Exchanging Medieval Material Culture

Studies on archaeology and history presented to Frans Verhaeghe

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Exchanging Medieval Material Culture

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Contents

Preface

Frans, before anything else, our sincere apologies for the fact that it has taken so long for this Festschrift to appear. We will not attempt to present explanations or attenuating circumstances for, quite frankly, there are none. We roundly admit it, in plain language. You like plain language, and looking back we have to say: that's exactly what all of us have always admired in you. We've been toying with the idea of a Festschrift since long before your appointment as Emeritus Professor, and yet it has taken until 2010 for this volume to appear. However, 2010 is also the year in which you reach the age of 65, which makes for a timely appearance of this Festschrift by a lucky coincidence.

Having said all that, we are proud to have been able to do this for you, as it allows us to give something back to you, in a fitting manner, for the many things you have enriched our lives with in the course of many years. And many years it was: the three of us got to know you some 20 to 30 years ago as an expert in medieval archaeology at the Ghent University. We subsequently obtained our PhDs with you at the Vrije Universiteit Brussel between 2002 and 2005, with our research on medieval material remains. In this we were able to build upon research begun by you or in which you had been involved during the 1960s and '70s, on medieval pottery and medieval forms of rural settlement such as deserted villages and moated sites. Before moving on to the individual contributions, we would like to make a few brief observations.

Let us start at the beginning. Our first encounter with medieval archaeology was during fieldwalking done in the framework of a master dissertation – after all, the lion's share of fieldwalking finds is generally formed by medieval and post medieval pottery. Like no other, you were able to answer our many queries regarding the curiosities we collected from the 'fields of Flanders', the agreement being that we not only presented you with the curiosities but also with all the associated finds. This instilled in us an acute awareness of the necessity of always including context in an analysis, even if this meant that we had to lug bagsful of pottery into the lecture room. Everything comes at a price and as a researcher you soon learn the truth of the saying '*there is no such thing as a free lunch*'. Moreover, this gave you the opportunity to impart all manner of information on artefacts of which in those days we thought we already knew everything there was to know. Whether we had asked for it or not, you would always provide feedback within the wider framework of this type of research, such as the importance of the landscape, the use of cartographic sources and methodological underpinnings.

Two decades later there was a surprising follow-up to this prospection work in the form of several international collaborative projects, involving researchers from France, the UK and Poland. No doubt you are pleased to see that prospection is playing an increasingly important role in archaeology and that new research techniques are being developed, even at sea. As you have often argued, there are still opportunities galore in this field of research. Not only is prospection an essential link in the heritage management cycle, is it also a powerful research tool, one that in our opinion is still underused. Current archaeological research still focuses too much on stratigraphy, with not enough attention paid to the landscape perspective.

Having carried out a thorough investigation of potential research themes, we focussed on a number of specific research projects: the development of medieval pottery in the Oudenaarde region; the material world of fishing communities along the southern North Sea coast, including Walraversyde; the medieval settlement history of the coastal plain, with a focus on Leffinge and its surrounding area. In carrying out our research for these projects we were often confronted with problems and obstacles, some of which appeared insurmountable or threatened to derail the research. However, you always pulled a solution out of your hat, whether it be a publication from your legendary library or an expert from your vast network. And if the ease with which we found 25 Belgian, British

and Dutch specialists in medieval or post medieval archaeology willing to contribute to this Festschrift is anything to go by, that network has lost none of its vastness. We all know how much effort and energy goes into making such a contribution, so a more fitting tribute to a valued researcher is not conceivable.

Another aspect of this Festschrift is publication of research, a topic that is equally dear to your heart. Too often, research remains unpublished, or insufficiently published, thus failing to contribute to the enlargement of knowledge, new insights and the enhancement of expertise. This used to be the case and unfortunately it remains a point of concern in archaeological research to this day. For this reason we are keen to offer you this publication, despite your protestations, whenever you heard rumours, or alleged rumours, that the last thing you wanted to be given was a Festschrift. While we have always respected and carefully heeded your advice, regarding the matter of a Festschrift we have studiously ignored it.

The contributions in this volume have been grouped into three themes: material culture, settlement and landscape, and finally, archaeological theory – three themes in which you have always taken a particular interest.

Frans, we hope you will enjoy it and we wish you all the best.

