux decided to transfer the four remaining nuns residing in Clairefontaine to the abbey of Differdange. A small community of monks from the Cistercian abbey in Himmerod took their place. For ten years, between 1497 and 1507, Clairefontaine was a male abbey lead by two abbots consecutively (Goffinet 1877, 226-228; Margue 2003, 281-282). This major change can only be understood by taking in account some site-specific events and the wider reformation movement that characterised late-15th to early-16th-century female monasticism.

Gofrinum, a former Himmerod monk, was procurator and confessor of the Clairefontaine community. Living a loose life, he spent a large part of the abbey's means. In addition, he had a scandalous affair with abbess Sophie de Muel that came to the attention of the General Chapter after several complaints from community members (Canivez 1934, statuta 1489: 32). The case dragged on until 1496 and, without doubt, accelerated the moral and financial decline of the house. The late 15th- to early-16th-century reformation was influenced by the so-called *Devotia Moderna* which was aimed in particular at Cistercian nunneries. These reformations were meant to strengthen everyday life by reinforcing the regulations on enclosure and the interference in monastic life by the nuns' families. More time and attention was to be spent on praying and spirituality, while material poverty became much more important. Early echoes of this reform movement were attested to in 1406 in the diocese of Liège, more specifically in the abbey of Marche-les-Dames, near Namur. Around 1415, it had spread to the abbey of Soleilmont. Before the year 1500, the new monastic ideals had reshaped life in about 15 other abbeys (Lefèvre 1990, 156-174). Many communities opposed the reform which was aimed at a more severe and spiritual life. As a reaction against this, the General Chapter often decided to put a reformed abbess in charge of – or even to disband – the revolting communities and to replace them with a community of reformed sisters or monks. This frequently led to an exchange in communities: male communities handed

their monumental and well-equipped abbeys over to a community of nuns and installed themselves in the often more-modest and less-functional nunneries[17]. "The reformism did not fade away, although the communities sometimes needed some encouragement and a boost to hold strong. Solidarity made both Cistercian brothers and sisters find each other in prayer. The reform movement continued after the 15th century and is mentioned in the annals of every community which classify all acts 'before' and 'after' reformation" (Henneau 2002; Montulet-Henneau 1990). Reformation and the arrival of new religious groups introduced new social dynamics which often resulted in building activity: first of all the church, then more specifically the sanctuary, the choir and the choir stalls were renewed (Coomans 2004a; Coomans 2005). In addition, other parts of the abbey such as the chapter house, a sign of the order's authority, were rebuilt (Vermeersch 1976).

The exact events that took place in Clairefontaine at the end often 15th century are difficult to reconstruct. The abbey of Clairefontaine was situated in the dioceses of Trier, which, as regards Cistercian reformation, is poorly studied compared to the dioceses of Liège and Utrecht. In 1507, the General Chapter of Cîteaux gave authorisation for the four *dames* to return to their abbey. A new abbess, Cathérine de Berentzeim, was put in charge (Canivez 1934, statuta 1504: 36; statuta 1513: 14; statuta 1514: 32). She would govern the abbey from 1507 until 1551, a flourishing period: finances and moral were restored, the number of religious increased markedly and the monastic buildings were completely renovated. Cathérine could count on the unconditional support of the Governor of Luxembourg, Christophe de Bade, an important character in the abbey's history who will be discussed later in this paper. The almost complete reconstruction of the abbey under the government of Cathérine de Berentzeim is known as Clairefontaine III (De Meulemeester 2000). Taking into consideration the large extent of the renovations, it may be that the monks initiated the abbey's reconstruction before 1507. Unfortunately, documentary sources are incomplete and help little in determining the precise building chronology. In 1516, there was another dispute about the felling of timber between the abbey and the villagers of Eischen (Joset 1935, 184). Apparently, the new basilica was not finished before 1552 when, under the government of abbess Elisabeth de Rottart de Wiltz, the tomb of Ermesinde was relocated and equipped with a new sculpted tombstone (Joset 1935, 63-64).

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[17] The nunneries of Saint-Remy in Rochefort (founded in 1229), Jardinet (founded in 1232), Moulins (founded in 1233) and Boneffe (founded somewhen in the 13th century) became male houses in 1464, 1430, 1414, and 1461 respectively. The sisters of Rochefort were transferred to the former male house of Félipré (in the French Ardennes). In 1441, the abbay of Nizzelle was founded, giving rise to a community of monks coming from the abbeys of Moulins and Jardinet.

Figure 2—13   Clairefontaine III, ground level of the 16th century abbey: 1. church, 2. chapel of Our Lady, 3. chapel of Saint Marguerite, 4. Saint Bernard's fountain, 5. cloistergarth, 6. water basin, 7. ambulatory, 8. laysisters' wing, 9. passway, 10. refectory, 11. kitchen with annexes, 12. latrines, 13. abbess quarter (Davy Herremans, topography Dominique Bossicard, ©SPW-Dpat)

In half a century, the medieval abbey completely disappeared and gave way to a new monumental architectural ensemble. This shows that the community had found a new dynamism, allowing it to grow from four *dames* in 1507 to 13 in 1551. Except for the southern wall of the nave, which separated the church from the cloister, the entire abbey was pulled down and rebuilt following a new plan which included a three-naved church with transept, an extended cloister and new wings to the west, south and east of the cloister (Fig. 2-13). Only the east wing, situated under the actual farm, was not excavated. The slightly trapezoid form of the primitive cloister was transformed and extended to the east, turning it into a perfect square of 25 metres each side. To facilitate

this, the east wing of the abbey was pulled down and rebuilt 3.5 metres over to the east. The south-west corner, previously at an acute angle, was built at 90°, which allowed the south wing to be rebuilt on an adjusted axis. These building works were accompanied by a raise in the floor level which allowed for the conservation of previous foundations, substructures and even pavements (Fig. 2-9).

The new church was of the basilical type, with side aisles and a transept of the same width as the nave. The sanctuary was characterised by an even chevet flanked by two lateral chapels aligned with the side aisles. All this was set within a large rectangle measuring approximately 50 metres by 20 metres – in other words, on a surface area more than double the size of Clairefontaine I. Evidenced by their bases, the dimensions of the nave pillars were large. The bases of the pillars built into the south wall of the church indicate the axis of the transept which was apparently 5 metres long. The tomb of Ermesinde, surrounded by choir stalls, was located at the interception of the nave and transept. The side chapel in the south of the sanctuary was dedicated to Saint Marguerite, patroness of Ermesinde; the north chapel was certainly dedicated to the Virgin Mary. The interior level of the church was raised once more by approximately 60 centimetres (Fig. 2-9).

The west wing of the cloister housing the community of lay sisters was rebuilt from top to bottom. The whole edifice was erected using the same dimensions as the south wing of the cloister and its eastern façade, adjacent to the new church, which must have been huge. In addition, the interior was completely rearranged. The passageway, which previously divided the building, was relocated to the south, and aligned with the southern gallery of the cloister. Two large rooms of more than 10 metres length took up the ground level together with a smaller room, adjacent to the church. The exact use of the west wing remains unclear, but by comparative research they have been determined as quarters for the lay sisters. Another indication may be a hallway constructed in parallel with the cloister along the entire length of the northern room. There is no mistaking that this concealed passage was designed for the lay sisters or maybe guests to get to the church without disturbing the cloister[18].

Those guests may have been found in the new building west of the lay sisters wing which replaced the former kitchen facilities. The new construction was well aligned with the new south wing and connected to the cloister range. This architectural entity comprised a gallery, two spacious rooms, a number of smaller rooms and a complex of

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[18] Throughout the 17th century, the number of lay sisters did not exceed three. Later, during the 18th century, this number would reach 8. The small numbers suggests that not all of the west wing was reserved for the lay sisters. (Goffinet 1907, 117-156)

latrines built over the river. A stairway constructed from reused materials lead to the upper floor of the ancient tower house and the newly constructed edifices. The architectural layout of this is reminiscent of a luxurious quarter for the abbess, including lodgings for prominent guests. This hypothesis is supported by the position of the building west of the cloister, facing the main entrance of the monastic precinct and directly connected to the refectory, the cloister and the church. As such, it is its symbolic position that refers to the transitional zone between the in- and outside world or the religious and worldly life. A rare example of an abbess' quarters built between 1519 and 1548 was preserved in the noble abbey of Herkenrode, close to Hasselt (Fig. 2-14). Also separated from the cloister, this building comprised a hallway leading to several luxurious rooms, vaulted with ogives and decorated with late Gothic paintings depicting vines and heraldic signs (Coomans 2004a, 112-115; Coomans 2005, 74). A similar construction remains at the abbey of Soleilmont, dating to around 1500 (Buxant 1986).

Figure 2—14   The abbesses' quarters in the Cistercian nunnery of Herckenrode. The construction of the luxurious complex was directed by abbess Mechtilde de Lechy between 1519 and 1548 (Thomas Coomans)

During the 17th and 18th centuries, the late medieval-early modern residences were often replaced by even more prestigious quarters reminiscent of a '*maison de plaisance*'

providing place for spacious and luxurious guest rooms[19]. From the beginning of the 16th century onwards, similar abbatial quarters appeared in male abbeys, situated west of the cloister and also equipped with a typical gallery (Coomans 2000, 416-419 and 452). On the corner of the south and the west wing connected to the abbess' quarters and directly accessible from the cloister was a large refectory measuring approximately 7 metres by 11 metres. South of the refectory, in the south wing, finally a new kitchen was constructed with a large chimney anchored in the eastern wall.

With Clairefontaine III the community was provided in a new and monumental material setting. The early 16th century also meant a change in the structural organisation of monastic life and the communities budget. For far too long, the community had depended on the generosity of its lay benefactors, providing money for the *memoria* of their forefathers and the daily life of their daughters living inside the convent walls. The documentary record reveals the reorganisation of the vast monastic estates, from the 16th century onwards, exploited by the farming system[20].

However, it must be noted that this second life for Clairefontaine would never have succeeded without external support. Already, dating back to the late 15th century, Clairefontaine could count on the support of the House of Habsburg and their legal representatives in the Duchy of Luxembourg. As part of their propaganda strategies, the Dukes of Habsburg systematically invested in the memory of their legal predecessors. As such, they spent a lot of money on the restoration of the old dynastic burial churches and abbeys of the old aristocracy, the titles of which they had acquired (De Jonge 2005, 125-146). The history of the Premonstratensian abbey of Middelburg, in Zeeland, is comparable to that of Clairefontaine. The abbey was completely rebuilt by the orders of Maximilian I and Charles V at the beginning of the 16th century. In the church, a new splendid mausoleum was erected for William II, Count of Holland and Zeeland (✝1256). This tomb of dynastic prestige was erected according to a renaissance design between 1542 and 1546 along one of the outer walls of the choir (Dhanens 1985). Under the direction of Charles V, the body of Charles the Bold was exhumed in Nancy to be buried in a magnificent tomb in the heart of the choir at the Church of Our Lady in Bruges in 1553 (Dumortier 1999, 686; Smolderen 1980-1981, 21-53). The intervention of Charles V at Clairefontaine in 1531 and Ermesinde's new tomb, inaugurated in 1552, are unquestionably consequences of this quest for dynastical identity.

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[19] Examples of such luxurious palaces include: La Cambre (Brussels), Marche-les-Dames, Argenton, Solières, La Ramée, Val-Notre-Dame, La Paix-Dieu, etc.
[20] First mention of such a farming system: (Weyrich 1950, 257-274)

In 1507, it was a political intervention of Christope, Margrave of Bade and Governor of Luxembourg (†1517) which led to the return of the sisters in Clairefontaine. He was the nephew of George de Bade, Bishop of Metz, and of Jean de Bade, Archbishop of Trier. He was a member of the embassy which his uncle, Emperor Frederick III sent to the Netherlands in order to prepare for the marriage of Archduke Maximilian of Austria with Mary of Burgundy. In 1488, Maximilian named his cousin as heir to his titles of *Stathouder* and Governor of Luxembourg and gave him several fiefs in Luxembourg[21]. In 1531, Charles V confirmed the privileges granted to the community of Clairefontaine. There is no doubt that this happened through the middleman Bernard de Bade, who succeeded his father in 1517 (Goffinet 1877, 235-236). In 1547, Christophe de Bade, Bernard's brother, and his wife Marguerite de Mamer, made a considerable donation to the abbey as a dowry when their daughter Elisabeth took the veil (Goffinet 1877, 240-241). Soon after the confirmation of Charles V, Bernard was discredited and had to renounce his title of Governor of Luxembourg (Cools 1993, 200-201; Viton 1807).

One of his successors appeared in the abbey's material culture. On a fragment of stove tile the blazon of Pierre-Ernest de Mansfeld (†1604), who was not only a confidant of Charles V and Governor of Luxembourg from 1545, but was also a great Maecenas and a client of a luxurious urban palace in the centre of Luxembourg (De Jonge 2004; Mousset 2007). The presence of the coat of arms of his first wife Marguerite de Bréderode, who died in 1554, enables us to date the fragment between 1545 and 1554 (Fig. 2-12, 5). It seems probable that the governor offered a stove to the Clairefontaine community during the consecration of the new church at Clairefontaine, around 1552. Several tiles were decorated with an iconography linked to Charles V and the House of Habsburg, displaying amongst others the emblem of Charles V (Fig. 2-12, 6) and the image and name of Eleonora of Habsburg, the emperor's sister (Fig. 2-12, 7). Also at the abbey of Neumunster, several stove tiles and pieces of a majolica floor bear the coat of arms of both Mansfeld and of Charles V. Situated in the city of Luxembourg and rebuilt in 1561, this abbey was the burial ground of Luxembourg's first dynasty and the resting place of John the Blind (Bis-Worch / Mousset 1999; De Meulemeester 1999b; Dumortier 1999). A fragment of the same tile series bore the emblem of the Duchy of Luxembourg[22] (Fig. 2-12, 8).

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[21] In 1491, Christophe de Bade became a member of the Order of the Golden Fleece and of the private council of Philip the Good.(Cools 1993, 161-170)

[22] The tiles also displayed the lettres LUT written in reverse (Part of LUT-CEN). Similar imprints are known from the archaeological site of Maison Hamelius in Arlon. (Borremans 1952)

2.6 Clairefontaine IV – Reconstructions after the flood (late 17th and 18th century)

Unlike the north and centre of the Low Countries, the Duchy of Luxembourg was never a theatre for civil conflicts between Catholics and Protestants during the 16th century. Counter Reformation could blossom and shape Luxembourgian society inside out. The cult of saints and pilgrimages was stimulated by the church, and Clairefontaine did not escape this movement. Archdukes Albrecht and Isabella, supporters of Counter Reformation and promoters of the veneration of the Virgin Mary in the southern Low Countries, were the last European sovereigns to confirm the community's privileges (Goffinet 1877, 250-252). In this period, in 1633 to be more specific, the foundation story of the abbey appears for the first time in the writings of a local chronicler, linking the foundation to an apparition of the Virgin Mary (Mandy 2000). The statue of the Virgin Mary, which had been present in the monastic church since the 13th century, now became the object of a cult that was linked to commemorative prayers for Ermesinde and the devotion of Saint Bernard.

The name of the latter was associated to a source which appeared in the foundation story and which materialised in a fountain in the church near the sanctuary. In 1671, Pope Clémence X agreed to a request from abbess Marguerite de Pouilly to make the abbey church a site of pilgrimage in honour of Saint Anthony (Goffinet 1877, 292). The abbey's collection of relics was extensive and contained, amongst others, hair of the Virgin Mary, some textiles bearing Christ's blood, and some blood-stained stones recuperated after the stoning of Saint Stephen[23]. On 20 July, a belt belonging to Saint Marguerite was shown to the public and attracted pregnant women praying for a successful delivery.

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[23] Referenced in the 17th or 18th century notes of one of the Clairefontaine sisters: (Mandy 2000)
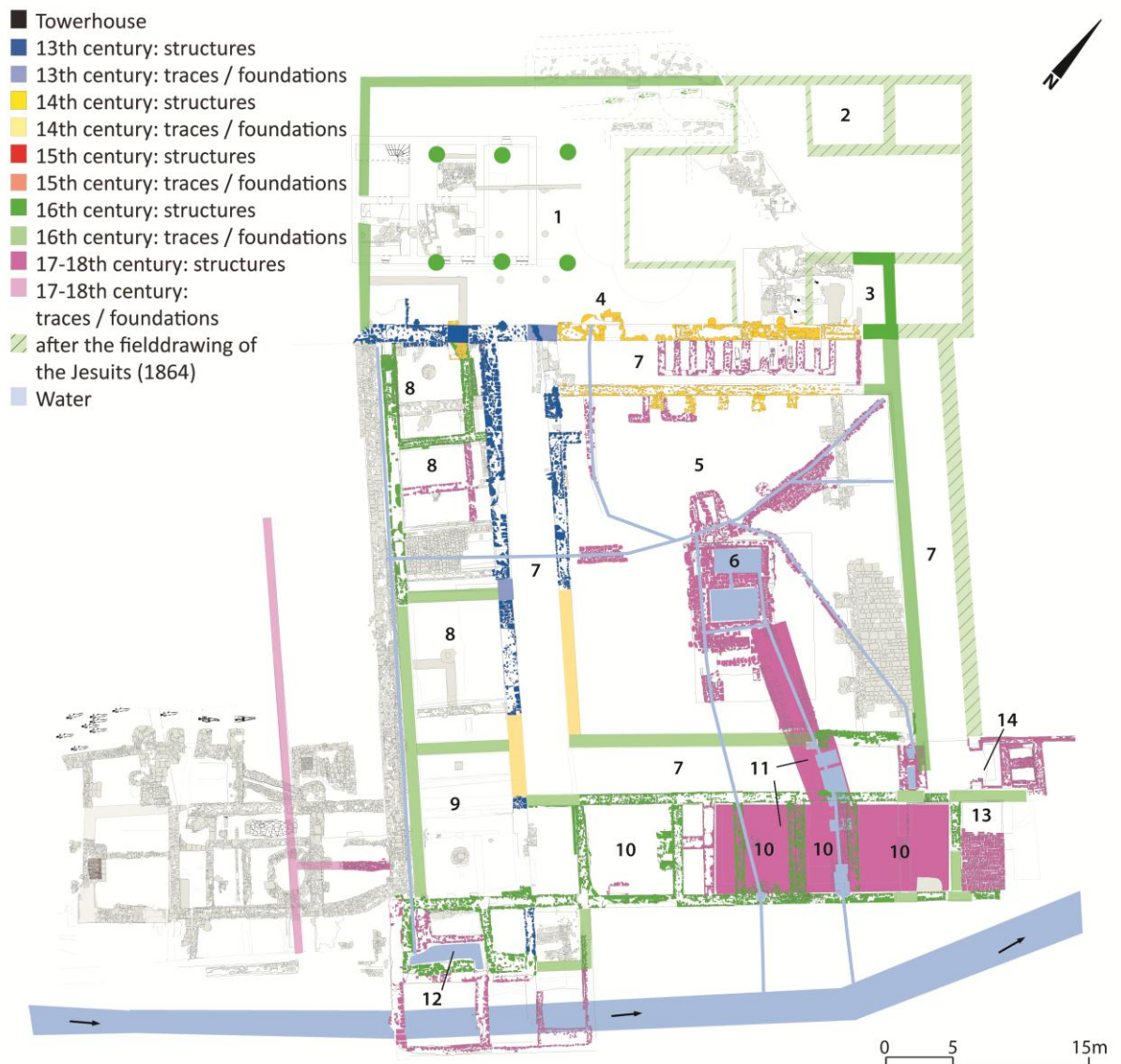
Figure 2—15   Clairefontaine IV, ground level of the 18th century abbey: 1. church, 2. chapel of Our Lady, 3. chapel of Saint Marguerite, 4. Saint Bernards' fountain, 5. cloister garth, 6. water basin, 7. ambulatory, 8. laysisters' wing, 9. refectory, 10. kitchen with annexes, 11. cellars, 12. latrines, 13. passway, 14. gate to the outer court (Davy Herremans, topography Dominique Bossicard, ©SPW-Dpat)

In this period, the water level may have risen faster than the spiritual level. During the 17th century, the valley of Clairefontaine suffered successive floods and a rising water level. On 29 May 1617, after a devastating thunderstorm and flood, six construction workers recorded damage to the underground foundations and part of the upstanding masonry (Goffinet 1877, 252-253). It is difficult to assess the extent of the damage, but it

is clear that the latrine complex south-west of the cloister was rearranged[24]. The abbess' lodging, founded on the 13th century medieval kitchen, had to be pulled down and was overbuilt with an enclosure wall. The riverbed was diverted a couple of metres to the south. At the end of the 18th century, the abbey was struck again by an even more devastating inundation which made the ground floor untenable. The sisters decided to rebuild their abbey once again, marking the era of Clairefontaine IV (Fig. 2-15). The construction campaign is recorded in the abbey's cartulary. Several texts point to a final conflict with the villagers of Eischen on the felling of wood, between 1695 and 1728 (Joset 1935, 144). The duration of the dispute corresponded approximately to the building period. In 1731, the abbot of Clairveaux visited the abbey of Clairefontaine and praised abbess Marguerite-Josephe de Fontaine in public for the works which had entered an advanced stage (Goffinet 1877, 129).

During digging at the end of the 19th century, the Jesuits draw up a concise plan of the abbey as it was during the last days before its suppression and dismantling (Joset 1935, 74). Although not entirely accurate, this plan is useful, especially for an interpretation of the church's sanctuary since this area was partly rased by the construction of the commemorative chapel. It also gives a complete picture of the abbey's outer court located to the east, which was rebuilt in 1734. Today, the guest rooms, the mill and some agricultural buildings are maintained in the modern farm, the presence of which made further archaeological fieldwork here impossible.

Before the building work began, the site was raised by about 1.5 metres in response to the rising water level and to restrict the mudflows which regularly damaged the abbey. Clairefontaine IV was equipped with an ingenious hydraulic system that provided the community with water, while also ensuring the discharge of waste water and drainage of the inner court (De Meulemeester / Larbalestrier 2004). Part of the hydraulic system had probably already been in place since the 16th century, but the vigour of the 18th century transformations made it impossible to assess those earlier phases. As water was a constant threat in Clairefontaine, waterworks were probably a daily concern.

In the centre of the garth, a large and uncovered central basin was created on the same level as the late medieval or early modern basin. Around this basin a wall was constructed to hold back the thick levelling layers (Fig. 2-16). In the 19th century this basin was known as the *vieux lavoir* (old washbasin). The new washbasin was installed in the cellars of the south wing and was accessible from the garth. The old and the new washbasins were connected by an open channel. Along the western facade of the lay

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[24] The bottom of the latrine was boarded. The boards were dated between 1595 and 1639 using dendrochronology.

sisters' wing a stone gutter evacuated water recuperated from the roof. The water was directed towards the latrines in the south. On the north-east and south-east corners of the cloister, drainpipes collected the rainwater from the roof and took it to the basin in the inner court, using underground canalisation. On the farm grounds another basin was installed and connected via an underground canal to the basin in the garth and the Saint Bernard source.

Figure 2—16   Waterbassin in the centre of the cloister garden. The basin probably dates to the 16th century. Despite a raising of the site with 1.5 metres, it stayed in use until the 18th century. In the background the 19th century Jesuit chapel (Thomas Coomans)

The raising of the site by 1.5 metres forced the sisters to partly rebuild the cloisters. Walls were made higher and the interior was adapted to the new requirements. The

number of lay sisters living in Clairefontaine during the 18th century stayed around six[25]. The refectory, in the corner of both the south and west wings, was extended to take in about three metres of the lay sisters' quarters. The kitchens in the south wing were reorganised and a transversal passage was created to link the garth to the riverside. The eastern part of the south wing was built on the 16th century vaulted ground level which was transformed into cellars – these are still accessible today. According to the Jesuits' plan, the east wing housed a sacristy at the back of the church chevet, a parlour in the north and the chapter room in the south. Adjacent to the chapter room was room for the abbess' residence (Joset 1935, 54). Further to the east, the farmyard was approximately twice the size of the cloister's inner court and was surrounded by stables, outbuildings, a shed, a coach house and an almoner's house. A gate, named after Saint Humbeline, lead into the farmyard from outside.
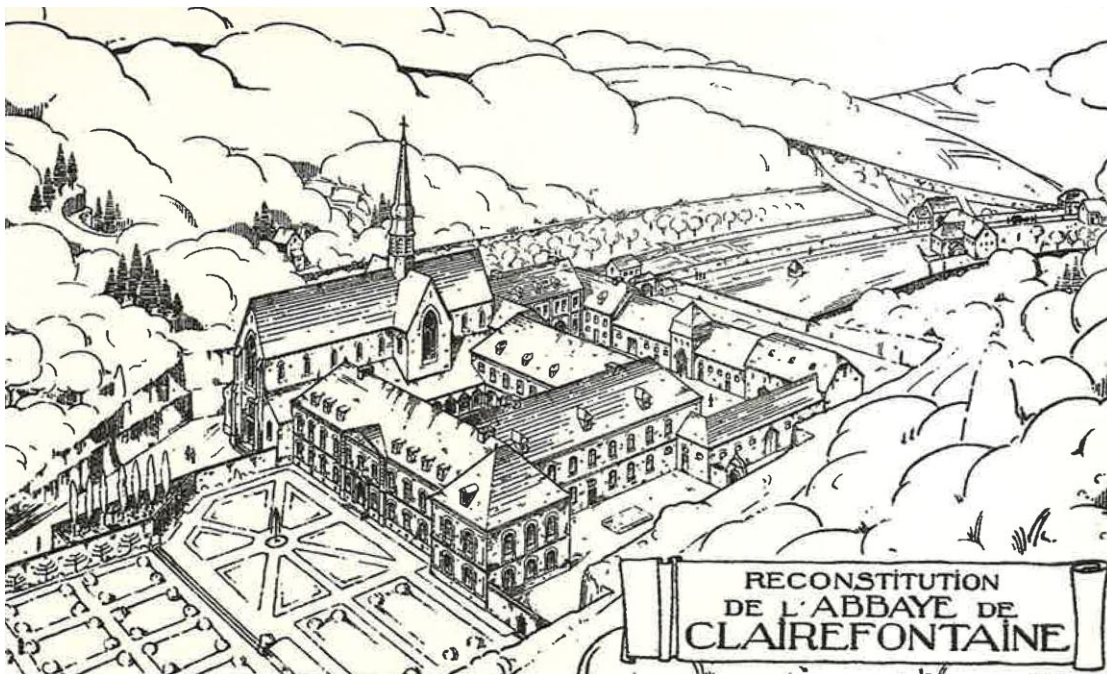
Figure 2—17   Reconstruction   drawing   of   the   18th   century   monastic   complex   in Clairefontaine. View from the south. Drawing G. Ledent (Joset 1935)

The layout of the Clairefontaine church remained unchanged but the ground level of choir stalls was raised. At a certain distance from the river and situated on a higher point on the site, the church was less exposed to the devastating power of the water. The recent excavations, the Jesuits' plan and the historical sources enable us to locate a number of tombs and cenotaphs, in both the 18th century church and cloister. Without

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[25] 3 in 1644; 4 in 1710; 7 in 1722; 8 in 1748; 6 in 1749; 6 in 1751; 6 in 1769; 6 in 1786; 5 in 1788; 4 in 1796 (Goffinet 1877; Goffinet 1907)

doubt, the tombs of the House of Luxembourg-Limbourg and their relatives had already been relocated in the 16th century. A tomb in front of the high altar was identified by the Jesuits as the resting place of Henry the Blond. In addition, the tomb of his wife, Marguerite de Bar, was to be found in the nuns' choir. A third tomb, a little further to the south, was unmistakably that of Ermesinde. In the side aisle lay the cenotaphs of Marguerite, Cathérine and Jeanne of Luxembourg, the three daughters of Henry V and Marguerite de Bar. As a matter of fact, Joan had been the second abbess of Clairefontaine. Excavations have revealed several other tombs dating from the 16th, 17th and 18th centuries, all belonging to lay benefactors who are impossible to identify. In the east gallery of the cloister, in front of the chapter room, the cenotaphs of a son of Henry and Marguerite and one of Theobald de Bar, Henry V's brother-in-law were bricked into the wall. Peter-Alexander-Cyprian Merjai, a Luxembourg lawyer and commoner, visited Clairefontaine in 1786 and made drawings of these burial monuments (Guillaume 2010). A series of nuns' tombs, bizarrely oriented north-south, have been discovered in the northern gallery of the cloister, close to the Saint Bernard source. The title page of the first monograph about Clairefontaine, published by the Jesuit father Camille-Jean Joset in 1935, depicts a reconstruction drawing based on the 19th century Jesuit plan (Fig. 2-17). Certain imperfections left aside, this outline makes the archaeological remains more tangible. The unusual location of the monastic outer court, adjacent to the monastery in the east, catches the attention.

2.7 After the suppression: the Clairefontaine site during the 19th and 20th centuries

At the time of the suppression by the French, the community comprised an abbess, seven choir sisters, one professed nun and four lay sisters. Tradition has it that the abbey was dismantled in 1793 and set on fire in 1794 (Joset 1935, 307-333). However, the excavations have yet to yield any traces of fire. Whatever else happened, the abbey was suppressed by the *Directoire* in 1796 and the grounds were divided into several lots which were sold to different buyers. While the farm and the mill continued their activities, the monastic buildings were considered as a quarry for construction materials and were completely demolished by the local population. A monumental gate in the 18th century precinct was rebuilt at the church of Habergy in 1818 and then moved to the Montée Royale in Arlon where it is still standing today (Anonymous 1994, 60-61).

François Simonet developed an on-site forge that never lacked water. Nine years after the Belgian Revolution of 1830, Luxembourg was divided in two linguistically different parts: the French-speaking area became the Belgian province of Luxembourg and the German-speaking part became the Grand Duchy. Clairefontaine actually belonged to the Grand Duchy, but after a political intervention by Simonet, who questioned the competitiveness of the young Luxembourg steel industry, provided for the border to be redrawn, Clairefontaine then moved to the Belgian side (Péporté 2011, 135-140). A lithography published in Arlon in 1854 (Fig. 2-18) shows that, at that time, little remained of the abbey except a Gothic arch and a 16th century pillar of the chapel of Saint-Marguerite. At the back, the remaining farm buildings are recognisable.

Figure 2—18   Site in 1854 with the remains of the chapel of Saint Marguerite. Lithography by F. Damoiseaux, published in 1854 by J. Bourger, Arlon.

In 1874, 'la Province méridionale belge de la Compagnie de Jésus' which had had an important noviciate in Arlon since 1855, acquired the site of Clairefontaine and built a country house at the top of the southern slope. In 1877, Father Hippolyte Goffinet published the Clairefontaine cartulary to which we have referred often in this article. He was also the driving force behind the Jesuits' 'archaeological research' before the construction of the chapel. In 1875, to honour Ermesinde and in particular to restore the Marian cult of the Notre Dame de Belle Amour, the Jesuits erected a chapel right on the spot of the countess' tomb at the intersection of the nave and transept of the 16th-century church (Kurth 1880). Excavations have revealed the remains of an elderly woman, of hefty build who had given birth to several children (Malavez 2010). The Jesuits identified the remains as belonging to Ermesinde. The physical characteristics

mentioned may support this identification but on the other hand, it needs to be stressed that the fortunate discovery must be put into context against the background of a group of Jesuits searching for relics to give credence to their cult. The chapel of Our Lady crowned with a refined turret faces the road north of the monastic site. Charles Arendt, the Grand Duchy's national architect, designed the chapel in the Neo-Romanesque style. The chapel has two levels: at the level of the ancient monastic church, there is crypt, while the sanctuary is at street level (Fig. 2-19) (Joset 1935, 347-351). The trefoil plan refers to the centralised design of funeral mausoleums. A splendid white tomb bearing the effigy of Ermesinde created an atmosphere of remembrance, together with the various stained-glass windows installed between 1930 and 1940, depicting Cistercian saints and the three founders of the abbey.

Figure 2—19   Front of the 19th century Jesuit chapel dedicated to Virgin Mary, constructed on the sanctuary of the church of Clairefontaine III-IV (Thomas Coomans)

The interbellum was a period of monastic revival in Belgium. Two new Cistercians abbeys were founded in the province of Luxembourg, adopting the names of two historic houses: Orval in 1926, next to the ruins of the medieval abbey (Soetens 2001, 135-140),

and Clairefontaine in 1935, on a new site close to Bouillon[26]. Because the latter was built on a new site with no other link than the name itself, it would be overstated to consider it as 'Clairefontaine V'. In this period the pilgrimage in Clairefontaine flourished as never before (Fig. 2-20). In 1947, just after signing a treaty which lead to the creation of the Benelux, Luxembourg and Belgium agreed on a pompous commemoration of the 700th anniversary of Ermesinde's death. Clairefontaine was given a central place in this festivity being a symbolic mark of cross-border Luxembourg identity (Péporté 2011, 135-140).

Figure 2—20   Pilgrimage on the site of Clairefontaine in 1935 (Archives Amanoclair)

In 1997, in order to celebrate the 750th anniversary of the foundation, Ermesinde's commemorative chapel and mausoleum was restored. In the framework of a wider European, research project on the origin of the counties of Arlon and Luxemburg, large-scale excavations were initiated on the monastic site. In an initial phase, the project was meant to promote the cross-border collaboration between the Walloon region, the

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[26] The Abbey of Our Lady in Cardemoy, near Bouillon housed a community of French and Belgian Trappestine sisters.

Grand Duchy of Luxembourg and the Rhineland[27]. The archaeological activities, coordinated by Johnny De Meulemeester[28], took place in close collaboration with 'les Amis de l'Abbaye noble de Clairefontaine' and 'les Oeuvres du doyenné d'Arlon', owner of the site. As from 1999, the 'Direction de l'Archaeologie de la Division du Patrimoine de Wallonie' not only took care of the follow-up to the excavations, but also oversaw the maintenance of the archaeological site. For a decade, the site functioned as a field school for students in history and archaeology from different universities throughout Europe[29]. In 2007, at the end of the last campaign, the main part of the abbey had been uncovered, except for the area east of the cloister, situated under the modern farm.

2.8 Conclusions

This article presents the results of 11 successive archaeological field campaigns, assessed in a wider historical context. Building chronology is linked to the abbey's documentary record and the history of female monasticism in the Low Countries and abroad. The excavations shed new light on our knowledge of the history of an extraordinary site which provided the material setting for a community of nuns for more than 500 years.

The story of Clairefontaine is shaped by both the spiritual and political aspirations of the inhabitants, their families and the other benefactors of the community. The material setting of this story is well preserved thanks to the successive raising of the ground level and the lack of any significant post-suppression occupation. Such a detailed stratigraphy is uncommon for a nuns' church, and even more exceptional for a complex of buildings around a cloister, especially because female abbeys have rarely been the focus of large-scale excavations such as those carried out at Clairefontaine[30].

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[27] Research assembly comprising members of the Division du Patrimoine du Ministère de la Région wallonne (André Matthys), Service des Sites et Monuments nationaux du Grand-Duché (Georges Calteux), Römisch-Germanisches Zentralmuseum de Mayence (Konrad Weidemann), CLUDEM, centre d'étude du Moyen Âge luxembourgeois (Michel Margue) and Séminaire d'Histoire médiévale de l'Université libre de Bruxelles.
[28] Research was directed by Johnny De Meulemeester (MRW et SSMN) with the collaboration of Philippe Mignot and Denis Henrotay, archaeologists responsible for the Luxembourgian area (MRW). Topography was done by Dominique Bossicard (MRW).
[29] France (UMR5648, Lyon II/ EHESS), Ireland (Trinity College Dublin) and Spain (Universidad de Murcia).
[30] In Belgium, there have been excavations to a certain extent in Herkenrode (Hasselt), La Paix-Dieu (Amay), Bijloke (Ghent), and Groeninge (Kortrijk). Several other nunneries were subject to archaeological research on a much smaller scale: Vrouwenpark (Rotselaar), Rosendaal (Sint-Katelijne-Waver), Soleimont (Gilly), Maagdendale (Flobecq), Maagdendale (Oudenaarde), La Cambre (Bruxelles), Nieuwenbos (Heusden), Boneffe

The architectural history of the abbey can be divided in four main chapters: the plan of the 18th century abbey was already known, thanks to the work achieved by the Jesuits during the 19th century. Recent excavations revealed three other main phases (13th century, 14th century and 16th century). The building chronology is characterised by a notable but gradual expansion of the architectural setting, both for the church and cloister. It is striking that during this evolution the choir of the *dames* occupied three different locations consecutively: first in a western tribune, then in the eastern part of the church, and finally under the cross vault.

Striking, too, is the change in architectural concept made in the 14th century: the open cloister in the form of a straight-angled 'S' (Clairefontaine II) evolved into a typical Cistercian abbey, with all the functional buildings grouped around a central garden with an ambulatory (Clairefontaine II). This ambitious project was not completed before the 16th century with the construction works of Clairefontaine III. Excavations have revealed that the abbey of Clairefontaine was under construction throughout most of its history, except for some temporary interruptions, such as, for example, in 1346 at the time of John the Blind's abrupt death. The work had to be carried out in several stages so as not to disturb the nuns' daily routines. For example: the 13th-century kitchen and its annexes remained in operation until the construction of a new kitchen in the 16th century. The duration of the 16th-century construction work shows slow progress at several stages: the construction of Clairefontaine III took about half a century and therefore affected the everyday life of two generations of *dames*.

A clear relationship was noticed between the internal and external worlds. Ermesinde, Henry the Blond, John the Blind, Christophe de Bade, Pierre-Ernest de Mansfeld as well as the Archdukes Albrecht and Isabella have all played an important role in the history of the community. Through financial and political support they contributed to the community's welfare and the memory of its founders. Populated with noble daughters and historically linked to Luxembourgian aristocracy, Clairefontaine became a tool for several European princes and rulers in search of political recognition in the area. However, environmental circumstances were far from inviting: until well into the 18th century Clairefontaine remained, because of its spiritual and symbolic meaning, an attractive house where daughters of affluent parents could dedicate their lives to the service of God.

(Eghezée), Guldenberg (Wevelgem), Zwijveke (Termonde), Roosendael (Sint-Katelijne-Waver), Beaupré (Geraardsbergen), Valduc (Beauvechain), Nazareth (Lier), Hemelsdaele (Werken) and Muizen (Mechelen).

Part 2 – From etic to emic…

Chapter 3　What's cooking behind the curtain? A cross-disciplinary perspective on the late medieval kitchen complex of the Cistercian nunnery of Clairefontaine

3.1　Introduction

According to the foundation narrative, the famous Luxembourgian countess Ermesinde of Luxembourg-Namur installed a community of Cistercian sisters in the wooded valley of Clairefontaine, a few kilometres south from the market town of Arlon.

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[31] Mona Court-Picon conducted palynolgical analysis. Sidonie Preiss conducted the research of plant remains and Aurelie Salavert conducted the analysis of the charcoal remains. These authors provided the text for paragraph 3.7, figure 3-9 and tables 3-3 and 3-4. Quentin Goffette conducted the analysis of the faunal remains and provided the text for paragraph 3.6, figures 3-7 and 3-8 and table 3-2. All authors contributed to the conclusions and commented on the manuscript.

In her last will, dating in 1247, the dying countess entrusts her son Henry the Blonde with the finishing of the monastery (Goffinet 1877, 211-213). However, the authenticity of the testament and foundation narrative is questioned today. Historical scholarship demonstrated that especially Henry, the first male descendant of the dynasty, and his wife Marguerite de Bar were the real moving spirits behind the foundation (Margue 1993; Margue 1994b). After a long and eventful occupation history the community was not suppressed before 1796. Soon after the closure the monastery buildings disappeared. In 1997 excavations on the site were initiated recalling the 750th anniversary of the foundation. Under the direction of the late J. De Meulemeester and financed by the Région Walonne, the project became a long-term research excavation, with a final season in 2007.

The excavation campaigns of 2004 to 2007 revealed a well- preserved part of the late medieval monastic complex located in a rather independent complex west of the conventual buildings (Fig. 3-1). The oldest structures were part of the initial monastic settlement and stayed in use as kitchen- and reception area until the first of half of the 16th century. At that moment the old kitchen quarters were dismantled to a large extent and rearranged as private quarters for abbess Cathérine de Berentzheim.

This chapter focuses on these particular areas of monastic space. Specific attention will be given to the material remains dating before the 16th century, which yield information on the use of the area as kitchen quarters. A varied dataset, comprising architectural elements, ceramic products, animal bones and plant remains (wood charcoal, fruit/seeds and pollen) allows an assessment of monastic space, material culture and food habits of a small monastic community between 1247 and the early 16th century.

3.2 Historical and social context

Assessing medieval religious life has proven to be a difficult exercise because of the layered and often conflicting social identities thriving inside the convent walls (Evangelisti 2004; Gilchrist 1993), where religious, Cistercian sisters had to live in respect with monastic regulation and vows on poverty and containment. Yet, during the Middle Ages and Early Modern Times most of the religious women were recruited amongst high class noble circles and consequently, their behaviour and consumption practices were shaped as much (or even much more) by 'the noble way of life' than by imposed monastic prescriptions. The noble character of communities was actively fostered from

outside by benefactors and patrons who were willing to invest in monastic life in their everlasting quest for economic, social and symbolic capital. Nobility offered the community along with their daughters high dowries consisting of money, land and privileges. In return, the community offered their benefactors prestige, display and a welcome outcome for daughters for whom no appropriate wedding candidate was found (Coomans 2004a; Evangelisti 2004; Gilchrist 1993; Hills 1999; Hills 2003).

The installation of the community in Clairefontaine can be considered a political act that must be situated against social history of late medieval Europe and the rise of the House Luxembourg-Limbourg. Count Henry the Blond was the first male member of this famous dynasty and the first to rule an extended Luxembourgian territory. With the construction of an *abbaye de lignage* in Clairefontaine, a prestigious dynastic burial ground for the Luxembourgian dynasty, he created a *lieux de mémoire,* a powerful material symbol for the authority of the new ruling family. As symbolic location for this prestigious project Henry chose a fertile river valley on the border of the old ancestral grounds of the House Luxembourg-Namur and the recently acquired territories of Arlon-Durby-Laroche (Herremans / De Clercq 2013b).

The presence of the aristocratic tombs gave the abbey prestige and a way to differentiate itself from other houses in the Luxembourgian. The aristocratic character of the house attracted noble families to invest in the material culture and architecture of the abbey. Until the suppression of the abbey in 1796 the community of Clairefontaine was mainly populated with noble daughters (Goffinet 1877; Hudemann-Simon 1985, 197-210). There is little or no information on the actual size of the community during the 13th, 14th and 15th century. Numbers are available from 1497 and show that throughout the abbeys later history the community never exceeded 20 sisters[32]. Seen from the scale of the monastic complex, we may suppose that during the Late Middle Ages the abbey was populated by a dozen sisters, accompanied by an equal number of lay sisters and servants. During the 13th and early 14th century the abbey gave place to several members and relatives of the House of Luxembourg-Limbourg, amongst others Hawis de Bar was often referred to in the abbeys cartulary as the 'bienheureuse', or the blessed. She was the first abbess of Clairefontaine and a relative of Marguerite de Bar, wife of Henry the Blond. Another famous abbess of aristocratic origin was Jeanne de Luxembourg, daughter of Henry the Blond and Marguerite de Bar and abbess in Clairefontaine between 1295 and 1311 (Kelecom / Muller 2010). From the second half of the 14th

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[32] 4 in 1457, 5 in 1507, 12 in 1570, 19 in 1622, 10 in 1644, 6 in 1672, 16 in 1697, 15 in 1710, 12 in 1722, 13 in 1734, 14 in 1738, 15 in 1748, 17 in 1749, 17 in 1751, 18 in 1752, 16 in 1769, 10 in 1786, 9 in 1788 and 9 in 1796: Goffinet 1877,

century the ties with Luxembourgian aristocracy were loosened. Nevertheless, community members were still recruited in the highest levels of feudal society. The list of abbesses contains the names of the most prestigious and influential Luxembourgian families such as: *de Clemency* (Anne: 1383-1408 and Jane:1429), *de Semelle* (Marie: 1419-1425) and *d'Autel* (Elisabeth: 1434-1474) (Kelecom / Muller 2010). Yet, as with many other religious institutions, Clairefontaine suffered under moral deterioration and religious transformations striking the Low Countries at the end of the Middle Ages (Goffinet 1877, 225-226). An absolute low-point was reached in 1497 with the replacement of the four remaining sisters by a group of Cistercian monks. Although, a scandalous affair between the communities priest and abbess Sophie de Muel functioned as trigger for the replacement, the arrival of religious men in Clairefontaine can only be understood against the background of a wider wave of monastic reformation (Goffinet 1877, 225-226). During the 15th and early 16th century, many female communities were replaced by (reformed) male members of the same order and vice versa (Henneau 2002; Lefèvre 1990). As such, nearly ten years Clairefontaine was the home of a small community of Cistercian monks under the lead of the abbots Marc Tetinger and André Thibolt (Kelecom / Muller 2010). In 1507, thanks to the political and financial support of Christophe de Bade, Luxembourgian governor in service of the House of Habsburg, the community was reinstalled (Goffinet 1877, 228-231).