Marnix, Dries and Koen
Aalst, 6 December 2009

The Nine Lives of Frans Verhaeghe: an overview of his career until now

Dries Tys

1 Introduction

Frans Verhaeghe is one of the most prominent scholars in European Medieval Archaeology of the last 40 years. He has played a central role in the development of medieval archaeology as an academic discipline in Europe since the 70's. In one way he can be seen as someone who bridges the achievements of the pioneers of medieval archaeology in the years after World War II and the international and interdisciplinary research environment nowadays. However, more accurate and more important is that he played directly and indirectly an invaluable part in the development of the research issues, questions and projects in medieval archaeology in Europe today, and at the same time he played an interesting role in the growth of an important network of scholars in medieval archaeology, mainly in the North-West of Europe.

His research covers the study of settlement, ceramics, early medieval towns and other issues, but also the theoretical and methodological research issues and questions of the discipline. His thoughts and ideas on these issues are published in a vast amount of well-known publications that are both thorough and extensive. One of the secrets behind this is the fact that Frans is widely read, his personal library is notorious, and that his knowledge covers topics and issues in archaeology, technology, decorative arts, social and economic history, anthropology, philosophy, sociology and more.

His strong and critical reflections expressed in excellent keynote lectures and conclusions of innumerable conferences are well known to have triggered inspiration and ideas, as well as warnings of the inevitable research problems involved. As such, his sharp analyses have been and still are important to map the complexity of the discipline of medieval archaeology and material culture studies. One can easily state that his contributions make us think. At the same time they warn us not to jump into easy or simple conclusions and interpretations and never to lose ones critical sense.

He is well known in the field of medieval archaeology throughout Europe and the UK. He has always stressed that the only way to develop research is to look beyond frontiers and exchange ideas and knowledge on an international scale.

Any contribution aimed at the description, let alone analysis of the career of Frans Verhaeghe is bound to be incomplete. Such is the richness of his thoughts and activities in research during the last 40 years … We will try to go slightly deeper into some of the different aspects, such as his university career, his role in international research, his importance for the study of ceramics and other topics, his concern for archaeological legislation and management and other issues.

2 The start of his career (1967-1977)

Frans Verhaeghe studied Archaeology via the History program at Ghent University. In doing so, he was trained both as an archaeologist and an historian. In those days, medieval archaeology in Belgium was hardly developed. There was only some attention for Merovingian cemeteries, while the first urban archaeology had started in the late fifties with the excavations of the 9th to 11th century phases of the town centre of Antwerp by A.L.J. Van de Walle. These excavations belonged with the archaeological projects in Bergen, Novgorod, York and other towns to a group of pioneer attempts in town archaeology in North-West Europe. For Frans Verhaeghe, it became clear that he had to travel out of Belgium in order to look for training in medieval archaeology. Before graduation he went to France during the summer of 1966, to participate in the field school organised by Professor de Bouärd in the castle of Caen. Marie Leenhardt directed the field school. Frans did his '*licentiaatsverhandeling*' (master thesis) on lead glazed ceramics, excavated in the town centre of Antwerp.

In 1967 he graduated in History and Archaeology at Ghent University (*magna cum laude*). His scientific achievements as a student were very promising and were noticed by the head of the Archaeology Department, Professor Siegfried De Laet, and the internationally famous medievalist and landscape

historian, Professor Adriaan Verhulst. They gave Frans his first scientific appointment, as starting research assistant of the NFWO (National Fund for Scientific Research), with the instruction to develop Medieval Archaeology in Flanders. In order to do so, he went on international study travels.

Frans travelled to Germany to study the Rhenish wares (1968) and in 1969 he crossed the Channel for an extensive two-month study trip to a.o. London, Cambridge, Ipswich, Norwich, York, Oxford, Portsmouth and Southampton to study field methods and medieval ceramics in the UK. This brought him into contact with pioneers as Gerald Dunning, Jean le Patourel and John Hurst, people who would be of great importance for the further development of his ideas and research. During his travels and visits, as well on the first conferences he attended, he met many young colleagues in whom he found partners in crime to develop research in medieval ceramics and settlement, as well as good friends, and many of them are present in this volume. Equally important was the contact with the writings and ideas of David Clarke and the issue of theoretical innovations in archaeology, which was entirely new for Belgian and Continental Archaeology.