3.3 Building chronology of the kitchen complex

3.3.1 General site chronology

The house of Luxembourg-Limbourg provided arable land and the necessary funding for the construction of an abbey. In 1252, five years after the dead of Ermesinde, Henry the Blond and his wife Marguerite de Bar, confirmed the privileges and donations the countess granted to the community (Goffinet 1877, 12). At that moment the abbey was still under construction. Nevertheless the works must have been in an advanced stage, since a year before in 1251, after successive visits by envoys of Cîteau, the community was admitted to the Cistercian Order (Goffinet 1877, 9). As many Cistercian nunneries in those days, the initial monastic settlement (*Clairefontaine I*) consisted of an assemblage of rather small-scale constructions, reminding only little of the monumental Cistercian male abbeys of that period (Fig. 3-1).
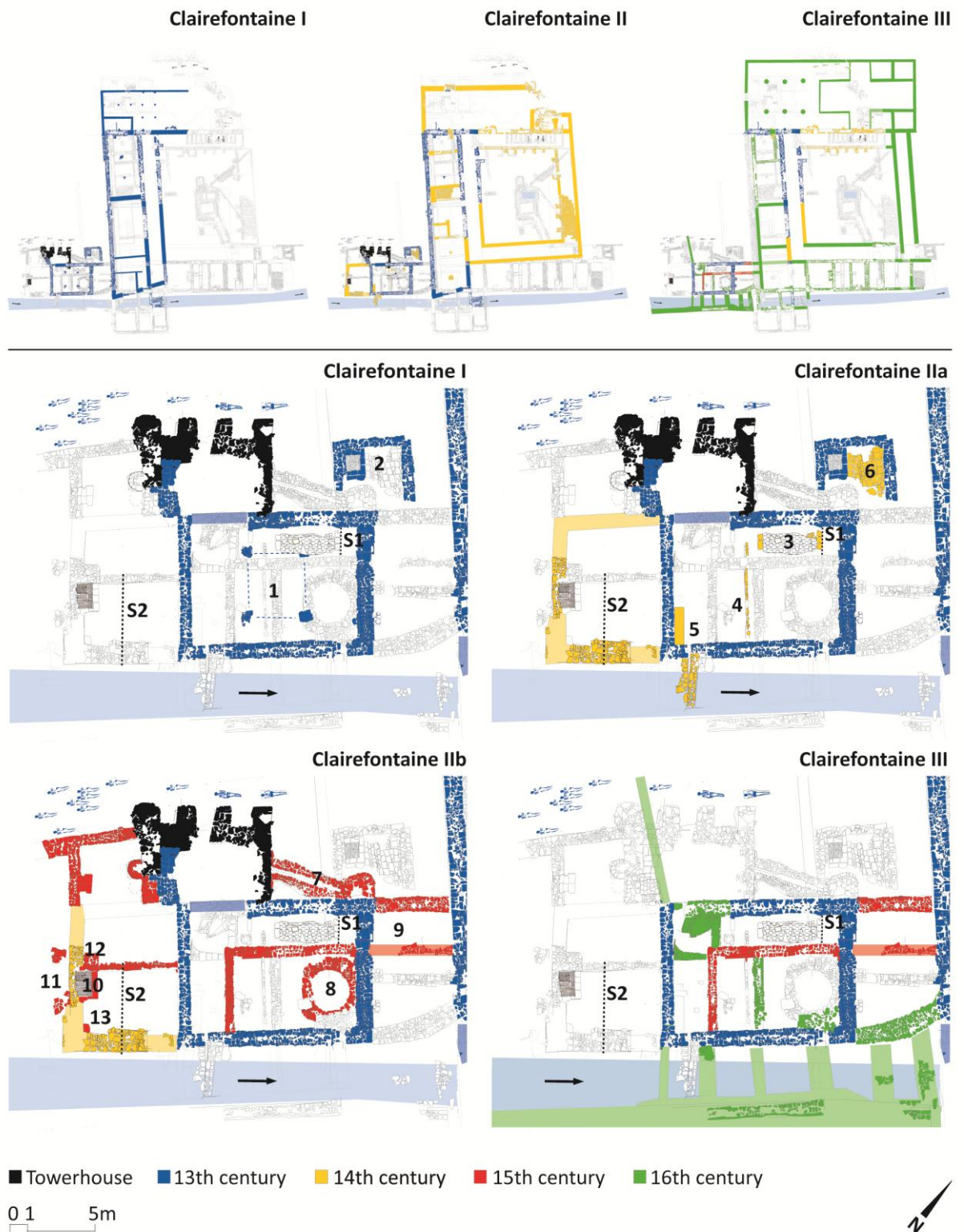
Figure 3—1   Top: excavation plan with remains of Clairefontaine I, II and III. Bottom: Zoom on the kitchen area with remains of Clairefontaine I, IIa, IIb, III: 1. 13th century hearth with hood, 2. small kitchen, 3. 14th century hearth, 4. base of wooden partition wall, 5. Water basin, 6. 14th century pavement, 7. water reservoir with channel, 8. oven, 9. passway, 10. 15th century hearth, 11. oven, 12. basement of tile stove, 13. ashpit, S1. section 1, S2. section 2 (Davy Herremans, topography Dominique Bossicard, ©SPW-Dpat)

In the north there was a small single nave church with in the western part, the sisters' choir located on a raised tribune. The church gave place to the tombs of the founding family and their most important relatives. In the south, connected to the church there was a large building consisting of a chapter room and the living quarters of the religious women. The kitchen area, which will be the focus of this chapter, was situated west of the 13th century convent wing and comprised a large monastic kitchen and several annex buildings.

In 1340, through his testament the Luxembourgian count John the Blind made his wish to be buried in Clairefontaine a legal statement (Goffinet 1877, 168-169). His decision was already known to the public for some years. Already around 1315, in preparation of the prestigious burial, intensive reconstruction works were initiated (Goffinet 1877, 141-142). A temporary increased inflow of donations resulted in a total makeover of the monastic complex during the first half of the 14th century. A new and enlarged abbey church was constructed with separate burial chamber for the count. The conventual buildings were completely rearranged according the standards of Cistercian monastic planning with all spaces grouped around a cloister. Yet, the prestigious abbey John had in mind was never finished. When the count died in 1346 his son Charles IV decided to neglect the wish of his father to get buried in Clairefontaine (Margue 1997). The early dead of John on the battlefield of Crécy brought an abrupt end to the ambitious building project (Fig. 3-1). The flow of money stopped shortly after Charles' decision. The accounts of the abbey show that construction costs were made but never reimbursed by the counts of Luxembourg (Goffinet 1877, 190-191). The construction of the southern wing of the cloister, including a new kitchen near the water, was initiated but never finished. Instead, the 13th century kitchen area west of the partly renovated monastery stayed in use. To assure and optimize its functioning the existing kitchen facilities were reorganized profoundly.

The decision of Charles to bury his father in Neumunster must be situated within the transforming political landscape of 14th century Europe. From the mid-14th century onwards the descendants of the House of Luxembourg-Limbourg became kings of Bohemia and Hungary. Charles IV aimed for the title of Emperor of the Holy Roman Empire, which he would obtain in 1355. According to late 14th century vogue, emperors were to be buried in a capital. Therefore, Charles IV decided to bury his father in the abbey of Neumunster in the city of Luxembourg. For himself he would choose a burial in Prague, the capital of Bohemia (Margue 1997). Endowed with a new and enlarged territory, the Luxembourgian dynasty gradually lost his interest in its ancient homeland and hence its ancestral burial ground. The changing interests of Luxembourgian aristocracy definitely implied a financial downturn for the community ending in a serious decline of prosperity during the late 14th and 15th century (Goffinet 1877). Nevertheless,

despite the rupture between the community and Luxembourgian aristocracy, the abbey persisted as a symbol for both the rise of Luxembourg as an independent political entity and the cultural identity of the Luxembourgian people. Architecture and material culture shows a continuous interest of 'foreign rulers' in the community from the mid-15th century onwards, and provides evidence for the symbolic meaning of the place. As part of their propaganda strategies they invested in the architecture and material culture of the abbey in search for political support in the area (Herremans / De Clercq 2013b).

The cartulary of the abbey mentions a dispute between the community and the villagers of Eischen that reached its apogee around 1457. After the arrival of the sisters in the middle of the 13th century they shared with the villagers the privilege to chop wood in the surrounding forests. As documentary evidence shows, every building activity of a notable extent led to a temporary overexploitation and a shortage in wood for the villagers (Goffinet 1877, 212). Around 1457, Elisabeth d'Autel, daughter from an old noble family from the neighbourhood of Arlon, was abbess at Clairefontaine (Kelecom / Muller 2010). Various stove tiles with the image of the Hungarian King Ladislas Posthumus, found in deconstruction and levelling layers across the abbey site, seem to pinpoint the patron of the 15th century reconstruction works. From 1388 onwards the Luxembourgian territory was given in pledge by the counts of Luxembourg. By signing the treaty of Hesdin (1441), the then pledgee Elisabeth de Görlitz, sold her rights on the county of Luxembourg to Philippe the Good. The latter became Mambour et Governor of Luxembourg while the title duke remained with the last descendants of the house Luxembourg-Limbourg. After the death of Elisabeth in 1451, Ladsilas Posthumus, son of Elisabeth of Luxembourg and grandson of Sigismund, Holy Roman Emperor and duke of Luxembourg claimed his legal rights on the Luxembourgian crown, leading to a conflict between him and Philips the Good. The struggle was definitively solved with the unfortunate and 'sudden' death of Ladislas in 1457 (Trausch 2003, 149-170). In this troubling period ambassadors of Ladislas assembled more than once with members of the Luxembourgian nobility revolting against the Burgundian rule (Würth-Pacquet 1877, 3). The investment in the material culture of the abbey might refer to a well-considered political act of Ladislas, and may have been part of his propaganda strategies to set foot on ground in the Luxembourgian region during the mid-15th century. The 15th century construction works were limited to a rearrangement of the existing kitchen area.

In 1497 the community of Clairefontaine comprised only 4 sisters. After rumours of an affair between abbess Sophie de Muel and the community's confessor, the remaining religious were transferred to another house in the area and replaced temporarily by a male community (Goffinet 1877, 225-226). The reinstallation of the sisters in 1507 was directed by the dukes of Habsburg. It is well known that during the 16th century they intervened conspicuously in the material setting of several dynastic burial churches and

abbeys all over Europe (De Jonge 2005). In particular the severe political support of Christophe de Bade, governor of Luxembourg and protégé of Maximilian of Habsburg led to reinstallation of the sisters and the appointment of Cathérine de Berentzheim, religious in the convent of Bonnevoie, as new abbess of Clairefontaine (Goffinet 1877, 225-228). Between 1507 and 1552, the late medieval abbey was completely reconstructed with the financial input of Christophe de Bade. His aspirations were fulfilled by his successor, governor Pierre-Ernest de Mansfeld. Together with reference to Charles V and his family, his armoury would appear on a new tile stove, probably donated to the abbey in 1531, when the Austrian Emperor formally restored the ancient privileges of the community.

The intensive renovations meant the end of the medieval kitchen area. The ambitious building project, directed by Christophe de Bade and abbess Cathérine de Berentzheim, included an enlargement of the abbey church and a total reconstruction of the 14th century conventual buildings (Fig. 3-1). A new kitchen was constructed in the south range of the cloister in accordance with the standards of Cistercian architectural planning. Consequently, the old medieval kitchen area was razed for the greater part. Some fundaments of the 13th century central kitchen were reused in a new architectural complex, which served as abbesses' quarters and consisted of private lodgings and more public reception rooms. The manorial tower house and other annexes were dismantled. Yet, a mince clay layer covering the 15th century wooden floor and ash pit suggest that at least part of the kitchen constructions were organized as temporary living quarters during the first phase of the building project. The abbess' house was abandoned during the 17th or early 18th century due to the raising water level of the river (Goffinet 1877).

3.3.2 The kitchen in detail

Clairefontaine I: a large monastic kitchen with central fireplace

The first monastic kitchen measured about 10 by 7.5 meter *intra muros* and had a central fireplace (a four square covering about 9 m²) with a floor of schist stone fragments arranged in geometric pattern. Above the fire there was a large cooker supported by four posts (Fig. 3-1, 1). The northern kitchen wall cut an older structure with four massive buttresses on its north side. The construction resembles a late medieval fortified tower house, probably part of the initial endowment of the Counts of Luxembourg and maybe related to Ermesindes manor, the Bardenbourg, according to historical sources located somewhere in the valley (Goffinet 1877). This ancient tower house was partly integrated with the kitchen complex and arranged as a cellar. In a small

separate building north of the main kitchen was a secondary kitchen, with a smaller fireplace with floor in schist stone fragments (Fig. 3-1, 2).

## Clairefontaine IIa: complete reorganisation of the old monastic kitchen

The 14th century building campaign directed by John the Blind changed the lay-out of the monastic kitchen drastically. The four-post central fireplace in the large kitchen was abandoned and replaced by a new hearth, about 4 meters in length, constructed against the northern exterior wall (Fig. 3-1,3). The space was subdivided by a wooden partition of which the stone foundation was revealed during excavations (Fig. 3-1, 4). On the west side of the partition wall a water basin was installed, flowing down in the river (Fig. 3-1, 5). The cellar and small separate kitchen building stayed in use. The floor level of the latter was heightened and paved with reused construction materials (Fig. 3-1, 6). To the west of the kitchen, a new annex building was built covering a surface of 7.5 by 6 meter.

Clairefontaine IIb: relocation to the west

The mid-15th century reconstruction works in Clairfeontaine focused on the existing kitchen complex. The small and separated 13th century kitchen building was dismantled. Through these abandoned structures an underground water reservoir was dug. Assumedly, rain water was gathered on the roof and led to the underground reservoir by a channel (Fig. 3-1, 7). In the large kitchen, the hearth place and water basin were covered. The space was subdivided into a bakery with a large bread oven (Fig. 3-1, 8) and a surrounding corridor (Fig. 3-1, 9) connecting the former kitchen building with the west range of the cloister. The annex building to the west was enlarged with 4 more meters and sub-divided by a partition wall. The southern part of the space was in use as a kitchen, as indicated by the large fireplace in its north-west corner (Fig. 3-1, 10). The floor of the hearth consisted again of fragments of schist arranged in geometric patterns. The floor in the kitchen had a wooden floor laid out on heavy beams. A large oven built against the outer wall of the new kitchen (Fig. 3-1, 11). The northern part of the annex building was probably in use as parlour or reception room. A new entrance was made, allowing outsiders to enter. In its south-west corner, a stove tile was installed, recuperating the ascending hot air from the fireplace (Herremans 2010) (Fig. 3-1, 12).

3.4 Find assemblages: selection and taphonomy

Section 1
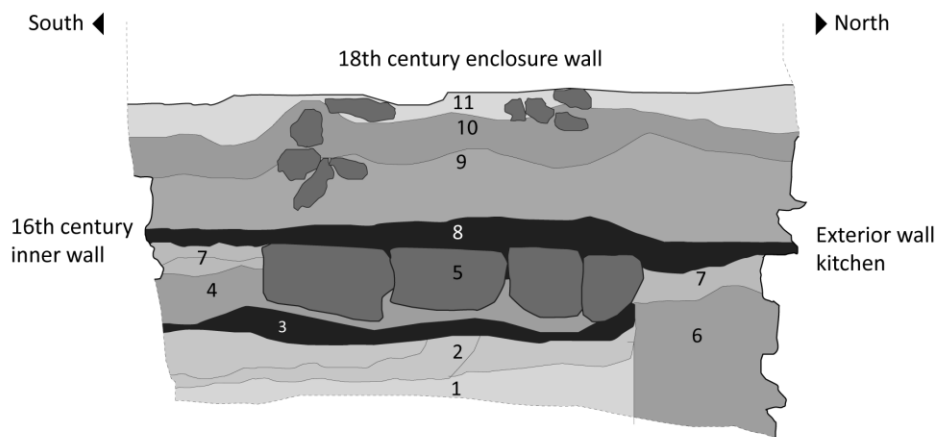
1. Natural soil, 2.Levelling layers CLFI, 3. Floorlevel CLFI, 4. Levelling layer CLFIIa,
5. Fireplace CLFIIa, 6. Foundation trench CLFIIb (reinforcement exterior wall), 7. Levelling layer CLFIIb,
8. Floorlevel CLFIIb, 9. Levelling layer CLFIII, 10. Destruction debris late 17th-early 18th century
11. Levelling layer late 17th-early 18th century

Section 2
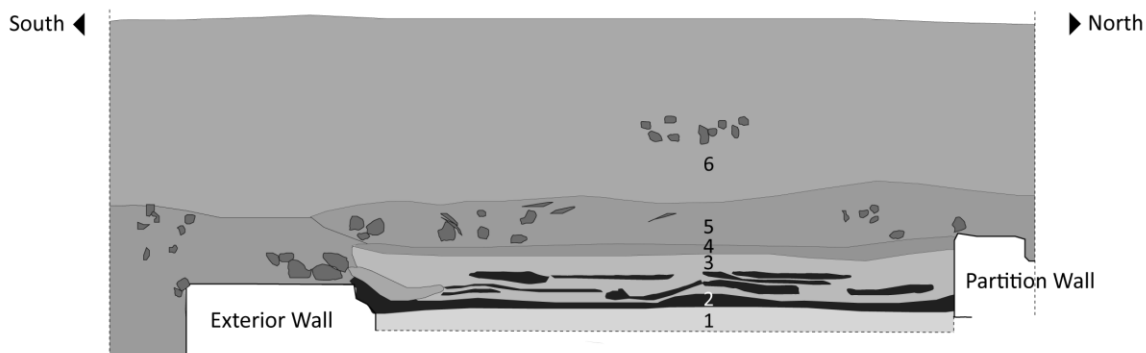
1. Natural soil, 2. Floorlevel CLFIIa, 3. Wooden floor on beams CLFIIb ,
4. early 16th century clay layer, floorlevel during early 16th century constructions,
5. Destruction debris 16th century, 6. Toplayer

Figure 3—2   Sections made during fieldwork. Section one depicts stratigraphy in the area of the 13th century kitchen while section 2 shows stratigraphy in the 15th century kitchen area (Davy Herremans, ©SPW-Dpat)

According to the building chronology presented above, the occupation of the medieval kitchen can be subdivided into three phases. A first phase (Clairefontaine I: 1247-1346) started with the foundation of the abbey and the construction of the initial settlement shortly after 1247. The second phase (Clairefontaine IIa: 1346-1441/57) was related to the reconstruction works in preparation of the burial of John the Blind with as *terminus ante quem* the death of the latter in 1346. The third phase (Clairefontaine IIb 1441/1457-

1507/1552) began with the construction of a new kitchen and heated room during the second-half of the 15th century. The kitchen facilities were dismantled somewhere between 1507 with the start of the large-scale reconstruction works directed by Christophe de Bade, and the finishing of the project around 1552. Five find assemblages that could be linked to the different architectural sequences and the relative site chronology, were selected for further analysis:

- Assemblage 1: Kitchen floor Clairefontaine I (Fig. 3-2, Section 1, layer 3).

  The construction works of Clairefontaine IIa were preceded by a raising of the floor level. Covered by this elevation layer, the floor level of Clairefontaine I remained largely untouched in the main building of the medieval kitchen area, despite successive rearrangements and posterior construction activities.

- Assemblage 2: Floor level of Clairefontaine IIa from the western annex building (Fig. 3-2, Section 2, layer 2).

  The floor level was laid out on the natural soil and covered with the levelling layers for the wooden floor of Clairefontaine IIb. The layer contained a coin with the image of Philippe VI of Valois minted between 1328-1350 and a coin with the images of Wencesclas I and Bohemond of Sarrebruck minted between 1359 and 1362 (Beeckmans Forthcomming).

- Assemblage 3: The filling of the water basin in the southwestern corner of the kitchen of Clairefontaine IIa. (Fig. 3-1, 5).

  The structure installed during the first half of the 14th century and filled up during / in preparation of construction works of Clairefontaine IIb.

- Assemblage 4: Occupation layer of Clairefontaine IIb comprising the remains of the levelling layer and wooden floor of the kitchen (Fig. 3-2, Section 2, layer 3).

  The levelling layer was laid out on the floor level of Clairefontaine IIa. The layer contained a coin minted in Metz after 1456 (Beeckmans Forthcomming). The wooden floor was covered with a temporary clay floor in use during the first half of the 16th century.

- Assemblage 5: ash pit in the south-western corner of the kitchen of Clairefontaine IIb (Fig. 3-1, 13).

The ash pit was simultaneous to the wooden floor of Clairefontaine IIb. It was dug through the floor level of Clairefontaine IIa and covered by the mince clay layer of the 16th century.

Assemblage 1, 2 and 4 are floor levels. Their content informs us on a phase of habitation (LaMotta / Schiffer 1999). They are primary depositions that consist mainly of objects and consumption refuse used or produced on site. Finds entered the archaeological record through accidental refuse and were immobilized through trampling (assemblage 1 & 2) or disappeared between the boards of the wooden floor (assemblage 4) (Ervynck / Van Neer 1993). The finds in such assemblages provide the strongest line of evidence, but since they are mainly the result of accidental deposition, they are generally fragmented and limited in number (Fehon / Scholtz 1978; Schiffer 1996). Assemblages 5 on the other hand may be seen as a primary refuse since the filling of the ash pit may be related to the use of the 15th century hearth and tile stove. Assemblage 3 gives information on the phase of abandonment of the water basin around 1457.

3.5 Material finds

3.5.1 Pottery

Introduction

Assemblage 1, 2, 3 and 4 contained fragments of pottery. Assemblage 2 and 3, both belonging to phase Clairefontaine IIa, were clustered for quantification. Quantification was made using sherd count and a rim-based minimum number of individuals (MNV). This results in 419 fragments of pottery, representing at least 70 individuals. Fragments are classified into four main ceramic categories: greyware, redware, stoneware and whiteware (Tab. 3-1).

For period Clairefontaine I, whiteware is the best-represented category (sherd count 59.2%, MNV 43.8%), followed by greyware (sherd count 29.1%, MNV 25%) and stoneware (sherd count 11.7%, MNV 31.3%). For the period Clairefontaine IIa, stoneware is the best represented (sherd count 40.4%, MNV 65.9%), followed by redware (sherd count 30%, MNV 18.2%) and greyware (sherd count 20.4%, MNV 13.6%). Whitewares are present in minor numbers (sherd count 9.2%, MNV 2.3%). For the period Clairefontaine IIb finally, redware become the best represented category (sherd count 75.8%, MNV

80%) followed by greyware (sherd count 15.2%, MNV 10%) and stoneware (sherd count 9.1%, MNV 10%).

The grey- and redwares are assumedly of a local or regional origin. The fabric is hard and dense. It consists of a fine, rounded and sandy grain and contains angular quartz. Sparse fragments of larger grains of quartz, lime and mica, may occur. For the oxidized fired redwares, colours range from brown-red to orange-red. The colour of the reduced fired grey wares is consistently bluish grey. The whitewares are imported from the medieval production centres in the Meuse area. The oxidized fired fabric is hard and dense. It consists of a fine, rounded and sandy grain and contains angular quartz. Minor fragments of iron may occur. Stoneware is imported from the Rhineland. In the assemblages of the period Clairefontaine I some fragments belong to so-called near stoneware with partially sintered fabric.

Table 3—1   The pottery of the studied assemblages in numbers (Davy Herremans)

	Clairefontaine I				Clairefontaine IIa				Clairefontaine IIb			
	Sherds	MNV	Sherds%	MNV%	Sherds	MNV	Sherds%	MNV%	Sherds	MNV	Sherds%	MNV%
Greyware	30	4	29.1	25	51	6	20.4	13.6	10	1	15.2	10
Redware					75	8	30	18.2	50	8	75.8	80
Stoneware	12	5	11.7	31.3	101	29	40.4	65.9	6	1	9.1	10
Whiteware	61	7	59.2	43.8	23	1	9.2	2.3				
Total	103	16	100	100	250	44	100	100	66	10	100	100

MNV	Greyware	Redware	Stoneware	Whiteware	CLFI	CLFIIa	CLFIIb
Food	**4**	**15**	**1**	**4**	**5**	**10**	**9**
Bowl with rounded body	2	2		4	5		3
Cooking jar	1					1	
Large carinated bowl	1					1	
Lid		1				1	
Single-handed conical bowl		3					3
Tripod		9	1			7	3
Liquids	**7**	**1**	**34**	**4**	**11**	**34**	**1**
Biconical beaker			2			2	
Bottle	1		2			3	
Drinking bowl			7		2	5	
Funnel-necked beaker			2			1	1
Globular beaker			6			6	
Jug	6	1	8	4	9	10	
Necked Cup			7			7	
Total	**11**	**16**	**35**	**8**	**16**	**44**	**10**

Preparation and consumption of food

The find assemblages contained 8 bowls with rounded body, most likely used for the preparation of food. One individual in greyware, dating in the 13th century has a deep, rounded body. The vessel is characterized by a flattened and everted rim with pronounced upper- and lower lips (Fig 3-3.1). Similar forms were present amongst the

whitewares. One fragment was identified as part of a small bowl. This bowl with a rim diameter of about 19 centimetre diameter is characterized by a flattened and everted rim and a rounded body (Fig. 3-3, 11). Three other individuals in white ware were identified as larger bowls with deep rounded body, high inward sloping shoulder, a sickle-shape rim and wide rim opening (in the case of the Clairefontaine example about 26 centimetres in diameter) (Fig. 3-3, 9). The base is slightly sagging with a series of finger impressions. The inside of the vessels were covered with a clear lead glaze. These bowls are typical products of the 13th and early 14th century Meuse area ceramic production centres (Borremans / Warginaire 1966, 89). A late 15th century bowl in greyware shows a slightly less deep rounded body (Fig. 3-3, 2), and is therefore comparable with an individual in redware, dating in the late 15th-early 16th century with sickle-shaped rim (Fig. 3-3, 5). The inside of the latter was treated with a white slip and covered with green copper-rich glaze.

The late Clairefontaine IIb assemblages contained three single-handled conical bowls. These open vessels are characterized by a flat base and a strap-shaped handle connecting rim and flaring body (Bis-Worch 1999, 285). They all have a flattened rim with a pronounced inner lip (Fig. 3-3, 16), one of them with an applied thorn underneath the inner lip (Fig. 3-3, 6). The inside of the vessels is treated with a white slip and covered by a yellow to green copper rich lead glaze.

One probably late 14th-early 15th century large carinated bowl **(**Fig. 3-3, 3) in grey ware, with wide cuff-shaped rim, was probably used to skim the cream of milk. These vessels have generally a flared body and a characteristic wide pouring lip (De Groote 2008, 260).

Eleven individuals can be related to the preparation of food on the fire. Amongst these vessels there is one cooking jar in greyware with wide rim opening, in use during the late 14th or first half of the 15th century (Fig. 3-4). These kind of cooking vessels are commonly found in late medieval ceramic assemblages in the Luxembourgian area. They are characterized by a crescent-shaped rim with pronounced lower lip, an inward sloping shoulder, a globular body, a flat base and a strap-shaped handle running from the rim to the body (Bis-Worch 1999, 283).

Thirteen individuals were identified as tripods. Seven of them were recovered from the Clairefontaine IIa layers. Common characteristics are the presence of three feet, a globular body and an inward sloping shoulder. Two opposed vertical loop handles with round to triangular section connect the rim and shoulder. The feet are applied and modelled through pinching (Fig. 3-3, 9). Four of these tripods are characterized by a crescent-shaped rim, relatively wide rim opening, an inward sloping shoulder and a globular body (Fig. 3-3, 12). The width of the rim opening varies between 12 and 13 centimetres. Both on the in- and outside, these tripods were covered with a dark purple

to black shining manganese or iron-rich lead glaze, undoubtedly imitating the metallic lustre of the large bronze cauldrons. The application of blackish manganese or iron-rich lead glaze on tripods appears regularly in the Luxembourgian area. The custom was probably adopted from the potters of the Meuse Area (Janssen / Nijhof 2010). Two other examples were also glazed with manganese or iron rich lead glaze, but had simple everted and slightly rounded rims (Fig. 3-3, 13).
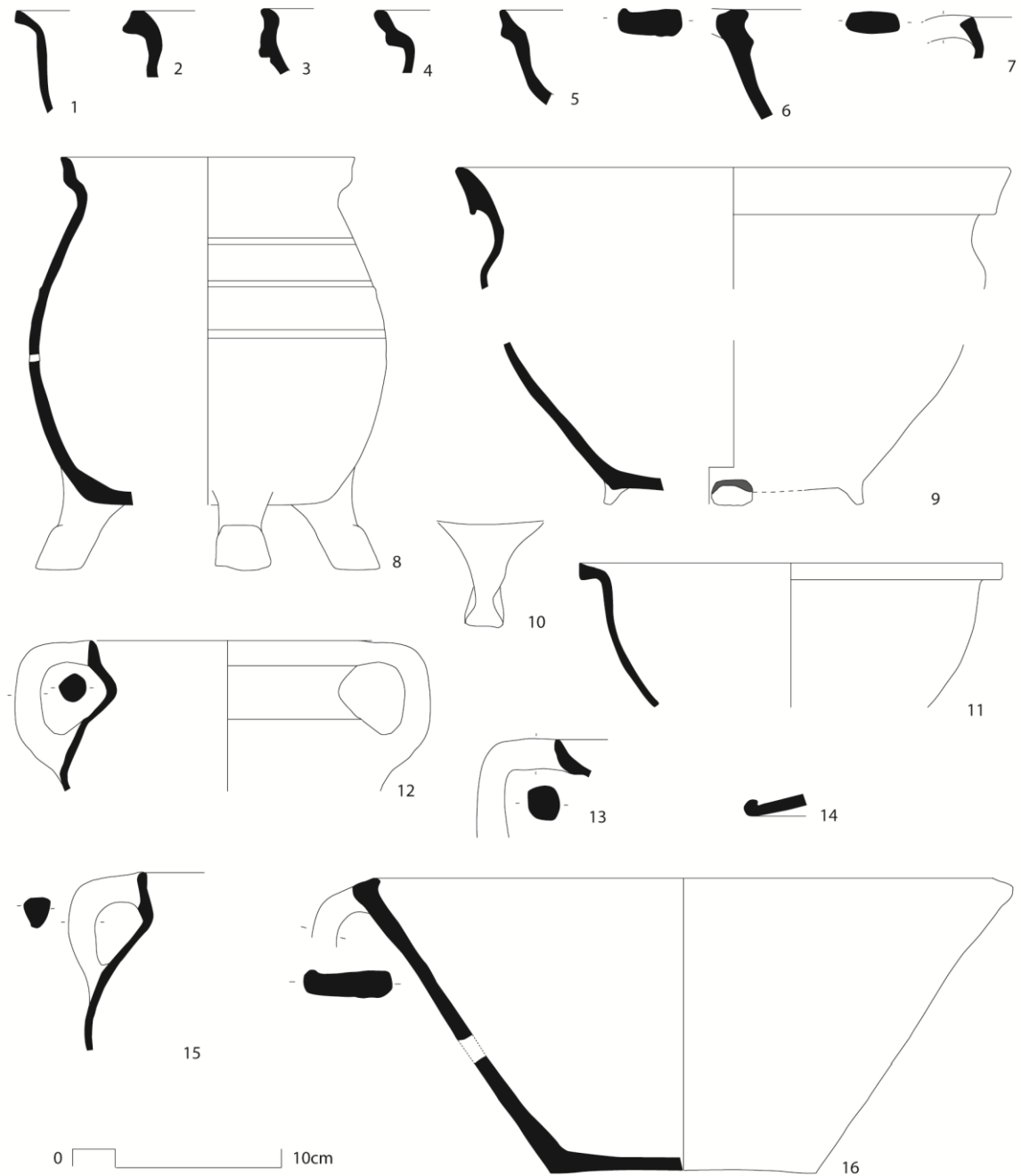

Figure 3—3   Selection of the pottery used for the preparation and storage of food (Davy Herremans)

Two tripods had a more pear-shaped body and an upstanding rim, with rounded lip and a slightly pronounced thorn (Fig. 3-3, 15). Their body was covered with a green lead-glaze. From the 15th century onwards the body of tripods in the Luxembourgian area in general become more stretched and pear-shaped, while the feet were modelled by folding back a tip of clay (Fig. 3-3, 8) (Bis-Worch 1999). Often these cooking vessels were equipped with one or two vertical loop handles, however, examples with single strap-shaped handles are also known from the Luxembourgian area (Bis-Worch 1999, 284). Three more tripods with pear-shaped body were present in the 15th and 16th century find assemblages. All of them have only the inside and the upper part of the outside covered with a green copper rich lead glaze. Characteristic for three of them are the everted and collared rim, mostly measuring about 13 centimetres in diameter (Fig. 3-3, 8). One 15th or 16th century fragment in redware belonged to a lid. The item with rolled rim might have served as lid for a tripod (Fig. 3.14). One individual, present in the second half of 14th – first half of the15[th] century layers, belonged to a tripod in stoneware as known from production in Speicher and the wider Rhineland (Seewaldt 1990). The vessel with strap-shaped handle, was characterized by a flattened and everted rim. Its surface was covered with a brownish slip layer and sparse patches of clear salt glaze (Fig. 3-3, 7).

Storage and consumption of liquids

Twenty-two individuals belonged to vessels used to store or serve liquids. At least 19 of them belonged to jugs. Eight of them were identified as Langerwehe II jug produced during the 14th century. Characteristic for these jugs are the slightly inverted and rounded rim with thorn, a slightly convex rilled neck ending in a slim body on a frilled foot ring (Hurst 1977, 227). One fragment, with a rim diameter of about 5 centimeters dates to the early 14th century since its fabric is not fully sintered and its surface granulated, similar to so-called near stoneware (Fig. 3-4, 1). The other example is produced in full quality stoneware (Fig. 3-4, 2) (Gaimster 1997, 34-35). Both vessels are covered with a brownish slip layer. A fragment of a frilled foot (Fig. 3-4, 10) and a fragment from the shoulder, decorated with roller-stamp decoration (Fig. 3-4, 7) both covered with a reddish brown slip layer, equally belonged to a large Langerwehe jug. Worth mentioning is the base of a jug made in the typical clear-white fabric characteristic for stoneware productions of Siegburg (Fig. 3-4, 13). The frilled base and the slim rilled body make it possible to identify the fragment as part of a 15th century 'Jacobakan'(Janssen 1988). The vessel is not represented in the MNV.

Abundantly present are jugs in local earthenware. The assemblages contained six jugs in greyware. The rounded strap-shaped rims with marked thorn reveals stylistic influence from the 14th century Langerwehe stoneware production (Fig 3-4, 3-4)(Hurst 1977). In contrast to the Langerwehe jugs, the local products have a more marked funnel-shaped

neck. Furthermore they have a slim, attenuated body tapering from the high shoulder to the foot. Generally the vessels are equipped with a frilled (Fig. 3-4, 8)or thumbed foot ring (Fig. 3-4, 9). Similar vessels are known from 14th century find assemblages in Luxembourg and the surrounding areas (Zimmer 2002, 111). One jug in red ware, present in the layers of the Clairefontaine IIa layers and merely covered with a white slip, reveals the same stylistic influence (Fig. 3-4, 5).

Figure 3—4   Selection of the pottery that was used to store or serve liquids (Davy Herremans)

A completely different morphology can be found in the four identical whiteware jugs. Most characteristic are an inward sloping shoulder and everted and flattened rim with spout. The vessel has a rim diameter of about 12 centimetres. The inside of the vessels are covered by a thick yellow to greenish lead glaze. The outside also shows some glazed areas. These kinds of jugs are known from the pottery production of the Meuse Area

during the second half of the 14th century (Fig. 3- 4, 6) (Borremans / Warginaire 1966, 89). Other typical characteristics are the globular body and strap-shaped handle runs from the rim to the body. The base is generally slightly convex and thumbed.

Next to jugs the find collection also contained three bottles, all recovered from the Clairefontaine IIa layers. Two examples in stoneware were definitely made in the Rhine area, probably in the production site Langerwehe area. Characteristic attributes are the globular and rilled body, narrow neck, and strap-shaped handle. The largest bottle had a rim opening of 5 centimetres, the smaller one 3 centimetres. The rim of the bottles is slightly inverted, rounded and equipped with a thorn (Janssen 1983, 208). Both vessels are covered with a reddish brown slip layer and irregular patches of salt glaze (Fig. 3-4, 11). One fragment belonged to a similar bottle in grey ware. This large container, used to store liquids, had a rim diameter of 10 centimetres. A wide strap-shaped handle runs from its slightly inturned rim with a thorn to its high shoulder (Fig. 3-4, 12).

Twenty-four individuals, all fabricated in stoneware, were identified as vessels used for the consumption of beverages. Except three items all of them were recovered from the Clarefontaine IIa layers. At least seven vessels were identified as drinking bowls, characteristic products of the late medieval and early modern pottery industry in Siegburg. However since no bases were preserved, an origin in Beauvais cannot be excluded (drinkingbowls of both production centres can be distinguished by the pedestal foot of the vessels which is in the case of an origin in Siegburg mostly frilled. Drinking bowls originating in Beauvais have a flat foot, smoothly cut off with a wire). All the vessels were characterized by the typical clear-white fabric and patches of orange iron rich precipitation. Rim diameter ranges from 10 to 12 centimetres. Two drinking bowls were recovered from the Clairefontaine I layers and were probably in use during the first half of the 14th century. The 14th and early 15th century drinking bowls have a markedly smoother transition from rim to base (Fig. 3-4, 15), while the few younger examples have a more hooked profile with a pronounced thorn on the transition of rim to base (Fig. 3-4, 16)(De Groote 2008). Two other fragmented vessels were characterized by the typical white Siegburg fabric. They were identified as funnel-necked beakers (Fig. 3-4, 17).

The fifteen remaining drinking vessels were produced elsewhere in the Rhineland. Two fragments covered by a reddish brown slip and sparse salt-glaze, belonged to conical beakers (Fig. 3-4, 14). These kinds of vessels are characterized by a conical section and a frilled pedestal base. Often they are equipped with two opposite strap-shaped loop handles. Conical beakers were produced between the 14th century and 16th century in Langerwehe and elsewhere in the Rhineland. The fragmented Clairefontaine examples were in use during the second half of the 14th century or first half of the 15th century (De Groote 2008, 374; Hurst 1977). The Clairefontaine IIa assemblages comprised at least 7 individuals that were determined as necked cup with rounded body

and a foot ring. Characteristic is the S-shaped profile with inward sloping shoulder. The body is covered with a reddish to brown slip layer and on certain parts with a thick grey salt glaze. All cups had a rim diameter of about 8 centimeters (Fig. 3-4, 18). Six individuals were identified as globular beakers. Characteristic attributes are the rilled globular body and (slightly) everted rim (Fig. 3-4, 19). The vessels have pedestal foots that are generally frilled (Fig. 3-4, 20). Rim diameter varies little and measures about 8 cm. The beakers are covered with a dark-reddish slip and a sparse salt-glaze. Both necked cups and globular beakers were produced in Langerwehe but also elsewhere in the Rhineland (Seewaldt 1990). Conical beakers, necked cups and globular beakers regularly appear in late medieval archaeological assemblages in the Luxembourgian area (Bis-Worch 1996; Bis-Worch 1999).

3.5.2 Stove tiles

Introduction

The assemblage 5, recovered from the ash pit of the Clairefontaine IIb kitchen contained 106 fragments of highly decorated stove tiles. The tile stove is a Central-European development that spread amongst elite circles during the 14th century. The tiles were built into the mud wall of the stove. Warm air was recuperated from an adjacent fireplace or oven and channelled through the stove. Circulating heath was absorbed and conducted by the loam wall and stove ceramics. This innovative system made it possible to heat a room without the use of an open fire (Maire / Schwien 2000). As a result, steady temperatures could be maintained in the most prestigious quarters, without the oppressive spread of smoke.

Before the 14th century, stove ceramics resembled large spherical cooking jars or cylindrical beakers and their front was mostly undecorated. These jar- or beaker-like tiles functioned in the first place as constructive elements to prevent the wall from collapsing under its own weight. From the Late Middle Ages onwards the decorative aspect became more and more important. Gradually, the traditional jar- and beaker-like tiles were replaced by various other types with a square or rectangular front that allowed a more profuse decoration. The visible parts of the tile were generally mould-decorated and covered with a green or multi-colour lead glaze. These new quadrangular tiles could be built up side by side, replacing the mud wall and leaving little of the stove exterior undecorated. The most common type during the 14th century and 15th century was the so-called *Halbzylinderkachel*, characterized by a half open framework fixed on a half-cylindrical body. From the second half of the 15th century the half-open framework was often replaced by a pane, creating even more space for decoration. To assure heath conduction, an opening was cut into the back of the half cylindrical body. Later on during

the 16th century the half-cylinder was replaced by an open frame (*Blattkachel*)(Frantz 1981; Hallenkamp-Lumpe 2006).

Morphology and technology

Morphologically the Clairefontaine tiles could be subdivided into two main groups: a first group consists of tiles characterized by a half-cylindrical body, fixed on a half open framework (T1, Fig. 3-6, 1-4). Some tiles were meant for the upper layer of the stove, as they had crowning ending in a point. The second main group consisted of tiles with a half-cylindrical body but fixed on a pane (T2, Fig.3-6, 5-6). The back of the half-cylindrical body was cut open to allow the conduction of heath. The tiles also measured 15 centimetre in width and 25 centimetre in height. In general they measure about 15 centimetre in width and 25 centimetre in height.
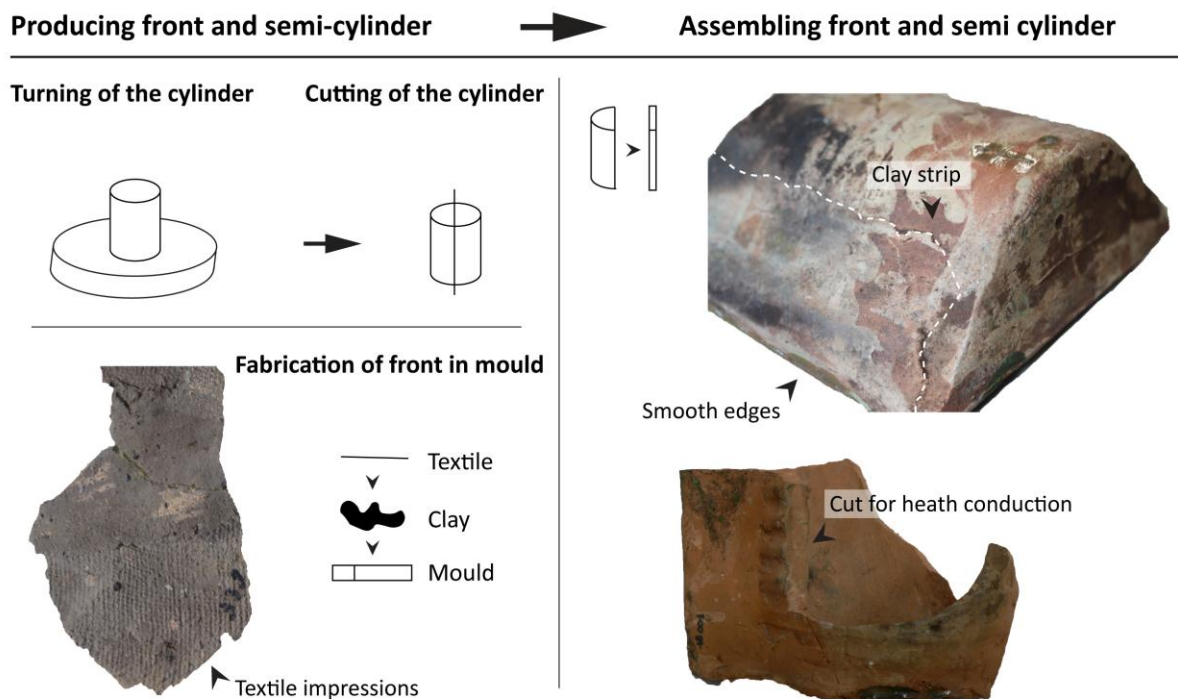

Figure 3—5   Production process of the Clairefontaine stove tiles. Semi-cylinder and front are made separately (left) and assembled later on in the production process (right) (Davy Herremans)

Both types are fabricated more a less in the same way. All tiles are fabricated in iron rich clay containing relatively little fine quartz and fired in an oxygen rich environment. The frameworks of the open front, as well as the pane of the closed front are always moulded. Impressions of textile on the back show the way the clay was pushed into the mould (Fig. 3-5). A cylinder was turned on the wheel and separated in two parts. Before firing, a half-cylinder was fixed on the framework or pane. As the Clairefontaine fragments demonstrate, the half-cylinder was placed on the back of the frame or pane.

Next, the edges of the front were folded over the half cylinder and reinforced with clay strips. The sides of the framework or pane were cut to assure a smooth result. In in the case of T2, a rectangular opening was cut into the back of the half-cylinder. Before firing the front was covered with a white clay mixture and a green copper rich lead glaze.

Decoration

Most present in the assemblage are tiles with a half open framework in the front (T1). For all fragments, the framework consists of a simple frame and a mould-decorated panel covering the upper quarter of the front. These panels are all shaped as arculated arch and decorated with architectural elements. For certain tiles the decoration consists of an abstract interplay of lines referring to late Gothic architecture (Fig. 3-6, 1 and 4). On others the decoration panel displays more detailed and realistic late Gothic architectural elements. Fig. 3-6, 3. shows a tile with a decoration consisting of pillars and pointed arches with stained-glass windows.