All these influences were translated in his PhD-projects at Ghent University. He accepted a position at the department of Archaeology of Ghent University from 1 October 1967, first as research assistant of the National Fund for Scientific Research and from 1 October 1969 as teaching assistant of the department. In 1967 and 1968 he started a first research project on red-painted and glazed pottery from the excavations of the early, late 9th- to 11th- century town of Antwerp by A.L.J. Van de Walle[1]. The project could not succeed because of the very problematic nature of the archaeological stratigraphy excavated by Van de Walle. Nevertheless, the research on this material would be of importance for his ideas on trade in ceramics later on. The main results of this part of his research were published in 1995[2].

In 1968/1969, Professor Adriaan Verhulst, who had just started up the Centre for Rural History at Ghent University, contacted Frans Verhaeghe in order to redirect his PhD research towards the study of rural settlement in Coastal Flanders. Adriaan Verhulst was interested in interdisciplinary approaches towards problems in social and economic history, such as the development and the rise of the towns in the Low Countries, rural history and the development of landscape and settlement. Verhulst was an important promoter of collaboration with other natural sciences as well as archaeology. In Frans Verhaeghe he finally found the collaborator he needed to start up and expand this new field of research in order to bring in expertise on medieval ceramics, settlement patterns and study of historical settlement dynamics. Frans Verhaeghe has always acknowledged the influence of Verhulst on the development of his own scientific interests and approaches. He regarded Adriaan Verhulst as *'un grand seigneur'*, whose openness and sound understanding of the relationship between history and historical archaeology were very rare gifts in the academic environment of Flanders and of uttermost importance in the development of his own views.

The doctoral research that Frans started in interaction with Verhulst would prove very successful. He studied the phenomenon of moated sites in coastal Flanders, starting from a combination of historical, cartographical and archaeological survey methods, in the area south of the town of Furnes/Veurne. He excavated one of the most peculiar sites in this region, namely Leenhof ter Wissche in Lampernisse (1972-1974) and studied the relation between the use of moats and social groups in 13th- and 14th- century coastal Flanders[3]. In doing so, he touched upon the social behaviour behind the material and archaeological features of the medieval landscape and settlement structure. He did not look at infrastructure and spatial features alone, but also paid attention to the material culture of the household, and mainly household ceramics. The study of the ceramic material, mainly late medieval regional grey and red wares, from the moated sites in coastal Flanders but also from the lost fishermen's villages of Walraversyde, was one of the first in their kind and would contribute to the development of Frans Verhaeghe's trajectory of medieval ceramic studies[4]. He was the first to write about fabrics, forms and functions of regional wares in relation to consumption patterns.

His ceramics research led him towards questions concerning the production of ceramics in coastal Flanders, which brought him to Bruges, and to a lesser extent also Ghent. Immediately after his PhD, Frans would contribute to the research of the ceramic production near the Potterierei in Bruges, in close collaboration with Mariëtte Jacobs[5]. These excavations were very important in his (and our) understanding of the highly decorated wares from Flanders and Bruges. His study of this very peculiar group of late medieval ceramics is still today a seminal work on the subject and it not for nothing is his name still closely attached to this group[6].

Another issue that he touched upon was the management of archaeological sites, and this twenty years before Malta. As soon as 1974, he published a small text on the subject of the destruction of archaeological sites and options for protection of the archaeological 'heritage' in the context of a very early conference on which path Flanders had to take with its landscape and spatial development[7]. In the short text, he proposed the idea that the government had to provide legal instruments for survey, study, protection and conservation of archaeological sites, which was almost visionary in these times. He also launched the idea that we needed pro-active archaeological research in relation to public works and stressed the importance of extensive inventory and surveying in order to study and protect sites in time. Further on, archaeological sites needed to be conserved in their 'own' landscape context.

1 Verhaeghe 1968; Verhaeghe 1969.

2 Verhaeghe 1995.

3 Verhaeghe 1975; Verhaeghe 1976; Verhaeghe 1977; Verhaeghe 1981.

4 Hurst, Vandenberghe & Verhaeghe 1978; Verhaeghe 1983.

5 Verhaeghe & Jacobs 1980.

6 Verhaeghe 1982; Verhaeghe 1986; Verhaeghe 1989; Verhaeghe 1990; Verhaeghe 1996.

7 Verhaeghe 1974.

So, at the start of his career, all the important issues of his research and activities were already present. In the coming year, this would provide a strong basis for the development of his ideas and research initiatives.