The tiles with a closed pane on the front (T2) are characterized by a more narrative decoration. One tile is decorated with architectural elements in early renaissance style (Fig. 3-6, 6). The round arch and stained window with polygon glasses clearly refers to Romanesque architecture. In front of this architectural setting glides a little angel or *putti* pointing at the emerging renaissance culture. Another tile bears the image of Christ with nimbus and the cross in his left hand (Fig. 3-6, 5). The acronym 'JRI' refers to his symbolic title: '*Jesus Rex Iudaeorum*'. In his right hand he carries the armoury of Maximilian I, Emperor of the Holy Roman Empire. Taking into account the Chain of the Golden Fleece, surrounding the coat of arms, the tile dates after 1477 and the marriage of Maximilian with Mary of Burgundy. Probably as set of tiles was donated in 1480, when the emperor confirmed the privileges of the community (Goffinet 1877). Tiles found in deconstruction layers elsewhere on the site displayed the armoury of Elisabeth de Frantz, who was abbess in 1480 (Kelecom / Muller 2010).

Figure 3—6   Selection of stovetiles present in find assemblage 5, the ash pit in use during the second half of the 15th century (Davy Herremans and Joris Angenon)

3.6 The animal remains

3.6.1 Material and methods

The faunal remains described below have been retrieved during the excavation of the medieval kitchen area. The filling of the Clairefontaine IIa water basin was sampled (4 litres) and wet-sieved through a series of meshes of 4, 2 and 1 mm in width. Residues were completely sorted to recover the small fragments of animal, which were very few. Most of the material was collected by hand during the excavation, but it appears that this did not lead to the loss of significant amounts of bones of smaller species or small bones of larger taxa. In fact, the bone remains in Clairefontaine are in general small, with an average weight of about 10 g, suggesting we are mainly dealing with kitchen and table refuse related to the processing of carcasses, the preparation of food and the removal of food consumption debris. The archaeozoological analysis took place at the Royal Belgian Institute of Natural Sciences (RBINS), Brussels. The identification of the faunal remains was performed by using the reference collection of the Institute. For the land snails, only the specimens possessing the summit of the shell (apex) were identified and counted. Find assemblages were clustered chronologically according to relative site chronology and the phasing of the abbey's building history.

3.6.2 Inventory

Table 3—2   Clairefontaine abbey. Animal remains collected by hand (HC) and by sieving (S): number of specimens (Quentin Goffette)

| | CLFI | CLFIIa | | | | CLFIIb | TOTAL |
	HC	HC	4S mm	2S mm	1S mm	HC	
LAND SNAIL							
Rounded snail (*Discus rotundatus*)	2	-	-	-	-	-	**2**
Glossy pillar (*Cochlicopa lubrica*)	2	-	-	-	-	-	**2**
AMPHIBIAN							
Frog or toad (Anura)	1	-	-	-	-	-	**1**
FRESHWATER FISH							
Carp (*Cyprinus carpio* f. domestica)	-	3	-	-	-	-	**3**
Cyprinid	-	3	1	-	-	1	**5**
Pike (*Esox lucius*)	-	2	-	-	-	-	**2**
MARINE FISH							
Herring (*Clupea harengus*)	-	-	-	1	-	-	**1**
Haddock (*Melanogrammus aeglefinus*)	-	-	1	-	-	-	**1**

BIRD

Greylag or domestic goose (*Anser anser* ? f. domestica)	5	18	-	-	-	7	**30**
Domestic fowl (*Gallus gallus* f. domestica)	12	70	2	-	-	51	**135**
cf. Domestic pigeon (*Columba* cf. *livia* f. domestica)	-	1	-	-	-	-	**1**
cf. Magpie (cf. *Pica pica*)	1	-	-	-	-	-	**1**
Egg shell	-	-	-	+	+	-	**+**

WILD MAMMAL

Vole /rat (*Arvicola terrestris/Rattus* sp.)	-	-	-	-	-	1	**1**
cf. House mouse (cf. *Mus musculus*)	-	3	-	-	-	-	**3**
Unidentified rodent (Rodentia)	-	-	-	1	4	-	**5**
Hare (*Lepus europaeus*)	2	9	-	-	-	6	**17**
Roe deer (*Capreolus capreolus*)	-	1	-	-	-	-	**1**
cf. Roe deer (cf. *Capreolus capreolus*)	-	1	-	-	-	-	**1**
Red deer (*Cervus elaphus*)	-	1	-	-	-	1	**2**

DOMESTIC MAMMAL

Cattle (*Bos primigenius* f. taurus)	32	70	-	-	-	69	**171**
Pig (*Sus scrofa* f. domestica)	26	117	-	-	-	70	**213**
Sheep (*Ovis ammon* f. aries)	3	11	-	-	-	10	**24**
Sheep (*Ovis ammon* f. aries)/Goat (*Capra aegagrus* f. hircus)	34	121	-	-	-	71	**226**
Dog (*Canis lupus* f. familiaris)	-	1	-	-	-	-	**1**
TOTAL IDENTIFIED FRAGMENTS	**120**	**432**	**4**	**2**	**4**	**287**	**849**
Unidentified fish	-	4	1	-	-	2	**7**
Unidentified bird	6	66	-	-	-	35	**107**
Unidentified mammal	34	231	6	12	3	129	**415**
TOTAL UNIDENTIFIED FRAGMENTS	**40**	**301**	**7**	**12**	**3**	**166**	**529**
TOTAL	**160**	**733**	**11**	**16**	**7**	**453**	**1380**

Table 3-2 list the find numbers (NISP, number of identified specimens) of the species that were identified in both the hand collected and the sieved samples. Livestock represents the majority of the assemblage with sheep being the most abundant. Pig bones are somewhat less numerous, followed by those of cattle. Game was also discovered in the kitchen, mainly hare, as well as a few remains of roe and red deer. A considerable amount of bird remains, primarily from domestic fowl, is present. The wild or domestic status of the goose is always difficult to assess on the basis of bones. However, it is generally regarded as domesticated (Clavel 2001). The single pigeon bone is a scapula of a young bird, probably coming from the domestic form of the rock dove (Tomek / Bochenski 2000). The pigeon has been imported in our regions from the Roman or the Early Medieval period onward and was just like the domestic fowl and goose part of the medieval diet (Serjeantson 2009). A single bone of a wild bird species has been found, namely a corvid tarsometatarsus most probably from magpie (Tomek / Bochenski 2000). Corvids sometimes live close to human settlements and it is not possible to decide whether the bone comes from a discarded carcass or from a consumed individual. Although they are frequently considered as intrusives (Gautier 1987), corvids have also been eaten, as illustrated by B. Clavel for medieval contexts from northern France

(Clavel 2001). Furthermore, consumption is confirmed by medieval cooking books [see, for example, *The Good Wife's Guide*, 2009 (Greco / Rose 2009)].

Fish bones were scarce both in the hand collected material and sieved samples. Two freshwater species were discovered, namely carp and pike as well as two marine species, herring and haddock. The standard length is around 30-40 cm for the carps, 40-60 cm for the pike, 40-50 cm for the haddock and 20-25 cm for the herring. A tarsal bone from an unidentified anuran is present. Consumption of frogs is attested for the 18th century at the abbey of Clairefontaine (Goffette 2012). Therefore, this bone can be equally considered as consumption refuse, yet an intrusive origin cannot be excluded. The remaining animal species are unlikely to have been consumed. These are the land snails and the small rodents species, considered as intrusive. The single bone of dog, a thoracic vertebra without any trace of human modification, is interpreted as part of a carcass.

3.6.3 Diet
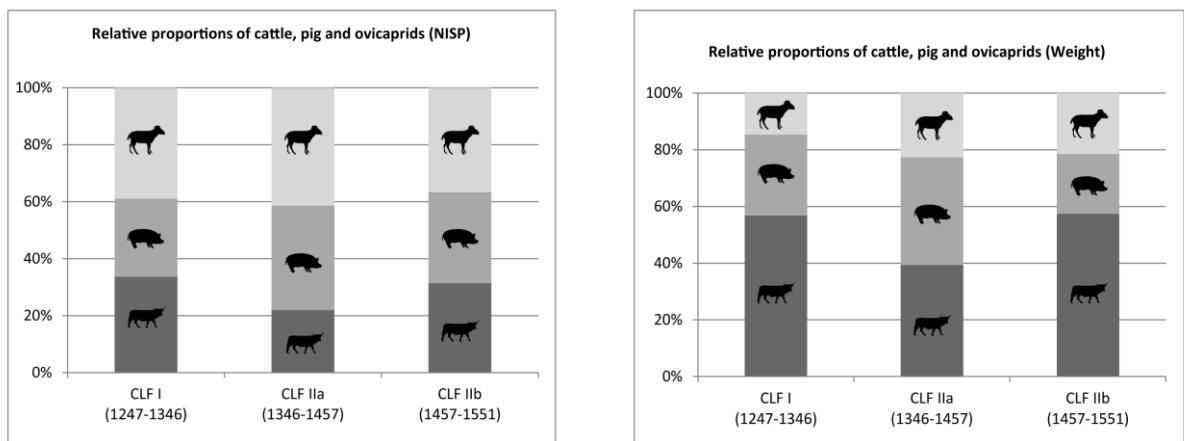
Figure 3—7   Clairefontaine abbey. Relative proportions of cattle, pig and ovicaprids over the different chronological phases based on the number of identified specimens (NISP) and on weight of the bones (Quentin Goffette)

In Clairefontaine, domestic mammals were, by far, the main meat suppliers. The bone weight gives information on the amounts of meat animals have provided: cattle turns out to be the most important species, followed by the pig and then the ovicaprids (Fig. 3-8). Pig remains cover about 30% in both NISP's and bone weight. This contrasts sharply with data from Flemish abbeys, where pork is always rare (Ervynck 1997). Also poultry constituted an important part of the sisters diet, reaching up to 20% of the faunal remains consumed, with the domestic fowl being the most frequently consumed species followed by goose. Certainly they were also kept for egg production as eggshell was recovered. According to the archaeological dataset, game and fish seem to be of minor

importance. Among game, hare is the most frequently captured species. The presence of large and mobile species such as deer and roe is unusual in such a monastic context (Clavel 2001; Ervynck 1997; Ervynck 2004). The scarcity of fish remains in the assemblages is surprising and seems to point at a bias in the dataset. It is unclear if this is due to excavation strategy (animal remains were mainly recovered by hand), post-depositional phenomena, or the simple fact that fish consumption was limited. It may also be due to waste management: if fishes were not deboned in the kitchen before serving, their bones may have been discarded elsewhere together with the table refuses. It seems indeed little convincing that the underrepresentation of fish remains reflects a historical reality since fish has proven to be an important element in monastic diet during the Middle Ages and Early Modern Times (Van Neer / Ervynck 2004). The abbey possessed numerous fish ponds and for the 17th and 18th century it is known that in these pounds carp, pike and other fresh water species were bred (Goffinet 1877). Archeozoological research has acknowledged that fish was an important element in the diet of the sisters in later periods (Goffette 2012). The few fish remains recovered from the medieval kitchen complex are clearly dominated by freshwater species. Since the nearest sea shore is more than 250 km away, the herring and haddock reached Clairefontaine as processed fish, probably smoked or salted (Van Neer / Ervynck 2004).

Proportions of the different categories of consumed animals, namely domestic mammals, poultry, game and fish, remain more or less stable between the different periods. Poultry increase slightly from the phase CLFIIa onward (AD 1346-1457), growing from 14,9% to 20,8%, at the expense of domestic mammals that decrease from 83,3% to 74,5%. Because of the relatively small amount of bone within each phase, trends should be treated with caution. Fish and game are too scarce to give accurate trends. Based on bone weight, proportions of cattle, ovicaprids and pig show clear differences between the three phases (Fig.3-8). The major trend is an important decrease of cattle during Clairefontaine IIa, which is also visible when considering the number of identified specimens (NISP). At the same time, ovicaprids, and in particular pig, increase. During phase Clairefontaine IIb, pig bone weight is less than during phase A, while ovicaprids stay at the same level and cattle reach the level of phase CLFI. It is unclear how this decrease in the proportion of cattle bones between the mid-14th and the mid-15th centuries can be explained. Cattle remains the major meat supplier during all the periods dealt with here, followed by pig and then the ovicaprids. During phase CLFIIb, when the contribution of pig decreases, its bone weight becomes comparable to that of the ovicaprids. It remains to be seen whether this decline of pork can be linked with the general decrease of pigs detected elsewhere in Europe, from the 14th – 15th century onward (Audoin-Rouzeau 1995; Clavel 2001).

Age of the domestic animals was assessed by examination of the epiphyseal fusion following Silver (Silver 1963). The ageing data show that cattle was kept alive some time, being only seldom slaughtered before the age of 3 or 4. Ovicaprids show a similar pattern, with a substantial part of the individuals kept alive beyond 3-4 years of age. This shows that ruminants were not only raised for meat consumption but also for the production of milk and wool. Also NISP's show that ovicaprids were preferentially bred (Fig. 3-8). In many male abbeys the income of the wool production contributed substantially to the economy of the community (Ervynck 1997). In Clairefontaine wool and sheep's-milk cheeses were certainly traded, but on a smaller scale and only when the production exceeded the need of the community (Joset 1935). Pigs were only raised for their meat. They were mainly slaughtered when they reached the optimal meat weight, between 1 and 2 years and half (Oueslati 2006). Some of them were still sucking pigs (11 fragments, 3 individuals). The sisters' taste for young and tender meat is also mirrored by the calves (14 fragments, 4 individuals) and lambs (5 fragments, 2 individuals) consumed.
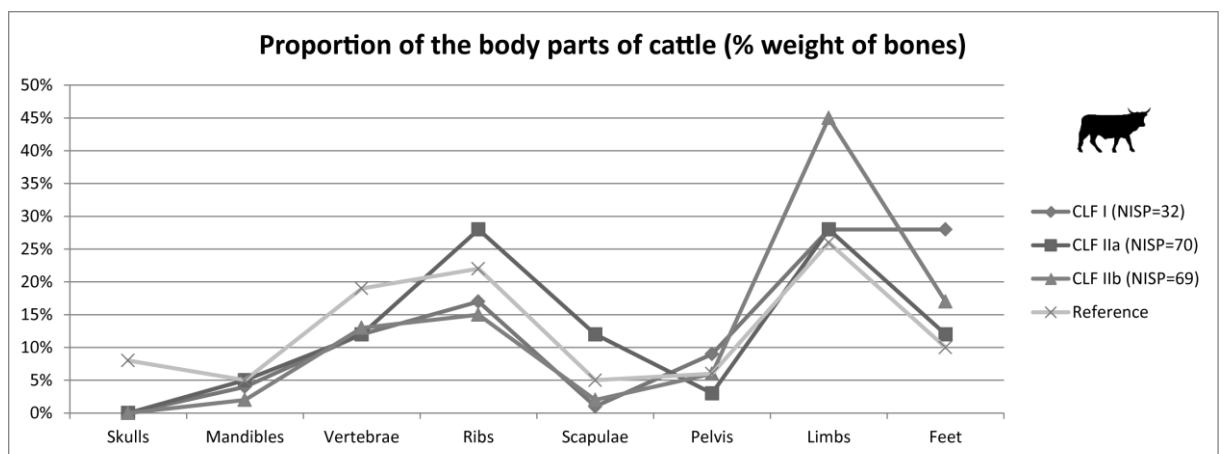
Figure 3—8   Clairefontaine abbey. Proportion of the body parts of cattle over the different chronological phases based on weight of bones. The curves for the different periods are generally close to the reference curve (coming from Oueslati 2006). Skulls are always absent. Feet are over-represented in phase CLF I and limbs are over-represented in phase CLF IIb. The under-representation of vertebrae, ribs and scapulae during some phases could be related to their lower structural density (Lyman 1994) (Quentin Goffette)

Taking a closer look at the fragmentation of the bones and the relative proportions of the skeletal elements, it emerges that for sheep, pig and cattle largely all parts of the skeleton are represented. Furthermore, their proportions (little or no skeleton parts are over- or under-represented) do not suggest a selective purchase of certain particular skeletal elements. For the cattle however, parts of the skull are lacking completely, except from the mandibles (Fig. 3-9) and therefore it seems that complete carcasses

were processed in the kitchen, with the exception of the skulls. B. Levitan made the same suggestion for the Polsloe Nunnery, England. There meat was produced on the monastic estates or purchased by neighbouring farmers, while urban monasteries merely purchased meat ready for consumption, on the town's market (Levitan 1989).

3.7 The botanical remains: wood charcoal, fruits and seeds and pollen analysis

3.7.1 Material and Methods

The same four-litre sample that served the study of the animal remains was also used for archaeobotanical research (wood charcoal, fruit/seeds and pollen). The sediment was recovered from the single structure 5 (water basin) situated in the south-western corner of the kitchen of Clairefontaine IIa (Fig. 1.5). The infilling of this structure (assemblage 3) is supposed to correspond to the final phase of Clairefontaine IIa (around 1457).

Wood charcoal and fruit/seed analyses were performed on the same 1 litre-sample collected from the structure infilling sediment. The sieving was done using a series of meshes from 0.25 to 4 mm. For the fruit and seed remains, the identification was performed with the help of Cappers *et al.* (2006) (Cappers et al. 2006) and the fresh and archaeological fruit/seed collection from the RBINS (Brussels). Nomenclature of plant names follows the flora from Lambinon *et al.* (2004)(Lambinon et al. 2004). For the wood charcoal analysis, considering the huge amount of remains present, only a part of the residue has been observed (remains > 1 cm width in transversal view). A total of 110 big charcoal fragments were split according to the three plans of anatomical observation (transversal, longitudinal tangential, longitudinal radial). Identifications were carried out with the help of Schweingruber (1990) (Schweingruber 1990) and the wood charcoal collection from the RBINS.

The palynological sample (34 g) was processed according to standard techniques for pollen extraction (Berglund / Ralska-Jasiewiczowa 1986; Moore et al. 1991). *Lycopodium* tablets were added for calculation of pollen concentrations (Stockmarr 1971). Next to pollen and spores, also non-pollen palynomorphs (NPPs) have been studied (e.g. micro-charcoal, fungi) and were counted during pollen analysis. Pollen identifications were carried out using photographic atlases and available keys (Beug 2004; Moore et al. 1991; Reille 1992), and a reference collection of modern pollen and spores stored at the RBINS.

Pollen taxonomy and nomenclature generally follows Beug (2004) (Beug 2004); the mention "type" groups several taxa indistinguishable by their morphology, whereas *cf.* gives the most likely taxa. For other microfossil types, reference is made to descriptions and illustrations by van Geel (1986, 2001) and van Geel and Aptroot (2006) (Van Geel 1986; Van Geel 2001; Van Geel / Aptroot 2006). A minimum of 400 pollen grains was counted, excluding grains of wetland species, spores and NPPs. All percentages are based on the sum of terrestrial pollen. Mire taxa, spores and other microfossils are excluded from this sum (Berglund / Ralska-Jasiewiczowa 1986).

The combination of few numbers of specifically identified plant remains and a mineralization rate greater than 50% (fruit and seeds), correlated with an over-representation of some taxa and non-negligible unidentified, is a measure of an overall bad preservation state of archaeobotanical assemblages (Murphy / Wiltshire 1994). Low level of identification at Clairefontaine CLIIa limits the interpretation of the data and means that results should be treated with certain precaution.

3.7.2   Results and interpretation

Results of the charcoal analysis show that a large majority of fragments belongs to the genus *Quercus* (oak, 99 %). Only one piece of *Carpinus* (hornbeam) has also been identified. Considering the almost monospecific assemblage and the sampling context, charcoal fragments might correspond to firewood used for cooking activities and thrown in the basin after hearth and fireplace emptying. Generally, one assumes that charcoal assemblage concentrated in the sediment and containing only one or two species could correspond to a single combustion event (Chabal 1994) and reflect the last activities of the CLFIIa kitchen before its reorganization from the mid-15th century onwards. This assemblage indicates the exploitation of oak-hornbeam stands situated in the surroundings of the abbey as described in historical sources (Goffinet 1877).

The fruit/seed analysis identified 24 taxa, which are listed in table 3-3. They include only 6 cultivated taxa belonging to the group of cereals, cultivated pulses, and vegetables, kitchen herbs and/or technical plants. These cultivated plants represent 24% of the total minimal number of individuals (MNI = 219) (Fig. 3-9a). Wild plants, such as corncockle (*Agrostemma githago*), stinking chamomile (*Anthemis cotula*), danewort (*Sambucus ebulus*) *etc.* (Table 3-3), have also been identified; they indicate mainly arable land and ruderal areas. This group represents 48% of the total MNI (Fig. 3-9a). This high rate is partly due to the abundance of pip fragments of the elder species (*Sambucus* spec.) that can't be further identified. Most of the wild plants present in the structure may have been rejected with the chaff (glume and lemma) or may result from manual

sorting for the cleaning of cereal grains before making flour or cereal-based food (bread, oatmeal, porridge *etc.*)(Ruas 1999). On the contrary, although the bad preservation influenced the quality of identification, the absence of usual plants such as fruit (apple, pear, plum, grape *etc.*) is very surprising in a kitchen area. A third group of taxa, representing 27% of the total MNI, is composed by all the "other taxa" (Table 3-3, Fig. 3-9a), that is to say plant remains that have only been identified to the family or genus level, or which are totally unidentified. A part from this third group may be considered as useful plants such as, for example, the *Apiaceae* and *Lamiaceae* families for which some species could have been used as spices or as kitchen herbs.

Table 3—3   Clairefontaine abbey. Fruit/seed analysis of sediment sample collected in assemblage 3: specimen counts (Mona Court-Picon – Sidonie Preiss – Aurelie Salavert)

	CM	N	f	MNI	
CULTIVATED PLANTS					
Cereals					
Cerealia	M		2	2	cereals
Cerealia (glume and lemma)	M		22	15	glume and lemma from cereals
Cultivated pulses					
Fabaceae sativae	M/C	1	1	2	cultivated pulses
Lens culinaris	M	1		1	lentil
Vegetables, kitchen herbs and technical plants					
Brassica nigra/rapa; Sinapis alba/arvensis	M	27		27	black, wild, white and/or field mustard
Cannabis sativa	M	1		1	hemp
Papaver cf. somniferum	M	4		4	probably opium poppy
ARABLE/RUDERALS					
Aegopodium podagaria/Conopodium majus	M		1	1	ground elder/pignut
Agrostemma githago	M	15	2	17	corncockle
Anthemis cotula	M	8		8	stinking chamomile
Chenopodium album	W	6		6	lambsquarters
Papaver argemone	M	1		1	prickly poppy
Polygonum cf. aviculare	M	1		1	propbably knotgrass
Sambucus ebulus	W	4		4	danewort
Sambucus nigra/racemosa	W	23		23	elder/red elderberry
Sambucus spec.	W		100	45	elder species
Urtica dioica	W	2		2	common nettle
OTHER TAXA					
Apiaceae	M	3		3	carrot family
Asteraceae	M	2		2	sunflower family
Brassicaceae	M	1		1	cabbage family
Galium spec.	M	1		1	bedstraw species
Lamiaceae	M	2		2	mints
Polygonaceae	M	2		2	knotweed family
Rumex spec.	M	2		2	sorrel species
Indeterminata	M		46	46	unidentified plant remains

OTHERS

insects (pupa of Diptera)	M	5		insects	

Total	**112**	**174**	**219**
Total sum		**286**	
Fruit/seed concentration			**219**
Fragmentation rate (MNI)			**60,8%**
Mineralisation rate (MNI)			**52,44%**

CM = conservation mode, N = number of whole fruit or seeds, f = fragments, MNI = minimal number of individuals. Conservation mode may be : M = mineralized, C = carbonized, W = waterlogged.

Cereals and pulses, such as lentil, were cultivated for consumption. Black, wild, white and/or field mustard (*Brassica nigra/rapa*; *Sinapis alba/arvensis*) are species that provide vegetable oil which is comestible but also used for home lighting (Körber-Grohne 1987). The seeds of black and white mustard can be used crushed or ground, but also as a whole as spices and condiment to seasoning dishes (Wiethold 2005). The hemp (*Cannabis sativa*) is both an oil and fibre plant. The seed of hemp can be pressed to obtain oil which can be used as much for seasoning cooking as for lighting (Beck 1984). The whole seed can also be consumed as vegetable or as condiment (Preiss 2011). The opium poppy (*Papaver somniferum*) can also be cultivated for oil, but its seeds can be added to some food preparations and then eaten. The three taxa mentioned above are regularly quoted during the medieval period (Ruas 1992), as the cereals and cultivated pulses, which were part of the staple diet.

Pollen identifications are listed in table 3-4 whereas figure 3-9b shows the results expressed as ecological and economical groups of taxa. A total of 62 different taxa was identified in the sample analysed (Table 3-4): 43 pollen taxa from vascular plants (8 trees and shrubs, 34 land herbaceous plants, and 1 hydrophilous) completed by 19 non-pollen palynomorphs (1 moss, 15 fungal spores, and 3 wood remains, namely tracheid, scalariform perforation plates and micro-charcoal fragments). Although the pollen assemblage is considered as statistically reliable (pollen sum > 300 grains, number of terrestrial vascular plants > 20 different taxa), the pollen concentration reaches only 3589 grains per gram of sediment, which is quite few for waterlogged, organic rich sediments. The cultivated and potentially cultivated taxa represent 19.7% of the assemblage (Fig. 3-9b), which could seem rather few considering the context. However, some arboreal taxa ("trees and shrubs") and some species from the *Poaceae*, *Apiaceae*, *Brassicaceae* and *Cichorioideae* families ("other taxa") could also have been cultivated. Cultivated herbaceous plants comprise a majority of cereals (9.3%), which is very common in (post)medieval sites and is explained by the consumption of cereal-based

food such as bread (mainly *Triticum*) or porridge (*Avena*). A small percentage of cereals is represented by *Hordeum* which flour could have been added in some breads and porridges and/or used in brewery or as potion for the sick (Weiss Adamson 2004).

Fabaceae cf. Lens culinaris (lentil) and *Vicia* type, including *inter alia* the species *Pisum sativum* (pea) and *Vicia faba* (broad bean), are other food plants represented in the pollen spectra (2.7%). The observation of pollen, supported by the presence of seeds for *Lens* and other *Fabaceae sativae*, can most probably be attributed to the consumption of these pulses, even if *Vicia* type also includes wild species among which a majority of arable weeds and ruderals.

Table 3—4 Pollen analysis of sample collected in assemblage 3: specimen counts and relative frequencies (Mona Court-Picon – Sidonie Preiss – Aurelie Salavert)

	Nb	%	
CULTIVATED AND POSSIBLE CULTIVATED PLANTS			
Cerealia cf. Avena	20	4.52	oats
Cerealia cf. Triticum	13	2.94	wheat
Cerealia cf. Hordeum	5	1.13	barley
Cerealia type	3	0.67	cereals
Cannabis type	3	0.67	hemp and/or hop
Papaver cf. somniferum	3	0.67	opium poppy
Fabaceae cf. Lens culinaris	5	1.13	lentil
Vicia faba type	7	1.58	vetches (probably field bean and/or pea)
Apiaceae cf. Apium graveolens	10	2.26	(wild) celery
Apiaceae cf. Pimpenella anisum	3	0.67	anise
Vitis vinifera	2	0.45	grape
Aquilegia cf. vulgaris	2	0.45	common columbine
Reseda cf. luteola	2	0.45	dyer's weed
Brassicaceae cf. Brassica oleracera	9	2.03	probably cabbage
WILD PLANTS			
Trees and shrubs			
Alnus glutinosa	11	2.48	alder
Betula	3	0.67	birch
Corylus avellana	12	2.71	hazel
Tilia	3	0.67	lime
Quercus	15	3.39	oak
Picea abies	1	0.22	spruce
Pinus sylvestris type	3	0.67	pine
Sambucus nigra type	8	1.8	elder type
Herbaceous taxa			
Centaurea cyanus	6	1.35	cornflower
Agrostemma githago	3	0.67	corncockle
Galeopsis	1	0.22	hempnettle
Solanum nigrum	1	0.22	black nightshade
Anthemis type	12	2.71	chamomile/mayweed type
Polygonum aviculare type	6	1.35	knotgrass type
Brassicaceae cf. Lepidum/Cardamine	7	1.58	cress. bittercress. pepperweed. etc
Lamium type	1	0.22	deadnettle
Artemisia	21	4.75	mugwort
Chenopodium	6	1.35	goosefoot

Rumex cf. acetosella	5	1.13	field/sheep's sorrel
Urtica dioica	5	1.13	common nettle
Plantago lanceolata	15	3.39	ribwort plantain
Parietaria	2	0.45	pellitory
Aster type	13	2.94	aster type
Poaceae	33	7.46	grass family
Cichorioideae	121	27.37	chicory family
Ranunculaceae	15	3.39	buttercup family
Apiaceae	14	3.16	carrot family
Brassicaceae	11	2.48	cabbage family
Cyperaceae	6	1.35	sedge family
Pollen Sum	**467**	-	
Pollen Concentrations	**3589**		
MOSSES			
Anthoceros punctatus	2	0.45	field hornwort
NON-POLLEN PALYNOMORPHS (NPPs)			
Fungal spores			
Thecaphora sp.	3	0.67	
Caryospora sp. (HdV-1001) [x]	1	0.22	
*Sordaria sp. (HdV-55A)**	31	7.01	
*Sporormiella (HdV-113)**	2	0.45	
*Apiosordaria cf. verruculosa (HdV-169)**	1	0.22	
*Rhytidospora cf. tetraspora (HdV-171)**	3	0.67	
*Chaetomium sp. (HdV- 7A)**[x]	120	27.14	
*Coniochaeta ligniaria (HdV-172)**[x]	1	0.22	
Coniochaeta xylariispora (HdV-6) [x]	25	5.65	
*Gelasinospora cf. retispora (HdV-2)**[x$]	6	1.35	
Glomus cf. fasciculatum (HdV-207)	2	0.45	
HdV-361	29	6.56	
HdV-351	18	4.07	
HdV-203/206	3	0.67	
UG-1197	1	0.22	
Wood remains			
Charred particles	21424	4587	
Coniferous tracheids	35	7.91	
Scalariform perforation plates cf. Corylus/Alnus	8	1.8	
Non-Pollen palynomorphs Concentrations	**164975**		
Unidentified	26	5.88	
Total Microremains Concentrations	**168779**		

Fungi : * coprophilous, [x] lignicolous/cellulose decomposers, [$] carbonicolous

Other taxa that most probably also reflect the diet of the former occupants of the abbey are cabbage, celery, anise, grape, hemp, opium poppy, common columbine and dyer's weed, altogether grouped in the "vegetables, kitchen herbs and technical plants" which accounted for 7.7% of the pollen assemblage (Fig. 3-9b). Vegetables seem to be

underrepresented with pollen grains of only one taxa identified (*Brassicaceae cf. Brassica oleracera*), probably the 'cabbage', although, in theory, these could also derive from wild representatives. Cabbage was quite important for the common people during the Middle Ages, but was however rarely mentioned in upper-class cookbooks (Weiss Adamson 2004). Kitchen herbs, or more generally condiments, are also sparingly represented with *Apiaceae cf. Apium graveolens* (celery) and *Apiaceae cf. Pimpenella anisum* (anise), which could not be identified with certainty. The first is a condiment that was commonly used in north-western Europe since the Roman Period, both for its green leaves and seeds. In addition it can be assumed that the green parts were used also as vegetables. They may have been used for medical purposes as well (Märkle 2005). Celery was probably accessible to most people, even if it seems to become a luxury of urban life or rural elites during the 10th-15th centuries(Livarda / van der Veen 2008). The second is a kitchen herb which was later imported in north-western Europe, not before the end of 13th century (Wiethold 2003), and should be then more expensive at that period. Anise was used as seasoning in a variety of dishes, such as fish and chicken dishes, and as comfits (sugar-coated anise) eaten at the end of a meal in order to sweeten the breath and aid digestion (Weiss Adamson 2004).

Vitis vinifera pollen could belong either to *Vitis vinifera* subsp. s*ylvestris*, the wild subspecies of the taxa, or to *Vitis vinifera* subsp. *vinifera*, the cultivated form (grape). The former grows in riparian vegetation at the edges of water bodies, such as the river running south-east along the kitchen; it could be then theoretically the source of the pollen grains observed in our assemblage. The latter is not native to Belgium but was widely cultivated here during the Middle Ages. The presence of *Vitis* pollen might result from the consumption of fresh grapes or raisins, although drinking wine might also be an explanation (Rösch 2005); historical sources mention that the abbey owned vineyards in the valley of the Mosel near Grevenmacher, since its foundation in the 13th century and that a large part of the rents was collected in the form of wine, especially from the 14th century onwards (Goffinet 1877). In this context, *Vitis* pollen grains certainly originate from the cultivated form of the plant or its products, but it is unfortunately not possible to say if they are from imported or locally grown grapes.

Relative proportions of ecological/economical groups

a) FRUIT and SEEDS (MNI = 219)

b) POLLEN TAXA (PS = 467)

Legend:
- ☐ Cereals
- ■ (dark grey) Cultivated pulses
- ☐ (light grey) Vegetables, kitchen herbs and technical plants
- ■ (black) Arable/ruderals
- ⊞ Other taxa
- ▨ Trees and shrubs
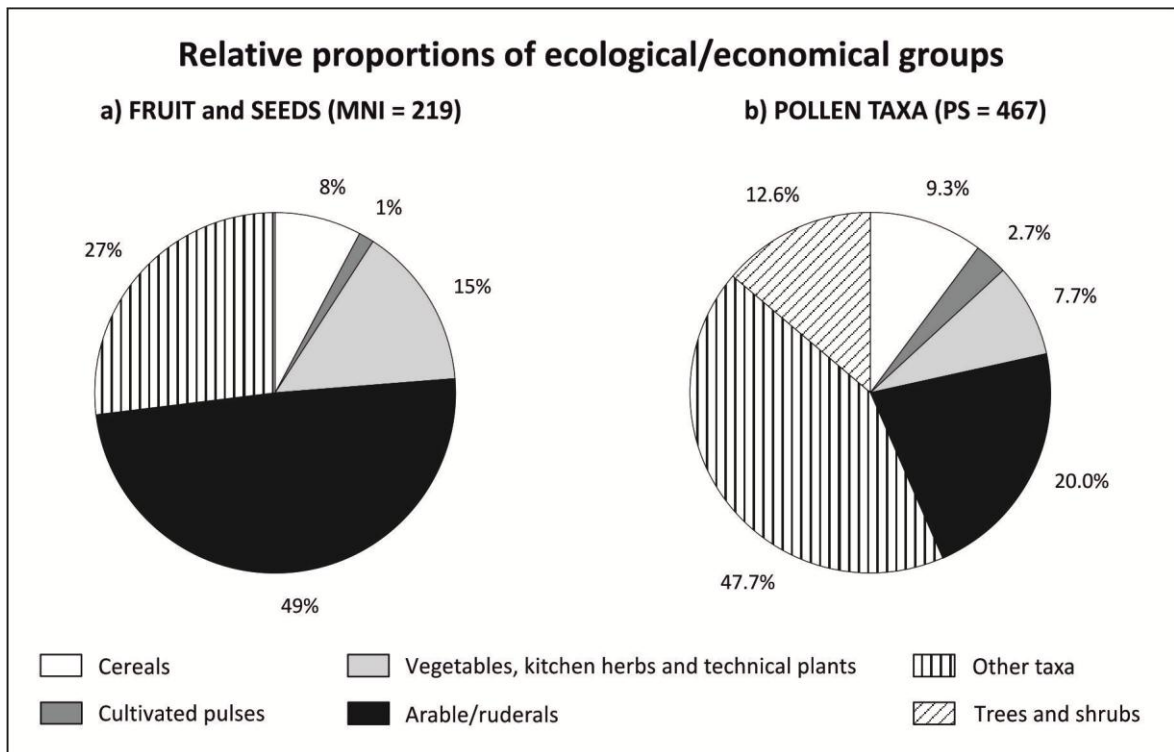
Figure 3—9   Clairefontaine abbey. Relative proportions of the main ecological and economical groups of fruit/seed (a) and pollen taxa (b) of sample collected in assemblage 3. MNI = minimum number of individuals, PS = pollen sum (Mona Court-Picon – Sidonie Preiss – Aurelie Salavert)

Cannabis type pollen includes two possible species: *Cannabis sativa* (hemp) and/or *Humulus lupulus* (hop), both can be cultivated. Hemp was exploited as an oil plant using its seeds and/or as a fibre plant using its stalks, whereas hop was used in brewery but also in medicine (Märkle 2005). Hop can also grow widely along the rivers but it is known to have been cultivated at least since the end of the early medieval period (Behre 1999). Both hemp and hop productions are reported between the 16th and 18th centuries in the account book of the abbey (Bernard 2001). The presence of a hop garden and a brewery on the domain of Clairefontaine is mentioned in the historical sources of the abbey (Goffinet 1877). However, as an achene of hemp and no seeds of hop have been found, we consider that the pollen grains of *Cannabis* type observed in our sample are belonging to hemp produced at or imported to Clairefontaine. Both pollen and seeds of another oil plant, *Papaver somniferum* (opium poppy), were identified. *Papaver somniferum* was a very popular horticultural crop in medieval Europe and mentioned in every list of food and medical plants. It was originally grown for their medicinal properties in physic gardens attached to the monasteries and hospitals (Moffat 1992). Its uses as a powerful painkiller, as a soporific and for coughs and other ailments were known in north-western Europe in the Middle Ages (Comrie 1932).

The possible use of *Aquilegia cf. vulgaris* (common columbine) has only been attested by its pollen. This species was popular ornamental garden flowers since the beginning of the 11th century (Märkle 2005) and was considered sacred to Venus in traditional herbalism; from the 15th century it became more and more cultivated as astringent and diuretic uses (Hellwig 1997). Finally, the technical plant *Reseda cf. luteola* was probably identified in our sample. It was the most used plant in the past to give a colourfast yellow dye. It was introduced in north-western Europe as a dye plant and its seeds are frequently found in medieval sites. This dyestuff was imported before the 12th century (Dickson 1996). However the pollen taxa found can also refer to other species of *Reseda*, most of which being ruderals and mainly used as ornamental or medical plants.

Annual and perennial ruderal plants are well represented in our sample and characterize the local environment. This importance results directly from the abundance of *Artemisia* (4.75%) and *Plantago lanceolata* (3.39%). *Chenopodium*, *Polygonum aviculare* type, *Urtica dioica*, *Rumex acetosella* type and *Lamium* type are also noticed among the ruderals. These taxa are very common in archaeobotanical records, and indicate nitrogen rich ground, which is quite usual for medieval habitats. However, some of the species included in this group could also grow as crop weeds, and are thus presented together within the group "arable/ruderals", which accounted for 20% of the pollen assemblage (Fig. 3-9b). Most of these are considered to be weeds from arable fields, with chamomile type (*Anthemis* type), corncockle (*Agrostemma githago*), cornflower (*Centaurea cyanus*) and *Anthoceros punctatus* (field hornwort), as the most common species. The taxa recorded grew mostly in winter but also in summer crops. These weeds were very common in the Middle Ages of central and north-western Europe and are found regularly in archaeobotanical samples. Without doubt, pollen of arable weeds, but also from the vegetation surrounding cereal crops, were contaminants of the grain harvested and consumed in the abbey. Therefore part of this pollen ends up in cereal based food products after cereal processing and food preparation (Märkle 2005). Note also that several wild taxa of these "arable/ruderals" could have been used as medical plants; they include *Achillea millefolium* (*Anthemis* type)*, Lamium purpureum* (*Lamium* type)*, Urtica dioica*, and also *Sambucus nigra* ("trees and shrubs" group), which were used in herbal medicine during the 15th century (Dickson 1996).

The taxonomic pollen spectra identified include the additional community of arboreal taxa ("trees and shrubs" group), representing 12.6% of the assemblage (Fig. 3-9b):. Woodlands, wood edges and shrubs were a highly appreciated resource in medieval times for animal fodder, timber, berries for nutrition *etc*. The large majority of tree and shrub taxa belong to mixed woodlands (*Quercus*, *Tilia*, *Corylus avellana* and *Sambucus nigra* type, which includes *S. racemosa*), which echoes the anthracological results and would probably have come from the abbey's own local oak woodland. Oak is indeed

ideal for burning, both as firewood and as charcoal, and could also have been used as timber. *Sambucus nigra*, which grows preferentially on waste places and next to habitats, also has edible fruits and has a long tradition in European cookery; the berries were usually turned into jelly, mousse, or as food colouring, whereas the flowers were used in syrup and fritters that were especially popular (Weiss Adamson 2004). Berries, flowers and leaves were also used in medicine. The presence of one taxa which nowadays naturally grow only at high altitude (*Picea abies*) should be underlined. Spruce was indeed not present in the studied area during medieval times. The presence of its pollen at Clairefontaine could result from an importation of wood and/or pitch (resin or tar), as it was the case during the 15th century in Germany (Hellwig 1997). *Pinus* sp. could also be an exogenous element and an importation of pine nut (*P. pinea*) from the Mediterranean region or of wood and resin from the mountainous species (*P. uncinata*, *P. mugo* and *P. nigra*) is always possible. However, the pollen grains observed in our assemblage certainly originate from some Scots pines (*P. sylvestris*) which could naturally grow in the site area and develop in plain within more or less degraded oak forests surrounding the abbey.

The non-pollen palynomorphs spectrum is characterized by the remarkable abundance of micro-charcoal fragments (Table 4),which confirms that of macroscopic wood charcoal found in the basin in which they were certainly thrown after emptying of fireplaces and hearths. Coprophilous and lignicolous fungi are the most abundant taxa identified within the NPP assemblage. The presence of lignicolous, carbonicolous and cellulose decomposer fungi is not surprising since these species develop on wood, wood charcoal and dead higher plants which are part of the construction, utensil and firewood material of the kitchen, and of the refuses and leftovers from the culinary activities, respectively. Finding large quantities of coprophilous species in that context is more unusual since they are considered as very little transported and generally associated with intensively grazed meadows, cattle keeping in sheds, slurry pit and/or manure spreading on fields. Their observation could be thus the result of refuses from the cutting of carcasses of consumed animals (intestines thrown in the basin ?), live animals present in the kitchen, or even use of dried dung as fuel in times of shortage of wood, are also possible.

3.8 Conclusions

Excavations in Clairefontaine revealed the architectural remains of a late medieval monastic kitchen and annex buildings. Three main building phase were recognized and could be related to relative site chronology and site history (Clairefontaine I: 1247-1346; Clairefontaine IIa: 1346-1441/57; Clairefontaine IIb: 1441/1457-1507/1552). The successive floor levels and the filling of an ashpit and a water basin provided a constrained but nevertheless significant and varied dataset consisting of ceramic products, animal bones and plant remains (wood charcoal, fruit/seeds and pollen). Accordingly, aspects of architecture, material culture and food consumption practices could be reconstructed through a multi-disciplinary approach.

Patrons and benefactors invested intensively in architecture and material culture of the community in Clairefontaine. The abbey was founded and constructed on lands endowed by the counts of Luxembourg. The link between the community and the counts made Clairefontaine a social tool for local noble families willing to close up with Luxembourgian aristocracy. During the first half of the 14th century, in preparation for the burial of John the Blind the monastic complex was totally reconstructed. The count created a prestigious grave for himself, but meanwhile he upgraded the quality of the sisters' everyday life. It seems certain aspects of noble life were reproduced inside the convent walls. During the reconstruction works financed by Ladislas in the middle of the 15th century a tile stove was installed in the reception room adjacent to the monastic kitchen. Such stoves took a central place in the reception area and living quarters of castles and elaborate urban houses. Decorated with chiefly heraldic and biblical scenes their iconography was meaningful and mirrored aspects of identity. Stove ceramics were a popular item in the gift exchange of the late medieval elite and served as metaphors for cultural imperatives and social aspirations of the owner and the giver (Sabjan 2007). Present in the material setting of daily life, they constantly structured the minds of people passing, gathering and working by the stove (De Clercq et al. 2007b; Ostkamp 2002). The emblem of Maximilian of Austria reminded both visitors and sisters in Clairefontaine of the generosity of the emperor and the social networks of the abbess and the community.

Fruit, seeds and pollen analysis offer information on the plants that may have been consumed in Clairefontaine. Cereals such as wheat, oat and barley are well presented, but also cultivated pulses like lentils and probably field beans and peas. Celery, different kinds of mustards, anise, cabbage, grape, opium poppy, hemp, and dyer's weed were also recognised. Some of these plants may have been used as spices, condiment and kitchen herbs, while others were processed into oil, textiles or dyestuff. The poor state of

preservation of the plant remains prevent exhaustive social interpretation. More concrete data on social status and diet habits can be derived from the results of archaeozoological analysis. The rule of Saint Benedict offers certain prescriptions on the consumption of meat. As so, it was in origin prohibited to consume the meat of four-legged terrestrial animals, except for sick people (Coune / Vrensen 1986). In reality, meat consumption was allowed at least four times a week under certain conditions, except during the periods of fasting (Harvey 2005). In addition, the rigor of observance has varied over time, up to weaken considerably in the Late Middle Ages. Fish remains on the other hand are generally abundantly present in monastic assemblages, since fish offered a permissible alternative for meat with regard to animal proteins (Ervynck 2004). However the consumption of fish may be assumed in Clairefontaine, fish bones were scarce in both hand collected and sieved assemblages. Bones of mammal were on the other hand well represented and it seems that mammal was consumed on a regular basis. The presence of bones of young animals such as calves, sucking pigs and lambs indicate the sisters love for tender and high quality meat. Equally striking is the abundant presence of pig remains reflecting without doubt the noble status of the community. Consuming pork is supposed to have been sinful for a long time and appears only seldom in monastic bone assemblages[33]. Pigs were herded in forests, mainly oak woods, a noble right, and were therefore mainly served on the table of the feudal elite (Callou 1999). The abbey of Clairefontaine, in the person of the abbess, acted as lord and performed certain rights on its territory. It is known that the abbey pastured pigs in the surrounding oak woods. The exploitation of the mixed oak forests surrounding the abbey has also been demonstrated by anthracology and palynology. Historical sources testify of wood being lumbered for heating and construction works(Goffinet 1877). The abbey equally owned the right to hunt in those forests and indeed wild animals such as deer and roe ended on the communities table. Dovecotes were peppered all over the monastic estate (Bernard 2001; Joset 1935). Keeping pigeons was highly prestigious and reserved to nobility. Apparently these prestigious birds also appeared on the dinner table. Finally, carp and pike breeding was an expensive activity and generally reserved to high status settlements such as abbeys and castles that had moats and ponds on the surrounding estates.