3 Academic career (1977-2005)

After his PhD, from 1 October 1977, Frans took the position of 'Qualified Researcher of the National Fund for Scientific Research'. This position gave him the freedom to be a quasi full-time researcher (unthinkable these days) in an autonomous environment, and to restrict teaching duties. The first years of his mandate (1977-1979), he became responsible for the research program of the Comity for Archaeology of the European Science Foundation, concerning the study of interdisciplinarity in European Archaeology. In those days, the question of interdisciplinarity concerned if and to what extent European Archaeological Institutes applied and/or cooperated with natural sciences, as a result of the development of New Archaeology in the years before. Intensive travels and study visits resulted in an extensive report[8] and a continued strong personal interest in natural sciences applied in archaeology (*infra*).

As full-time researcher, Frans could write and publish at a rhythm seldom seen, with often more than 5 key publications each year in the 1980's and 1990's. Institutionally, he remained attached to the Archaeology Department of Ghent University, where he was responsible for teaching 'Medieval Archaeology' and 'Early Medieval Archaeology' (both since 1974) and 'Excavation Techniques' (from 1976 to 1989). In 1991, he went from the Department of Archaeology to the Department of Medieval History, where he once again became one of the important figures in the research group attached to Professor Adriaan Verhulst. The reasons for this change were a.o. that he felt that he could not develop medieval archaeology as an important branch of the Department anymore and that he had different views on the publishing policies of the Department. Frans was one of the central figures behind the journal *Helinium* on Low Countries archaeology (member of the redaction between 1984 and 1991). Jacques Nenquin, the successor of Professor De Laet as Head of Department, did not support this journal. On the other hand, the department of Professor Verhulst as a research environment, was much closer to Frans Verhaeghe's historical archaeological approach and his interests in urban and rural history and archaeology. In this period, Frans also developed an interest in environmental history, together with Erik Thoen.

In 1993, he became Research Director of the National Fund for Scientific Research, a position he would take up until 1998. In that year, he became fully attached to the Department of Art History and Archaeology of Brussels Free University. His career as lecturer at Brussels University had already started in 1979, when he was appointed to lecture 'National Archaeology of the Medieval and Modern Period'. Later, he also lectured 'Excavation Techniques' (from 1985), 'Natural Sciences in Archaeology and

FIG. 1 **The young Frans Verhaeghe and his team in Lampernisse in 1974.**

Art History' (1988) and 'Social and Economic History of the Medieval Period' (1994). In 1999, he got the chair of Professor in Archaeology at Brussels University, while between 2000 and 2004, he became Head of Department at Brussels Free University and a serious candidate to become the next Dean of the Faculty, an honour that he refused politely. These years of presidency were rather heavy since he had to translate the European Bologna reform to the education of the department and design entirely new Bachelor- and Master degrees at the VUB. The recent successful Teaching Assessment of the Department praised the vision behind these new degrees and programmes. In 2005, after personal health problems, he ended his university career at Brussels University.

Frans also gave many much appreciated guest lectures at the universities of Liège, Louvain-la-Neuve, Aachen, Lund, Paris-Sorbonne, Leicester, Leiden, Harvard and above all the François Rabellais University of Tours, where he was member of the CNRS research unity on '*Archéologie et Territoires*', directed by Elisabeth Zadora-Rio and Henri Galinié.

In 1983, Frans was elected as Fellow of the Society of Antiquaries of London.

4 Historical archaeology and material culture studies (500-1800)

Simply to describe Frans Verhaeghe's scientific activities in full detail is sheer impossible. His energy, eagerness, self-discipline and above all his intellect have resulted in innumerable projects

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8 Verhaeghe 1979.

great and small, 197 publications, more than 500 notes, more than 200 reviews and more than 200 conference participations (as co-organiser, key-note speaker, lecture giver etc). But the numbers only tell a small part of the story of course. Thematically, we can divide his activities into 3 aspects: Historical Archaeology and the study of Material Culture (period 500-1800), study of Methods and Interdisciplinarity in Archaeology and Archaeological Management.