In short, we may conclude that this paper on the late medieval kitchen complex of Clairefontaine, reveals the structuring effects of the interaction between religious and worldly life on monastic material culture, architecture and consumption practices. It has

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[33] Comparative research combining archaeozoological data of nine monastic sites in Flanders: Ervynck 2004,

been demonstrated that monastic space served as theatre for display and the negotiation of social identities by lay benefactors and the community's patrons. These social groups clearly left their mark on both monastic architecture and material culture. Despite religious regulations, certain aspects of noble life style were reproduced inside the convent walls by the religious themselves. As such, aspects of material culture and patterns of conspicuous consumption characteristic of the acquired manners and taste of the feudal elite were introduced in a monastic context.

Chapter 4 Composition and state of alteration of 18th century glass from the Cistercian nunnery of Clairefontaine

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4.1 Introduction

During the 17th century various new technologies were introduced in European glass industry. In this period of innovation the leading role of the Low Countries in the production of glass was taken over by other European areas. Since the beginning of the century, English glassmakers start to fire there ovens with charcoal. Higher and more

stable temperature could be obtained which allowed them to produce high quality products on a larger scale. Exemplary are the large and robust wine bottles in coloured potash glass which were exported to the continent and North America (Jones 2010). The production locations near the woods were abandoned and glassmakers settled near and in towns and urban centres (Cabart 2011; Henkes 1994). New recipes for colourless crystal glass were developed in England and Central Europe and products of these areas took over the market of luxury glass. As such, traditional luxury products such as the soda-lime *Façon de Venise* glass got replaced by new kinds of crystal like glasses. Since the early 17th century Continental and English glassmakers experimented with the addition of lead to soda and potash glass (Engen 1989; Francis 2000). At the same time, in Bohemia and North-Central Europe, glassmakers developed another new kind of potash glass. Through the addition of lime, a shiny and almost unbreakable glass was produced (Hötl 1995; Petrova / Olivié 1990). Just as the English lead glass, the Bohemian vessels were characterized by a soft paste which was perfect to decorated by wheel engraving. These both relatively cheap but highly decorated types of glass became increasingly popular since the end of the 17th century(Drahotová 2008; Pesatova 1968).

English and Bohemian glass tradition was spread all over Europe soon. In a first stage mainly finished products were exported (Hötl 1995). However, there are several indications suggesting that the glassmaking technology itself was diffused only little later. By the end of 17th century also on the continent, charcoal as energy sources became more and more important (Cabart 2011), while historical sources testify that several glassmakers in the Low Countries experimented with English and Bohemian recipes to produce highly decorated crystal clear glass *à la façon d'Angleterre* and *à la façon de Bohème* (Charleston 1958). With varying success it seems. Most of them struggled with the stability of the glass, which made their products much more prone to deterioration and crizzling (Francis 2000). This long experimental period is illustrated by a document of written in 1746 by Sebastien Zoude, glassmaker in Namur in which he proudly claims have developed the perfect recipe for potash-lime and potash-lead glass of high quality (Watts / Tait 2007).

The study of 18th century vessel glass from archaeological context is still in an early stage. The advances made in the past are based on mainly art-historical interpretation. Unfortunately, this approach excludes the assessment of several fundamental questions on transforming production techniques, raw materials and provenance. 18th century vessel glass in the Low Countries is determined as being 'Bohemian', English' or 'local' products by mainly visual aspects such as shape and decoration. Past research already proved the subjectivity of such an approach (Henkes / Laan 1986). Unlike in studies of 16th and 17th century vessel glass (De Raedt et al. 2002; Janssens et al. 1998; Lemberge et al. 2000), only seldom the chemical composition of 18th century finds are taken into

account (Van der Linden et al. 2005). The main purpose of this study is to contribute in the construction of a reference dataset for 18th century glass in Northern Europe and the Low Countries more in particular. Furthermore, the relationship between colour, chemical composition and deterioration behaviour are investigated. The outcome can be compared with the compositional dataset on glass found in England (Ashurst 2005; Dungworth / Brain 2009; Jackson 2005) and the Bohemian area (Ciepela 1973; Kunicki-Goldfinger et al. 2000; Mucha 1991) and with future research results on imported and local produced vessel glass in North-western Europe.

In this current study, the major and minor composition of 100 glass vessels from the 18th century are determined by means of SEM-EDX. All fragments were recovered from a latrine in the Cistercian nunnery of Clairefontaine, near Arlon (B). According to historical sources the latrine was constructed during the first half of the 18th century and stayed in use until the suppression of the abbey in 1794. The archaeological finds consisted, next to large amount of animal bones, mainly of glass and ceramic vessels all dating in this period. The find assemblage is comparable with that of an average 18th century bourgeois family, which is not surprisingly keeping in mind the birth of the religious inhabitants of the nunnery.

Clairefontaine abbey
Context 26: 18th century latrine
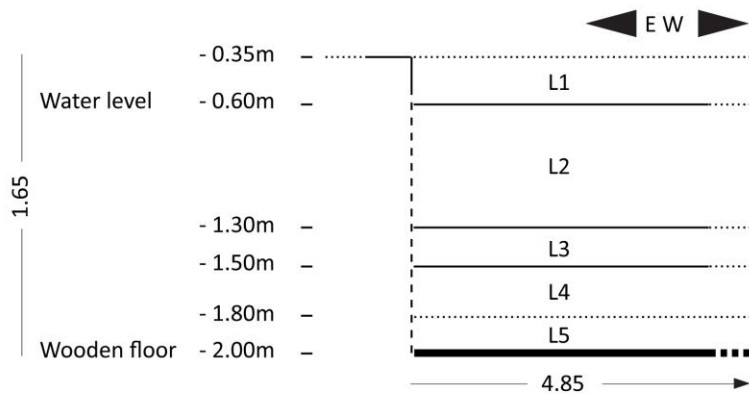
L1-2: Heterogeneous filling layer consisting of greyish clay, brownish humous soil and yellowish sand with charcoal spots
L3: Heterogeneous greyish sandy layer
L4: Blackish compact layer with zone of more sandy sediment.
L5: Dark greyish compact layer. Difficult to distinguish of L4

Figure 4—1   The 18th century latrine in Clarefontaine: location on the excavation plan, picture from the west and section drawing (Davy Herremans, ©SPW-Dpat)

4.2   Archaeological context

The latrine discussed in this paper lays in the south-wing of the 18th century nunnery of Clairefontaine (Fig. 4-1). Rectangular in plan, 145x595 centimetres, its bottom was boarded. The latrine complex was built over the Durbach, a narrow stream which flows on the south side of the monastic complex. The constant inflow of water assured the removal of the waste. The heterogeneous upper fill (L1: -0.35-0.60m and L2: -0.60-1.30m below the present surface) consisted of mixed building materials, greyish clay, brownish humous soil and yellowish sand with charcoal spots. At -1.30m the deposit become more sandy with less deconstruction debris but remains nevertheless heterogeneous (L3). The deposit changed abruptly at about -1.50m into blackish compact soil with more heteregoneous sandy zones. The blackish soil is probably the remaining residue from the final period the latrine was in use (L4-L5).

Although certain stratification was observed, it became clear during fieldwork and post-excavation research, that pieces of pottery and glass recovered from the uppermost and lowest levels joined to form complete or almost complete vessels. Therefore a sudden fill-up of the latrine in times of abandonment is assumed. It also came clear that the remaining residue at the bottom of the latrine was not homogenous and disturbed by the impact of the fill up of the latrine.

4.3   Sampling strategy

The glass was sampled mainly on visual aspects such as the type of alteration, the colour of the glass and the shape of the vessels. As much as possible, the complete range was sampled taking into account the true quantitative proportions of the context (Tab. 4-1) . Samples were taken from both the lower layers (L2-L5) and from the layers above, more regularly affected by the fluctuating water level (L1).

A significant part of the samples consists of coloured glass all dating in the 18th century. Most of the fragments are part of green thick-wall wine bottles and green or blue thin-wall storage vessels of all kinds such as square bottles, jars and phials. However, the major part of the samples consists of colourless glass with a large number of highly decorated 'Bohemian' or at least 'Bohemian' styled conical beakers or tumblers. Most of them are plain beakers with wheel graved decoration typical for the first half of the 18th century. The few facetted and mould blown beakers in the context can be dated

in the second half of the century. Other drinking- and table ware from the same period such as salt tubs, shot glasses, jugs, goblets and cups were present in fewer quantities. Few coloured goblets were revealed (Herremans 2012).

Table 4—1   The sampling of the Clairefontaine Glass in numbers(Davy Herremans)

Clairefontaine Latrine
Sample Count (n100)

Alteration	%	Shape	%
Crizzled surface	6	Beaker	45
Crizzled surface and discolouring	16	Cup	3
Crizzled surface, discolouring, iridization and stains	1	Jug	2
Iridization and stains	4	Gobelet	11
Iridization, stains and rest	29	Phial	7
White patina	16	Salt cellar	1
Unweathered	28	Shot Glass	1
		Square bottle	10
Coloured	**%**	Storage Jar	1
Blue	5	Wine bottle	19
Colourless	63		
Green	32		

The entire assemblage shows a high degree of corrosion. Five types of weathering were recognized varying from heavy crizzling to a white opaque patina (Fig. 4-2). Both the thick-wall and thin-wall green glass was in general heavily iridized and stained, some of them showed thick crusts, with or without relic glass (Fig. 4-2, E, F) (Koob 2006; Newton / Davison 1997; Schreiner 1991). The blue glass (D) and a significant part of the colourless glass is completely unweathered (B), while an equally part has a notable opaque white patina on the surface (A). The cloudy appearance of the surface indicates the presence of alkali and an initial stage of crizzling. A certain smaller amount of the samples is heavily crizzled: the cracking has progressed and in many cases spalling occur leading to small chips or flakes loosing from the surface (C). Several of these heavy altered fragments are discoloured, turning the glass body from transparent into brownish (Kunicki-Goldfinger 2003; Kunicki-Goldfinger et al. 2003).
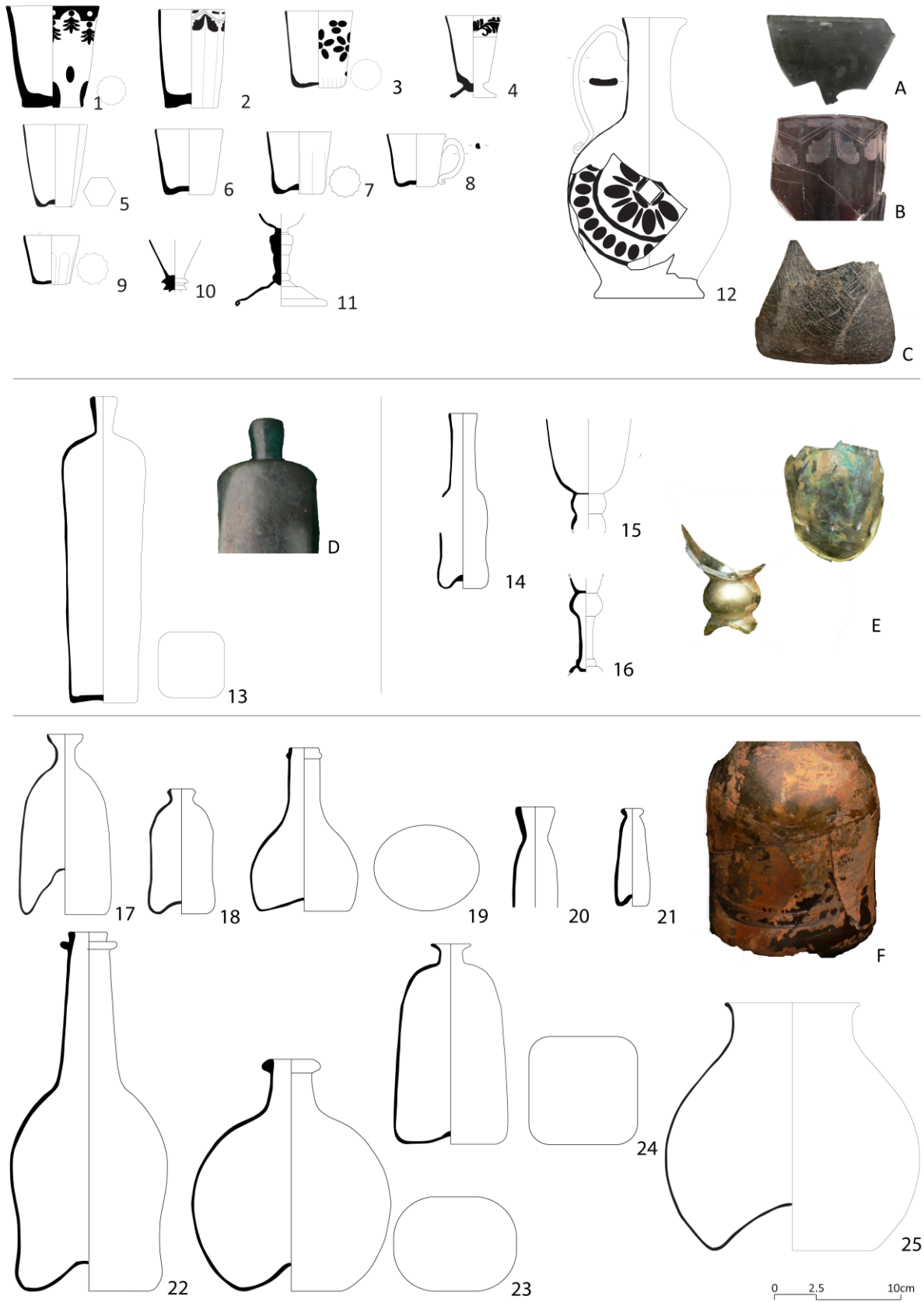
Figure 4—2   Typology of the glass in relation with the compositional groups (Davy Herremans)

4.4 SEM-EDX analysis

Small glass samples (a few square millimetre) were removed from the archaeological finds and embedded into acrylic resin. The resin blocks were mechanically ground with silicon carbide paper and polished with diamond paste down to a particle diameter of 0.25 mm in order to obtain a smooth surface of unaltered glass. Finally the resin blocks were coated with a thin carbon layer and Scanning Electron Microscope-Energy-Dispersive X-ray spectroscopy (SEM-EDX) measurements were performed.

SEM-EDX measurements were performed with a JEOL 6300 SEM equipped with an energy-dispersive X-ray detector. The spectra were collected for 100 seconds by using a 2 nA electron beam current, an accelerating voltage of 20 kV and a microscope magnification of 500. The net intensities were calculated with the program AXIL and quantified by means of a standard-less ZAF program(Schalm / Janssens 2003). Precision and accuracy were tested by analysing NIST and Corning glass standards.
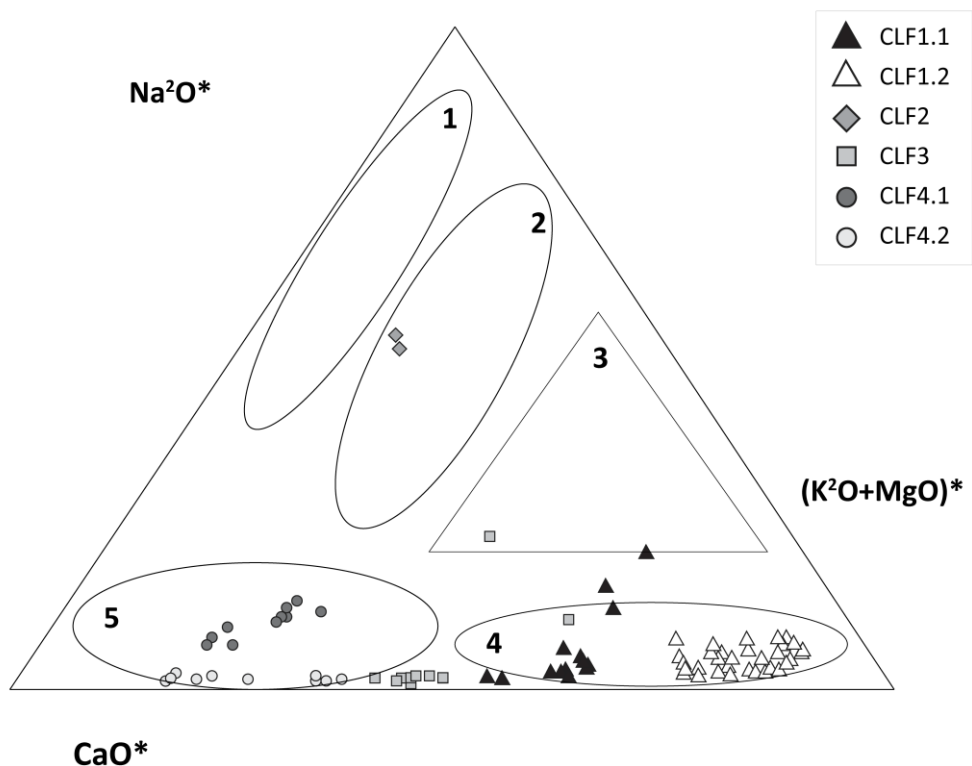
Figure 4—3   Na$_2$O, CaO and K$_2$O+MgO normalized concentration of the Clairefontaine glass samples. The ellipses and triangle numbered 1 to 5 show the boundaries of historical glass groups: 1. Mineral-based soda glass; 2. Vegetable-based soda glass; 3. Mixed alkali glass; 4. Potash glass; 5. High Lime Low Alkali (HLLA) glass (Simone Cagno – Anke Vincke – Koen Janssens)

4.5 Results

4.5.1 Glass composition

On the basis of their quantified compositions, the glass fragment from Clairefontaine could be divided with hierarchical clustering (Matlab, Ward's method) in four main groups (CLF1-4) that can be visualized well on a triangular plot (Fig. 4-3). This plot shows the normalized concentrations of Na_2O, CaO and K_2O+MgO and is useful in distinguishing main compositional groups typical of different periods of glass history. The average compositions of the different groups are reported in Table 2. The samples for which no remaining non-altered glass is found are excluded from this classification.

Table 4—2   Compositional groups identified in the Clairefontaine glass (Simone Cagno – Anke Vincke – Koen Janssens)

	CLF1.1	CLF1.2	CLF2	CLF3	CLF4.1	CLF4.2
	n 20	n 41	n 2	n 10	n 10	n 11
Na_2O	1±1	1,2±0,4	17,1±0,4	2±2	3,4±0,8	0,5±0,1
MgO	1,3±0,8	0,3±0,3	2,5±0,1	4,3±1,4	4,2±0,6	3,6±0,9
Al_2O_3	1±1	1,2±0,4	2,5±0,1	2,0±0,7	3,1±0,5	3±1
SiO_2	71±3	71±2	62,2±0,1	62±1	59±1	56±2
P_2O_5	nd	nd	0,2±0,1	0,8±0,3	1,1±0,1	1,5±0,2
Cl	0,1±0,1	0,1±0,1	0,8±0,1	0,1±0,2	0,6±0,1	0,1±0,1
K_2O	15±2	21±2	3,5±0,2	11±1	4±1	6±2
CaO	9±1	4±1	9,6±0,1	16±3	22±2	26±3
MnO	0,4±0,3	0,6±0,2	0,5±0,1	1,4±0,3	1,1±0,2	1,0±0,3
Fe_2O_3	0,2±0,1	0,2±0,1	0,9±0,1	0,5±0,1	1,4±0,2	1,3±0,3
As_2O_3	1±1	nd	nd	nd	nd	nd
PbO	1±1	1±1	nd	nd	nd	nd

In table 4-2 it is clear how the greatest part of the Clairefontaine fragments are either made of potash glass (CLF1) or high lime low alkali glass (CLF4). Group CLF3 is made of potash lime glass (intermediate between CLF1 and CLF4) and mixed alkali glass, and group CLF2 is made of vegetable-based soda glass. No lead crystal (*à la façon d'Angleterre*) is found in the sampled glass set.

Potash glass

The potash glass group comprises, with the exception of a few blue fragments, all colourless glasses, part of vessels related to drinking and table culture, dated to the 18th century (CLF1). The colourless glass was characterized by a wide chrono-typological variety. The major part of the vessels consists from plain conical beakers and cups from the first half of the 18th century. Part of them were undecorated (Figure 4-2, 6; 8) while most of them were engraved on the wheel with mainly floral and more geometric patterns (Fig. 4-2, 1). Similar decoration was found on other table- and drinking ware in the assemblage including various shot glasses (Fig. 4-2, 4) and decanters (Fig. 4-2, 12). Some beakers, dating to the second half of the 18th century are mould blown. With this production technique it became possible to produce ridged beakers (Fig. 4-2, 3 and 7), beakers with rows of contiguous arcades (Fig. 4-2, 9) or facet-cut beakers (Fig. 4-2, 2 and 5) from the middle of the 18th century onwards. In this period also mould-blown decoration patterns appeared on the body of the vessels (Fig. 4-2, 3). The few goblets analysed, had a solid stem decorated with one or more knops.

Subdivision of potash glass according to the K/Ca ratio and the presence/absence of As and Pb have been reported for 18th century glass from Northern-Central Europe in order to distinguish white and crystal glass. In the case of the Clairefontaine glass, two subgroups of potash glass can be identified (CLF 1.1 and 1.2). Group CLF1.1 is characterized by a K_2O/CaO ratio of 1.67, with occasional presence of As and Pb, while the more abundant group CLF1.2 features a more unbalanced $K2O/CaO$ ratio of 5.25, while As is not present. This type of potash glass was normally produced by melting together a source of silica (white sand), a source of lime (crushed limestone) and a source of potash (potassic ashes, wine tartar or saltpetre). This recipe was developed in the Bohemian area and Central Europe at the end of the 17th century.

High lime low alkali glass

The HLLA glass comprises green glass only all dated to the 18th century (CLF4). The typology shows a wide range in storage vessels from the 18th century, including a large storage jar (Fig. 4-2, 25) and various types of wine bottles (Fig. 4-2, 19 and 22), flasks (Fig. 4-2, 23, square storage bottles (Fig. 4-2, 24) and phials (Fig. 4-2, 17; 20; 21).Also within this glass group two subgroups can be distinguished (CLF4.1 and 4.2), based on their different K2O and CaO contents, and the presence of little amounts of soda in CLF4.1.

HLLA glass was used for all objects, from window glass to tableware from the 16th to the 19th century and it was the most common cheap glass on the market, since it was produced with materials easily found (most likely ordinary sand and unwashed plant ash) (Dungworth / Clark 2004).

Potash lime glass

For what concerns the smaller potash lime (CLF3) group, it shows a similarity with the composition of glass types from earlier centuries (14th-16th century). Potash-lime glass was produced in different locations in Europe (e.g. France, Germany) by means of sand and woodash(Caen 2009; Freestone 1992). Typo-chronological analysis suggest a slightly older date for at least part of the glass vessels in the group: next to several phials dating in the 18th century (Fig. 4-2, 14) the assemblage consist of some fragments of late 17th century beakers and early 18th century goblets (Fig. 4-2, 15-16).

Soda glass

The soda ash found appears to be produced by means of natural soda (sodic plant ashes). This indication is given by its relatively high K_2O, MgO and P_2O_5 contents. Artificial soda, as the one obtained through the Leblanc or Solvay processes, gives rise to contents of K_2O and MgO lower than 1%. Thus the two soda glasses (CLF 2) from Clairefontaine still belong to the soda glass production of Low Countries *façon de Venise* tradition (16-17th century) (De Raedt et al. 1999). The type of object (in both cases blue square storage bottles) lets us hypothesize that the use of soda was maintained well into the 18th century for the productions of certain types of qualitative storage vessels.

4.5.2   Relation colour-composition

When observing the CaO vs K_2O plot (Fig. 4-4), we see a general tendency to a higher K-content and lower Ca, going along with the preciousness or at least the transparency of the glass. This can be related to the advances in ash/potash purification, starting with unpurified wood ash (CLF4) and ending with pure potassium carbonate/nitrate added to pure silica and lime in order to obtain crystal potash glass (lower right part of Fig.2-4).
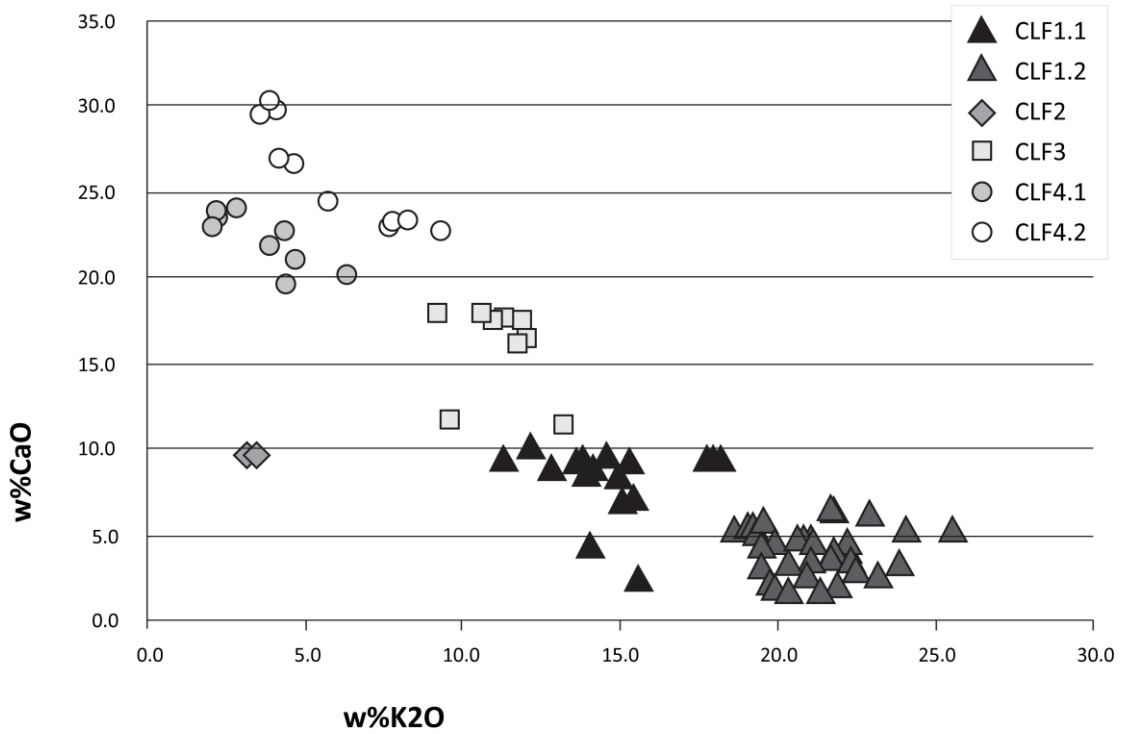
Figure 4—4   CaO vs. K_2O content in the Clairefontaine glass (Simone Cagno – Anke Vincke – Koen Janssens)

A similar pattern can be seen in the degree of purity of the sand. In Figure 4-5 we can notice a clear correlation for the CLF1 and CLF3 groups, meaning that all Mn and Fe in the glass entered through the same source, that is sand. While for both groups the Fe_2O_3 amount is always lower than 0.5% the MnO content is as high as 1.6% in the CLF3 group. In the CLF1 group these values are lower, in reason of the highest purity of the sand selected for glassmaking. The low concentration of iron in these groups, also combined with the presence of Mn allows to obtain a colourless glass. In group CLF4, instead, the contents of iron are sensibly higher, exceeding 1%, giving a green colour to the glass, due to the presence of Fe(II) and Fe(III) ions in the glass matrix.

Generally, all potash glass is colourless and all HLLA glass is green: this means that the workshops producing the sampled objects deliberately made glass with different target markets, and consequently different starting materials, the first focusing on high-end table- and drinking ware, the second on less qualitative commodities, mainly storage ware for temporary use.
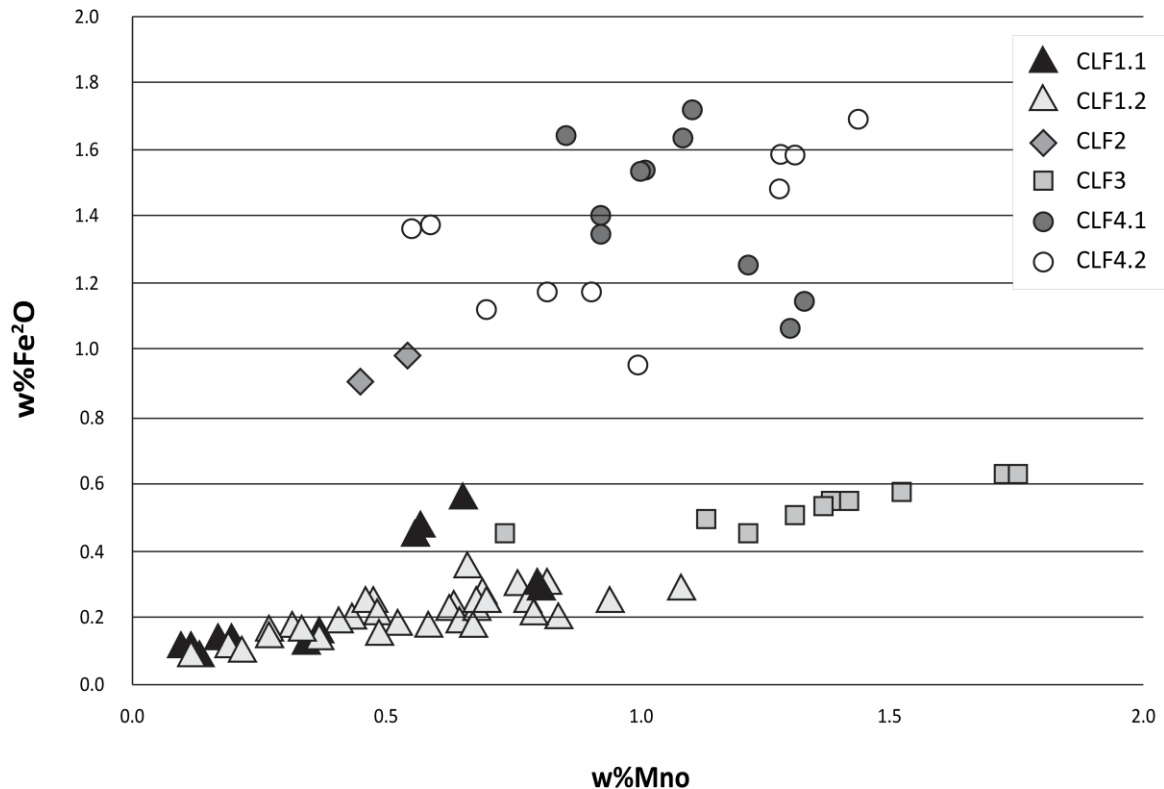
Figure 4—5   Fe$_2$O$_3$ vs. MnO contents in the Clairefontaine glass (Simone Cagno – Anke Vincke – Koen Janssens)

4.5.3   Relation alteration-composition

A clear relation has been found between the type of alteration macroscopically observed and the glass composition, as determined with SEM-EDX. For all CLF1 glasses, about a half of the objects shows no visible alteration, while the other half suffers from crizzling. This last part corresponds with group CLF1.2, the potash glass with unbalanced levels of K and Ca. The lack of Ca, a glass stabilizer, creates a glass that is easily subject to weathering (leaching of K), but does not lose its transparency. Historical sources testify that especially a lot of glass makers in the Low Countries and the surrounding areas, were faced with the problem of instable crystal glass during the late 17th and 18th century (Francis 2000). For what concerns the high Ca CLF4 glass, more visible phenomena of glass alteration occur, such as iridisation and appearance of crusts. These alteration pattern are common in medieval HLLA and potash lime glasses(Cagno et al. 2011), and their relatively limited extension in the Clairefontaine glass can be explained with its younger age.

4.6 Conclusions

The results presented in this paper are the first data obtained in a wider investigation campaign involving the Clairefontaine material. For what concerns these glass samples, further analyses of the trace elements are in progress at the moment and will possibly further help us in understanding history of modern glassmaking in the Low Countries. However further analyses are necessary, the results of the SEM-EDX analysis allows to present some preliminary conclusions.

The colourless table- and drinking ware in the assemblage seems to be produced in the 'Bohemian' tradition, melting together a source of silica, lime and potash (CLF1). However the chemical differentiation in the group suggests a local or regional (e.g. Lorraine) production of a part of the vessels. The results of the forthcoming trace elements analysis might shed light on this point of discussion. No lead crystal (à la *façon d'Angleterre*) is found. The coloured glass comprising mainly storage vessels, was made according to the more traditional European glass recipes: the HLLA glass (CLF4) recipe is comparable with that of the cheap and common glass produced in France since the 14th century. The small potash lime group shows similarities with other medieval and post-medieval glass found during archaeological digs in the Low Countries and surrounding areas. The few soda glasses still seemed to be produced according to the *façon de Venise* tradition using natural soda from sodic plant ashes.

The analysis show a clear relation between colour and chemical composition and between alteration and chemical composition. Analysis points out that the colour of the glass in the assemblage is related to the degree of purification of ash and sand. Almost, all potash glass is colourless and all HLLA is coloured. Therefore, it seems that the choice of the glassmaker between producing table- and drinking ware in crystal clear glass and making less qualitative storage vessels in coloured glass, is directly related to the facility to obtain the proper raw materials. The presence of Ca as glass stabilizer influences the weathering behaviour of the glass itself: the lack of Ca creates a glass that is easily subject to weathering, but without losing its transparency, while glass with an excess of Ca glass shows more visible glass alteration, such as iridizations, and the appearance of crusts. Such alteration pattern was recognized in limited extension on the Clarefontaine HLLA/Potash lime glasses.

Chapter 5   All crystall clear: 18th century glass *à la façon de Bohème* from the Cistercian nunnery of Clairefontaine

The content of this chapter is accepted for publication in

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[Herremans D. / Cagno S. / Vincke A. / Janssens K. / De Clercq W. (in press - 2013), All Crystal Clear: 18th Century Glass *à la Façon de Bohème* from the Cistercian nunnery of Clairefontaine, Belgium, *Journal of Glass Studies* 55][35]

5.1 Introduction

This article is a contribution to the study of 18th-century glass from archaeological contexts, a largely unexplored theme in northern European archaeology. Unlike glass of the 16th and 17th centuries, 18th-century archaeological glass is studied only occasionally from a multidisciplinary perspective, combining archaeological, historical, and archaeometric data (De Almeida Ferreira 2005; Henkes / Laan 1986). To date, the study of glass from the past 200 years has been based principally on objects in museums,

which has resulted in a biased data set characterized by a marked concentration on high-quality products. Unfortunately, this approach excludes the assessment of several fundamental questions regarding the production, distribution, and consumption of glass for everyday use in a period of considerable change. By studying glass from an 18th-century archaeological assemblage from Clairefontaine Abbey, we will explore these issues.

Clairefontaine Abbey, a small Cistercian nunnery, was founded in 1247 by the Luxembourgian countess Ermesinde in the valley of the river Durbach a few miles south of Arlon. Situated in an isolated location in the woods but near the village of Eischen and the fertile acres surrounding it, the house is a classic example of a Cistercian foundation. In 1997, excavation on the site began within the framework of a European project celebrating the 750th anniversary of the founding of the abbey. The following years it became a long-term research excavation, with a final season in 2007 (Herremans / De Meulemeester 2010). The archaeological remains of the abbey were particularly well preserved because of a lack of notable post-suppression occupation.

In the field campaigns of 2003 and 2004, a latrine complex in the northern wing of the cloister was excavated. The structure came into use during the first half of the 18th century. Historical sources attest a total reconstruction of the abbey around 1730, following a devastating flood (Goffinet 1907, 129). The latrine remained in use until the suppression of the abbey in 1794. The dumping of an extensive set of glass objects dates from this period. The material record includes 774 glass fragments, more than 55 % of which came from bottles and various other types of storage wares made of green high-lime, low-alkali glass and blue soda-ash glass (Herremans et al. 2012; Wedepohl et al. 2011). This article focuses on the colourless glass that constitutes the other 45 % of the assemblage. The morphology of the vessels and the engraved decoration suggest a central European origin or, at least, stylistic inspiration. Chemical analysis points to a glass recipe combining silica, lime, and potash: a colourless potash glass reminiscent of so-called Bohemian crystal, developed in northern central Europe at the end of the 1600s and produced all over Europe during the following century.

In the first part of this article, the typo-chronology, technology, and origin of the glass objects are considered. The descriptive analysis is supported by chemical research (scanning electron microscopy–energy-dispersive X-ray spectroscopy [SEM-EDX]). In the second part, the finds are discussed in light of changing consumer habits and the emerging rock crystal–like glass production and consumption in 18th-century Europe and the Luxembourgian area.

5.2 The Clairefontaine glass set

The colourless Clairefontaine glass features a wide typological variety of vessels, all of which are dated to the 18th century. Most of these vessels are conical beakers. Although there are some undecorated examples, the majority was decorated in one of two ways. The glass was blown in a relief mould or copper-wheel engraved to produce mainly floral and geometric patterns. Similar decoration is found on other table and drinking glasses in the assemblage, including shot glasses and jugs. There are a few goblets, along with a limited number of undecorated cups and small bottles.

5.2.1 Bottles

Two types of colourless bottles were included in the assemblage. Several fragments are part of similar kinds of phials (Fig. 5-1, 17). These small (H. 12 cm) cylindrical bottles with a slightly raised base and a funnel-shaped mouth were used to store medicinal products or other volatile fluids. Some fragments belong to square storage bottles (H. 20 cm), which are characterized by rounded corners and a stockier body that tapers toward a narrow mouth with an everted rim (Fig. 5-1, 16). This type of bottle was used for the consumption of snuff.

5.2.2 Goblets

Goblets were used for the drinking of wine. In general, 18th-century crystal goblets were less profusely decorated than the 16th- and 17th-century Venetian-style examples. The few undecorated goblets in the Clairefontaine assemblage can be clustered into three groups: (1) cup-shaped, with a hollow baluster stem and decorated with one or more globular knops (Fig. 5-1, 13 and 15); (2) with a cup-shaped bowl on a solid and knopped baluster stem (Fig. 5-1,14); and (3) with a conical bowl and a solid stem with applied ribs, also known as *mezza stampatura* (Fig. 5-1,12).

5.2.3 Beakers

Beakers or tumblers became the most common type of drinking vessel from the end of the 17th century onward. Morphologically, they vary only slightly (Fig. 5-1, 1–8). Their

most common form is conical. The variance in size is also slight; rim diameters range between six and nine centimetres, and heights are between 10 and 11 centimetres. Both thick- and thin-walled beakers are present in the Clairefontaine assemblage. The thick-walled examples are characterized by a heavy, solid base that is sometimes slightly inverted, while the thin-walled beakers have a lighter and more defined inverted base. Both kinds of beakers were introduced in the north by central European glassmakers: a 1769 inventory from a trade company in Amsterdam mentions both "*Becher glatte Dickboden*" (smooth beakers with a heavy base) and "*Becher Dünnboden runde glatte*" (smooth beakers with a thin base) (Henkes / Laan 1986; Schebek 1878, 221-254).
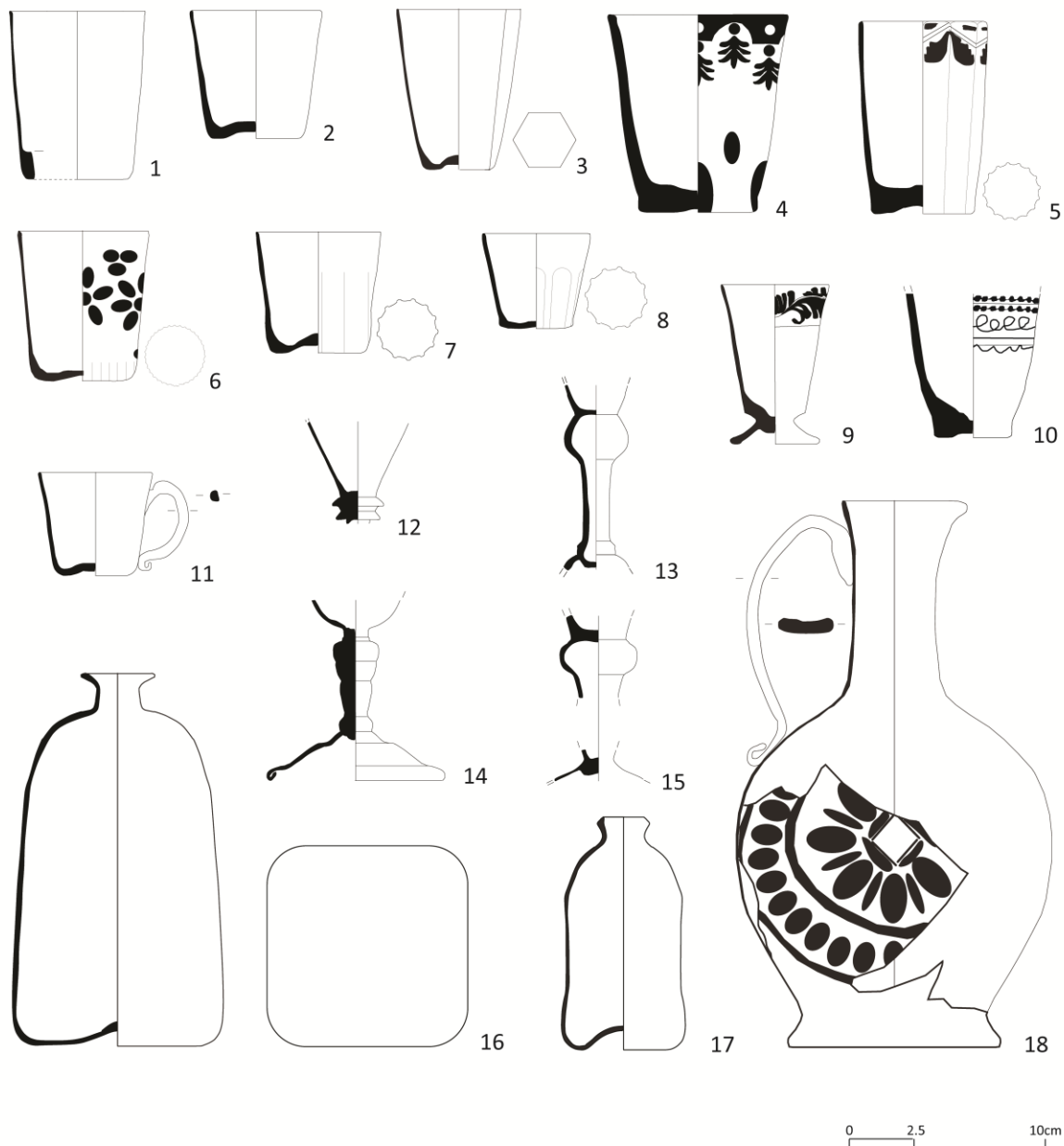
Figure 5—1   Typology of colourless glass from Clairefontaine (Davy Herremans)
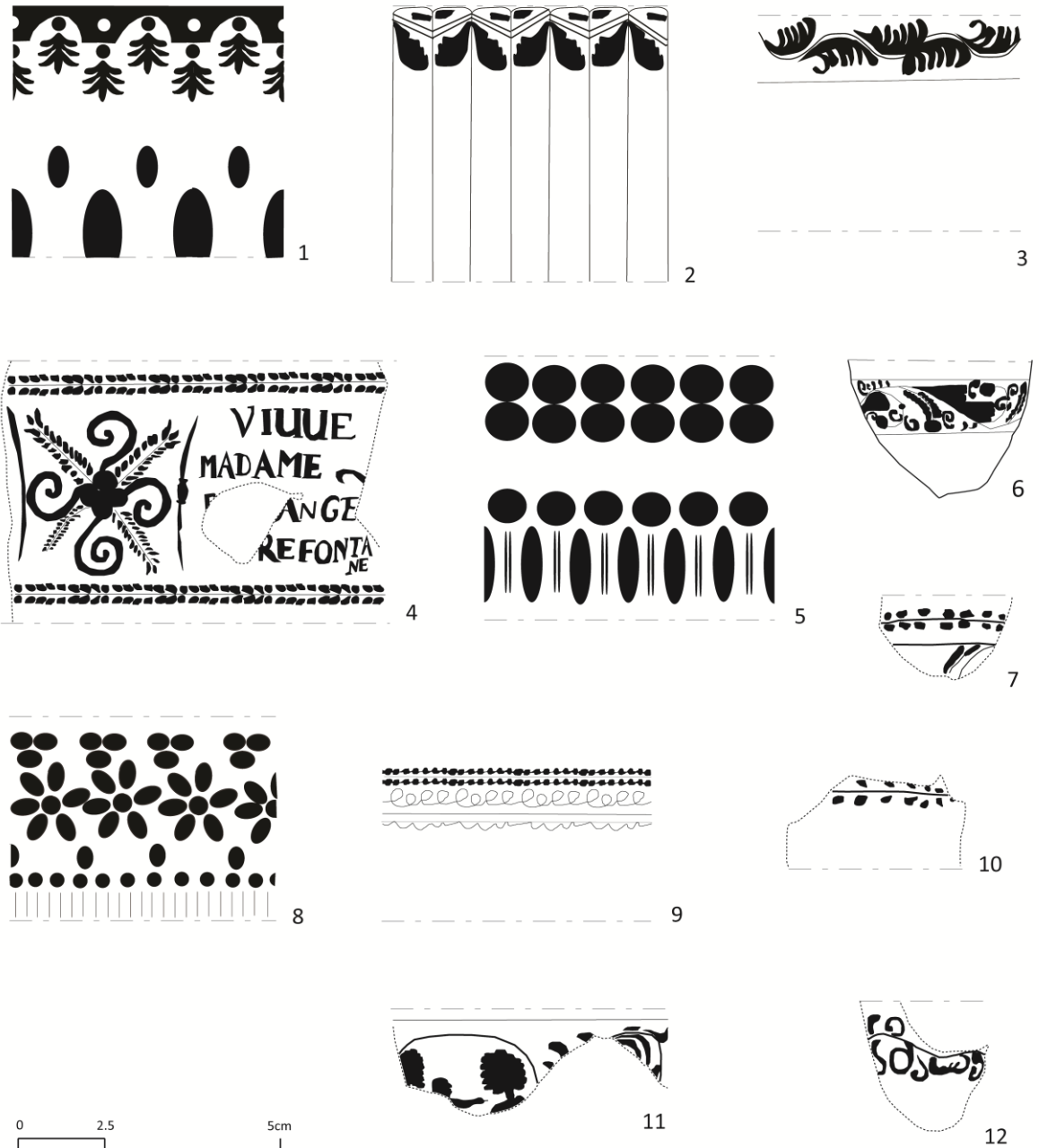
Figure 5—2   Decorative patterns on Bohemian-style colourless tableware (Davy Herremans)

Although a significant number of beakers are undecorated, many of the tumblers display profuse ornamentation. Several decorative techniques can be recognized, and they are often used in combination. The relationship between the thickness of the glass and the choice of decorative technique is striking. For example, many of the thick-walled

tumblers are facet-cut or covered with abundantly engraved designs. In the latter case, decorative patterns were copper-wheel engraved (Pesatova 1968, 7-9). This technique was introduced into modern glass production during the late 16th century, and it continued to be employed well into Modern Times. The Bohemian potash glass, which was soft and calcareous, was well suited to engraving.

The designs were often restricted to certain parts of the glass objects. In the case of the various types of drinking vessels, a band of subtle, ornamental lacework generally runs around and just below the rim. For example, a decorative frieze appears on the upper part of a fragmentary beaker. The design consists of festoons squeezed inside a linear motif (Fig. 5-2, 6). Another common motif is the bucolic scene (Fig. 5-2, 11). In this instance, two individuals are shown in a rural setting, surrounded by trees, and one of the figures points toward something unidentifiable in the background.

The lower parts of the beakers are mostly undecorated. Only occasionally is the entire body covered with an engraved pattern. One example has an engraved maxim on the front and a floral design on the back, with fasces on both sides (Fig. 5-2, 4). Beneath the rim and above the base, a wavy line is displayed. The inscription suggests that the vessel was made for a particular individual. The surviving letters, of uneven quality, can be read as "VIuuE MADAME F. . . ANGE . . . REFONTAINE." A wish for good health (Viva) is occasionally found on 18th-century drinking vessels all over Europe(Henkes / Laan 1986, 203), but the custom of decorating glasses with such sentiments dates back to Roman times(Künzl 1997). The beaker was probably owned by Cécile de Florange, precentor in the nunnery of Clairefontaine in the first half of the 18th century (Goffinet 1907, 130).

Some of the tumblers in the assemblage were cut as well as engraved. A well-preserved example has an engraved lambrequin (Fig. 5-3), while the lower portion of the object is decorated with cut facets (Fig. 5-2, 1). Very common are tumblers with an undecorated upper part and cut facets in the base, resulting in rows of contiguous arcades (Fig. 5-1, 8). In a more advanced variation, cutting was used to shape the body of the glass, as shown here in one late 18th-century faceted tumbler (Fig. 5-1, 3).

The use of relief moulds afforded some of the other beakers a varied appearance. Several of these objects have parallel oblique ribs covering the base (Fig. 5-1, 7) or even the entire body (Fig. 5-1, 5). One complete vessel has engraved lacework, consisting of geometrical lines and rather abstract leaves, just below the rim (Fig. 5-1, 5). A single late 18th-century beaker illustrates the choice of very elaborate relief moulds; instead of a wheel-engraved design, it presents a rather abstract domed floral pattern (Figs. 5-1,6 and 5-2, 8).

Figure 5—3   Well-preserved beaker with engraved lambrequin (Davy Herremans)

5.2.4 Cups

These glasses, which were also used in the drinking of beverages, are related in form to the beakers described just above. The body of these vessels is shaped like a truncated cone (Fig. 5-1, 11). The main difference here, in contrast to the tumblers, is the presence of a vertical handle applied to the body. The cross section of the handle varies from round to oval. Another difference can be seen in the dimensions: the cups are smaller in height (5 cm) than in width (6 cm), which results in a stockier shape. There were no decorated cups among the Clairefontaine assemblage.

5.2.5 Shot Glasses

These small, stemmed drinking vessels were used for the consumption of liquor. The conical body slowly tapers to a foot (Fig. 5-1, 9). The height (including the foot) varies

between eight and 10 centimetres, while the diameter of the rim is usually about five centimetres. Although some of these glasses are undecorated, most of them have bands of engraved designs just below the rim.

5.2.6 Jugs
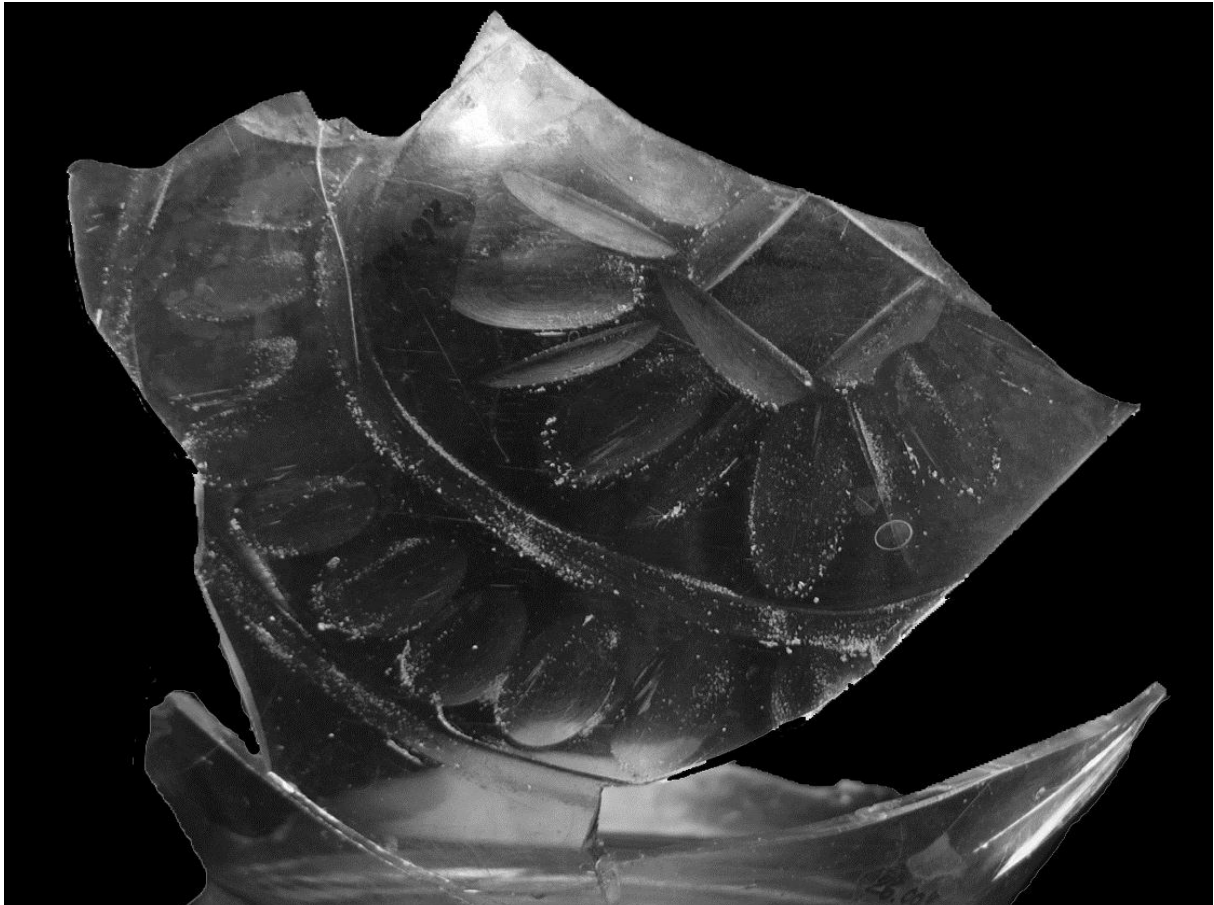
Figure 5—4   Abstract floral motif on fragmentary wine jug (Davy Herremans)

Highly decorated jugs, which were used for serving wine and other liquids, were an indispensable part of 18th-century tableware. The two fragmentary specimens in the Clairefontaine assemblage are quite similar in form. The body is a flattened sphere with a domed front and back. The neck is long and narrow, and there is a flaring rim with spout. A vertical handle with a strap profile extends from the neck to the body. These jugs would have been about 25 centimetres tall, with a rim diameter of about four centimetres. The front of one of the Clairefontaine jugs is heavily decorated (Figs. 5-1, 18 and 4). At the centre of the motif, which is situated inside two concentric circles, is a flower with a diamond-shaped pistil and alternating elongated and rounded petals. The space between the circles is filled with rounded petals. The wheel-engraved design has an abstract appearance, created through a combination of cutting and engraving.

Judging from glass recovered during archaeological research in the Low Countries, there was a marked interest in abstract designs during the second half of the 18th century (Henkes / Laan 1986, 188). One preserved tumbler was probably part of a table set consisting of a jug and several beakers. While not identical, the decoration on the tumbler is clearly related stylistically to that on the jug: two rows of cut facets appear just below the rim. The base has cut facets alternating with vertical incisions. The pattern resembles that on the ribbed bases of the mould-blown beakers. Above this band is another row of cut facets.

5.2.7 Saltcellar

Saltcellars are hard to distinguish from tumblers unless the base of the vessel is preserved. The lower body is another distinguishing feature, tapering more distinctively toward a narrow, solid base (Fig. 5-1, 10). The diameter of the base of the sole example in the abbey's assemblage is about four centimetres. The upper part of the vessel is decorated with rudimentary linear engraving (Fig. 5-2, 9).

5.3 Fashionable glass of doubtful quality

5.3.1 Experimental Glass

The composition of the colourless glass found at Clairefontaine Abbey is generally similar to that of glass made with recipes developed by northern central European glassmakers in the late 17th century (Drahotová 2008). Recipe books mention the raw materials for the production of this kind of glass. It was normally made by melting together purified white sand, relatively high amounts of lime derived from crushed limestone or chalk, and a source of potash. The high purity of the sand, the low amount of iron, and the presence of manganese enabled the glassmakers to obtain colourless glass (Kunicki-Goldfinger et al. 2003; Mádl / Kunicki-Goldfinger 2006).

During the 18th century, both kinds of colourless glass were produced in the forests of southern Bohemia and elsewhere in central Europe. The production of crystal was more costly, and its purchase was therefore limited to members of the upper class. Purified

potash and other technical innovations, such as a furnace with two hearths, allowed Bohemian glassmakers to create relatively inexpensive but high-quality chalk glass on a large scale. This glass would become the most highly valued export of Bohemia's glass industry (Drahotová 2008).

Table 5—1   Composition of Clairefontaine potash glass as determined by SEM-EDX (Simone Cagno – Anke Vincke – Koen Janssens)

	CLF1.1 n 20	CLF1.2 n 41
Na_2O	1±1	1,2±0,4
MgO	1,3±0,8	0,3±0,3
Al_2O_3	1±1	1,2±0,4
SiO_2	71±3	71±2
P_2O_5	nd	nd
Cl	0,1±0,1	0,1±0,1
K_2O	15±2	21±2
CaO	9±1	4±1
MnO	0,4±0,3	0,6±0,2
Fe_2O_3	0,2±0,1	0,2±0,1
As_2O_3	1±1	nd
PbO	1±1	1±1

Based on the compositional analysis of several central European and German Baroque glass samples, Jerzy J. Kunicki-Goldfinger distinguished between crystal and white (chalk) glass, a division that is also noted in recipe books and other historical accounts (Kunicki-Goldfinger 2003; Kunicki-Goldfinger et al. 2003; Mádl / Kunicki-Goldfinger 2006). It seems that Baroque crystal and chalk glass followed the tradition of Venetian *cristallo* and *vitrum blanchum*. However, the recipes were altered by substituting potash for soda as a flux and by the introduction of lime. The distinction between the two types of central European Baroque glass is generally made by calculating variables from the alkaline and alkaline earth oxide concentrations and by assessing the potassium:calcium ratio. The presence or absence of arsenic and lead may also be an indicator (Mádl / Kunicki-Goldfinger 2006). In the case of the Clairefontaine glass, two subgroups of potash glass can be identified by quantitative analysis with SEM-EDX (Tab. 3-1)[36]. Group

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[36] Small glass samples (a few mm²) were removed from the archaeological finds and embedded in acrylic resin. The resin blocks were mechanically ground with silicon carbide paper and polished with diamond paste down to a particle diameter of 0.25 mm in order to obtain a smooth surface of unaltered glass. Finally, the resin blocks were coated with a thin carbon layer and SEM-EDX measurements were performed with a JEOL 6300 SEM equipped with an energy-dispersive X-ray detector. The spectra were collected for 100 seconds by using a 2 nA electron beam current, an accelerating voltage of 20 kV, and a microscope magnification of 500X. The net

CLF1.1 is characterized by a K_2O:CaO ratio of 1.67, with the occasional presence of arsenic and lead, and it more closely resembles the recipe for white glass. The more abundant CLF1.2 group features a clearly unbalanced K_2O:CaO ratio of 5.25 and an absence of arsenic, which resembles the recipe for central European crystal. The alkaline and alkaline earth oxide concentrations confirm this subdivision.
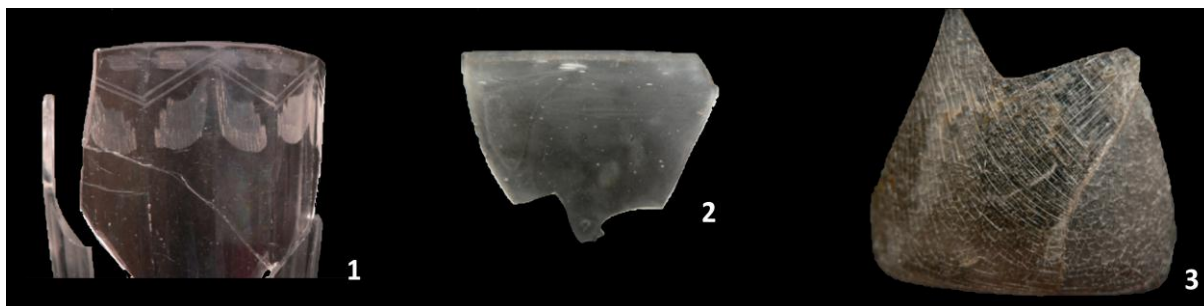
Figure 5—5   Visible alteration of colourless glass. Left to right: unweathered, white patina and crizzled (Davy Herremans)

A clear relationship has been found between the type of alteration observed macroscopically and the glass composition, as determined by SEM-EDX. A significant part of the glass seems to be unweathered (Fig. 5-6); there are no visible signs of alteration. An equally sizable part has an opaque white patina on the surface. The cloudy appearance indicates the presence of alkali and incipient crizzling. A smaller number of samples are heavily crizzled: the cracking has progressed, and, in many cases, spalling has occurred, resulting in the loosening of small chips or flakes from the surface. Several of these heavily altered fragments are discoloured, turning the glass from colourless to brownish (Kunicki-Goldfinger 2008). The heavily crizzled glass corresponds to group CLF1.2, the potash glass with unbalanced levels of potassium and calcium. The lack of calcium, a glass stabilizer, creates a glass that is easily subject to weathering because of the leaching of potassium (Fig. 5-7). The change from colourless to pinkish might be explained, according to Kunicki-Goldfinger, by the changes to the structural position of manganese in the deteriorated glass and/or by light scattering because of the presence of alteration bodies.

Because of the small number of published chemical analyses of Baroque colourless glass, it is hard to attribute the Clairefontaine glass to a particular area of origin. Nevertheless, the chemical composition of the glass offers several indirect indications of a local or at least regional genesis. The spread of concentrations of major components

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intensities were calculated with the program AXIL and quantified by means of a standard-less ZAF program. Precision and accuracy were tested by analyzing NIST and Corning glass standards.

within the compositional groups CLF1.1 and CLF1.2 and the relatively high potassium: calcium ratio found in the Clairefontaine glass, with respect to the reference values for 18th-century potash glass, (Kunicki-Goldfinger 2003; Kunicki-Goldfinger et al. 2003; Mádl / Kunicki-Goldfinger 2006) suggest that the glass objects found in the nunnery were of a less stable type of chalk-based glass than was produced by experienced central European glassmakers.
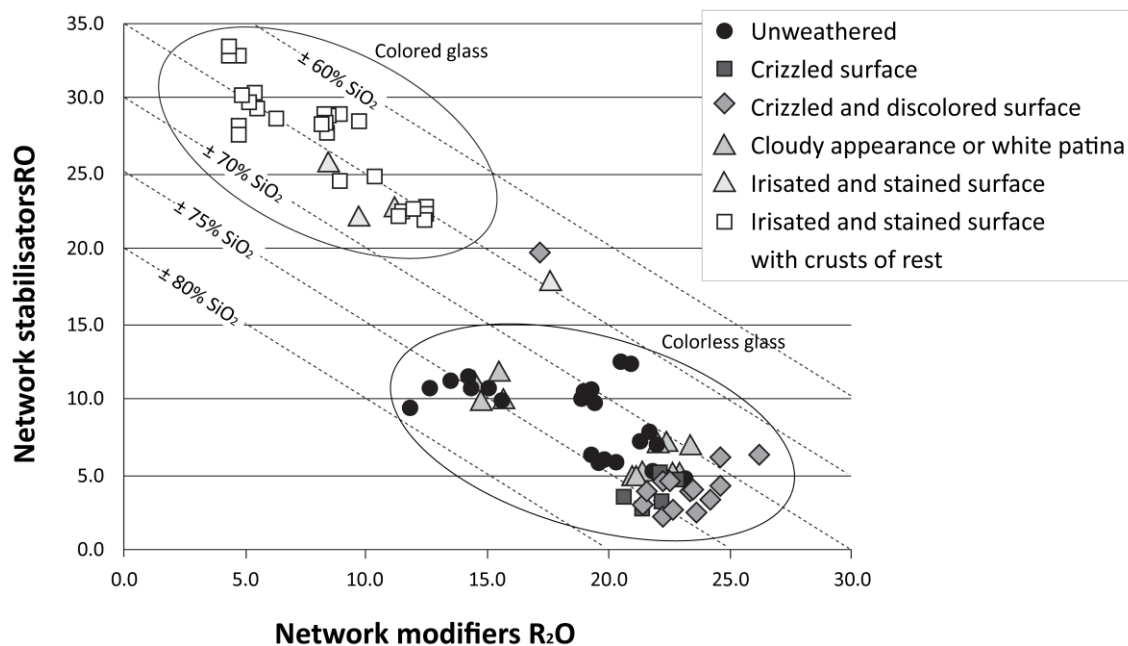
Figure 5—6   Network modifiers/stabilizers in Clairefontaine glass, with samples divided according to their state of alteration. The colourless glass clusters at the bottom of the right figure (Simone Cagno – Anke Vincke – Koen Janssens)

From the early 18th century onward, the glass industry flourished in the Walloon area, the Vosges, the Lorraine, and along the river Saar, all of which are located (not coincidentally) near charcoal resources (Cabart 2011; Engen 1989; Mendgen 2010). Desiring to share in the success of the new kinds of relatively inexpensive high-quality glass, local industries were soon making colourless glass in both British and central European styles. In the face of competition and in an effort to meet market demands, glass companies needed to offer a variety of vessel types. Most factories produced, to a minor extent, high-quality products for local courts and nobility. At the same time, they became the leading suppliers of cheaper and more common colourless glass in the southern Low Countries and surrounding areas (Engen 1989, 67-192).

The major challenge for the young local industries during the first half of the 18th century was replicating the original British and central European recipes. Historical sources demonstrate that glassmakers struggled with the stability of their glasses. Their

lack of knowledge and experience made their products much more susceptible to deterioration and crizzling (Francis 2000). Because recipes were retained as family secrets and were passed down from father to son, success was, for a long time, tied to the presence of one or more foreign master glassworkers on the companies' payroll. This was the case, for example, with the Walloon industry; it was not until 1746 that Sebastien Zoude, a glassmaker in Namur, proudly claimed to have developed the ideal recipe for high-quality potash-lime and potash-lead glass (Chambon 1955; Watts / Tait 2007). The lower quality of the Clairefontaine glass, and particularly the unbalanced alkaline and alkaline earth element ratio, caused extensive alteration visible in the form of crizzling, a problem experienced by many glassmakers during the 18th century(Francis 2000). Given the location of Clairefontaine Abbey—near Arlon, close to the glass manufactories in Wallonia, the Lorraine, and the Saarland—it would not be surprising to learn that the sisters bought their glass from a merchant supplied by one of these emerging industries.

5.3.2   Decorated in a Hurry

The patterns of decoration on the colourless Clairefontaine glass provide samples of wheel-engraved motifs employed in the northern European glass industry. Although some of these designs seem to have been made by more experienced and talented glass cutters (e.g., Fig. 5-2, 1; 3; 11), most of them are rather clumsy and appear to have been hastily made, and are of little aesthetic value (e.g., Fig. 5-2, 2; 9; 12). The collection includes a fragmentary beaker and a shot glass with related patterns of festoons inside a linear motif. The decoration on the beaker is detailed and refined, displaying leaves alternating with lilies of the valley. The design on the shot glass is less ornate, with a festoon consisting only of leaves. Other beakers are decorated with a vine below the rim or just above the base. This is one of the most common decorative patterns on Bohemian-style crystal from the early 18th century onward. Tableware with this kind of vine, consisting of a stem with repeating leaves on both sides, was produced in north-western Europe and Bohemia until the late 18th century. Some of the vines on the Clairefontaine glass are carefully engraved (Fig. 5-2, 10), but others were carelessly and poorly executed (Fig. 5-2, 7) . The vines on the saltcellar are abstract to such an extent that they are hardly recognizable (Fig. 5-2.9).

Scholars tend to emphasize the importance of the migration of Bohemian and German glass cutters through Europe during the 18th century (Pesatova 1968). Indeed, craftsmen wandered from factory to factory, offering their skills. Karel Hetteš refers to a guild book

that mentions several glass cutters who left Bohemia to work in the north-western European glass industry; among them was Elias Horn, a native of Kamenický Šenov, who established himself, by royal permission, in Stockholm. He was followed, a few years later, by his colleague Tobias Oppits. The Gerners, father and son, who came from Polevsko, were employed in the Kungsholm glass industry in the 1740s (Hetteš 1962). Researchers have traced the movement of glass cutters from Bohemia who took their pattern books to Portugal, where they were hired by the Royal Manufactory of Glass in Coina, near Lisbon (Custódio 2002; De Almeida Ferreira 2005).

The impact of these master craftsmen on the mass production of more common household glass should not be overestimated. In 1764, there were 38 glassworkers on the payroll of the glass manufactory of Sebastien Zoude in Namur: six master glassmakers, six servants, a variety of labourers, and only one glass cutter(Engen 1989, 89). Master glass cutters hired by larger manufactories were probably involved mainly in the finishing of high-quality wares, while merchants' houses enlisted various glassworkers with differing backgrounds. It seems that only a small number of them were actually schooled in the art of glass cutting. At best, the others were active in a related artistic field. Some of them appear to have combined their activities as glass cutters with working as painters. A major part of the glass was probably decorated in the merchant's house or in the marketplace by traveling merchants and less refined artisans such as knife grinders (Henkes / Laan 1986, 193). Many half-finished products that were undecorated (or decorated only in part) left glass manufactories in Bohemia and north-western Europe to be finished by local merchants. It is likely that this practice continued when the local manufactories upgraded their production.

It is also worth noting that the engraving on the Clairefontaine glass appears to have been only slightly affected by stylistic changes during the 18th century. The high-quality engraved glasses found in museum collections and various publications (Drahotová 1983; Höltl 1995; Langhamer 2006; Petrova / Olivié 1990; Ritsema van Eck 1995, 172-478) display detailed figural designs that clearly reflect Baroque, Rococo, and Classical styles. Their decoration thus affords a trustworthy basis for accurate dating. In contrast, the motifs found on the glass from Clairefontaine and other archaeological sites seem to have evolved very little. They are dominated by festoons, floral themes, and wavy lines. These patterns, together with a pronounced enthusiasm for symmetry and repetition, clearly originated in the Baroque aesthetic (Drahotová 1995). Therefore, it is hard to believe that they were made by master Bohemian glass cutters, all of whom were well-educated men moving among the higher levels of society and therefore familiar with the latest stylistic and cultural developments (Pesatova 1968, 18).

That one glass object could be decorated by more than one engraver is illustrated by the beaker with the engraved motto in the Clairefontaine assemblage. In the first stage

of decoration, the tumbler was ornamented with the floral motif between the fasces. Although the twigs in the central theme are unequal in length, the design is detailed and carefully engraved. However, the unpolished style of the engraved maxim squeezed between the two fasces should be noted (Fig. 5-2, 4). The engraver failed to estimate the space for the inscription correctly: the last two letters of what was supposed to be "CLAIREFONTAINE" were awkwardly placed beneath the rest of the word. It seems that the beaker was personalized on the way from the manufactory to the customer.

5.4 Holy vows, worldly manners

Fundamental changes in material culture can be noted from the Late Middle Ages onward (Verhaeghe 1996b), although it seems that advances beginning in the 17th century were more radical and extended to a wider range of social groups. In this period, a new kind of material consumerism emerged, and it reached its apogee in the 18th century. The archaeological and historical study of housing culture shows that from the late 17th century onward, in noble and upper-class circles, pewter and silver table wares were replaced by a variety of crockery, based on the latest fashions, including high-quality Asian porcelain and abundantly engraved "exotic" British and central European glasses (Blondé 2002). The transformation in material culture was, in fact, only a marginal change, shaped by the rise of a global market and the establishment of a new European lifestyle. Colonial trade gave access to exotic imported goods—such as chocolate, tea, coffee, sugar, and tobacco—that were soon being consumed by large portions of the European population (Wills 1993). New dietary customs and related social practices resulted in the need for an adopted material culture (Pennel 2010). In the Late Middle Ages and the 16th century, the wealthy saw material culture as a tool for display and a store of value: objects needed to be of high quality, beautiful, and—even more important—very durable and of high secondary value (Blondé / van Damme 2010). In the 17th century, material goods lost their significance as symbols of wealth and became a material testimony to a civilized way of life. The true meaning of material culture was no longer related to secondary market value. On the contrary, most of the new consumer items were very fragile and breakable. Objects needed to be in fashion. Equally important was their suitability for the performance of social practices, such as drinking tea, coffee, or hot chocolate, and the habit of convivial dining.

During the 18th century, these ways of living became generally accepted by individuals at all social levels—from working class to middle class to nobility (McCants 2008). The transition from a purely agricultural society to a proto-industrial wage economy allowed a wider range of social groups to enter the market (Mendels 1972). For most common people, the reorganization of employment meant more continuity in labour demand and an increase in annual household income. As they were forced into the constraints of a full-time job, their time was reordered, with clear divisions between work and leisure (De Vries 2008, 25-40). On the other hand, a new wealthy middle class of proto-industrialists and urban merchant entrepreneurs emerged(Blondé / van Damme 2010). Exotic goods were quickly transformed from luxury articles into products for everyday use, even for a large portion of the poor and lower middle classes (McCants 2008). The more colourful and diversified material culture associated with such new consumer practices entered most 18th-century households by means of porcelain and glass of various qualities. Next to these products, a range of locally or regionally produced crockery appeared, such as porcelain like tin-glazed delft ware and lead-glazed earthenware. From the second half of the century onward, saucers, cups, and other tea wares in English industrial ceramics became fashionable (Blondé 2002). Archaeological research in the Low Countries shows that, during this period, rather ungracefully engraved colourless glass *à la façon de Bohème* was present in almost every urban middle-class household (eg.Carmiggelt / Kersing 1992; Clevis / Kottman 1989; Henkes 1994; Henkes / Laan 1986; Henkes / Veeckman 1999; Kottman 1999; Laan 2003; Reyns 2009). It is probable that the purchase of top-grade products, as known from museum catalogues, was the privilege of the upper and middle classes and the aristocracy (De Almeida Ferreira 2005; Engen 1989, 77). The same can be noted for porcelain: imperial quality was found mainly in courtly and high-class urban repertoire (De Almeida Ferreira 2005; Laan 2003, 143-144). Most of the high-quality goods, expensive even for the wealthy, were not for daily use and were kept and displayed by the owners as marks of their social position.

How can we apply these general observations on 18th-century consumer culture to daily life and the consumption of colourless glass inside Clairefontaine Abbey? Assessing material culture and female monastic life is a difficult exercise, because human behaviour inside the abbey's walls was conditioned by several conflicting social identities. Monastic life and, often, gender-specific restrictions forced those who had taken holy orders into a straightjacket of multiple regulations, creating a new habitus for the daughters chiefly of the elite, who had been raised in a liberalizing secular society (Evangelisti 2004; Gilchrist 1993). Therefore, in order to fully understand the consumption practices of the sisters of Clairefontaine, it is necessary to focus both on their background and on the social setting in which they were living.

Before the 18th century, it was mainly daughters of the local gentry who entered the convent. From the end of that century, however, their interest in a religious life seems to have decreased gradually—a phenomenon noted in many other Cistercian houses and doubtless influenced by the new philosophy of the Enlightenment, which questioned the social utility of the contemplative life (Bonis et al. 2001). This growing disinterest meant that, from the early 18th century, houses had to recruit from other areas and social strata. Previously, most of the Clairefontaine sisters had come exclusively from Luxembourgian families. During the 18th century, however, more and more French and German women appeared in the lists of inhabitants; *Cécile de Florange*, for example, came from the Argonne (France). On the other hand, an increasing number of rural and urban middle-class daughters entered the religious community. In monastic life, they found a way to communicate their social status and to adopt the traditions and practices of the old aristocracy. In the case of Clairefontaine, the historical accounts attest to a new generation of young women from well-established but non- aristocratic families joining the community from the early 18th century onward (Goffinet 1907, 130).

At that time, the abbey prospered, largely because of continuing income from gifts, endowments, and a large estate with various farms, mills, and ponds that were leased to lay tenants. The community did not suffer at all from the famines and economic crises that struck the Luxembourgian area during the 18th century (Trausch 2003, 190-191). The sisters in Clairefontaine could afford the best consumer products on the market. However, at first sight, the material culture of the abbey seems relatively modest for a community of upper-middle-class and aristocratic women. As noted above, their colourless glass was of rather ordinary quality and decoration, and it seems to have been very similar to glass vessels that are usually found during excavations of ordinary urban middle-class households. In addition, the abbey's cups and saucers in Qianlong and Kangxi porcelain appear to have been of secondary quality. The vessels are clearly from the same production line as the imperial-class porcelain found in the *Ca Mau* shipwreck and recently sold at auction by Sotheby's (Bouman / Schulten 2007). Although the designs on the abbey's porcelain are quite similar to those found in the hull of the Ca Mau ship, the quality of the decoration differs. The painting on the Clairefontaine porcelain is good but clearly inferior to that on the top-grade products. Moreover, the amount of Chinese porcelain owned by the sisters (about 10 % of the wares) was eclipsed by the number of cups, saucers, and teapots in other materials, such as tin-glazed pottery, locally produced lead-glazed red ware, and English creamware, pearlware, and Staffordshire pottery (Fig. 5-7). Some of these vessels even showed evidence of having been repaired.

Figure 5—7   Selection of crockery in Chinese porcelain and substitutes wares, identified from right to left. Row 1: cup in pearlware and cup in creamware, both second half of 18th century. Row 2: teapot of Staffordshire ware (second half of 18th century), saucer in Kangxi porcelain (first half of 18th century), and cup for chocolate in tin-glazed pottery (18th century) (Davy Herremans)

The foods eaten by the sisters, on the other hand, were of markedly higher quality. Tenants supplied them with a variety of excellent cereals, meat, poultry, and fish[37]. The abbey's accounts record purchases of tobacco, tea, chocolate, crustaceans, and other goods. They also describe the acquisition of beer and mead, while the coloured glass bottles point to the consumption of French wines. The larger beakers in Bohemian style were definitely used for the consumption of beer and mead, while the smaller beakers, as well as the shot glasses, were employed for spirits and other strong drinks. Social drinking became increasingly popular in upper-middle-class circles in the early 18th

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[37] This finding seems to be ascertained by the archaeozoological study that will be published in combination with the material record and the detailed analysis of the historical sources. For the study of the archaeozoological remains, see Quentin Gofette, "Clairefontaine: Etude faunique. Rapport préliminaire" (unpublished   research report, Museum of Natural Sciences, rue Vautier 29, B1000 Brussels).

century and later among the lower social strata (Laan 2003, 179-193). It is obvious that the sisters' consumer habits were barely influenced, if at all, by their monastic vows, as is evidenced by the presence of handmaidens in the abbey. The provision of servants, which was at odds with the monastic rules of poverty and containment, was disputed by the order's superiors during canonical visits to the abbey (Goffinet 1907, 125-126). Regular visits by family members, as noted in the historical records, would also have afforded ample opportunities to purchase luxury items (Goffinet 1907, 125-150).

The significance of the Clairefontaine glass is revealed in an examination of habits of consumption among the Luxembourgian middle class in the 18th century. Without doubt, these were people of substance who were nevertheless circulating in a provincial setting (Joset 1935, 84-85). Although they had been educated in a rural middle-class environment, they had come into contact with fashionable consumer habits and innovations. However, because the sisters had been born and raised in the Luxembourgian area, their patterns of consumption were shaped mainly by life in such small market towns as Arlon, Luxembourg and Thionville. The daily routines of the provincial elite were determined by new consumer habits and new forms of sociability (Dibbits 2010). Because they were a considerable distance from the trading capitals and larger cultural centres of the Low Countries and France, such as Brussels, Amsterdam, and Paris, the influx of fashionable and top-quality material goods was limited. The material culture of the Clairefontaine sisters was surely influenced by the availability of goods on the local markets. Although the engraved glass and the other commodities found in the community's material inventory are not of the highest quality, they testify, together with the purchase of refined foods, to a cultivated consumption pattern in line with an 18th-century lifestyle. It is clear that the sisters were children of their time, who were well aware of worldly pleasures and fashionable consumer practices.

5.5 Conclusions

The composition of the Clairefontaine potash glass is generally similar to the recipes for crystal and white glass developed in central Europe during the late 17th century. The glass from the abbey seems to reflect an experimental stage of manufacture in relation to genuine Bohemian products. The instability of the glass and the slightly different chemical composition indicate an experimental recipe. We may assume that this glass was produced by local glass industries that were taking part in the mass production of

Bohemian-style colourless glass from the early 18th century. The decoration on the Clairefontaine glass is rather clumsily executed and of mediocre quality, bearing no resemblance to the high-quality engraving of master Bohemian glass cutters.

The glass from Clairefontaine reflects the engraved Bohemian-style glass found in urban middle-class households in the Low Countries and elsewhere in north-western Europe. The study of the abbey's glass provides an insight into the consumer habits of a religious community of middle-class women in a remote location in the southern Low Countries during the 18th century. The material inventory is somewhat comparable with that of an average middle-class home, which is not surprising, considering the background of the inhabitants of the nunnery. Material culture suggests a community of religious women who were well aware of fashion and worldly pleasures—an image that seems to be confirmed by the foods they consumed and by their purchases of tea, chocolate, and other fashionable goods, as recorded in the abbey's accounts. Further study of this material culture and the dietary customs of the sisters will bring more clarity to this image.

Part 3 – …into the nebulous concept of culture

Chapter 6   The memory remains. Memoria, material culture and monastic space in Clairefontaine

6.1   Introduction

The way people approached death in the Late Middle Ages in Europe was determined to a great extent by concerns about what would happen after life had ended. During the Last Judgement, the good and bad deeds of the dead would be weighed up and the soul would be granted or denied access to paradise accordingly. Worried about this judgment, medieval people actively sought out a way to tip the balance in their favour. Prayers for the soul offered the most certainty for a peaceful existence in heaven (Ariès 1977, 109-124). As a consequence, from the Late Middle Ages onwards, more and more people turned to a monastic community for the salvation of their soul. The religious assured salvation through prayer and long-term remembrance, in exchange for material and financial support (Lauwers 1996, 67-68). Many members of the aristocracy and nobility chose a grave *ad sanctos*, within the walls of a monastic house, close to the community's patron saints. The most influential families either built or rearranged an

abbey's church as a dynastic burial place. A tomb within the walls of a religious institution offered important spiritual advantages: in addition to the family and relatives, an entire religious community would be involved in the prayers for one's soul. Moreover, the prayers were anchored in daily practice and the liturgy, which assured greater regularity and continuity in remembrance (Coomans 2006).

Concern about the soul's destiny was clearly an important motive when managing death and locating the grave. However, it is also important to position the reciprocal relationship between the religious institution and the 'concerned' layman against a broader social background and medieval mentality, where spiritual and earthly ambitions were inseparable. Similarly, investing in the religious life was an element in the social semiotics of the medieval elite. For the deceased, burial in a monastic environment meant access to heaven through the main gate while, at the same time, being a symbolic action to the greater glory of themselves and their entire family (Thomas 1978). The foundation of a dynastic monastery and the establishment of a dynastic burial ground at a strategic location were symbolic acts often well considered, politically inspired and part of a broader propaganda strategy (Meijns 2010, 182-193).

This paper highlights the example of Clairefontaine. This small community of religious women was founded in 1247 by Ermesinde, Countess of Luxembourg and ancestress of the House of Luxembourg-Limburg. The construction of the abbey, the last wish of the countess, was completed in 1253 by her son Henry the Blond. In that same year, the community was admitted into the Order of Cîteaux (Goffinet 1877, 1-14). Along with Ermesinde, several other members of the family were also laid to rest in Clairefontaine. Among others, Henry the Blond, the founder of the community, and his wife Marguerite de Bar had tombs in the dynastic monastery. For more than a century, the abbey served as the count's dynastic burial place (Margue 1994b, 24). This situation ended abruptly in 1346 when Count John the Blind, at that time also King of Bohemia and Emperor of the Holy Roman Empire, died a hero's death on the battlefield at Crécy. Against John's will, his son Charles decided to bury him in the Neumünster Abbey, in the interest of his own political goals (Margue 1997). Sources are few, but it seems the community passed some less prosperous decades at the end of the 14th and early 15th century. Probably, because of the rupture with Luxembourgian aristocracy the convent became also less attractive for lower nobility to invest. However, the elite's support gradually returned in the second half of the 15th century when the symbolic value of the place was 'rediscovered' by new players in the political field.

Much has been written about the foundation of the abbey and its function as the count's dynastic burial ground (Margue 1993; Margue 1994b; Margue 1995; Péporté 2011). Unlike the cited authors, however, we will also treat the period after 1346 and what we call the 'aftercare' given to the count's tombs during the 15th and early 16th

century and, accordingly, the renaissance of spiritual life. Besides, this is the first time the rich archaeological data set has been taken into account[38]. Through a combination of material and historical sources, we will analyse how, during the Late Middle Ages and the Early Modern Period, death in Clairefontaine was managed by various social groups in line with their own spiritual and social aspirations.

Like Jenny Hockey and others correctly state, dealing with death is culturally and historically specific (Hockey et al. 2010). This is why first and foremost, we give a view on the social setting of the Late Middle Ages and how the elite in the Low Countries and the County of Luxembourg handled the transience of life in that period. Next, we direct ourselves at the material culture and architectural space of Clairefontaine, where we show that the monastic space was not just a theatre for contemplative life. Monastic space was a carefully created and maintained setting of remembrance. The very heart of which was the church with the tombs of the founders and other benefactors of the community – tombs that gave the deceased a body for eternity, a material metaphor for the no longer tangible presence of the departed (Ariès 1983). The meaning of a tomb is layered and socially structured (Verdery 1999). The grave can carry several messages, all of which are open to multiple interpretations. The medieval tomb played an active part in the construction of the social identity of the deceased (Gell 1998) but, a prestigious burial and grave equally served the next of kin and other social groups in their quest for economic, social and symbolic capital. The tombs, the monastery and, by extension, the entire monastic space in Clairefontaine functioned as *lieux de mémoire*, powerful and active symbols for the identity of a dynasty, its territory and its legal and political practice[39]. The spirit of the deceased gave prestige to the convent and its patrons. Therefore, the tombs and the memory of the Luxembourgian dynasty were not only carefully preserved during ages, but even consciously shaped and actively employed by the community and its benefactors. From the mid-15th century, new political forces who sought to set foot in the county showed a particular interest in the material memory of their legal predecessors, the Counts of Luxembourg. All these acts of remembrance left

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[38] Architecture plays an important role in the discourse on the founding of the abbey and its function as a dynastic burial ground of the House of Luxembourg-Limbourg. Unfortunately, past authors have only taken into account the findings of the 19th century Jesuits. All the remains recorded by the priests date back to the 18th century. As a result, many hypotheses on the abbey's medieval past have been wrongly based on the 18th century remains, neglecting the medieval and early modern material reality which was totally different. For such oversimplified use of material evidence, see: (Margue 1994b; Péporté 2011)

[39] Here and further in the article we understand *lieu de mémoire* as "matters were a collective memory is anchored or crystallised in a material, symbolic, ideal or functional way". Original definition by Pierre Nora (Nora 1992)

their mark on the material setting in Clairefontaine, resulting in a complex cultural biography of tombs and monastic space.

6.2   A ticket to heaven

In present-day society, death is mainly associated with fear of the physical pain and emotional distress attached to the parting (Ariès 1974, 85-108). For many of us, death is not a very inviting final destiny. However, during the Late Middle Ages things were different. Then as now, contact with death was dominated by fear. However, the basis for this fear was fundamentally different. Then people were familiar with death and considered it as something natural and inescapable. In a tough world where survival was an end in itself, death often presented a welcome way out. Fear of pain and distress was less important. More determining were the worries about the afterlife. Whether or not a soul made it to heaven depended on the way the person had behaved in life. Therefore, medieval men mainly feared a 'bad death' – a death where there was no time for confession and repentance. This fear increased during the 12th century. Until then, the salvation of one's soul was a rather impersonal affair. A place in heaven was reserved for all members of the Christian community. According to the Revelation of John, Jesus would return at the end of time, on 'Judgment Day', and the chosen ones would then follow the shepherd through the gates of heaven. From the 12th century onwards, the focus moved more and more on to individual responsibility and the Last Judgment: a court session where everyone would be judged by the balance of their lives. Good and bad deeds would be separated and considered meticulously (Ariès 1977, 109-124).

A pious life without lapses guaranteed a place in heaven. But even deviant behaviour did not necessarily hinder entry into the kingdom of God as long as absolution could be assured (Van Bueren 2010, 281-288). A sudden death without time for confession and repentance could of course endanger a blissful future after the end of life. However, even an unexpected demise meant the gates of heaven would be closed definitively. After all, until well into the 14th century, the last judgment was believed to take place during *dies illa*, just before the End of Days and therefore not at the hour of death. Medieval man felt comfortable believing that existence did not end with the decay of the body. This meant there would be time for an existence between dying and the Last Judgment (Ariès 1977, 109-124). In other words, there would be enough time after death to secure the salvation of the soul. This responsibility lay with the next of kin who, through prayer and remembrance, were accountable for the salvation of their

relatives' souls. During the Late Middle Ages, the idea that the Last Judgment could be affected by prayers for the soul urged people to actively search for proper ways to advocate a positive judgment. A convincing solution was found in the monastic communities. By partly outsourcing the prayers for the soul to the religious community, a second, more sacral 'family' was involved in the process of remembrance and the responsibility for the soul was thus shared (Coomans 2006, 685-688; Lauwers 1996, 74-76; Lauwers 1997).

The quality of the prayers for the soul was of major importance. According to late medieval belief, the quality of the prayers was linked to the standards of the community charged with the act of remembrance. Throughout the Middle Ages, there are clear tendencies in the choice of institutions (Meijns 2010). Opinions as to who delivered the most effective prayers for the soul were constantly changing and thus tended to be a mainly fashion-related phenomenon. Until the second half of the 12th century, people preferred to be buried in a collegiate church where the *memoria eternalis* was taken care of by collegiate chapters. In this period, many aristocratic families found their last resting place in one of the many Benedictine monasteries (Margue 2006). During the 11th and 12th centuries, most members of the first House of Luxembourg (Luxembourg-Namur) were buried in the Benedictine Neumünster Abbey, at the foot of the old count's castle in the centre of Luxembourg City. From the end of the 12th century, more and more aristocratic families chose a burial place in one of the many Cîteaux settlements. This relatively young and rising order maintained strong ties with the European aristocracy and nobility from its foundation at the end of 11th century. The Order was, among others, one of the moving forces behind the crusades in this period (Bredero 1998). During the 13th century, under the influence of personalities such as Elisabeth of Thüringen, female contemplative life received a significant boost. During this period, it also became a goal to be on the obituary list of a female community. The women of Cîteaux in particular were very popular during the 13th century, as they were known for delivering the purest and most effective prayers for the soul. Because of their virginal purity and being a clear choice for ascesis, these *mulieres religiosae* were already one step ahead on the road to heaven (Coomans 2006, 686; Lauwers 1997). Many of these communities were not Cistercian when they were founded, but were accepted by the Order after political intervention of the founder, usually powerful princes with links to the highest ecclesiastical and papal levels (Coomans 2004a). The counts of Luxembourg's choice to have their dynastic burial ground in Clairefontaine, which was admitted to the order of Cîteaux in 1253, five years after its foundation, must be seen in the light of this 13th century spiritual vogue (Canivez 1934, statuta 1247: 39; statuta 1250: 41; statuta 1251: 31).