Frans Verhaeghe's work in historical archaeology covers a wide range of topics. Ceramics, urban craftwork and artisanal production, the study of trade through archaeological sources, glass, consumption and social distribution of commodities, early medieval towns and settlement, rural settlement and social reproduction, study of elites and castles, food studies and research in Material Culture in general.

Frans is known throughout Europe as one of the initiators of the study of medieval ceramics. Starting from his views on the production and consumption of ceramics in coastal Flanders (rural moated sites, the lost village of Walraversyde and the town of Bruges), he broadened his views through international contacts and study travels, mainly to the UK (as he had done at the end of the sixties). Important for his own development, as for the development of his international role in the study of ceramics, was the decision to join the Medieval Pottery Research Group (MPRG). Dave Evans testifies[9]:

According to other members, the early meetings of the group were rather parochial in nature, and did not attract many delegates from continental Europe, but this was to change with the 1980 conference at Hull, which looked at the trade in medieval pottery around the North Sea. The first time that I can remember meeting Frans was at the 1980 Hull MPRG conference – which was also the first time that I heard him lecture[10]. He gave a tour de force presentation on 'medieval pottery production in coastal Flanders' [this is the paper which was subsequently published in Ceramics and Trade in 1983]. The three Low Countries contributions from Frans, Hans Janssen, and Tarq Hoekstra, were outstanding, and set a very high academic and presentational standard – which sadly many of the British contributions failed to match; even today (nearly 30 years later), the overviews which Frans and Hans presented are still very good baseline introductions to medieval pottery production in coastal Flanders and the Netherlands – and whilst obviously the last 30 years has resulted in additional discoveries and refinements to certain areas of dating, these seminal papers have stood the test of time well.

During the following few years Frans was a regular friendly face at the MPRG annual conferences – often giving papers (including the prestigious Gerald Dunning Memorial Lecture at Aberdeen in 1983; but he also gave an excellent lecture the year before at the 1982 Oxford conference, where the theme was change and transition in ceramics in the late medieval period). Even when the conferences were otherwise unmemorable, Frans would liven up the proceedings with some excellent conversation, scurrilous discussion, and some very lengthy but extremely good-natured sessions in the bar; it was at a particularly bad conference in Canterbury in 1981, where we found that we both shared a healthy interest in certain distinctive single malt whiskies.

He also often visited Britain at this time to look at material, which was turning up on excavations. Whether at the conferences, or touring units and museums, he was not only a tremendous source of information, but he was also always willing to make time for others – to help with identifying forms and fabrics, and also to provide encouragement and support for others who had only recently started working with pottery assemblages.

Among those early 'compagnons de route' in the study of ceramics we find next to Dave Evans the late Sarah Jennings and Alan Vince, Hans Janssen, Mark Redknap, Geoff Egan, Derek Hall,

9   E-mail Dave Evans to Dries Tys, 4 January 2010.

10   Frans attended also the foundation conference of the MPRG, on 'Medieval pottery research and its problems', in Irchester (UK) in January 1975.

Paul Courtney, David Gaimster and many others. Typical for him was his never-ending critical feedback and input[11]:

In the early 1980's I was working in Norwich with Sarah Jennings and others at the Norwich Survey, writing up major urban excavations in what had been England's second largest medieval city. We regularly come into contact with Frans at MPRG meetings, and he helped both of us considerably; some of that work fed into Sarah's 'Eighteen Centuries of Pottery from Norwich', but much more fed into the three subsequent excavation volumes, and into identifications of material from other sites which sadly remain unpublished. Not only did he help us with solving various ceramic conundrums, but, as one of the few genuine polymaths that I have had the privilege to meet, he was a rich fund of suggestions of other printed sources which we could look at, in search of possible comparanda.