Everyone who wanted to contribute to the community's prosperity had a right to the spiritual support of the sisters. Anyone who could afford it made large or small donations in exchange for prayers and remembrance of the soul. It was the ultimate form of patronage: an agreement for eternity between the community and the benefactor. The length of this 'eternity' and the frequency of these prayers (from daily to yearly) were proportional to the size of the donation. Smaller donations were often practical items, like chalices or monstrances (Van Bueren 2010, 281-288). Larger donations included money, land, seigniorial rights or rents. Even then, the depreciation of these large gifts often meant that 'eternity' was rather finite (Trio 2010). A tomb within the abbey walls was not an absolute condition for securing a place on the community's obituary list. For example, Reginald, Count of Bar and brother-in-law of Henry the Blond counted on the prayers of the sisters of Clairefontaine. As Grand Master of the Order of Malta he had a memorial stone erected in the abbey, while his remains were buried in the temple of the Order in Braux in the County of Bar (Margue 1994b, note 62). In fact, it was preferable to have one's soul praised in several places. Those who could afford it always preferred a burial in the safety of a religious community. Those with a bulging purse turned an institution into a dynastic monastery and burial ground: a private place of remembrance for one's own soul and those of his or her descendants. In many cases, a new community was founded specifically for this purpose, although an existing community was frequently addressed as well. It often occurred that these mainly female communities survived solely on the earnings made by saving souls. Prestigious foundations like Clairefontaine could not only count on donations made by their patrons, but also by those from the lower nobility, both looking to save their own soul and anxious to do as the aristocracy did (Röckelein 2008, 211).

In most cases, the religious were already called to help during life, which is revealed in several deeds of gifts from the cartularium of Clairefontaine. It also shows that care of the soul was not merely a personal concern. In 1302, Marguerite, daughter of Henry the Blond, donated two grangiae (abbey farms) with their corresponding estates to the abbey…

> (…) pour le salut de mon ame, de mes ancessours, de mes parens et de mes amis[40]

When a body was actually entrusted to the monastic community, the task of the religious started even before the funeral. The ritual began during the approaching

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[40] (…) for the care of my soul, those of my ancestors, my parents and my friends (Goffinet 1877, 103)

parting with the first prayer, the *renconciliatio animae* or the forgiving of sins. After death came the *commendatio animae,* where the soul was offered to God. Then a series of prayers were uttered during the washing and laying out of the body, and the interment itself. Finally, the *commendatin animae* was repeated, ushering in the definitive exodus of the soul (Muschiol 2008). The prayers both preceding and during the interment were only a small part of the religious' task. At least twice a day, the community would gather in the Chapter room. As a daily ritual, a passage from the Rule of Saint Benedict was read and the names of the saints of the day were declaimed. Subsequently, the names of the dead were carefully recited. This recitation was sometimes followed by additional prayers and psalms. The remembrance and care for the soul occupied central stage during both the Divine Office and the personal prayer, although they were also anchored in the liturgy. The *memento* for the dead dominated the daily masses. The onrush of souls caused their administration to become ever-more important. To avoid forgetting someone, they made obituary lists that were handed over from generation to generation. Donations were written down, and a liturgical calendar was drafted which stated who needed to be remembered. In most cases this was a yearly event: an annual mass comprised a prayer meeting the evening before the anniversary of the death, a requiem mass on the day itself and a visit to the tomb of the celebrated (Muschiol 1994, 104-106; Röckelein 2008, 212; Trio 2010, 237-43).

6.3 Heaven on earth

In a medieval community where religion was intertwined with daily life, worldly ambitions and a devout life were not mutually exclusive. Investing in the salvation of one's soul was also part of the social semiotics and propaganda strategies of the aristocracy and nobility. It brought them prestige and social capital (Buylaert et al. 2011; De Clercq et al. 2007b). Donations during life helped to build personal social identity. Donations *post mortem* mainly served the standing and aspirations of the next of kin. Church Father Augustine had problems with the attention the deceased was to share with the next of kin during the funeral and memorial ritual (Gittings 1995, 170). English Bishop Wakeryng was of the same opinion in 1425. Speaking of his own interment, he said:

I want a modest service immediately after my death, without an extensive ceremony or a procession which, as the holy Augustine noted, mainly benefit the next of kin and not the deceased. (Tanner 1984, 99).

All the same, we see that in the reality of medieval times, where hereditary succession was very important, the earthly ambitions of the surviving relatives often overshadowed the parting of the deceased. Even though care for the soul of the departed was the central concern, the ceremony was mainly used to show the transfer of the worldly possessions and the social standing of the dead to their next of kin (Daniell 1997, 203-205). In fact, the wishes of the deceased were often not even taken into account. The previously mentioned story of John the Blind, Count of Luxembourg and King of Bohemia, is striking in this context. In his last will and testament in 1340, he explicitly stated his wish to be buried in Clairefontaine (Goffinet 1877, 168-169). Following his sudden death on the battlefield at Crécy in 1346, however, his son Charles IV decided to bury him in the Benedictine Neumünster abbey, the dynastic burial place of the old House of Luxembourg-Namur. Charles aspired the title of Emperor of the Holy Roman Empire, and therefore he thought a burial for his father in the city of Luxembourg to be more appropriate as most of the 14th century aristocracy family members chose for a burial in their capital. Charles himself would opt for burial in Prague, the capital of Bohemia and cultural centre of the Empire (Péporté 2006, 62-69). According to contemporary chroniclers, the funeral procession that accompanied John to the grave was interwoven with symbolism and fully directed towards the transfer of titles and possessions from father to son. It was a clear political statement for which Charles ignored his father's last will. By means of a pompous ceremony in the heart of the city of Luxembourg with Charles, not John the Blind, taking centre stage, Charles took the rights to the Luxembourg title. According to John's will, this title was to be given to Wenceslaus, one of Charles' younger sons (Margue 1997). The grave in the capital of Luxembourgian territories presented a platform to these *rites de passage*, and equally a timeless material witness to it.

Founding a dynastic burial ground or abbey and choosing a suitable location for it often showed territorial ambition or the search for dynastic legitimisation. Although the dynastic burial place was a symbol of dynastic continuity, it could also indicate a breaking point in family history. In this respect, the foundation of Clairefontaine should be understood within the tumultuous genesis of a dynasty rather than in the spiritual concerns of the abbey's legendary founder. The House of Luxembourg-Limburg would develop into one of the most influential dynasties medieval Europe has ever known. During the 14th century, the members would even number the Emperor of the Holy Roman Empire (Margue 2003). However, the story of this dynasty began with a

hereditary succession of which the chronology reads like a novel. Around the time of Ermesinde's birth in 1186, the Low Countries had disintegrated into several smaller political entities. It was a time of continuing violence: against the background of a persistent conflict between the Pope and the German emperor, several counties and duchies fought each other with an eye to territorial expansion. When Ermesinde's father, Henry IV, Count of Namur, died in 1196 without a male heir, the inheritance of the princess, who was 11 years old at that time, was an easy prey. The German emperor himself and the Count of Flanders divided the territory among themselves. As a mere plaything in a political jumble, and through two successive marriages, Ermesinde succeeded somewhat unintentionally in redeeming the largest part of her hereditary land and even expanding it. Her first husband, Theobald of Bar, managed to repurchase Luxembourg county and the lands of Namur west of the River Meuse. He also left the domains of Durbuy and Laroche to his wife, following his sudden demise on the battlefield in 1214. Only three months after Theobald's death, Ermesinde remarried, this time to Waleran of Limburg. When Waleran died, too, the marquisate of Arlon, which used to belong to the crown of Limburg, was added to Ermesinde's inheritance (Margue 2003, 115-120; Parisse 1993). This long and turbulent story showed how Ermesinde, as a political puppet, was at the foundation of a united Luxembourg territory. However, this territory was a patchwork: a compound land without common history but in search of a political and cultural identity.

As the first male descendant of the young dynasty, Henry the Blond understood as no other that his appointment meant a breaking point in the county's history. The male line of the first House of Luxembourg had stopped with his grandfather, Henry IV of Namur. To legitimise his power, he continued the politics initiated by his mother. During the final years of her life, the countess mainly invested in anchoring her power and her country's stability. To achieve this, she actively sought allies within the regional nobility: among other things, she granted rights to a number of rising market towns, she appointed a board of nobles (États de Luxembourg) and she invested in several monastic institutes (Margue 1993). Even though the charter of 1253 formally attributes the foundation of the abbey of Clairefontaine to his mother, it was Henry who was the main force behind the foundation of the dynastic abbey and expansion of a dynastic burial ground. He consciously stimulated the remembrance of his mother Ermesinde, architect of the new united Luxembourgian territories as well as a transitional figure between the old and the new dynasty. The descendants of the old family of Luxembourg were buried in the abbey of Neumünster, situated in the heart of Luxembourg city at the foot of the count's castle. Henry the Blond opted to build a new dynastic burial ground, thereby breaking with this tradition. He did this on the border of the old ancestral Luxembourg

lands and the newly attached territories formed by the marquisate of Arlon and the counties of Laroche and Dubuy (Margue 1994b).

13th century

14th century (A) and 15th century (B)

1. Church
2. Cloister
3. Ambulatory
4. Chapter room
5. Kitchen
6. Reception rooms/Guest lodging

▸ Points of contact with the exterior

16th century

0   10   30m

N
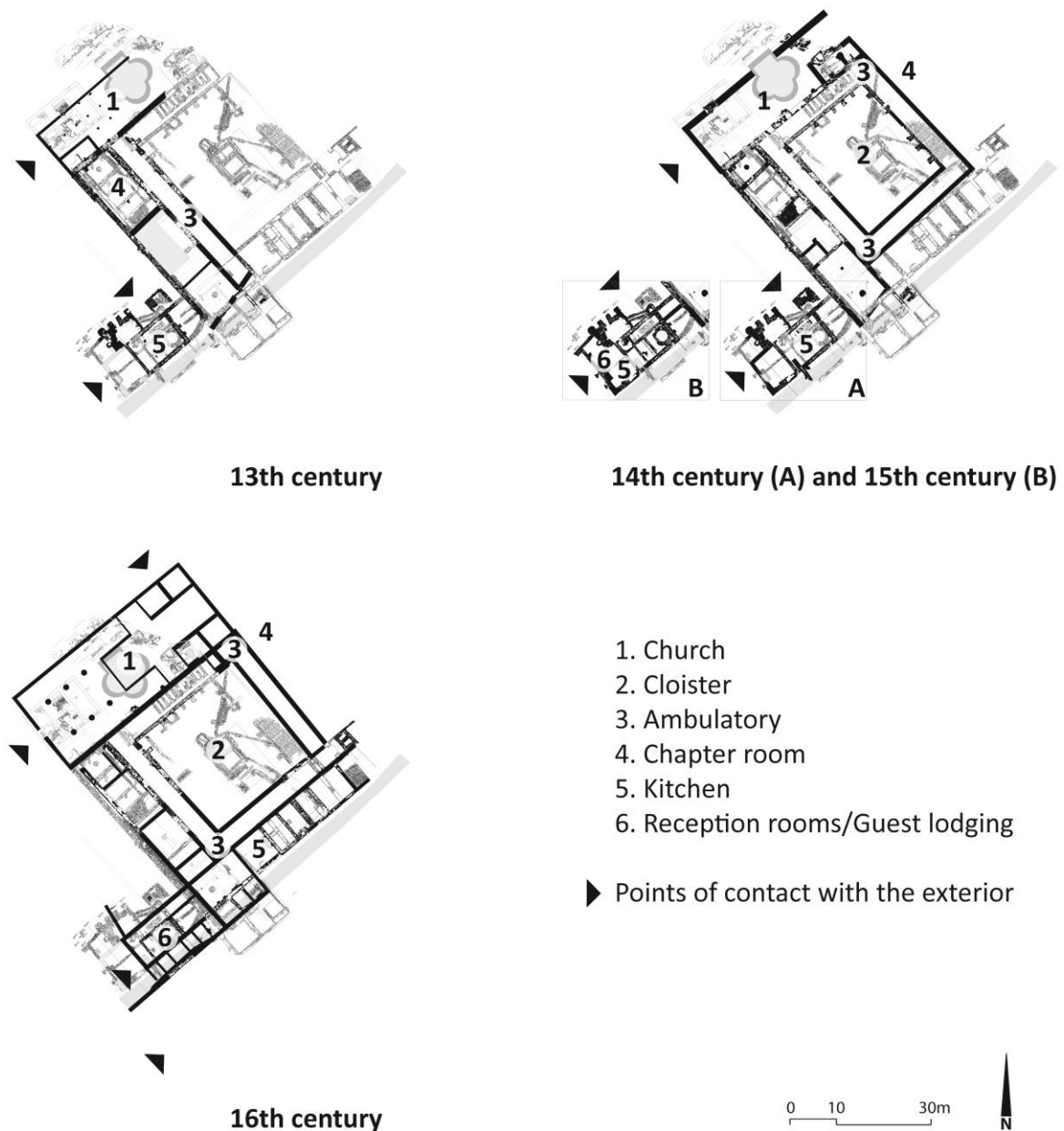
Figure 6—1   Building chronology of the monastic buildings in Clairefontaine (13th to first half of 16th century) indicating the relevant areas. The arrows indicate that contact with the outside world was possible (Davy Herremans, topography Dominique Bossicard, ©SPW-Dpat)

Later aristocratic burials were coupled with investments in monastic areas and the material culture of the abbey. Visibility and display were important, and thus the impact on the community's material setting was often significant. This is best illustrated through the work to prepare for the entombment of John the Blind. The earliest abbey church was largely dismantled and enlarged to the east (Fig. 6-1). The sisters' choir was

displaced from a raised tribune in the west of the church to the extreme west end of the church, west of the sanctuary and high altar. In addition, the rest of the monastic buildings underwent a complete metamorphosis. From the new choir stalls in the east there was direct access to the east range of a newly constructed quadrangular cloister. The first abbey was a modest settlement with a small church, one conventual wing with gallery and a detached kitchen building. The simplicity of the whole contrasted sharply with the grandeur and monumental splendour of other 14th-century royal dynastic abbeys, such as Saint Denis, burial ground of the French crown in Paris or Westminster Abbey in London (Hallam 1982). It is clear that the not-so-grand architectural ensemble from the 13th century no longer satisfied the desire of the House of Luxembourg-Limburg, which was already an influential dynasty with European allure at the start of the 14th century. Nevertheless, John the Blind preferred continuity and, like his ancestors, he opted for an interment under the wings of the sisters of Clairefontaine. No doubt a new monastic complex, characterised by four wings around a central monastery garden, like the large male abbeys, served the social aspirations of the Luxembourg monarchs much better. However, the ambitious project would never be completed due to the sudden death of John the Blind on the battlefield of Crécy in 1346. Even though he would only officially declare that he wanted to be buried in Clairefontaine in 1340, the construction work had already begun in the second decade of the 14th century. In 1315, there was a dispute between the abbey and the inhabitants of the nearby village of Eischen about the felling of timber for the construction work. No doubt the work had already started by then (Goffinet 1877, 141-142). The community's earnings showed that around that time the financial support by the count's family increased significantly. The initiation of the project gave rise to new social dynamics: rumours of the future princely burial urged local and regional lower nobility to boost financial support for the community (Goffinet 1877, 118-173).

6.4 A material reminder

The sisters' physical setting was organised as a material mnemonic for the process of remembrance. A large part of the *memoria* was looked after privately in the community. Everyday life took place mainly in and around the courtyard, the heart of the abbey. The different essential chambers where the sisters spent most of their time, such as the chapter room and the refectory, were grouped around this courtyard (Fig. 6-1). The ambulatories regulated traffic between the different chambers. In this enclosed space,

reserved for the nuns, death was omnipresent. Prominent members of the religious community were buried in the ambulatory or the chapter room. However, heraldic images and portraits of laymen were hidden in all corners of this area (Gilchrist 1993; Marks 2004). The transience of many of the used materials, such as glass, wood and textiles, often makes it hard to fully understand the visual impact this had. Late in the 17th century in Clairefontaine, a number of stone monuments were etched by Sébastien-François de Blanchart (Guillaume 2010). Among others, there was a commemorative stone for one of Henry the Blond's sons. The memorial for this man, who apparently was also a knight of Malta, was worked into the floor of the ambulatory with a number of other commemorative stones, in front of the entrance to the chapter room. Although it is clear that this was not the original location of the monument, its prominence clearly shows both the importance and the durability of such material remembrance.
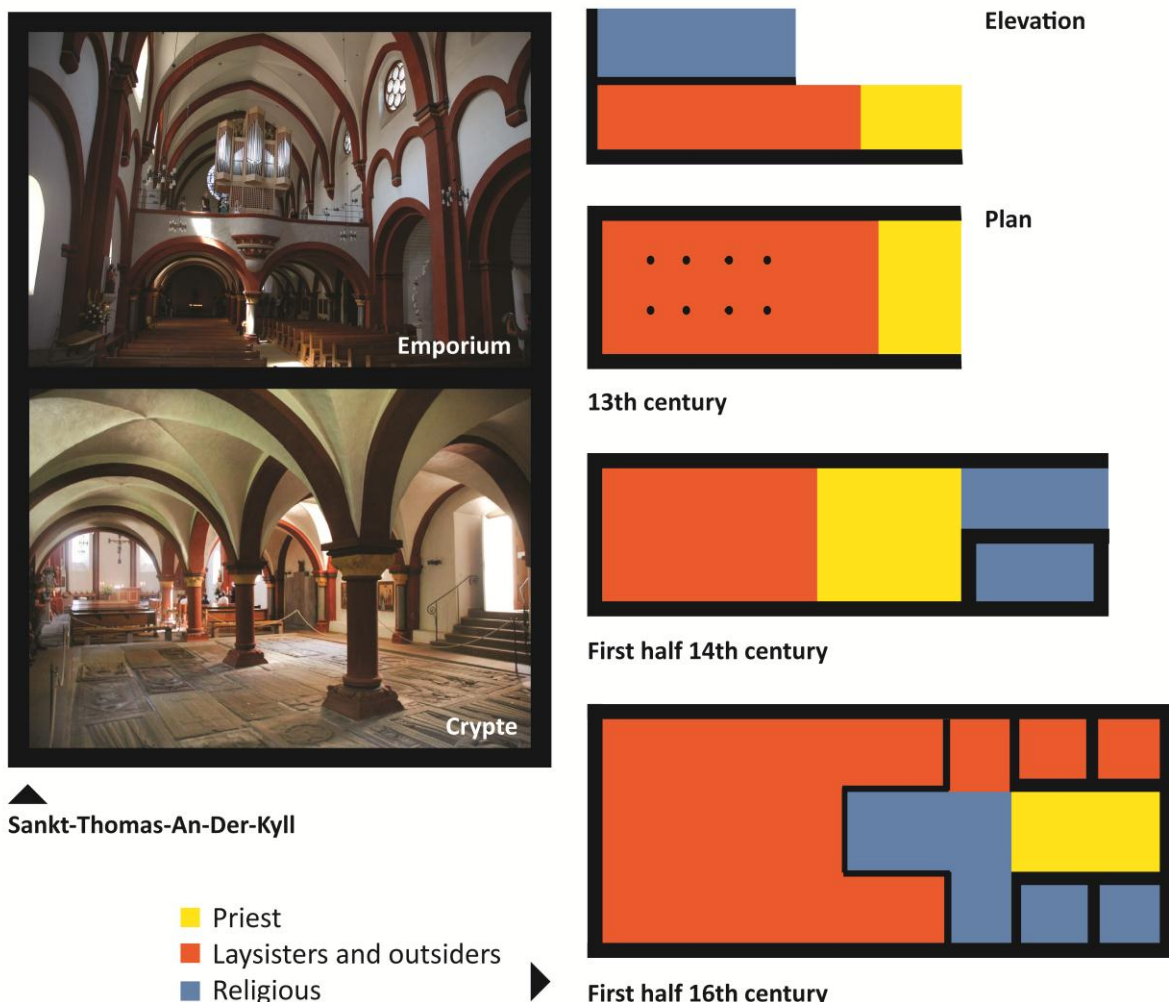
Figure 6—2   Reconstruction drawing of the different church phases in Clairefontaine, indicating the social organisation (on the right). The left part of the illustration shows the emporium and crypt of the 13th-century abbey church of Sankt-Thomas-An-Der-Kyll (Davy Herremans).

The tombs of outsiders were placed in the abbey church. Like the gatehouse, guesthouses, parlours and the reception rooms, this was one of the most public places in the abbey. It served as a transitional zone between spiritual life within the walls and secular life outside. The church building served numerous purposes: it was a place for memorial services, worship of the patron saint, and remembrance of the deceased (Muschiol 2008, 191-206). The funeral ceremony and specific parts of the remembrance work were particularly public in character. As previously mentioned, it was the manifestation of the identity of the dead and his or her surviving relatives. Their remembrance became more valuable by sharing it, which may be taken literally here since the long-term survival of both the community and the *memoria* was greatly dependent on the financial support of the local and regional nobility. It is also worth noting that, during the Late Middle Ages, people believed that the more people who participated in prayers for the soul, the more effective they would be (Trio 2010, 239).

Contact between the different groups who circulated in the church had to respect a number of social and religious rules, such as separation of the sexes and the strict *clausura* (Mohn 2006, 22-34; Tibbets Schulenberg 1984, 69; Untermann 2003). At the same time, they had to take into account the spiritual wishes of their patron. The tombs had to be visible to the religious during worship. Also, the graves had to be accessible to people outside of the community at certain occasions, in the absence of the religious (Hamburger 1992). The most important members of the *familia* were buried close to the high altar, a prominent place in the liturgical heart of the church, so that they would be able to participate in the services, even after their death. The tombs of other benefactors to the community were placed around these and were often placed in the choir aisle or side aisles of the church. New, prestigious interments were often coupled not only with building in the church, but also with a reshuffling of the tombs, as demonstrated by the excavations of the 14th-century and 16th-century church in Clairefontaine (Brown 1985, 243; Daniell 1997; Marks 2004, 172-182).

The construction of a commemorative chapel by the Jesuits around the end of the 19th century wiped out many traces of the choir and nave in the 13th-century abbey church. However, it is possible to appreciate the complex structure of the space from the remains (Fig. 6-2). For example, the church was divided vertically into three zones. The choir on its east side was reserved for the priest. The altar, which supposedly contained the relics of Our Lady, the abbey's patron saint, was located here. This part also contained the tomb of Ermesinde and possibly that of Henry the Blond and Marguerite of Bar. Centrally located, in the nave, was room for people outside of the community to attend ceremonies. The west side of the church had an added horizontal division. The nuns followed the service from an elevated gallery with a view of the altar and the founder's tomb. Under this so-called *emporium*, the lay sisters took their place. This

underlying space or crypt also housed other tombs (Coomans 2005). A striking comparison is the abbey church of Sankt-Thomas-an-der-Kyll in the Eifel. In this beautifully preserved Romanesque church, inaugurated in 1222, the crypt floor is paved with tombstones of the local and regional elite (Kosch 2001, 25-26). The dead were literally walked on by visitors entering the church here. High above this in the gallery – the transitional zone between heaven and earth – the religious prayed for the salvation of their soul. In Clairefontaine, this architectural concept was completely altered during the first half of the 14th century. The *emporium* was dismantled and the church was extended eastward. Because of these changes, the sisters' choir was moved from the gallery to the eastern end of the church, east of the high altar. West of the sanctuary was the lay sisters' choir and space for the laymen. The building campaign, initiated by order of John the Blind, caused no less than a complete reshuffling of the graves, and it was more than likely that the count reserved an ideal spot for himself. He either chose an area in front of the altar and close to the sisters' choir, nearby the graves of the abbey founders, or a place in the lateral chapel, which was added to the south of the sisters' choir. The construction of such a private chapel is known from other examples (Coomans / Bergmans 2009).

From the Middle Ages until well into Modern Times, the *gisant* (recumbent effigy) was the customary tomb for wealthy people. The gisant was shaped by the individual portrait that gave the dead person a body for eternity. Once again, this underlines the fear attached to the decay of the human body and the pronounced desire for both earthly and worldly immortality. It was also important for the visitors that the deceased remained 'tangible': they could look at and touch this surrogate body from up close. For the dead, it was a way of remaining physically present and to show themselves to the world, even after death. The tomb also mirrored social and political messages. During the Middle Ages, physical resemblance between the portrait and the deceased was of secondary importance. The most important things were the dead person's pose and the attributes surrounding him or her, which were often symbolic representations of the deceased's identity, social aspirations and beliefs (Ariès 1983; McGee Morganstern 2000).

This is also true of the gravestones of Henry the Blond and his wife Margaret of Bar (Fig. 6-3). Both were drawn by Sébastien-François de Blanchart when he visited the abbey in 1786 (Charles 2010). Stylistically, this seems to be the original 13th-century tomb of Henry the Blond. The canopy on Margaret's *gisant* indicates that the drawing is probably of a 15th-century reproduction of an older gravestone. Henry, with conspicuously blonde hair and folded hands, lays stretched out on the tomb. He is wrapped in a coat of mail and a gold-coloured tunic with blue stripes. Around the waist he wears a belt holding a sword and his coat of arms, a crowned red lion on a gold-blue

striped background. The three shields at the bottom of the tomb tell the story of the genesis of the House of Luxembourg-Limburg. On the left, there is the red-crowned lion, the shield of Henry's father and the House of Limburg. In the middle, there is the black lion with a red angled bar, the coat of arms of Henry IV of Namur, Henry the Blond's maternal grandfather. On the right his own blazon shines again. The gold-blue striped area on his coat is a *cadency*, which indicates that Henry was only a younger son of the House of Limburg. Finally, around 30 coats of arms around the edge of the monument show the deceased's political and familial bonds.

Figure 6—3   The gravestones of Henry the Blond (left) and Margaret of Bar (right) (©Archives Nationales du Luxembourg).

The heraldry on Margaret's tomb is simpler. On the edge of the monument and on the countess' garment it shows the same two coats of arms: on the one hand, the emblem of her husband, on the other hand, the shield of her own family of Bar – two golden fish on a gold-crossed blue background. At Henry's feet, the lion, the king of animals, was a symbol of the monarch's strength and bravery. The dog at Margaret's feet represented her loyalty and attachment to Henry the Blond (Durliat 1985). Both are laid out as if in bed, with closed eyes, their heads supported by a pillow. They are not dead but at rest,

at prayer, as shown by their folded hands. This represents a typical example of a man who flees to an everyday metaphor as a way of handling the unknown (Tilley 2002, 24). It also indicates that the grave was a resting point on the way to eternity. Many tombs describe the resting dead as *beatus* (blessed), neither dead nor alive: awaiting the Last Judgment they remain in limbo (*limbus patrorum*) at the edge of heaven (Ariès 1983, 53-63).

6.5   A second life

The unexpected break with the count's family in 1346 dealt a sledgehammer blow to the religious community in Clairefontaine. The counts' support continued in a symbolic manner but became a lot less substantial. For example, Charles IV, son of John the Blind, did no more than simply recognising the rights of the abbey in 1348 (Goffinet 1877, 174). Moreover, John the Blind's ambitious but never finished project left the sisters with a financial hangover. It was only in 1385 that Wenceslaus, grandson of John, paid off a number of debts incurred during work on the church in preparation for his grandfather's burial (Goffinet 1877, 188-189). The Luxembourg dynasty not only turned its back on the abbey, but on the whole county. As monarchs of Bohemia and some of them Emperors of the Holy Roman Empire, Ermesinde's descendants focused their attentions on their possessions in Central Europe. Having already started during the reign of John the Blind, more and more of the count's territories in Luxembourg were given in pledge. This evolution continued, and in 1338 Wenceslaus gave in pledge his ducal title of Luxembourg. In the 15th century, this title and the duchy would become subject to a political wrangling between the dukes of Burgundy and the last descendants of the House of Luxembourg-Limburg (Trausch 2003, 149-170).

Despite the difficulties, Clairefontaine remained a symbolic place: a memory of the count's traditional power, but mainly a symbol of Luxembourg's political and cultural identity. The community remained populated by high-class daughters recruited, until the 18th century, mainly among local and regional nobility (Goffinet 1877). The Duchy of Luxembourg was one of the most ample political entities in the Low Countries, although it was also one of the poorest and least developed. Politically speaking, there mainly appeared to be only a dispersed feudal elite with significant involvement. The Duchy did not have rich cities, only some developed market towns. The scenery was a chain of seigniorial markers such as abbeys and castles surrounded by small villages (Trausch 2003, 169-170). Memory of the counts of Luxembourg ensured that Clairefontaine could

distinguish itself among all those other feudal symbols. Mentioning a place with similar symbolical baggage, we can refer to the abbey of Neumünster, burial place of John the Blind and *lieu de mémoire* of the Luxembourg counts of the 11th and 12th centuries. Regarding this, at the end of the 14th century Wenceslaus stated:

> *(...) honorabilis et insignis fundatio divorum predecessorum nostrorum, comitum et ducum lucemburgensium*[41]

Material sources indicate that from the second half of the 15th century several new political players left their mark on the material culture and the monastic space in Clairefontaine. During archaeological surveys, a large number of stove-tile fragments were found. The tiled stove was a Central European invention that became popular across Europe from the 14th century onwards. The stoves had a triple function: first, they were a source of heat using a very ingenious system which, unlike an open fire, spread very little smoke across the room. Secondly, they had great decorative value. They were set with stoneware tiles, bathed in green lead glaze that was rich in copper. These tiles were also the bearers of social messages. They were often richly decorated with all sorts of motifs, from floral designs to moralising and biblical scenarios. From the 15th century, more and more heraldic motifs and portraits started to appear on the tiles. Studies have shown that tiles were part of 'gift exchanges' by the late medieval and early modern European elite and aristocracy and that they were dispersed through all kinds of local and international social networks (De Clercq et al. 2007b; Frantz 1981; Hinton 2011; Minne 1977; Ostkamp 2002; Sabjan 2007; Voit / Holl 1963).

Most religious were raised in noble circles during the Late Middle Ages and the Early Modern Period. The organisation and division of an abbey's living quarters at that time showed many rather noble domestic features (Gilchrist 1993, 123). In citizens' homes and in castles, the stove symbolised the 'hearth', the heart of daily life (Carsten / High-Jones 1995). People lived and worked around it and it assumed a central spot in the most prestigious rooms. Decorated with chiefly heraldic and biblical scenes, the tiles on the stove served as metaphors for the social identity, cultural imperatives, and social aspirations of both the owner and the giver (on gift exchange as social signifier see Carrier 1995). Therefore, they often appeared in public places. Present in the material setting of daily life, they constantly structured the thoughts of people passing by, gathering around and working by the stove (Alexandre-Bidon 2000). In Clairefontaine, there were probably stoves in the most important conventual areas, such as the chapter

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[41] (…) the noble and illustrious religious foundation of our predecessors, counts and dukes of Luxembourg (Margue 1997).

room, and in the more public places, such as the parlour and reception rooms. During the late 15th century, a reception room was located in the western part of the abbey, adjoining the kitchen. This part of the abbey with the kitchen complex is usually one of the most accessible places in the monastic area. The kitchen had to be easily accessible for the delivery and removal of goods. Visitors would also enter the domain via the very same route. This area would be rearranged during the early 16th century as a private lodging for the abbess. In this period, these private quarters often resembled palaces with profuse decoration, paintings and luxurious and spacious rooms. These palaces often housed prominent guests, too, and once again the presence of a tile stove was evident.

On several tiles from the 15th century we see the portrait of a Hungarian king, clearly recognisable by his characteristics: the sceptre, the globe and the crown with the fleur-de-lys, referring to his Anjou ancestors (Fig. 2-12, 1)(Marosi 2006). The image probably shows Ladislas Posthumus, King of Hungary and Bohemia. He was the maternal great-grandson of Charles IV and one of the last descendants of the House of Luxembourg-Limburg. Until 1441, the Duchy of Luxembourg was in pledge to Elisabeth of Görlitz. In 1441, she sold her rights to Philip the Good, Duke of Burgundy. After the death of Elisabeth, a conflict arose between Philip, who had had himself proclaimed *mambour et gouverneur du Luxembourg*, and Ladislas, legal heir of the ducal title of Luxembourg. A political and armed struggle ensued about power in the Luxembourgian area that only really ended in 1457 with the sudden and suspicious death of Ladislaus. The material presence of Ladislas in Clairefontaine seems deliberate and may be meant to strengthen ties with the revolting Luxembourg nobility who's daughters were living in Clairefontaine. The Duchy's strong and independent feudal elite did not want to have their hands tied by the unitary state envisioned by the Burgundians (Trausch, 2003). At that time, Elisabeth of Autel was abbess in Clairefontaine. Her family, with its main castle located less than three kilometres from Clairefontaine, were traditional allies of the Bohemian kings and the descendants of the former House of Luxembourg-Limbourg. Her father (Huart II), her older brother (Huart III) and probably also her younger brother (Gilles) played an important role in the revolts against Burgundian power (Péporté 2006, 62; Würth-Pacquet 1877, 1-3).

Likewise, for the later Habsburg monarchs, the Luxembourgian abbeys and Clairefontaine remained of interest. In 1480, Maximilian of Austria and his wife Mary of Burgundy confirmed the privileges of the Clairefontaine abbey. In the text, Maximilian showed he was aware of the site's symbolic weight and profiled himself as the natural successor to the counts and dukes of Luxembourg

> *(…)monasterium fuisse et esse fundatem a praedecessoribus nostris, comitibus et ducibus Lucemburgiae (…)*[42]

The deed was probably accompanied by the donation of a series of stove tiles since numerous fragments carry Maximilian's coat of arms (Fig. 2-12, 4). The chain of the Order of the Golden Fleece around the coat of arms, with the two-headed eagle, indicates a date after 1477 and the celebration of his wedding with Mary of Burgundy. Other tiles bear the image of Elisabeth de Frantz, abbess at Clairefontaine in 1480 (Fig. 2-12, 2) (Kelecom / Muller 2010). Her emblem can still today be found on a reused stone bricked in the façade of the 18th century parlour (Fig. 7-6). Maybe the confirmation of the abbey's privileges came along with not only the donation of stove tiles but also with certain architectural adaptations.

Under the Burgundians and the Habsburgs, the true power in the provinces was overseen by a governor. Christophe de Bade, one of the first governors under the Habsburgs, would play an important role in the history of the abbey. He was the nephew of George de Bade, Bishop of Metz, and of Jean de Bade, Archbishop of Trier. He was a member of the embassy that his uncle, Emperor Frederick III sent to the Netherlands to prepare for the marriage of Archduke Maximilian of Austria to Mary of Burgundy (Viton 1807). In 1488, Maximilian named his cousin as heir to his titles of *Stathouder* and governor of Luxembourg and gave him several fiefs in Luxembourg. In 1491, he would become member of the Order of the Golden Fleece and of the private council of Philippe the Good (Cools 1993). At the end of the 15th century, only four nuns remained at Clairefontaine. After the death of abbess Sophie de Muel in 1497, the Order decided to displace these remaining four sisters to a different community (Goffinet 1877, 225). Over ten years, a number of male monks moved into the abbey buildings. As a direct result, there was a scandalous affair between abbess Sophie de Muel and the community's confessor, a monk from Himmerod (Canivez 1934, statuta 1489: 92). However, the displacement of the Clairefontaine sisters must also be seen against the background of a broader reformation movement influenced by the *devotia moderna* and aiming for a stricter and poor spiritual life. During this period, many of the female community were transferred to male houses and vice versa (Henneau 2002; Lefèvre 1990). In 1507, after an explicit diplomatic intervention by Christophe de Bade, the female community at Clairefontaine was restored and a new abbess Cathérine de Berentzheim was put in charge (Goffinet 1877, 225).

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[42] "…the abbey founded by our predecessors, the counts and dukes of Luxembourg…") (Trausch 2003, 150-154)

The community's 'second life' was accompanied by the complete reconstruction of the monastery buildings (Fig. 6-1). The 14th-century abbey was all but razed to the ground and rebuilt into a huge convent with an enlarged basilica-type church. After Christophe's death, the bonds between the religious and the Bade family were maintained. Christophe's son Bernard, who succeeded his father as Governor of Luxembourg, supported the community both financially and politically. In 1547, Christophe de Bade, Bernard's brother, and his wife Marguerite de Mamer, made a considerable donation to the abbey as a dowry when their daughter Elisabeth took the veil (Goffinet 1877, 240-241). Under the governorship of Christophe's son Bernard, Emperor Charles confirmed the abbey's privileges (Goffinet 1877, 235-236). Soon after the confirmation of Charles V, Bernard fell into discredit and had to renounce his title of Governor of Luxembourg (Cools 1993). The construction of the abbey was probably completed a little later in 1552 when, under the government of abbess Elisabeth de Rottart de Wiltz, the relocated remains of Ermesinde were provided with a new tombstone (Joset 1935, 63-64). For the inauguration of the monastery, a tile stove was donated by the new Habsburgian governor and confidant of Charles V, Pierre-Ernest de Mansfeld (Fig. 6-12, 6). The fragments display, among others, the emblem of Charles V and the image and name of Eleonora of Habsburg, the emperor's sister (Fig. 6-12, 7). Others bear the blazon of Pierre-Ernest de Mansfeld and his first wife Marguerite de Brederode, who died in 1554 (Fig. 2-12, 5). A fragment from the same series of tiles displayed the letters LUT written in reverse, referring to LUT-CEN or Luxembourg. Similar imprints are known from the 'Maison Hamelius' archaeological site in Arlon (Borremans 1952, 25-26) which bore the emblem of the Duchy of Luxembourg (Fig. 2-12, 8).

The material presence of Maximilian I, Charles V and their legal representatives must be understood within the broader propaganda strategies of the House of Habsburg. As part of their propaganda, the Dukes of Habsburg systematically invested in the memory of their legal predecessors. As such, they spent a lot of money in the restoration of the old dynastic burial churches and abbeys of the old aristocracy, the titles of whom they had acquired (De Jonge 2005, 125-146). The history of the Premonstratensian abbey of Middelburg, in Zeeland, is comparable to that of Clairefontaine. The abbey was completely rebuilt by the orders of Maximilian I and Charles V at the beginning of the 16th century. In the church, a splendid new mausoleum was erected for William II, Count of Holland and Zeeland (†1256). This tomb of dynastic prestige was erected according to a renaissance design between 1542 and 1546 along one of the outer walls of the choir (Dhanens 1985). Under the direction of Charles V, the body of Charles the Bold was exhumed in Nancy to be buried in a magnificent tomb in the heart of the choir at the Church of Our Lady in Bruges in 1553 (Smolderen 1980-1981, 21-53; Vermeersch 1976). Also at the abbey of Neumunster, several stove tiles and pieces of a majolica floor bear

the coats of arms of Mansfeld and Charles V. This abbey, situated in Luxembourg City, was the burial ground for the House of Luxembourg-Namur and resting place of John the Blind (Bis-Worch / Mousset 1999; Dumortier 1999) and was rebuilt in 1561. In 1531, the intervention of Charles V at Clairefontaine and Ermesinde's new tomb, inaugurated in 1552, are unquestionably consequences of the same quest for dynastical identity. The symbolic value and appeal of the dynastic tombs were once again fed by giving them a prominent place in the new abbey church. The countess' tomb and remains were placed in a lateral chapel south of the sanctuary. Excavations by the Jesuits at the end of the 19th century show that Henry the Blond and his wife Margaret of Bar kept a place in the nave in front of the altar, surrounded by the nuns' benches. They were probably displaced together with the choir stalls and the high altar. The sisters' choir moved from the east end of the church to the interception of the transept and nave, while the high altar was positioned in the eastern bay of the nave (Fig. 6-2). The other members of the count's family were relocated to the church's side aisles (Joset 1935, 59-71).

6.6 The memory reinvented

The arrival of the House of Habsburg breathed new life into spirituality in Clairefontaine. The community grew rapidly: in 1570, there is mention of 12 nuns and in 1622 the community reached a peak with 19 members (Goffinet 1877, 242-254). The historical context of this second foundation indicates that after its revival the religious community was still eager for support from outside. However, at the same time, the community's budget was definitely reshaped. From the 16th century onwards, the community received more and more revenue from the abbey domain which, since the late 15th century, had been leased (Joset 1935, 188). Income from the *memoria* was gradually decreased from the 14th century onwards because of several reasons. First of all, on-going 'spiritual contracts' were no longer upheld by descendants with other social and spiritual aspirations than their predecessors. What's more, historical scholarship has shown that the late 15th- and early-16th-century reformations were quite vigorous, especially when they involved a community displacement. The chronicles of most of those houses refer to a history both 'before' and 'after' the reformation (Henneau 2002; Montulet-Henneau 1990). It seems very likely that such new beginnings often included the start of new obituary lists. Furthermore, the abbey cartulary shows that fewer and fewer new people came knocking on the abbey doors seeking prayers for the soul. New religious movements such as the mendicant orders were becoming ever more popular as saviours

of the soul (Trio 2010). Besides, during the 14th century, the belief also grew that the Last Judgment took place at the moment of death (Ariès 1983, 103-109). This lessened the spiritual value of the *memoria* on a long term in all respects.

During the 16th century, additional income was sought and was found in pilgrimages that were more intensively exploited. Since Luxembourg had never been the theatre of serious civil conflicts between Catholics and Protestants, Counter Reformation was able to blossom without any opposition. The cult of saints and pilgrimage was animated and carried out by a number of young orders such as the Jesuits and the Capuchins. Cult places where the devotion of saints was promoted appeared everywhere in the country during this period (Delfosse 2005; Maertz 1978). The church of Clairefontaine was known for its devotion to Saint Bernard (Joset 1935, 29-35). His name was linked to the source that surfaced in a fountain in the aisle on the southern side of the church. From 1671, the abbey was also officially a place of pilgrimage for Saint Anthony. Abbess Marguerite de Pouilly twice asked Pope Clement X to recognise the worship and to grant a plenary indulgence to those who came to worship on 17 January, the saint's name day (Goffinet 1877, 292). The 18th century community owned several relics, such as pieces of cloth impregnated with Christ's blood and some blood-stained stones recuperated after the stoning of Saint Stephen[43]. On 20 July each year, a belt belonging to Saint Marguerite was shown to the public and attracted pregnant women praying for a successful delivery (Mandy 2000).

Once again, the presence of the Luxembourgian dynasty's tombs distinguished Clairefontaine from other pilgrim sites in the area. In particular, the remains of Ermesinde would play an important role in the popular Maria cult that emerged in Clairefontaine. The worship of Our Lady, patron saint of the abbey, became very popular in the Low Countries at the end of the 16th century, spurred on by the Habsburg Archdukes Albrecht and Isabella (Delfosse 2005), who were the last European sovereigns to confirm the privileges of the community (Goffinet 1877, 250-252). This veneration of the Virgin Mary was actively promoted in the Luxembourg region and in Clairefontaine (Maertz 1978; Vanhoorne 1995). A chapel, west of the transept and just north of the priest choir, was devoted to Our Lady, while the veneration was linked to Ermesinde. The tomb and the remains of the countess were placed in a lateral chapel parallel to the praying area for Our Lady, which also held the relics of Saint Margaret, the countess' patron saint. The chapel was opened to the public every year on 20 July. The link between the Virgin Mary and Ermesinde was emphasised by the foundation story which

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[43] Relics mentioned in the 17th or 18th century notes written by one of the sisters in Clairefontaine (Mandy 2000, 133)

outlined how the Virgin Mary appeared to Ermesinde during a walk near her private residence, Bardenbourg in the valley of Clairefontaine. While stopping at a source for a rest, the countess dreamed about a young woman carrying a little child in her arms while being followed by 12 sheep, all marked with a black cross. Hoping to find an explanation for the true meaning of this vision, Ermesinde decided to consult a hermit living in the neighbourhood. This hermit explained to the countess that the Virgin Mary was expecting her to build a Cistercian convent at the site of the apparition (Joset 1935, 36-46). Although it has all the topoi of a medieval hagiographic source, the story, which does not appear in any written document before 1633[44], seems to have originated in the religion-inspired historiography of Counter Reformation.

These findings can give direction for future inquiries into the site's history following the suppression of the religious community in 1794. Roughly a hundred years later, in 1875, the Jesuits bought the land of the former abbey. They built a noviciate and breathed new life into the ancient Maria cult by organising a yearly pilgrimage. A chapel designed by the renowned Luxembourg architect Charles Arendt would be erected to give substance to the renewed devotion to Maria. An interesting track for future research would be to check if the Jesuits had originally planned to link the devotion to Maria to the rich history and the founders of the abbey or whether the idea developed over the years. Either way, very little remained of the abbey's material setting in 1875. Yet, the Jesuits built their chapel exactly in the choir of the old abbey church. It was a symbolical choice which was regretted by many influential Luxembourgian religious, including abbot Jean-Baptiste Reichling who interpreted it as a lack of respect for the deceased who were resting in the former abbey church (Reichling 1866, 165).

Several Jesuits originated from the immediate neighbourhood of Clairefontaine and were probably acquainted with the rich history of the site. Furthermore, the head of the community, Father Eugène de Gerlache, was a cousin of one of the last nuns of Clairefontaine (Mandy 2000, 165). It is also possible that the Jesuits were inspired during their 'archaeological excavations' preceding the construction of the chapel (Joset 1935, 59-73). Were the remains of the 16th-century chapel of Saint Margaret, still standing today, a point of reference for the construction of the commemorative chapel? A statue of Our Lady was placed in the middle of the choir of the newly built place of remembrance. The original project provided two altars: one for Henry's patron saint and one for Saint Margaret, Ermesinde's patron saint. During the excavations on 11 May 1875, something exceptional happened. While digging, a novice named Martin Paul de

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[44] This appears for the first time in a chronicle written in 1633 by one of the sisters in Clairefontaine (Mandy 2000, 112).

Marcourt immortalised himself that day by finding a chest containing human skeleton remains. Nearby, the lucky man found a silver plaque which read:

> *Voici les Précieux Ossements de la Très Illustre et Pieuse Princesse Ermesinde, Comtesse Souverain de Luxembourg et de Namur, Notre heureuse Fondatrice que Dieu Glorifie et sans fin Bénisse, icy transferez le may 1747*[45]

It is still unclear whether this discovery was based on coincidence or if it was staged by the Jesuits looking for fitting relics. The fact that they realised the need for relics was reinforced by their claim to have found Ermesinde's skull some years before in 1873. The relic was part of an inheritance donated to the community in dubious circumstances. The first skull silently vanished from sight following the new, more appealing discovery in 1875 (Mandy 2000, 73). The quite 'miraculous' finding and doubts about the authenticity of the silver plaque cast doubt upon the sincerity of the Jesuits (Péporté 2011, 119). On the other hand, a recent scientific examination of the skeletal remains goes in their favour. Apparently, the remains of the skeleton belong to a tall woman aged around 60 who gave birth to several children. Such physical features agree with the life story of the countess. Furthermore, carbon dating places the skeleton in the 13th century (Malavez 2010). However, these physical characteristics would probably fit various 13th-century community members. This discussion aside, the way in which the relic, real or false, was cultivated by the Jesuits in developing their place of pilgrimage is striking: the originally site in the chapel planned for the altar of Henry the Blond, would provide space for a new gravestone containing the illustrious remains of Ermesinde. The countess would play a prominent role in the yearly procession and coronation of Virgin Mary in Clairefontaine.

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[45] These are the precious remains of the very famous and pious Princess Ermesinde, countess and monarch of Luxembourg and Namur, our blissful founder, praised and blessed by the Lord. Moved here in May 1747 (Charles 2010).

6.7 Conclusions

The abbey of Clairefontaine was founded in 1247 by the counts of Luxembourg. It was a symbolic foundation, both for providing spiritual care and for demonstrating the worldly ambitions of the count's family. For almost a hundred years, the site served as a dynastic burial ground for the count's dynasty. The tombs and the monastic area within quickly became part of the collective memory, a *lieu de mémoire*, not only as symbolising the dynasty's identity, but also for the identity of the political and cultural entity that it represented. Material and textual sources illustrate how the memory of the counts was consciously kept alive and was used by various social groups looking for a basis for the own cultural and social values and beliefs. This formed a process whereby the material culture and architectural space were meticulously maintained, but also constantly shaped and structured.

Chapter 7   A cup of tea in the parlour. Material behaviour, consumer practices and elite identity in the 18th century Cistercian nunnery of Clairefontaine

7.1 Introduction

Medieval and early modern religious women are often depicted as living in a remote reality, detached from the secular world. As such, an ideal image persists of pious women choosing a disciplined and strictly regulated life of silent contemplation. A life characterized by solitude and alienation from worldly being. Religious communities were and often still are considered as highly regulated institutions, subject to a normative model designed to be universal, leaving little scope for deviant behaviour and individuality. According to this perspective, the choice for a religious life implicated a radical change in lifestyle for the women, chiefly of noble families entering the convent, forcing them to abandon all goods, worldly values and noble habits. Recent scholarship has nuanced this traditional view exploring a largely untapped reservoir of less informal

sources on religious life. Results from various disciplines, such as material culture studies, the study of visual arts, literature and music, demonstrate that despite the straightjacket of multiple religious regulations, many aspects of noble life and noble behaviour were reproduced in a monastic environment (Hamburger 1992; Hamburger / Suckale 2008; Mathhews Grieco 1997, 91-110; 139-164; Signori 2008). A social process that was stimulated through interaction and exchange with the outside world (Evangelisti 2004; Hills 1999).

A case in point is the Cistercian nunnery of Clairefontaine. Founded in the middle of the 13th century by the counts of Luxembourg as a dynastic burial place, the convent has known a long occupation history ending with its suppression in 1796 (Goffinet 1877). As one of the most prestigious convents of the area, the community was populated chiefly by members of Luxembourgian nobility. Large scale excavations revealed the belowground remains of the 18th century cloister range, well preserved due to the lack of notable post-suppression occupation. Combined with written evidence on the community, this unique material dataset comprising architectural remains, household goods and food consumption debris, offers a detailed insight into the everyday life of a small community of religious women during the 18th century.

This chapter examines how the sisters in Clairefontaine interacted with their material and social environment in order to understand their position in 18th century society. By using both documentary and material evidence (archaeological remains and standing structures) we will demonstrate how the religious in Clairefontaine deliberately used patterns of display exhibited by Luxembourgian nobility to communicate their position in the world. A social process in which it becomes clear that there was only a thin line between the female religious and their previous noble lay existence. What is more, convent life offered the surplus female offspring of the Luxembourgian nobility opportunities for social upward mobility and personal identity creation they would never have experienced outside. They grabbed these opportunities with both hands and they succeed in the creation of powerful groups- and self-images through conspicuous material and immaterial statements. Thereby, they articulated their noble (and spiritual) authority in the same way as many worldly lords, through material display, territoriality and the exertion of seigniorial rights. On the other hand noble lifestyle and social structures of noble family life were reproduced through conspicuous consumption and the organization of architectural space.

7.2 Nobility and female monasticism in the historic Southern Low Countries

In the Southern Low Countries being noble for a long time was foremost a form of social recognition. Somebody was noble if considered as such by his contemporaries. This social judgment was also a legal one, as nobility was grounded in customary law. For the Southern Low Countries the registration of customary law was ordered by Emperor Charles V in 1531 but not before the end of that century a normative framework for noble life came into being (Buylaert et al. 2011, 394). In other words, until the 17th century, nobility was a kind of social consensus, a particular form of social identity that needed to be negotiated with others. As such, a complex sign system was developed for the social communication of noble identity: a typical noble way of living and acting was developed, encompassing a wide spectrum of communicative concepts, actions and material manifestations that needed to be managed meticulously by those who pursued noble status (De Win 1985; Dumolyn / Van Tricht 2000). This durable noble sign system was maintained by true noblemen, as it helped them to propagate their social position. The same social signs however were adopted and imitated by other social groups willing to move up the social ladder and link up with nobility (De Clercq et al. 2007b). As such, noble appearance and lifestyle became durable markers for social distinction that maintained until late in the Modern Era, especially in traditional, rural, little populated and non-urbanised areas of the Southern Low Countries such as the Duchy of Luxembourg (Hudemann-Simon 1985, 15-27; Trausch 2003, 169-171).

Important aspects in the semiotics of nobility were, the display of heraldic symbols, display through material culture and architecture, gift exchange, charity, landownership and the conspicuous performance of lordship, keeping pigeons, hunting and eating game or other exquisite foodstuff. These signs served as social barriers between noblemen and commoners, but they were all the more used to differentiate within nobility (Buylaert et al. 2011). Members of nobility competed with each other for forms of capital as defined by Pierre Bourdieu (Bourdieu 1986). He acknowledges three fundamental types of capital: economic capital, including money and other forms of direct property; cultural capital comprising knowledge, taste, cultural goods and educational qualifications; social capital comprising relationships, social networks and membership of groups. These forms of capital can be perceived as a fourth category of capital: symbolic capital which may refer to less tangible possessions such as prestige, honour and reputation. Nobility may be seen as specific form of symbolic capital that comes into being through the distribution of economic, cultural and social capital: financial means (economic capital)

were invested in noble appearance (social capital) and life style (cultural capital) and as such a distinctive noble self-image was created (theory developped in De Clercq et al. 2007b).

Monastic charity was one of the key elements in the negotiation and communication of noble identity. The deployment of capital for the foundation of an abbey or for investing in the material setting of a religious community brought the benefactor spiritual welfare, but more importantly display and prestige. In this process, nobility showed a particular interest in female monasticism as it provided likewise strategies for preserving other kinds of capital. Forcing one or more daughters into convent life prevented fragmentation of property and estates through marriage. And, although the dowry required for an entry into the most prestigious convents was high, it was often cheaper than the cost for the arrangement of a marriage (Hills 1999, 37; Hills 2003; Johnson 1991, 13-61; Power 1922; Venarde 1997, 89-132). Monastic houses offered a secure home for women of wealthy families. Strict enclosure ensured the intactness of both virginity and honour (Gilchrist 1988; Gilchrist 2000). Female monasticism was an honourable alternative to place women for who no appropriate wedding candidate was found. When an high class daughter had to marry a man of lower birth there was a serious loss of honour and status: an unfortunate fate for many younger daughters and their families. Investing in female convent life equally provided the nobility with social capital, as nunneries maintained links with public life and local ecclesiastical power, valuable for maintaining family networks and broader social contacts, and the promotion of individual political careers (Evangelisti 2004; Evangelisti 2007, 27-33; Röckelein 2008).

A rather traditional image persists of noble women forced to spent their life in severe and silent contemplation all for the sake of their family name (Gilchrist 1993, 50-60). In theory, whatever convent or religious order women joined they all had to subscribe to a highly disciplined life and the three solemn vows of poverty, chastity and obedience. A cyclical routine of praying, penitence and work structured daily life within the convent walls. The choice for a religious life precipitated a total change in lifestyle and behaviour. Titles of social distinction or family coats of arms were not tolerated. Religious were expected to wear nothing more than a habit of rough and refined fabric that covered the body from head to toe and reflected the nuns' virginal status and integrity. Food and drinks met the vital needs and nothing more. Luxury objects and exquisite furniture such as mirrors or sumptuous pillows and mattresses were absolutely prohibited. Also colours were deemed inappropriate for the sacred space of the cloister, as they evoked the idea of pleasure and contrasted with the austere tones of a monastic setting. Contacts in the parlour with family and friends could threaten monastic discipline and therefore were restricted and regulated. As such a protected environment was created in which the

faintest desire for the world and its temptations was removed (Burns 1999; Evangelisti 2007, 28-31; Gilchrist 1993; Power 1922; Zarri 1998).

In reality however the impact of the religious restrictions on daily life was dependent on the community's disciplinary tradition and the community members' social background and financial means. In many convents, the chiefly noble sisters were provided for their family in yearly allowances and gifts of money, food and objects of various sorts, enabling them to lead a life according the standards of nobility. As such aspects of the noble way of life were reproduced inside the convent walls. Communities often got subdivided spontaneously in different smaller entities or *familiae,* reproducing the social dynamics of a real family by uniting relatives and like-minded (Evangelisti 2004; Gilchrist 1993, 167-170; Hills 1999). Many sisters had their personal servants inside the walls. Nuns often enjoyed the use of personal cells, comprising of several furnished rooms and private quarters, resembling to the domestic interiors of elite residences (Gilchrist 1993, 126-127; Gilchrist 2000). Furniture was luxurious consisting of all sorts of valuable objects and commodities brought in from home or received from families and friends (Evangelisti 2004).

For the women entering the convent, religious life was in fact a way to gain in cultural capital by avoiding the discomforts (e.g. an unwanted husband), dangers (e.g. dangers associated with childbirth) as and confinements that marriage brought along (Evangelisti 2007, 3-4; Johnson 1991, 13-61). Instead they were offered a stable, protected and educated life in relative freedom and with certain opportunities for upward social mobility. A kind of parallel universe was created inside the convent walls, structured by mainly the same rules of distinction as outside, but offering roles and responsibilities to women that they would rarely experience in secular society of medieval and early modern Europe (Evangelisti 2004; Evangelisti 2007, 17-33). The hierarchical structure of monastic life allowed women to cover a whole range of monastic administrative and leadership positions of which that of abbess was the most important and prestigious. Despite the fact competition was fostered amongst community members, they all shared a common religious and noble identity (Henneau 2009). An identity that was fostered and meticulously maintained as it brought the community welfare and prestige. As the case of 18th century Clairefontaine demonstrates, a shared identity the sisters conspicuously negotiated and communicated by means of material and immaterial behaviour, just like their noble relatives outside the wall .

7.3 Noble women in Clairefontaine

As in the choice of husband, prestige and social status played an important role in the choice of convent (Hills 1999, 38-42). In the 18th century, five convents in the Luxembourgian area were considered to be noble and therefore prestigious houses: the Dominican convent of Marienthal, the Augustan house of Hosingen, the Rich Clare Convent of Echternach and the Cistercian abbeys of Differdange and Clairefontaine. The community of Clairefontaine did not distinguish itself from these other noble houses in the area by its magnitude, but all the more by its symbolic value and long history. The foundation of the abbey was related to the emergence of the House of Luxembourg-Limbourg. Henry the Blond, the first male member of this dynasty constructed the abbey in honour of his mother; Ermesinde. As the location for this prestigious project he chose a fertile river valley on the border of the old Luxembourgian ancestral grounds and the territories of Arlon-Durby-Laroche (Margue 1993; Margue 1994b; Margue 1995). In no more than one hundred years Clairefontaine would function as the burial ground of the Luxembourgian aristocracy. In the following centuries however the abbey and especially the 'Royal' tombs in its church, remained symbols for Luxembourgian identity. Later foreign rulers such as the dukes of Habsburg realised the symbolic meaning of the place and invested deliberately in the architecture and material culture of the abbey as part of their propaganda strategies in the Luxembourgian area. Successively, Maximilian I, Charles V, Philippe II and Archdukes Albrecht and Isabella all recognised the ancient privileges of the abbey and supported the community both financially and politically (Goffinet 1877). Its long prestigious history and the clear link with Luxembourgian and European aristocracy, made Clairefontaine attractive to members from the most distinguished noble families of the area. The community was kept socially pure through high conventual dowries. Therefore, the number of choir sisters was limited throughout the whole history of the house. Numbers are available from the early 16th century to the suppression of the abbey in 1796: the community never exceeded 20 members (Goffinet 1877).

When reconstructing the community living in Clairefontaine it is necessary to outline Luxembourgian nobility as a social group first. Nobility in 18th century Luxembourg must be considered an heterogeneous group of which the members are united by first of all social position and secondly residence on Luxembourgian territory for at least one generation (Hudemann-Simon 1985). The latter point is important since Luxembourgian nobility had always been the subject to a high degree of mobility and social renewal. From the 15th century onwards the Duchy of Luxembourg became part of the larger political entity, known as the Low Countries that were ruled by successively the Dukes of

Burgundy and Habsburg. The centralized politics of these dynasties resulted in the inflow of foreign noble men that chose to establish a life in the Duchy of Luxembourg, in service of the princely state. On the other hand, noble families with a long history in the area but whose members climbed up to social ladder of the princely state, left the area to take up an administrative position elsewhere. From the 17th century onwards there was an emerging group of 'new nobility' that entered nobility through marriage, the buying of lordships and ennobling. Furthermore, there was a French speaking nobility living in the west of the Duchy (roughly the present-day Belgian province of Luxembourg) and a German speaking nobility living in the eastern part of the Luxembourgian territories (roughly present-day Grand Duchy of Luxembourg). A dichotomy that remained very strong into the 18th century despite contacts between families on both sites of this invisible border (Gaeng 1995a; Gaeng 1995b; Hudemann-Simon 1985, 24-27; Trausch 2003, 165-173). And, a dichotomy that also mirrored in the community of Clairefontaine.

During the 13th and early 14th century Clairefontaine was home to several members and relatives of the House of Luxembourg-Limbourg, amongst others Hawis de Bar often referred to in the abbey's cartulary as the '*bienheureuse*' or the blessed. She was the first abbess of Clairefontaine and a relative of Marguerite of Bar, wife of Henry the Blond. Another famous abbess of aristocratic origin was Jean of Luxembourg, daughter of Henry the Blond and Marguerite de Bar and abbess in Clairefontaine between 1295 and 1311 (Goffinet 1877; Goffinet 1907). From the second half of the 14th century as the ties with Luxembourgian aristocracy were loosened, community members were still recruited from the highest levels of feudal society. The list of abbesses contains the names of the most prestigious and influential Luxembourgian noble families such as: *de Clemency* (Anne: 1383-1408 and Jeanne:1429), *d'Autel* (Elisabeth: 1434-1474), *Rottart de Wiltz* (Elisabeth: 1551-1562) and *de Larochette* (Elisabeth: 1562-1583) (Kelecom / Muller 2010).

As in the first centuries Luxembourgian origin appeared to be an absolute condition to take the veil in Clairefontaine, more and more girls from noble families form the Lorraine area and France appeared on the inhabitants lists from the 17th century onwards. Three of them, Marguerite de Pouilly (1644-1671), Antoinette-Lucie de Pouilly (1672-1696) and Marguérite-Josèphe de la Fontaine (1696-1734) were even elected as abbess (Goffinet 1877). This may be related to the fact that the community in Clairefontaine had to face problems in finding novices amongst Luxembourgian high-nobility. This growing disinterest in an existence behind the convent wall may be considered a pan-European phenomenon that reached its apogee at the end of the 17th century - without doubt influenced by the new philosophical thoughts of the Enlightenment, questioning the social utility of contemplative life (Bonis et al. 2001, 12-14). Consequently the conditions for entrance became less imperative and the community in Clairefontaine, just as the

other noble convents in the Luxembourgian area, also started to recruit from alternative social strata. The growing disinterest in monastic life forced the community to choose between a noble identity or a Luxembourgian identity. A decision in which they were guided by the Luxembourgian authorities. In 1711 abbess Marguerite-Joseph de la Fontaine was urged, by the *Conseil Provincial* worried by the devaluation of the 'national' identity of the convent, to only accept novices of Luxembourgian origin, preferably of high noble birth. If no sufficient candidates were found, women from lower Luxembourgian nobility and even middle-class girls should have preference to foreign members of high nobility (Hudemann-Simon 1985, 189-195; Joset 1935). As such in 1696, Marie-France de Longueval was the first member of the so-called new nobility that entered the community. During the first half of the 18th century, several novices were recruited amongst families that only recently acquired noble status and girls with names like Marie-Barbe Pergener, Marie-Jeanne de Wiltheim-Grenteen and Gabriele-Josephe de Baillet joined the community (Goffinet 1877). In 1752 Thérèse Pujot, commoner of birth, took the veil in Clairefontaine (Hudemann-Simon 1985, 194). Such middle class girls were maybe not noble by law, but they certainly pursued the noble way of life and their families found in monasticism a way to communicate their social status and pick up with the traditions and practices of the nobility. The idea of non-noble entrance received little applause from the noble members of the community. In the official documents of the abbey, a clear difference is made between sisters of noble birth, referred to as lady (*dame*) and sisters from middle class origin (*soeur*), a social distinction not in-keeping with monastic regulations. Besides, these *soeurs* had no participation in the execution of convent life (Goffinet 1877; Goffinet 1907). The community in Clairefontaine during the 18th century was a medley of women of different backgrounds and different origins, but nevertheless all born and raised in a social environment structured by the noble way of life.

7.4 The monastery in the landscape: negotiating noble identity through territoriality

Landownership was an important element in the creation of noble identity (Buylaert et al. 2011; De Clercq et al. 2007b). During its history the community in Clairefontaine succeeded in assembling an extended monastic estate exceeding the possessions of many secular large landowners in scale and variety. Especially during the 13th and the

14th century when the monastery served as the burial ground of the Counts of Luxembourg, a serious accumulation of donated lands was noted. From the early days on, the community actively took part in the acquisition of both fiefs and allodial property. Accumulated economic capital, consisting of profits and donated monies were reinvested to enlarge the communities possessions and symbolic capital. The cartulary of the abbey shows that in this period about 50% of the gathered territory and seigniorial rights, was the result of the active acquisition (Goffinet 1877; Goffinet 1907).

Figure 7—1   Mill with fishpond situated in the community of Berckerich. The property was donated in 1328 by John the Blind, Count of Luxembourg (Goffinet 1877) (Isabelle Bernard).

As for many other examples, the constituency of the estates of Clairefontaine was much more secure than that of a secular domain, as fragmentation through marriage and inheritance was not an issue (Moorhouse 1981, 32-39). The state of the late medieval monastic manor remained largely unaltered between the Late Middle Ages and the suppression of the abbey in 1796. The abbey's holdings in the Luxembourgian area were recorded during a detailed land registry survey, executed in 1766 by order of the Holy Roman empress Marie-Therese[46]. Like any secular manor, the Clairefontaine estate was

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[46] Archives de l'Etat, Arlon. Cadastre de Marie-Thérèse. Seigneurie de Clairefontaine.

also in the first place an administrative unit, more than a cohesive areal entity. The community obtained several *vouerie*, farmsteads leased out on hereditary tenure, some of them for centuries to the same families (Joset 1935). The exact number of these kind of holdings in the possession of the abbey is unknown. Around the village of Beckerich only, the community had about 40 farmsteads in permanent lease. Next to these estates leased out on a long lease, the convent obtained a number of partially self-managed estates, including 14 granges with several fishponds, four mills (Fig. 7-1), a sawmill and five houses with garden. Initially, the possessions were exploited by the community. From the 14th century, also a lot of the more distant holdings were leased out to farmer families (Bernard 2001).

Figure 7—2   The area of Clairefontaine depicted on the Ferraris map (1771-1778). The abbey (framed in white) is located in the valley of the River Durbach surrounded by woods. To the north lays the village of Eischen, to the northwest the town of Arlon

Landownership alone was not a distinctive marker for the performance of noble identity. More distinctive was lordship, referring to the right to exercise power by nobles in their own right (Buylaert et al. 2011, 496-498). When the lord had low or middle

jurisdiction, he had to leave serious offences to the comitial bailiff. The performance of High Jurisdiction meant that in case of serious offences, the penal authority, including capital punishment was held by the lord himself or his representative, the local officer of Justice (Bisson 1995). Lordship augmented noble symbolic capital and social authority. The community possessed two Seigniories or lordships. The largest was the *Seigneurie de Clairefontaine* which comprised the abbey complex and several possessions scattered over an area stretching from the abbey's site to the locality of Wahl, about 25 kilometres to the north, including the important villages of Eischen, Noerdange and Beckerich (Joset 1935, 193-228). A large part of this lordly domain was part of the initial endowment by the Counts of Luxembourg. In 1302, the community conspicuously purchased another lordship, the *Seigneurie d'Hives;* located on about 80 kilometres from the abbey site near La Roche on current Belgian territory (Goffinet 1877, 108-110).

On its lordships the abbey owned a variety of rights. The most symbolic privileges were those linked to the exploitation of the lands including the right to hunt and herding animals in the seigniorial woods and the right to fish in the rivers and waters located within the lordship. The abbey had the rights to the use of certain public amenities on the seigniorial domain such as corn mills, bread ovens and roads. The abbey had certain rights over the traffic in property and goods and on the exploitation of raw materials such as metal ores and stone[47]. Only the abbess had the official right to hold markets, kermises, plays and dances. As with many others, this right could be bought off by commoners. Mostly the abbess was reimbursed in kind with a symbolic set of mainly agricultural products. Anecdotal is the compensation that was offered to the abbess by the inhabitants of Eischen, Beckerich and Noerdange in 1749 in exchange for the right to open a dance. For the occasion the inhabitants of a nearby village paid eight chickens to the community[48]. In 1788, the abbess of Clairefontaine owned the right on tithes of about 26 parish churches. In origin these tithes were a social tax which was meant to provide the parish with the necessary funding for the cost of religious life in the village covering costs for poor relief, the upkeep of the church, religious services and the wage of the priest. In return, parishioners were expected to contribute a tenth of their agricultural production consisting of products from the fields. In reality, tithes ended up in the hands of the lord, who if gentle, provided the parish with the necessary means to maintain the church building and organize the masses (Bisson 1995; Ganshof / Verhulst 1966).

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[47] Archives de l'Etat, Arlon. Abbaye Clairefontaine, Notre-Dame, Comptes généraux. 170, 1746-1749 (incomplet), 458.
[48] Idem, 607.

The performance of lordly rights and the collecting of tithes and other seigniorial contributions offered the abbey not only a welcome source of income, but was in the first place a specific form of symbolic capital that was used by the community, in the person of the abbess to communicate it's lordly identity. The exertion of seigniorial rights was a claim to public space that articulated the communities dominance over the area and underlined the sisters noble status. Hunters hired by the community kept the woods clear of wolves and other unwelcome guests[49]. Poachers were punished firmly as acknowledged by the condemnation of two villagers of Eischen fishing in the Eisch without permission of the abbess (Joset 1935, 221). Another distinct territorial claim was the felling of wood. In the forests surrounding the monastery, the community of Clairefontaine had to share this right with the villagers of Eischen. A shared privilege which led to many conflicts since the arrival of the nuns in the 13th century, especially in times of enduring construction works when the religious community exhausted the forest (Goffinet 1877).
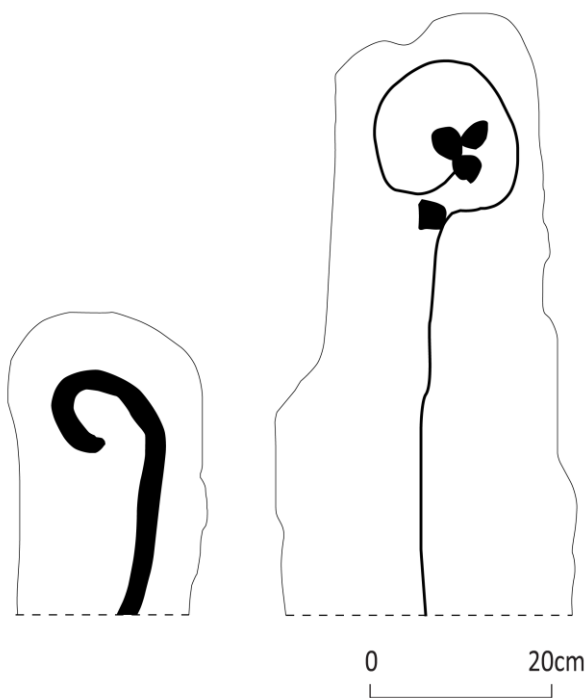
Figure 7—3   Drawing of two boundary stones that marked the frontier of the seigniorial woods in Clairefontaine. Both depict the abbesses' crosier, symbol of monastic authority (Davy Herremans)

These territorial claims were reinforced in more material ways. A network of enduring territorial markers delineated the abbey's noble estates. In 1756, 185 boundary stones

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[49] Archives Nationales de Luxembourg. Affaires militaires. A-XVII, 26 janvier 1767.

marked the frontier of the seigniorial woods of Clairefontaine (Fig. 7-3) (Mandy 2000). The front of the stones were decorated with a crosier, the distinctive symbol of the abbess. The back of the stone bears the acronym 'AB' referring to "Abtei Bardenburg" (Bardenbourg abbey), the name of the convent as cited in the legendary foundation narrative (Fig. 7-3). The abbey's territory was peppered with numerous dovecotes and fishponds; keeping pigeons was a lordly right. The devastation caused by the birds to the crops and agricultural produce of subjects was seen as part of the seigniorial rent (De Clercq et al. 2007b). Therefore, the numerous pigeon houses, scattered over the monastic estates served as a highly visible and physical manifestation of the noble identity and lordly authority of the community[50]. Also pounds were markers of social status. They gave place to the time and hence money consuming activity of carp and pike breeding. Furthermore, as the abbey's receipts demonstrate, they were equally used to breeding swans[51]. The practice of breeding and eating these birds was an important element in the social semiotics of the elite since medieval times. The swans breeding in the moats and ponds of elite residences were seen as integral part of the property and their ownership and consumption was therefore highly prestigious (Buylaert et al. 2011).

7.5 An architecture of relative solitude: monastic space in dialogue with noble identity

The presence of water made the valley of Clairefontaine fertile and attractive for habitation. However, history and archaeology shows clearly that settling in the Durbach stream valley has certain disadvantages too: from the early days on the abbey was confronted with floods and a rising water level. Before the 18th century the abbey had been reconstructed twice, once around 1340 and a second time during the first half of the 16th century. In both cases construction works were preceded by raising the site. At the end of the 16th century Philippe II, king of Spain and ruler of the Low Countries, spoke highly of the perseverance of the sisters to stay in Clairefontaine. A charter of 1586 describes a donation in his name of several barrels of wine from the Mosel valley because:

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[50] Archives de l'Etat, Arlon. Abbaye Clairefontaine, Notre-Dame, Régie des biens et du domaine, B. Biens, 205-207 : Clairefontaine, enceinte claustrale, seigneurie et biens, 1617-1686, 207 : Pied terrier, 1756.
[51] Archives Nationales de Luxembourg. Fonds Clairefontaine. A- XXV 5

(…)leur estant toutefois impossible de vivre avec pure eaue ou cervoise en telle situation du lieu, dedans bois et vallées fort rumaticques(…)[52]

During the 17th century the abbey was confronted with successive and devastating floods. In 1617, after a thunderstorm and torrential rain part of the 16th century abbey was ruined. In 1695 another flood struck the site (Joset 1935, 186). After several small-scale reparations, the community decided to rebuild their monastery one more time. Excavations showed the sisters raised the terrain by more than 1.5 metres. In 1731 the construction works were in an advanced stage according to the report of a canonical visit (Goffinet 1877). The 18th century reconstructions of the abbey were forced by devastating natural disasters, but nevertheless they offered the sisters a welcome arena for the negotiation of their religious and noble identity. The Ferraris map (1771-1778) depicts the walled monastic precinct at the end of the 18th century (Fig. 7-2). A restraint enclosed domain of about 10 hectare gives place to the cloister range with abbey church, an adjacent outer court with two successive courtyards and several isolated buildings. A road, running from Arlon the areas principle town located five kilometres west of the abbey ,to Eischen a small village about one kilometre north of the monastery, crosses the monastic precinct.

As many medieval, early modern, and modern elite residences, the new abbey complex revealed itself gradually to the visitor (Brewer 2010; De Clercq et al. 2007b; Johnson 2000a; Johnson 2002). Outsiders were guided through the precinct facing on their way successive identity markers materializing the subtle interaction between the secluded religious community and the outside lay society (Fig. 7-5). A monumental monastery wall functioned as a physical boundary between the inside and outside world. The high walls announced the institutional respectability of the convent. They embodied the principles of enclosure and spiritual separation. The general idea behind enclosure was one of protection. The walls provided not only physical protection for the religious: they equally fostered their chastity and virginity and, as such, they defended also the sisters' highest form of symbolic capital, their noble honour and public image (Gilchrist 1988; Gilchrist 2000; Hills 1999). Yet, the walls were meant rather as a symbolic reminder of the strict separation between religious and secular life. Enclosure was in the first place a conceptual means of defence, relying upon the mutual respect of both religious and laics (Parmentier 2008; Smith 2001). A variety of 'outsiders' entered the monastic

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[52] (…)it is for them (the sisters) nearly impossible to survive with only water and beer in the extremely humid and wooded valley where they live)(…)(Goffinet 1877)

precinct such as carpenters, blacksmiths, tailors, shoemakers and other craftsmen that were hired in the neighbouring villages[53]. Other social groups frequented the abbey, amongst others labourers, merchants, tenants, pilgrims and relatives of the community members (Joset 1935). Travellers probably also made use of the road passing the enclosed monastic territory.
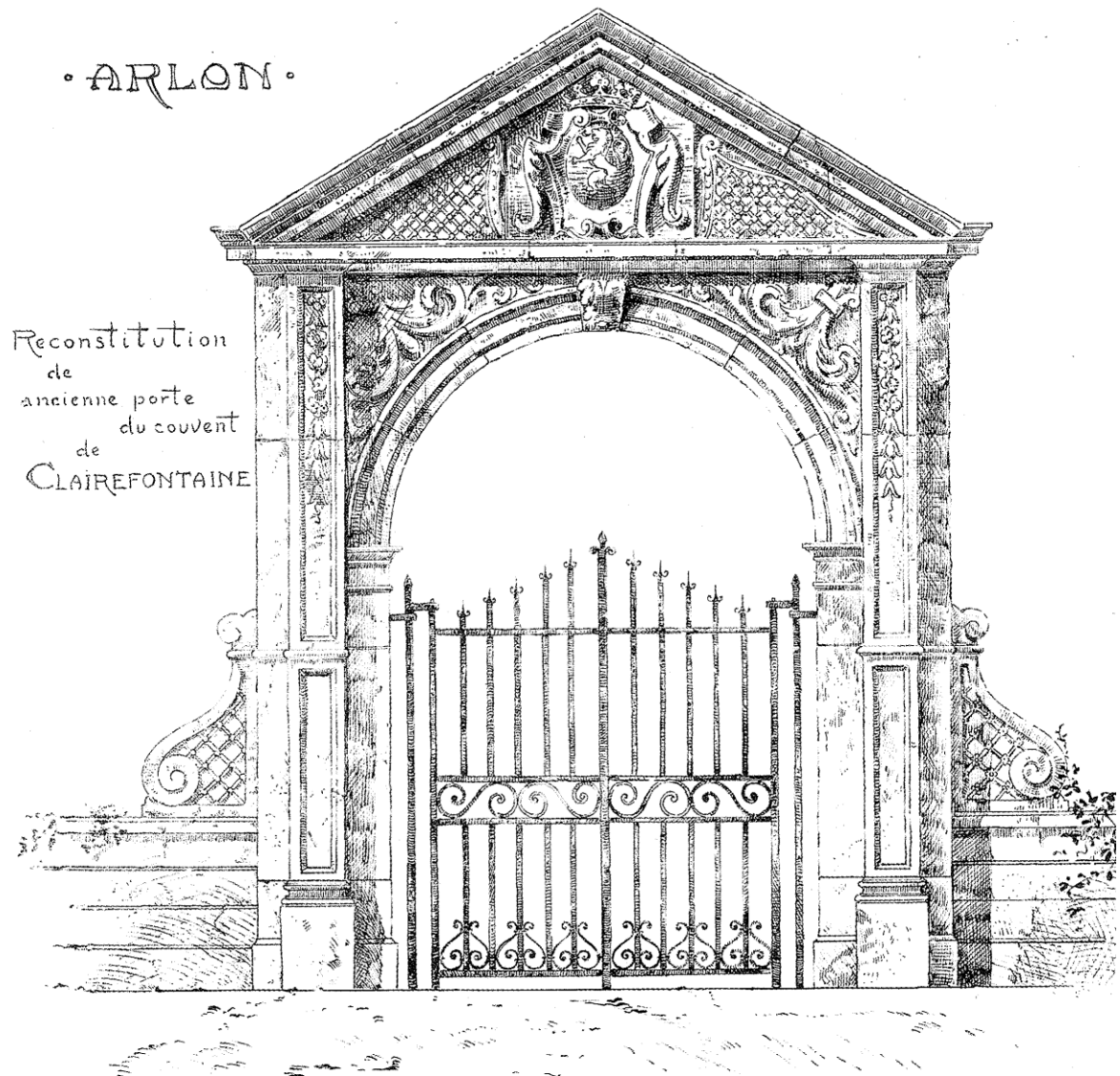
Figure 7—4   Early 20th century drawing of one of the two entrance gates to the 18th century monastic precinct. The façade is decorated with the armour of the Duchy of Luxembourg. After the suppression of the abbey in 1796, the gate was bought by the parishioners of Habergy. Today the monumental gate stands in front of the Saint Donatian church of Arlon (Anonymous 1917)

[53] Archives Nationales de Luxembourg. Fonds Clairefontaine. A- XXV 5
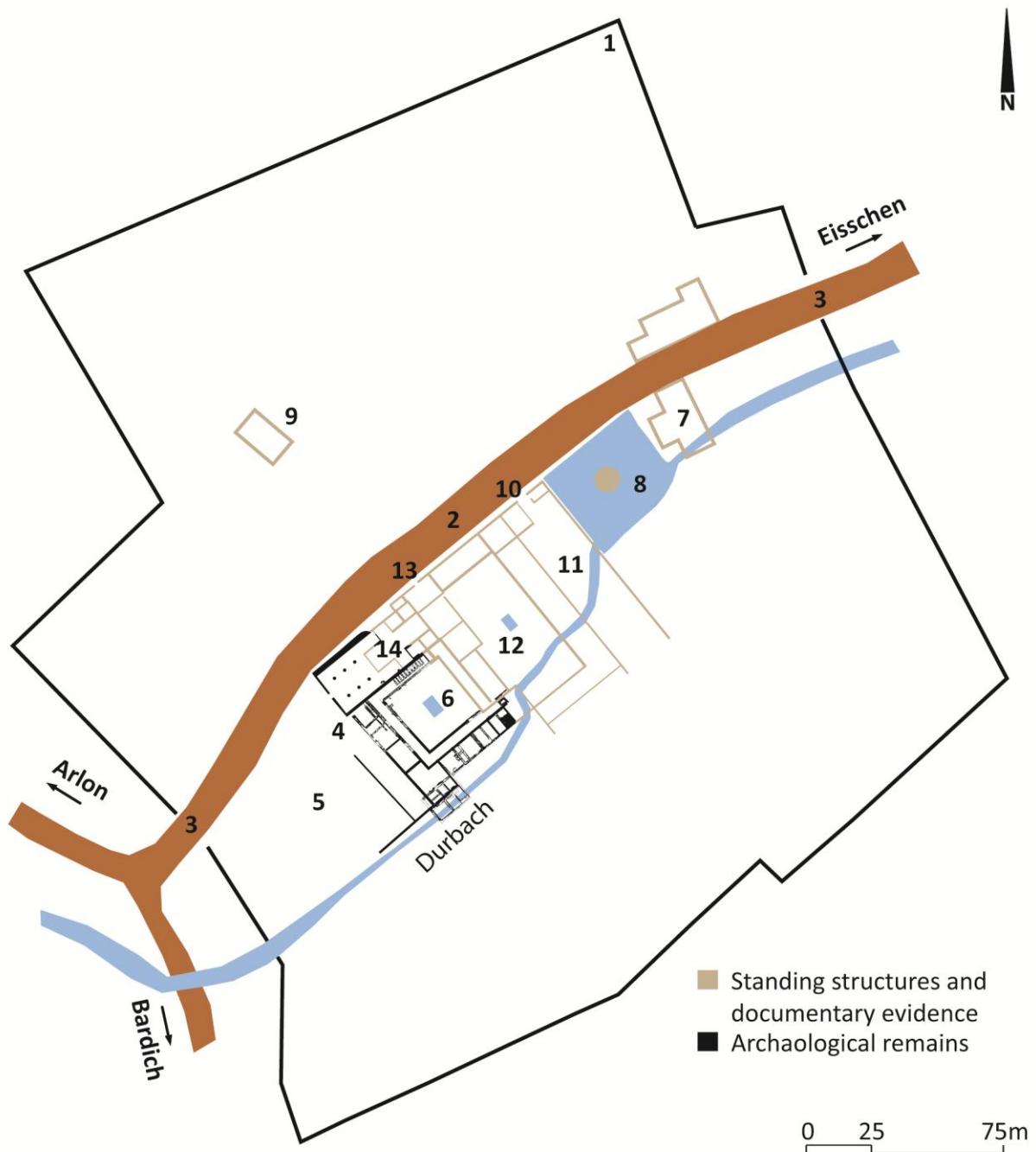
Figure 7—5   Reconstruction of the monastic precinct and abbey buildings based on archaeological evidence, standing structures and documentary sources: 1. precinct wall, 2. road, 3. gate, 4. monumental façade, 5. garden, 6. garth, 7. mill, 8. fishpond and dovecot, 9. court of justice, 10. gate to outercourt, 11. first courtyard, 12. secondary courtyard, 13. gate to the parlour, 14. church (Davy Herremans)

The precinct could be entered from the east and the west. Visitors from both sides had to pass through a monumental gate, decorated by a crowned lion emphasizing the 'royal' and Luxembourgian foundation of the monastery (Fig. 7-4). Once inside the precinct, the first thing the visitors coming from the west faced, was a monumental

façade, about 75 metres long, comprising the entrance of the church and the frontage of the eastern cloister range. In front a geometric *jardin à la française* accentuated this monumental architectural setting. As excavations revealed, the 18th century monastery of Clairefontaine observed a standard layout with an series of functional spaces organized around a central garth. This garden was the core of the cloister and as a metaphor for paradise, a place of solitary retreat (Jäggi / Lobbedey 2008; Kosch 2001; Mohn 2006). The most enclosed spaces such as the chapter room and the nuns quarters were situated in the east wing. These areas were only accessible to the religious. The ambulatory, a corridor surrounding the garth, facilitated movement between rooms. The living quarters of the lay sisters were situated in the west wing. The kitchen was situated as usual south of the garth in the direct neighbourhood of the water. The south wing was also approachable from the abbey farm in the east, in order to allow the supply of goods. In the corner of the south and the west wing, adjacent to the kitchen facilities there was a spacious room with a large fireplace. Owing to the presence of a *rostrum* or platform, the room definitely served as refectory and probably as warming room and area for leisure and pleasure. Visitors entering the precinct from the east had to pass several symbols of seigniorial authority: a watermill and a large fish pond. On a small isle in the middle of the fishpond stood a monumental dovecote. When approaching the religious centre of the monastic complex the attention of visitors from both sides was attracted by the court of justice located north of the road on the ascending slope. The courtyard consisted of a courthouse, a prison and a scaffold that served a visual marker for high judicial power (Bisson 1995). The right to judge exceeded the conceptual level, as in February 1743 carpenters of the village of Eischen were hired to construct a new pillory in preparation for a coming trial[54].

Through a monumental gateway merchants, tenants and workmen entered the first courtyard of the abbey's home farm (Fig. 7-6). Watched over by Saint Hombeline, sister of Bernard of Clairvaux, whose statue was placed in a small arch, all visitors, but also all purchased items and incomes from the estates entered the convent. Through an impressive ambulatory visitors could reach the second courtyard (Fig. 7-5): a large square surrounded by four wings of which two had a purely economic function. This was the economic nerve centre of the monastic estate: raw materials and agricultural products were stored and processed here. The east range of the courtyard gave place to several stables and storerooms. In the south wing there was amongst others a brewery, a forge and a bakery. The arrangement of the north range implies that other social groups

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[54] Ibidem.

entered through the main gate. This architectural unit, still standing today, offered lodgings for travellers and servants, but equally for the almoner of the community. The west wing of the second courtyard was part of the cloister and not accessible from the farm side. The only door led to the private quarters of the abbess with facilities to receive official and high rank guests (Coomans 2004a; Coomans 2005).