Also Bruges played an important role in his research on medieval pottery. He contributed to the excavations of the late medieval production centre at the Potterierei (a.o. of highly decorated wares), in collaboration with his former student Mariëtte Jacobs (between 1977 and 1980) and paid a lot of attention to the research of this specific production, dated between the end of the 12th and the start of the 14th century. He also cooperated with Hubert De Witte, the head of town archaeology in Bruges, in relation to the excavation project on the earliest town centre of Bruges (the 'Burg') [12]. He worked with three young archaeologists, who he had known as students in Ghent, namely Yann Hollevoet (specialist in early medieval rural settlement and ceramics in the rural area around Bruges), Bieke Hillewaert (who worked on late medieval settlements, urban archaeology and ceramics from Bruges) and Koen De Groote, at that time junior archaeologist at the excavations of the 'Burg'. Koen De Groote would later write, under supervision of Frans, his PhD dissertation on the ceramics of the *portus* and abbey of Ename and the region of Oudenaarde, and is today regarded as successor of Frans as critical pottery researcher in Flanders.

In his research he touched upon both regional and chronological overviews and *status quastiones*, historiographical and methodological contributions, specific productions and groups such as the highly decorated wares and above all issues on production, distribution and consumption of ceramics[13]. These topics were not only discussed in the MPRG, but also on conferences in Germany, the Netherlands and France. He was member of the PhD juries of amongst others Philippe Husi, David Gaimster, Fabienne Ravoire, Arno Verhoeven, Koen De Groote and Alexandra De Poorter. He also was one of the founding members of the '*Stichting Corpus Middeleeuws Aardewerk*', aimed at the publishing of closed primary contexts from Belgium and The Netherlands (1992). From the 90's on, Frans also started projects on glass vessels, such as the project on the chrono-typology of glass vessels in the former duchy of Brabant[14], with special attention for the study of Antwerp '*façon de venise*' vessels by means of chemical analyses.

Frans has always been interested in historical archaeology in general, without restrictions on periods. He was equally interested in what happened in the early modern period as in medieval times and for him, there was no real distinction between both periods[15]. Frans was also closely connected with the Society for Post-Medieval Archaeology, being vice-president between 1985 and 1988 and continental representative from 1988 on. He contributed to many conferences and to the Journal Post-Medieval Archaeology.

The importance of Frans Verhaeghe's work on medieval ceramic studies cannot be overestimated. When we look at what his contributions to the field of ceramic studies are, we see, first of all, the critical and high level research methods, the importance of the study of fabrics and technology, the differentiation of production and consumption in 'ceramic regions', the understanding of the role of consumption and distribution in the formation of ceramic productions (a.o. the process of imitations), the importance of 'access' in the distribution of ceramics, the idea of transfers in technology and forms in relation to social factors and the organisation of labour and much more.

In his PhD, Frans especially touched upon the relation between rural settlements and social formations. In this part of his work, international contacts also played an important role, and it is remarkable that Frans not only attended the foundation meeting of the MPRG, but also one of the earliest meetings of the 'Moated Sites Research Group', the predecessor of the Medieval Settlement Research Group and this in 1976. Frans did not develop a similar activity in this group compared to his contributions to the MPRG, but never lost contact and developed further research on moated sites through the 80's. As researcher of moated sites, Frans was also member of the '*Comité Permanent des Colloques Chateau-Gaillard*' and this between 1984 and 1992.

Probably more important in the field of study of rural settlement was the scientific attention for the lost fishermen's village of Walraversyde, next to his parental hometown Ostend. This late medieval village had known two phases and the remnants of the first phase (left after a storm in 1394) were visible on the beach until 1980. The local inhabitants Etienne Cools and Agnes Mortier were looking for scientific attention for this site, a call for help that Frans didn't take lightly. He started the first studies on the *mobilia* of the beach site, and more important, he initiated the first excavations on the second phase of the village, a phase that could be dated very precisely between 1394 and the end of the 16th century. Another former student of Frans, Marnix Pieters, who had been working a.o. on the Louvre Excavations in Paris, carried out these excavations. Frans was the main scientific advisor of these excavations, and the supervisor of Marnix' PhD on this unique site. The material life of this site, with its exceptional collection of data, is still under study of both[16]. In 1996 another of Frans his students, namely the present author, wrote a master thesis under his supervision

11 E-mail Dave Evans to Dries Tys, 4 January 2010.

12 Verhaeghe 1988;Verhaeghe & Hillewaert m.m.v. De Groote & Hollevoet 1991.

13 Verhaeghe 1988; Verhaeghe 1989; Verhaeghe 1992; Verhaeghe 1993; Verhaeghe 1995; Verhaeghe 1999; Verhaeghe 2003; Verhaeghe 2005; Verhaeghe 2006; Verhaeghe 2007; Verhaeghe 2008.