Other areas of the convent attested to the interaction between the secluded female religious community and outside society. Facilitator to this interaction was the parlour. During the period of rest in the daytime and the visiting hours relatives were granted to visit and speak to the community members. In Clairefontaine the 18th century parlour was situated east of the abbey church. The religious could enter the room from the chapter house. For visitors there was a separate entry, accessible from the road (Gilchrist 1988; Parmentier 2008). Yet, this gate (Fig. 7-6) was more than just the entrance for visitors. It was the actual main gate of the convent, a symbolic passage between the inside and the outside world. The convent gate often acquired specific meaning in the ritual celebrations associated with the entrance into religious life. It embodied the sisters' definitive departure from secular society. Once inside, the religious would never pass again through it, not even as a corpse, as they were mostly buried within the cloistered space (Hamburger 1992; Prigent 2004; Tibbets Schulenberg 1984). This point of contact between the interior and the exterior bear the stamp of both the community members and their patrons. As most visible and public parts of monastic space they served as an arena for the construction of social identity by client and sponsor, ending in minor and major adaptations of architecture and material culture. As every secular client, the abbesses of Clairefontaine left their mark on the architecture. The façade of the 18th century parlour bears the coats of arms of two abbesses, Elisabeth de Frantz (abbess around 1480) and Marguerite de Gorcy (abbess from 1594-1644). The engraved stones were reused, evident from the fact that the armour of the latter was bricked in upside down. These *spolia,* commemorating the abbesses' noble predecessors, were probably recuperated from the old private quarters of the abbess located in the west range of the cloister and dismantled at the end of the 17th century (Fig. 7-6).
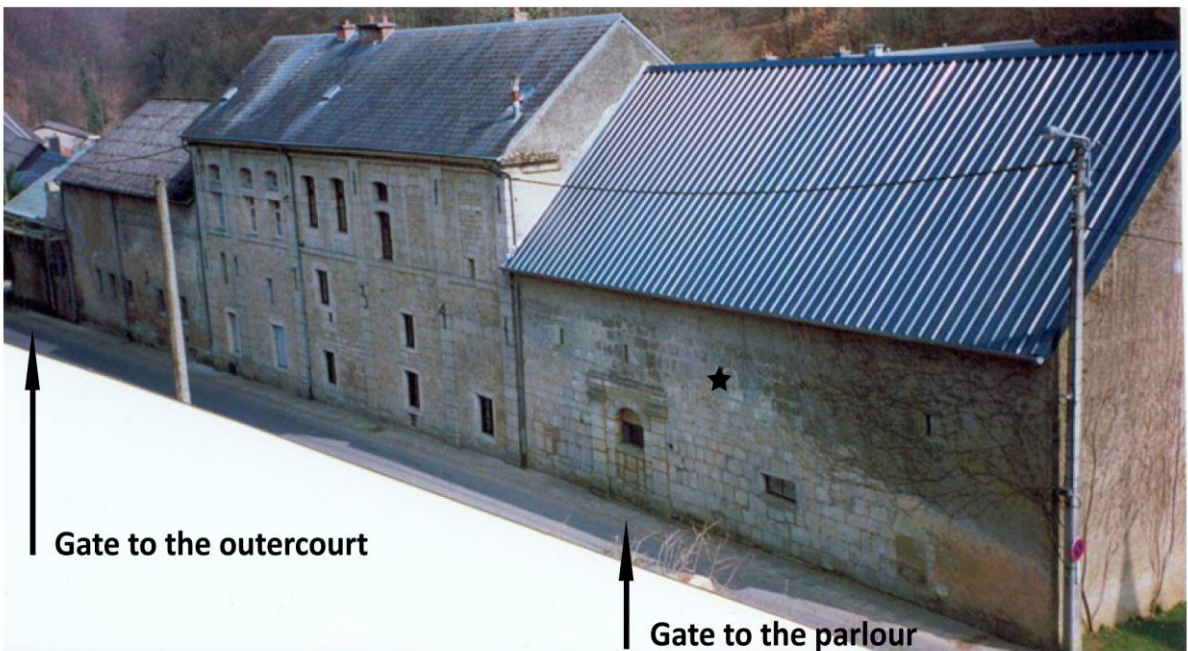
Figure 7—6 View of the north façade of the abbey complex with the entrances to the outercourt (gate of Saint Hombeline) and the parlour. Above the parlour gate (indicated with a star) two reused emblems were bricked in, that of Marguerite de Gorcy, and that of Elisabeth de Frantz (2) (Composition Davy Herremans, images Jean-Pierre Mandy)

As the former burial place of the counts of Luxembourg and a site of pilgrimage dedicated amongst others to Lady Mary and Saint Bernard, also the convent church was a (semi-)public place. Both sisters and lay sisters had separate choirs where they could hear the mass without having direct contact with each other and the priest and without

being disturbed by outsiders. All social groups were able to see the Eucharist as it was placed on the altar in full respect of enclosure. Notwithstanding its architectural separation from the public church, the sister choir facilitated them to reconnect with the outside world. They both joined the same religious rituals and by doing so became a part of the same community (Evangelisti 2007, 52-54). The spacious triple nave abbey church in Clairefontaine was constructed during the early 16th century (Fig. 7-5). Located away from the river, on the highest point of the abbey site, it survived the inundations during the late 17th century. In this church the ancient tombs of Ermesinde, Henry the Blond and their descendants had a prominent place. The tomb effigies of Henry and his wife are known from a 17th century drawing (Guillaume 2010). Their funeral monuments were decorated by the armorial bearings of the diseased, his family and his most important political allies. They were originally meant to underline the status of the departed and his next of kin (Hallam 1982; McGee Morganstern 2000). Yet, the remains of the Luxembourgian dynasty became equally well part of the communities social semiotics. The spirit of the founding family was at the very heart of the community's continued existence. The tombs were material reminders of the historic link between the sisters and Luxembourgian aristocracy and as such brought the community social and symbolic capital (Herremans / De Clercq 2013b; Margue 1994b; Margue 1995). Therefore, the valuable memory of the Luxembourgian dynasty was meticulously maintained and even fostered by the community. Building activity during the 14th , 16th and 18th century implied the complete or partial reconstruction of the monastery church. Despite numerous shuffles during these construction works, the tombs kept a prominent position in the church with high visibility.

7.6 Reproducing noble lifestyle through diet and material culture

Excavations revealed a cesspit, located south of the refectory / warming room. The archaeological structure clearly related to this multi-functional space was abandoned in 1796 when the abbey was suppressed or maybe some years before, and filled up with consumption debris. The content of the structure provides insight into the material culture and food preferences of the last generation of sisters in Clairefontaine. The community's consumption practices cannot be fully understood without pointing at the particularities of noble consumption practices in Luxembourg. The Luxembourgian

nobility was *à la mode*, in the sense that their daily routine was influenced by transforming consumer habits and new forms of consumerism that shaped sociability in 18th century Europe (Hudemann-Simon 1985, 441-443). Yet, their consumption practices differed from those of the wealthy elsewhere in the Low Countries and Northern-Europe. Luxembourg was not as urbanized as other areas in the Low Countries. As such, the new wealthy urban middle class of proto-industrialists and merchant entrepreneurs modifying cultural life to a large extent in those more urbanized areas, was little developed in Luxembourg and consequently rural nobility maintained a much more prominent role (De Vries 2008; Trausch 2003). Luxembourgian consumer revolution was mainly shaped by the lifestyle of the rural nobility and urban life in the major towns of the area, such as Arlon, Luxembourg and Thionville—all small market towns in the outback of the Southern Low Countries and France with a rather provincial character. Far removed from the trading capitals and larger cultural centres of the Low Countries and France such as Brussels, Amsterdam or Paris, the inflow of fashionable ideas and material goods was less omnipresent (Dibbits 2010).

As such, a consumerism with a rather 'provincial' character came into being, merging elements of traditional rural life and more fashionable aspects of 18th century urban life. Inquiry of probate inventories from several 18th century Luxembourgian noble households outlined for example that the presence of Chinese tea sets was exceptional and reserved for the most wealthy and fashion-conscious families. Instead, imitations of Chinese porcelain in substitute wares were omnipresent even in the highest noble circles (Hudemann-Simon 1985; Mousset 1999). This was different elsewhere in the Low Countries where porcelain was present everywhere in the cabins of the rich and even the poor (Blondé 2002; McCants 2008). Decorative elements of all kinds and furniture were modelled according to the latest vogue. Cabinets, commodes, chairs and beds *à la Duchesse*, *à l'Impériale* or *à tombeau* were present in almost every wealthy household. Markedly however, they are mostly made of local wood, generally oak instead of highly fashionable exotic wood species as common in other areas (Gaeng 1995a; Gaeng 1995b). Tea and chocolate were drunk regularly. Other more refined and exotic foodstuff were only purchased occasionally and 18th century noble diet was without doubt dominated by rural products retrieved from the field (Hudemann-Simon 1985).

Diet in Clairefontaine may be considered varied but traditional and in line with the typical consumption practices of the rural elite. Fish was abundantly present in the 18th century food consumption refuse in Clairefontaine. The major part of the remains belonged to fresh water species, chiefly carps, eel, pike, stone loach and chub (Goffette

2012), all bred and cached in the waters and fishponds of the monastic domain (Weyrich 1950). Atlantic Salmon was imported as well as few marine species such as herring, cod and haddock[55]. Part of this marine fished entered the convent prepared. Documentary evidence show that salted cod (*Stockfisch*) was bought and consumed by the community[56]. With the nearest coast more than 250 kilometres away, herring was probably brought in gutted and possibly salted and brined too. The abbey's receipt also mentions the purchase of smoked herring or *hareng saur*[57]. Also crawfish appeared on the sister's table and was bought from fishermen from the valley of the Ernz Noire, a river in the north of the Duchy shaping the current border with Germany[58]. These crustaceans were apparently an important element of noble diet during the 18th century (Hudemann-Simon 1985). Unknown from documentary sources, but clearly demonstrated by archaeology is the consumption of frog legs (Goffette 2012). Poultry was another important element in the sisters' diet. Mainly ordinary fowl was served but regularly other species appeared on the table such as capon, duck, turkey, goose and even swan[59].

These fishes, crustaceans and poultry offered a permissible alternative for meat with regard to animal proteins (Ervynck 1997; Ervynck 2004). The rule of Saint Benedict prohibited the consumption of meat of four-legged terrestrial animals, except for sick people (Coune / Vrensen 1986). During the Middle Ages this prohibition was observed strictly as illustrated by the near absence of mammal bones in monastic debris as attested on several monastic sites in the Low Countries and Western Europe. The rigor of observance however seemed to weaken from the Late Middle Ages onwards. As such, beef, goat and lamb became more commonly consumed. The consumption of pork however is supposed to have been sinful much longer, as pig remains appear only seldom in early modern monastic bone assemblages (Ervynck 1997). In Clairefontaine the community members consumed meat of four-legged mammals, mainly of cattle, pigs and sheep, on an everyday basis (Goffette 2012). These species were all bred on the outer court and on the more distant possession, and as such meat, just like poultry and fish, came in as part of rents and seigniorial contributions[60]. Historical sources show that until late in the 18th century, the community had its flocks of pigs herded in the manorial oak woods surrounding the abbey, according to a seigniorial privilege they were awarded

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[55] Ibidem.
[56] Ibidem.
[57] Ibidem.
[58] Ibidem.
[59] Ibidem.
[60] Ibidem.

by the Counts of Luxembourg during the 13th century (Goffinet 1877). The community was also allowed to hunt in these woods and as such undomesticated animals like hare and thrush ended up on the table. The consumption of veal, suckling pigs and lambs indicates the sisters love for tender and young meat [61]. In particular, calves lungs seem to have been a very popular dish[62]. Documentary evidence makes the consumption of such young animals quite tangible: as noted in the abbey's book-keepings, the kitchen was equipped with a mechanic spit driven by a system of weights, comparable with that of a *pendulum* clock. An utensil used frequently since the community had to change the string of the mechanism regularly[63].The consumption of these young animals suggests a high quality diet. Furthermore, the high amounts of pork consumed in Clairefontaine as well as the abundant consumption of crustaceans and prestigious birds like pigeon or swan, fits a noble way of life (Hudemann-Simon 1985, 441-443).

The 18th century vogue to drink French wines seems to have largely passed the sisters in Clairefontaine by. Only a few typical French flowerpot-shaped wine bottles are present in the find assemblage. The abbey owned rights on several vineyards near Grevenmacher along the Mosel, an area famous for wine production since Roman times. During dinner the sisters enjoyed a variety of other drinks. The accounts of the abbey report the purchase of mineral water bottled from the natural sources of Spa, a small Belgian town and from the 18th century a famous health resort known for its therapeutic iron rich and carbonated water. The highly decorated tankards in stoneware, originating in the area of Raeren or in the *Kannenbäckerland* near the Westerwald, point at the consumption of beer that was in the brewery in the outer court with hops and yeast picked on the monastic estates [64].

Material culture and the consumption of such luxury goods reveals more mundane aspects of daily life inside the convent walls. Tea and chocolate were purchased on a regular basis and in large amounts. As fit for 18th century ladies, the Clairefontaine sisters liked their tea sweet (McCants 2008; Mintz 1993; Vickery 1993; Weatherill 1988), since the abbey receipts note the purchase of sugar and pastries in rather large amounts[65]. According to 18th century sociability, these fashionable products were consumed in groups (Laan 2003; Pennel 2010) as demonstrated by the various tea and chocolate sets of the sisters made of Chinese porcelain, English industrial ceramics and European tin-glazed pottery. Along came matching saucers and other utensils such as teapots, chafing

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[61] Ibidem.
[62] Ibidem.
[63] Ibidem.
[64] Ibidem.
[65] Ibidem.

dishes, sugar pots, rinsing bowls and milk jugs. Imports such as Kangxi and Qianlong Porcelain, English Cream Ware, English Pearl Ware and Staffordshire pottery were well represented in material culture. Nevertheless, they were eclipsed by the number of cups, saucers, and teapots in cheaper substitute wares, such as tin-glazed pottery and locally produced lead-glazed red ware. The quality of body, glaze and painting of the cups and saucers in Kangxi and Qialong porcelain was fairly good but clearly inferior to that of the imperial-class porcelain on the European market (Bouman / Schulten 2007; Jörg 1982).

Figure 7—7   Selection of crockery for the consumption of tea and chocolate revealed during excavations in Clairefontaine. All belonged to sets of 6 or 8 vessels. Chocolate cups and associated saucers in tin-glazed ware (1 and 4) and redware (2 and 5). Teacups with associated saucers in Kangxi porcelain (7 and 8) and English Creamware (3 and 6) (Davy Herremans)

The sisters also dropped into other worldly consumer practices. Hard liquors such as *eaux-de-vie* (brandy) and mead were mentioned on the communities receipts[66]. Several well-decorated small shot glasses in glass *à la facon de Bohème* acknowledge the consumption of spirits *en petite goute*. Several typical small glass bottles with narrow mouth and everted rim suggest the sisters were taking snuff (Laan 2003). The religious also enjoyed a smoke now and then as acknowledged by the purchase of large amounts of tobacco and the numerous fragments of white clay pipes on the cloister garth[67].

Figure 7—8   Shot glass in glass *à la façon de Bohème*. The object was used for the consumption of brandy or other spirits (Davy Herremans).

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[66] Ibidem.
[67] Ibidem.

7.7 Conspicuous consumption and social distinction inside the convent walls

Female convent life involved a series of ritual and occasionally exchanges in which material culture played a key part as a symbolic marker (Syson / Thronton 2001, 33-38). In elite convents, the nun's dowry that had to be paid to the convent provided not only in a means for the community but equally in the sisters personal living allowance and a sort of monastic trousseau made of clothes, furniture and material possessions. Often such donations also contained religious objects that could serve in ceremonies and sacred life (Evangelisti 2004, 9; Johnson 1991, 107-110). More occasionally material goods entered the community as part of personal donations by families and relatives (Gilchrist 1993). The parlour served as transit zone and stage for these material transactions.

Personal donations were often accompanied with separate contributions to the convents budget (Evangelisti 2007). Besides, parts of the sisters personal budgets and possessions were diverted for communal purposes. When used for performance in (semi-)public such as the church or parlour, material culture and personal items became visible for outsiders and markers of the community's elite identity (Baernstein 2002; Evangelisti 2004; Hills 2003). Therefore chains of material supply were often maintained by monastic authorities, instead of challenged. The documentary record reveals a dispute between the members of the community in the year 1748 when three sisters, Augustine d'Offenberg, Anne-Claire de Robert and Marie-Anne de la Fontaine voluntarily chose a more severe way of life then there colleagues. They observed absolute silence and refused every kind of luxury. As so, the three sisters refused to eat meat, they fasted more than required, they slept on the ground without mattresses and they preferred clothes of shalloon instead of linen[68]. Assumedly the community and abbess Marie-Rose de Jodenville thought little of such ideas and despite their pious ambitions, the three 'mutinous' sisters were send to another convent[69].

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[68] Archives de l'Etat, Arlon. Conseil Provincial. 1751, 161-162
[69] Idem, 1.

Figure 7—9 Personalised beaker in glass *à la façon de Bohème*. The beaker was probably owned by Cécile de Florange, precentor in Clairefontaine and mentioned in the inhabitants lists since 1711 (Davy Herremans).

Material culture without doubt abridged the physical and mental distance between the religious and the world to which they once belonged. Yet, the social meaning for the religious women was multiple: gifts equally served as symbolic capital in the social networks of personal and as family connections within the religious community (Evangelisti 2004; Johnson 1991; Signori 2008). And as such, material culture contributed to the negotiation of individual identity and played an important role in the mechanism of social distinction that existed within the convent walls. Amongst the abundant collection of highly decorated glass à *la façon de Bohème*, revealed during excavations in Clairefontaine there was a well preserved tumbler with an engraved motto. The surviving letters, of uneven quality, cut in the glass, can be read as "VIuuE MADAME F. . . ANGE . . . REFONTAINE." The personalized beaker was probably owned by Cécile de Florange, precentor in Clairefontaine and mentioned in the inhabitants lists since 1711 (Goffinet 1877, 117-156). Apparently the piece was decorated by more than one engraver. In the first stage of decoration, the tumbler was ornamented with the floral motif between the fasces. Although the twigs in the central theme are unequal in length, the design is detailed and carefully engraved. However, the unpolished style of the engraved maxim squeezed between the two fasces should be noted. The engraver failed to estimate the space for the inscription correctly: the last two letters of what was supposed to be "CLAIREFONTAINE" were awkwardly placed beneath the rest of the word. The wish for good health (*Viva*) is occasionally found on 18th-century drinking vessels all over Europe, but the custom of decorating vessels with such sentiments dates back to Roman times. This personalized beaker meant for everyday use reveals the practice of gift exchange between community members and relatives outside. Despite its doubtful quality the

glass was an element in a game of social representation. The beaker celebrated the sister's social and family networks and may have strengthened Cécile's position in the community. The beaker carried not only Cécile's family name, it may equally have been part of and symbol for a more substantial contribution of the *de Florange* family to the community's welfare.

Figure 7—10   Two lids of teapots that bear a scratched mark. They were probably a personal possession of one of the sisters in Clairefontaine (Davy Herremans)

Such gifts became especially meaningful when used in processes of social interaction such as shared use and convivial practice. Both tea- and chocolate cups were bought in sets of six or eight pointing at a convivial use. Furthermore, a series of lids of teapots, all bear a scratched mark suggesting that they were part of the personal belongings of one of the sisters or maybe of a group of sisters. In various reports on Canonical visits, the Order's authority indicates the persisting negligence of communal life and the repeating performance of convivial drinking in the parlour together with family members and relatives (Goffinet 1877, 117-156). Thus, it is not so difficult to imagine a group of sisters enjoying tea or other luxurious consumption goods during noon in their private quarters or with visitors in the parlour. A scene that reminds us of the 18th century painting 'The parlour at San Zacharias' (1740-50) by Giovanni Antonio Guardi on which a tea-party is depicted. It is only the caption of the painting and the appearance of veiled women that

assure the scene takes place in the parlour of the San-Zacharias convent in Venice and not in the salon of one or another wealthy lay family.

7.8 Conclusions

The work of Guardi illustrates that the case of Clairefontaine is not singular and that early modern religious women may not have been necessarily living in a remote reality, detached from the secular world with all its pleasures and desires. Instead, they were part of an entire social system in which, the religious women as individual, their families and the monastic community as a whole participated for common and personal advantages.

As this paper demonstrates, the combination of archaeological and historical sources allows us to reconstruct how all these social groups interacted with their material environment in an attempt to define and shape their social setting. The precise significance of their behaviour comes only clear in narrative contexts. Since the community was populated by mainly noble women from Luxembourg and the surrounding areas, the story of the community can only be read against the social and historical background of 18th century Luxembourg and its nobility. A traditional rural nobility that negotiated its social position mainly through a durable sign system comprising a plethora of conspicuous and communicative concepts, actions and material manifestations that expressed noble identity.

The sisters in Clairefontaine deliberately used aspects of this noble sign system in the monastic context to create a social identity that emanated their noble background. Just as in the secular world, appearance and lifestyle were put first, instead of monastic discipline. Meanwhile, the religious installed a noble way of life inside the convent walls, by creating a kind of microcosm, structured by the same material and immaterial references for social distinction as in secular society. Material culture, architecture and consumption practices were related to that of their noble relatives on the other side of the wall. Through reproducing aspects of noble behaviour, such as material culture, consumption patterns and elements of sociability, the sisters in Clairefontaine continued their worldly existence and crystalized their noble background. Through conspicuous material and immaterial statements, imitating lordly behaviour, the sisters interacted with the surrounding lay society. These claims on public space reified the noble identity of the community. The noble way of life was fostered from outside by gifts and material supply. The incoming goods materialized the social and family networks that connected

relatives inside and outside the convent walls and provided the sisters with symbolic capital. As such, material culture served as a conspicuous statement to create social networks and achieve social distinction within the community.

Chapter 8   Final thoughts, further research perspectives and conclusions

8.1 Introduction

We believe that the research presented in this thesis may be seen as a valuable contribution to the study of female monasticism in the Low Countries during medieval and early modern times. We mean to have demonstrated the value of archaeological remains and material culture (in combination with historical sources) for the reconstruction of daily life in monastic context. As ultimate reminders of past human practice, archaeological remains have proven to be useful in revealing the multiple social identities at play within the convent walls. Furthermore they showed their significance in the designation and reconstruction of the often durable social relationships between the community and a variety of actors in the outside world.

The work presented here may not be looked at as an exhaustive chronological study of the Clairefontaine material record, nor is it meant as comprehensive or far reaching comparative work on the material culture of religious women in the Low Countries. We consider our work merely as a starting point of further research on Clairefontaine and the archaeology of religious women more in general. The chapters included in this thesis elucidate social and material life in a classic example of a historical Cistercian nunnery, but all the more they are meant to indicate valuable (and often unexplored) themes and methods for further inquiry of monastic life by means of material remains.

Therefore, this final chapter does not only summarizes conclusions and achievements reported in this thesis, but equally discusses some recommendations and further perspectives for research on monastic space, material culture and consumption practices of religious (wo)men in the Low Countries from an archaeological point of view.

8.2 Monastic space, consumer practices and social identity: final thoughts

8.2.1 In general

This research has endorsed the dialectical relationship between the social process of identity formation and the material world. A Cistercian nunnery may be seen as a contact zone between various (and often conflicting) social identities and structures (Gilchrist 1988; Gilchrist 1993) and Clairefontaine has therefore proven to be a singular case in point for the study of such social dynamics. The multi-disciplinary approach applied in this research has proven to be highly valuable for the study of vanished social structures and we wish to follow Grassby in the assumption that artefacts cannot reveal underlying cultural values without other evidence (Grassby 2005, 599). Realising of course that medieval and post-medieval archaeologists may be overindulged as the sources for the post-roman period are without doubt more plentiful (Herremans / De Clercq 2013a).

In this thesis material culture, cultural space and consumption practices were reconstructed by assessing architectural remains and artefacts in combination with information from archaeological proxies such as history, archaeozoology and archaeobotany. This varied dataset was 'read' within a wider historical and interpretative framework. The exact the use of such a multi-facetted approach allows us to grasp the deeper meaning of human practice even in complex social environments. With the case study of Clairefontaine it becomes clear that the results of different historical sub-disciplines are complementary and can improve each other's value and significance by providing the necessary context for interpretation. This may be illustrated with two simple examples:

1) Archaeological fieldwork and post-excavation analysis of the structural remains of Clairefontaine abbey revealed a complex building-chronology consisting of four major phases (CLFI, IIa, III and IV) and one important sub-phase (CLFIIb). These relative chronologies only became meaningful when placed in the broader political history of the region and linked up with the quest for capital and social identity of historical actors such as Henry the Blond, John the Blind, Ladislas Posthumus, the family de Bade, Elisabeth d'Autel, and many others.

2) For two periods in the history of the convent (13th-15th century and 18th century) we were able to understand consumption practices and the quality of daily life. The clarity of the picture of monastic life we obtained, was enabled

by the variety of sources available, comprising not only material evidence on architecture and household goods, but also containing food consumption debris and an extended written record. Findings were interpreted within our theoretical framework on material culture, agency and identity and interpretation was defined in the wider historical context of medieval and early modern society and (female) monasticism in the Low Countries. This allowed us to broaden our view and link up the case of Clairefontaine with wider cultural, social and historical phenomena. As such we were able to be less narrowly focussed and therefore create a more panoramic image as well.

8.2.2 Of founders, benefactors and abbesses: the stamp of the individual agent on material life in Clairefontaine

We have demonstrated that the material setting of the religious community in Clairefontaine was continuously (re-)modelled through active intervention from outside. The communities benefactors and patrons found in the abbey of Clairefontaine a welcome arena to negotiate and display their political and social aspirations: in their quest for economic, social and symbolic capital they invested intensively in the infrastructure of the sisters.

The construction of Clairefontaine I was largely financed by the counts of Luxembourg and their vassals. It was a prestige project underlining the social aspirations of the House of Luxembourg-Limbourg and Henry the Blond in particular. He endowed the community with the necessary land, finances and political support (Goffinet 1877, 14). In return the name of the founders were recited in the daily prayers. Investing in religious life offered them and their families spiritual welfare, but all the more an opportunity to underline their noble identity and social status.

The construction of Clairefontaine IIa can be related to the personal ambitions of John the Blind count of Luxembourg and King of Bohemia. Somewhere in the first decades of the 14th century the famous count decided to choose Clairefontaine as a site for his own burial (a decision he made legal through his testament in 1340) (Goffinet 1877, 168-169). From the second decade of the 14th century onwards building activity was noted in preparation of the 'Royal' burial. John the Blind directed the creation for a new and prestigious grave as expected of a man of his kind, leading eventually to the construction of a new abbey church and cloister. All these times local nobility also contributed substantially to the project to link up with Luxembourgian aristocracy (Goffinet 1877, 115-173). The ambitious project was never finished. After the sudden death of John in 1346, his son Charles IV decided to bury his father (against his will) in the Benedictine

abbey of Neumunster for proper political and social purposes (Margue 1997). The difficult financial period that the abbey went through after this decision, highlights the limited flexibility of such religious communities and demonstrates their fragile economic basis and dependence on exterior support.

The mid-15th century rearrangements of Clairefontaine IIb may be related to Ladislas Posthumus. As a descendant of Sigismund of Luxembourg he inherited the title of duke of Luxembourg. Ladislas struggled with Philips the Bold, duke of Burgundy for power in the Luxembourgian area. He searched and found support for his struggle with a large part of Luxembourgian nobility (Würth-Pacquet 1877). The traces he left in the material culture of Clairefontaine may reflect his bonds with the family d'Autel whose members had a leading role in the successive revolts against Burgundian power (Péporté 2006). Between 1434 and 1474 Elisabeth d'Autel was abbess in Clairefontaine (Kelecom / Muller 2010).

As part of their propaganda strategies, the dukes of Habsburgs systematically invested in the memory of their legal predecessors. As such, they spent a lot of money on the restoration of the old dynastic burial churches and abbeys of the old aristocracy of the titles they had acquired (De Jonge 2005, 125-146; Dhanens 1985; Smolderen 1980-1981). Successively Maximilian I, Charles V, Philippe II and the Archdukes Albrecht and Isabella recognised the ancient privileges of the community. Meanwhile, they presented themselves in the legal documents as natural successors of the counts of Luxembourg (Goffinet 1877). Some of them left their traces in the material setting of the sisters. For instance Maximilian I whose coat of arms were displayed on stove tiles. During the first half of the 16th century the abbey was totally reconstructed under impulse of Christophe and Bernard de Bade and Pierre-Ernest de Mansfeld, all governors in service of Charles V (Goffinet 1877, 228-231). These men were without doubt visually present inside the convent since emblems of Charles and his relatives and of Pierre-Ernest de Mansfeld were recognised on several stove tile fragments.

The relationship between the community and its benefactors was reciprocal. Patrons and donors gained in prestige by investing in religious life, but on the other hand, these investments meant an upgrade of the quality and the prestige of monastic life. The material setting of the community was improved and prestigious donations highlight the social networks of the community. These social dynamics may be illustrated by the cultural biography of the abbey church and the tombs of the members of the House of Luxembourg-Limbourg. The remains of the Luxembourgian dynasty enlarged the prestige of the convent and allowed the monastery to distinguish itself from other religious houses in the area. Furthermore the 'Royal' tombs attracted various social groups willing to link up with Luxembourgian aristocracy. As such local nobility invested intensively in monastic life in Clairefontaine. Also European rulers, such as the Dukes of Habsburg

showed interest in Clairefontaine in search for legitimization of their power in the Luxembourgian area. Therefore, the valuable memory of the departed was meticulously maintained and even fostered by the community. Building activity during the 14th , 16th and 18th century implied the complete or part reconstruction of the monastery church and the relocation of the remains. Despite, these reconstruction works and grave shuffling the most prestigious tombs kept a prominent place in the abbey church. In this light, the construction of a commemorative chapel in the 19th century, right in the very heart of the sanctuary of the church does not seems coincidental and may be considered as a well-thought symbolic act by the Jesuits to give material base to their Marian cult.

As patrons and donors definitely left their traces on monastic space and material culture, so did the successive abbesses put their mark on material life in Clairefontaine. Entering the convent offered medieval and early modern women a chance to climb up on the social ladder. Just as the secular society was organised so too various hierarchical positions existed within a monastic community. The most prestigious of all was that of abbess generally reserved for women of prominent noble families endowed with the necessary financial means (Evangelisti 2007). As the example of Clairefontaine demonstrates these abbesses had a social role comparable to that of a worldly lord, a position that in the secular world was hardly obtainable for women. As any secular lord, the abbesses left a mark on the material setting of her 'residence', the monastery. When Maximilian I recognised the ancient privileges of the community in 1480 he donated a set of stove tiles to monastery. It was not only the heraldry of Maximilian that decorated the stove but equally those of Elisabeth de Frantz, the residing abbess at that time. Most convincing however is the story of Catherine de Berentzheim who had erected a monumental private quarter on the place of the former monastic kitchen complex. Some reused architectural elements in the façade of the 18th century parlor bear the coats of arms of two abbesses, once again Elisabeth de Frantz (abbess around 1480) and Marguerite de Gorcy (abbess from 1594-1644). These *spolia* suggest that other abbesses also left their stamp on the communities material setting.

Agency and the negotiation of social identity modelled the material setting of Clairefontaine. Yet, it is important to realize that other more natural matters contributed to the history of the abbey and the community living inside its walls. Stratigraphy revealed that the sisters in Clairefontaine were faced with floods and rising water levels from the early days on. Every construction phase was preceded by a considerable raising of the site. As such, in the first half of the 17th century the community was forced to reconstruct part of the abbey buildings because of purely practical reasons (Goffinet 1877, 252-253). Such disastrous events however can also facilitate the staging of agency (Archer 2000). This may be illustrated by the total reconstruction of the abbey at the end of the 17th century-early 18th century. Several successive floods had ruined the first floor

of the conventual buildings . Consequently, the site was raised by more than 1.5 meter to face the rising water level of the river. This event is usually considered as a low-point in the abbey's history. Nevertheless, it must be noted that the community, under the direction of abbess Marguerite of la Fontaine, turned the situation to her advantage and gave rise to an entirely new and monumental monastic complex (Goffinet 1907, 129).

8.2.3 Acting religious, being noble: reproducing secular social structures and aspects of noble behaviour in monastic context

From the early days on until late in the 18th century, the community was populated by daughters from distinguished families. Clairefontaine was a prestigious house and the clear link with Luxembourgian aristocracy attracted members of the highest feudal ranks. Entering the convent was a privilege reserved for the indigenous elite: long time Luxembourgian origin and noble birth were two absolute conditions to take the vows (Goffinet 1877). As the most prestigious convents, the community of Clairefontaine was kept socially pure through high conventual dowries (Hills 1999). Since most of the community members were recruited amongst high class noble circles, their behaviour and consumption practices were shaped by 'a noble way of life':

Aspects of noble culture were re-created inside the convent walls. For the period 15th century-16th century especially the presence of several tile stoves testify of a noble material culture. Such stoves were part of the gift exchange of the late medieval elite and took a central place in the reception area and living quarters of castles and elaborated urban houses (De Clercq et al. 2007b). Their iconography mirrored aspects of identity of both the owner and the giver (Hinton 2011). Present in the material setting of daily life, the tile stoves in Clairefontaine highlighted the social relations of the community and the abbess, but equally made the sisters feel at home.

Food consumption revealed aspects typical of a monastic diet (Ervynck 1997; Ervynck 2004). As such fish was one of the main elements in 18th century cuisine. Yet, diet also revealed aspects that were typically noble such as the consumption of certain large game species caught in the seigniorial oak woods, certain fish species bred on the numerous ponds and moats on the monastic estates and prestigious birds such as swans and pigeons. Also the abundant consumption of pork and young mammals, in particular lambs, calves and suckling pigs points at a high quality diet. The 18th century diet of the sisters in Clairefontaine shows many similarities with that of the Luxembourgian rural elite at that time, combining aspects of a traditional rural kitchen and more refined consumption goods of fashionable 18th century urban middle-class culture (Hudemann-Simon 1985).

Social structures of noble family life were reproduced. It seems that certainly in the 18th century the community got subdivided spontaneously into different smaller entities or *familiae*, reproducing the social dynamics of a real family by uniting relatives and the like-minded. Such social structuring also mirrored in material culture and monastic space as demonstrated by the personalized objects in the 18th century find assemblages and the household goods that refer to the practice of consuming refined food and drinks 'in company' with friends or relatives. The reproduction of 'the noble way of life' inside the convent walls was fostered from outside. Sisters were provided by their family in the necessary means for a comfortable life. Furthermore, reports of successive canonical visits in Clairefontaine inform us about the negligence of enclosure and the performance of convivial drinking in the parlor together with family members and relatives (Goffinet 1907). Assumedly many of the luxury items entered the convent through the parlour gate as their purchase is only seldom reported in the abbey's receipts.

The sisters actively seek ways to communicate their noble identity to the outside world. For instance the 18th century abbey complex revealed itself gradually to the visitor. Along their way, visitors were faced with various material references emphasizing the elite character of the community. Outsiders were guided through the precinct and forced to take notice of the monumental architecture of the monastic complex, the heraldry of benefactors, patrons and abbesses in architecture and material culture, and various lordly symbols present such as the large pond with dovecot and the scaffold on the hill (Buylaert et al. 2011). Furthermore, the community of Clairefontaine, in the person of the abbess acted as worldly lord on its seigniorial territories through the performance of high jurisdiction and several seigniorial rights. The collecting of seigniorial contributions and the exertion of seigniorial rights was a claim to public space that articulated the communities dominance over the area and underlined the sisters noble and lordly status. A network of enduring territorial markers delineated the abbey's estates comprising boundary stones but equally more symbolic elements such pigeon houses, ponds and architectural possessions.

8.2.4 Between two worlds: conflicting social identities inside the convent walls

These processes of social identity formation took place within the particular context of monastic life with all its religious regulations and social restrictions. Consequently a vivid interplay arose between aspects of worldly behaviour and religious social structures, reflected in the material setting.

The architectural concepts of successive medieval abbey churches in Clairefontaine, demonstrates the way social and religious aspirations were reconciled. Passage in the church needed to happen in respect with regulations on separation and enclosure (Hamburger 1992; Mohn 2006, 22-34; Tibbets Schulenberg 1984, 69; Untermann 2003, 59-63). Sisters, lay-sisters, priest, benefactors, pilgrims and other social groups circulating in the church were carefully separated by architecture and spatial organisation. In this well-thought architectural setting, the tombs of the founders and sponsors of the community were given a prominent place, close to the altar, visible to the religious during worship and equally approachable for people outside of the community on certain occasions .

Another convincing example may be found in the scheduling of construction works. Archaeology and historical sources demonstrate that building activity related to the phases Clairefontaine II and III took both over half a century. We may assume that these construction works were accomplished in several phases because everyday life had to continue and the impact on religious life and enclosure needed to be kept to a minimum.

Archaeological and historical sources demonstrate that the interaction between religious and worldly practice could eventually lead to conflicts. At the end of the 15th century the female community in Clairefontaine was replaced by a group of Cistercian monks. In Clairefontaine it seems that an affair between Gofrinum the communities confessor and procurator, and abbess Sophie de Muel was the trigger for the reform (Goffinet 1877, 228-231). This event however needs to be situated within a broader reform movement that came about in the transition period between the Middle Ages and Early Modern Times. These reforms acted on moral deterioration and decadence thriving inside the walls of many monastic houses in Europe, but equally aimed on cutting through the entwinement of religious life and the social agendas of the secular elite (Bonis et al. 2001; Henneau 2002; Montulet-Henneau 1990). Probably not only Sophie's affair, but rather multiple causes led to the installation of a group of 'reformed' monks in Cairefontaine.

Successive canonical visits during the 18th century revealed negligence of religious regulations on poverty, communal life and enclosure (Goffinet 1907). The reports of these visits outline excesses on material and non-material consumption, which is ascertained by material culture and archaeological remains. The excesses of a large part of the community led to conflicts with the superiors of the Order, but equally with other sisters who were found indeed prepared to put a side pleasure and comfort in service of God (Joset 1935).

8.3 A way forward for…

8.3.1   …research on Clairefontaine

As already outlined in the introduction to this chapter, this thesis is does not pretend to be an all including chronological study of the material record of Clairefontaine abbey. First of all, find assemblages treated in this research were thoroughly selected on their nature, quality and suitability for the methodology presented [see paragraph 1.4]. The remaining find collection is merely touched in this thesis and may be suitable for inquiry in which a contextual analysis is not put first.

On the other hand, the dataset taken into consideration in thesis has not yet been exhausted: the study of the plant remains recovered from the 18th century latrine is still in progress (on-going project with Mona Court-Picon, Sidonie Preiss and Aurelie Salavert, Royal Belgian Institute of Natural Sciences, Earth and Life History Division) and will no doubt demonstrate new elements on daily life and consumption habits of the last generation of sisters in Clairefontaine. Also the study of the 18th century material culture and animal bones is not at an end (Goffette 2012). All of this data still needs to be published together in full detail. Furthermore, archaeometrical analysis on 18th century coloured glass (on-going project with Simone Cagno, Anke Vincke and Koen Janssens, Antwerp University, Departement of Chemistry), Chinese porcelain (on-going project with Jolien Van Pevenage, Debbie Lauwers, Bart Vekemans and Peter Vandenabeele, Ghent University, Department of Analytical Chemistry) and white wares (Van Pevenage 2009) are still in progress and results may contribute to further archaeological and historical interpretation. Assumedly this archaeometrical research will not only contribute to the study of consumption habits but equally tell us more about technology and the origin of those materials. Also research on the stove tile collection may be oriented in the future more towards technological aspects on which there are still many questions. Recent archaeometrical research on some samples seems promising (On-going project with Kaat De Langhe and Peter Vandenabeele, Ghent University, Department of archaeology).

We hope this study also triggers 'Luxembourgian' historians to resume research on Clairefontaine. Since they showed little interest in contributing to the project so far we were forced to analyse the historical documents chiefly by ourselves. Therefore we had to rely mainly on published sources such as the cartulary of the abbey published by Hypolythe Goffinet in 1877. A re-analysis of the charters of the abbey may definitely add to further interpretation. Furthermore, current research and especially the study of the relation between the community and the Luxembourgian nobility may profit from

expertise on the Luxembourgian feudal elite present amongst Luxembourgian academic circles. On the other hand, the results presented here may refine historical scholarship on the foundation of the abbey and the first centuries of its occupation. In past and recent research, generally the 18th century monastic lay out (as recorded by the Jesuits) is simply projected into the 13th century and as such falsely used to reconstruct the material setting of the late medieval sisters (Margue 1994b; Margue 1995; Péporté 2011). Archaeology however clearly demonstrated that the small-scale monastic complex of the 13th century bore no comparison to the monumental abbey of the 18th century. Finally, a sequence of abbey receipts from one year in the 18th century were studied in detail (transcription provided to us by Isabelle Bernard), many more sequences however remain unexplored (Bernard 2001; Joset 1935).

8.3.2 … the study of (female) monasticism in the Low Countries through archaeological remains

In the introduction to this thesis we outlined that not less than eighty-five Cistercian nunneries were founded in the ancient Low Countries during the Late Middle Ages. Up till now, at least thirty of those nunneries have been the subject of minor archaeological interventions or large scale excavations (Fig. 8-1). These excavations have generated an extended material inventory. Besides, in most of the areas the dataset is growing faster than ever since the introduction of 'Malta-archaeology' (De Clercq et al. 2012). A large part of this old and new data remains poorly studied or even fully untouched (Coomans 2004a). Despite, the difficulties in accessing old unpublished data, the worrying quality of some of the current field reports and the problems on quantity, variability and preservation of the archaeological finds, the dataset offers a unique source for study on site-level, but equally for more profound comparative work on a national and international level on female Cistercian monasticism. When it is also taken in account the material record of excavations on male abbeys and on house of Order different to the Cistercian, the dataset is even more impressive and nearly inexhaustible, realising monastic archaeology is one of the traditional themes in medieval and post-medieval archaeology (Herremans / De Clercq 2013a; Verhaeghe / De Meulemeester 1988; Verhaeghe / Otte 1988). To sketch an image of the available dataset: the proceedings of the conference *archaeologia medievalis,* held between 1978 and 2012 and assembling most of the key-players in Belgian and Luxembourgian post-roman archaeology, report of about 1300 archaeological interventions on medieval and post-medieval sites since 1977. In about 20% of the cases a monastic site was subject to archaeological inquiry.

The map includes the following legend:

1. Beaupré sur-la-Lys
2. Bijloke
3. Binderen
4. Boneffe
5. Clairefontaine
6. Groeninge
7. Grijzenvrouwenklooster
8. Guldenberg
9. Hemelsdaele
10. Herckenrode
11. Hocht
12. La Ramée
13. Le Cambre
14. L'Olive
15. Le Paix-Dieu
16. Loosduinen
17. Maagdendale
18. Marche-Les-Dames
19. Mariëndaal
20. Mariënhorst
21. Mariënkamp
22. Muizen
23. Nazareth
24. Nieuwenbosch
25. Roermond
26. Rozendaal
27. Soleilmont
28. Valduc
29. Vrouwepark
30. Zwijveke

Figure 8—1   Medieval Cistercian nunneries in the Low Countries (After: Coomans 2004a, updated by the author) subject to archaeological research

Challenges lay in the exploitation of this largely untapped but extremely valuable reservoir of unreleased and ever growing research potential on monastic life in the ancient Low Countries. Unfortunately, profound comparative and synthetic research on monastic material culture and consumption practices is hampered through the limited find collections that are brought into the (scientific) public. We believe that a first step in the exploitation of the available data would be to try to make up the backlog of unprocessed and unpublished excavation material. Only through thorough etic analysis the available find collections can be turned into 'readable' and applicable source of historical information for the assessment of past monastic life. In doing so, attention should be paid to,

1) The study of find assemblages as a whole: artefacts become only meaningful in relation to other artefacts, food consumption debris, architectural setting, etc… In other words, finds should be studied together with their archaeological context.

2) A contextual analysis implies a multi-disciplinary approach. Specialised archaeologists need to be involved for the study of various material remains (ceramics, glass, wood, metals, etc…). Additional information can be gathered through archaeometrical research. For the study of animal and plant remains expertise from archaeological proxies is needed. The best archaeological analysis is supported by historical research.

A second step would be to employ the results of such thorough etic analysis for more site-specific interpretative research. Occasional inter-disciplinary studies have offered a detailed insight to daily life and consumption practices in the Flemish Benedictine abbey of Saint-Saviour (Cooremans et al. 1994; De Groote / Lemay 1994; Lemay 1995), the Poor Clares convent of Petegem-Beaulieu (De Groote 1993), the Benedictine abbey of Saint-Peter in Ghent (Laleman et al. 1985) and Cistercian male abbey of Boudelo in Moerbeke (De Belie 1997). Yet, such studies are rather exceptional and they give little or no attention to 'the story behind': more studies should aim at understanding monastic life as social and cultural phenomena and take a look at social dynamics at play, such as the staging of agency and the negotiation of social identity. Thereby, it is necessary to frame and interpret results within a wider cultural, social and historical context provided by disciplines such as history, art-history and many others. In interpretation more attention should be paid to,

1) the position of a monastic community in society. Monasticism cannot be looked at as a separate social world, but must be evaluated as part of medieval and early modern society. Convents and abbeys belonged to the social networks of the feudal elite. Behaviour and consumption within the convent walls was interwoven with the noble way of life. Therefore, to fully understand monastic life in all its aspects it is necessary not only to focus on religious regulations and monastic role patterns, but equally on the social background of the community members and on the communities patrons and benefactors who facilitated convent life but equally left their mark on it.

2) the religious context. Monastic life is structured by monastic regulations and religious role patterns. These may differ depending on the particular circumstances (e.g. different order) by also showing transformations during time. Also these aspects are often site-specific and need to be taken along in interpretation. As such, it is also valuable to look at the effect of historical events such as reform movements on monastic space, material culture and consumption practices in general and on the interaction between the community and their worldly relations.

A final step would be to employ the results of site-specific research for more comprehensive and comparative study on historic monasticism and its material manifestation. Comparative work has been done on monastic architecture and the study of monastic space in Cistercian nunneries, but this positive fact is not the result of research agendas, but rather due to the personal efforts and interests of some enthusiastic scholars(Coomans 2004a; Coomans 2004b; Coomans 2005; Coomans 2006; Coomans 2009; Coomans 2012). The same thing can be said about the advances made in the reconstruction of monastic diet based on animal remains and food consumption refuse (Ervynck 1997; Ervynck 2004; Van Neer / Ervynck 2004). Unfortunately, comparative studies of material culture and material consumption practices in a monastic context (supported with evidence from archaeological research) remain few (De Groote 2005).

8.4 To conclude…

The research presented in this thesis has raised a corner of the veil so to speak. By the use of archaeological remains carefully interpreted in a multidisciplinary environment we were able to take a look behind the wall of the Cistercian nunnery of Clairefontaine. By doing so we were able to shed more light on the phenomenon of female monasticism in the Low Countries during the Late Middle Ages and Early Modern Times. The image we were able to provide was not one of women living in a remote reality, detached from secular society and alienated from worldly existence. On the contrary, research has demonstrated that female monasticism was entwined with the secular world and more specifically with the social world of nobility and aristocracy. Female monasticism was part of being noble and served the desire for social recognition of members of the nobility on both sides of the convent wall.

We realise this research just treats some aspects of material life and consumption practices in one particular historic Cistercian nunnery. Nevertheless, this modest contribution hopes to trigger scholars to walk a similar path and as such further explore the subject we broached. Maybe this work will invite archaeologists to look beyond the artefacts and search for the people behind them. An aim which can best be achieved, as this research demonstrates, through a multidisciplinary approach and a solid historical and theoretical framework. These thesis may also convince scholars from other historical disciplines treating female monasticism, of the value of material remains, and archaeological data in particular, for the study of past convent life. The complementary

nature of archaeological data with written sources came notably clear in this research. Historical evidence serves without doubt archaeological interpretation, but on the other hand archaeological remains enable us to reveal details on (monastic) life of the everyday that slip through the net of the documentary record.

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