14 PhD in progress Danielle Caluwé.

15 Verhaeghe 1997.

16 Pieters, Ervynck, Van Neer & Verhaeghe 1995; Verhaeghe 2003; Pieters, Verhaeghe & Gevaert 2006; Pieters & Verhaeghe 2009.

FIG. 3 Frans with his Brussels students on the fieldschool practice in Aalst in 2005.

on the historical landscape around Raversyde and the history of the fishermen's village. Out of this study followed a PhD under supervision of Frans Verhaeghe, on the development and life trajectory of the medieval rural landscape and settlement structure in coastal Flanders.

From the early eighties Frans' own contributions to settlement archaeology shifted gradually more towards urban archaeology. His connections with town archaeology in Bruges, Antwerp and Tours brought on the questions on the rise, development and organisation of and in early medieval towns, a.o. in relation to the question on continuity between Roman and medieval towns in the Southern Netherlands[17]. What few people know is that Frans was also member of the International Reference Committee on the excavations of Birka between 1989 and 1996. As well in the project in Ename Frans played an important advisory role. He also contributed to the study and publication of the excavations (1989-1991) '*des Jardins du Carrousel*' in Paris (study on the spatial distribution of archaeological small finds on the 15th to 16th century parcel structure) and was member of the scientific team of the excavations in Saint-Denis[18]. He did the study of the ceramics from the '*Quartier des foulons*' in Arras (France) and of the lead-glazed Meuse pottery from Oost-Souburgh, one of the well-known ring forts of the late 9th and 10th century in the Scheldt-estuary. His contributions on the subject are also of a methodological and theoretical nature, warning us for a correct and critical interpretation of the relation between written and material sources on these subjects. In the analytical and interpretation models on the development of early towns, he stressed the importance of the relation between these urban central places and the importance of trade and production of artefacts. The

PhD's of Koen De Groote and Dirk Callebaut (in progress) are connected to this part of his research. His attention did not only go out towards the early towns, but also to the urban phenomenon and lifestyle in the early modern period, in relation to the birth of the consumer society[19].

5   Archaeological theory and methods

Throughout his scientific thoughts and writings, Frans Verhaeghe has always been very concerned about the practice of theory and the critical approach of methods. In doing so, he is clearly a processual thinker, with an emphasis on the use of theoretical and even philosophical ideas and the critical use of models in the interpretation of material life. Another aspect was and is the use of natural sciences in archaeology, in order to elaborate the scientific dataset with which archaeologists can work to study the archaeological processes.

With his theoretical writings, he wanted to address both archaeologists and historians working on the medieval and early modern period. Many archaeologists, especially in the southern Netherlands were still comfortable with the role of archaeology as an anecdotic and descriptive science. In answer to them, he wanted to stress the potential of archaeology as social science, aimed at the explanation of human behaviour, indeed by using theory and investigating the limits of methods and models. Archaeology was/is not just about describing and classifying sites and artefacts, but about interpreting social practices in their context. Towards historians he stressed the idea of complementarity between historical and archaeological records and interpretations. Both records document the same past, but

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17 Verhaeghe 1988; Verhaeghe 1990; Verhaeghe 1992; Janssen & Verhaeghe 1993; Verhaeghe 1993; Verhaeghe 1994; Verhaeghe 1995; Verhaeghe 1998; Verhaeghe 2005.

18 Fixot & Verhaeghe 1996.
19 Verhaeghe 1996.

FIG. 4 **Frans studying pottery.**

through other phenomena and sources and it is only through interdisciplinarity and open exchange of ideas that both can get further than each apart, especially in fields like urban developments, consumption, environmental behaviour, production, power in the landscape, and so on. Frans has always followed the theoretical literature very closely. From the end of the 80's, he became influenced by the post-processual ideas of Giddens and Bourdieu and the approaches towards material culture of Chris Tilley and Daniel Miler. With them, Frans shares the paradigm and view that material culture is interactive. This means that men construct their material environment but at the same time are influenced by it, since the material environment is the shaping of their worldview and has an active influence on their behaviour. These ideas are translated in Frans' research and his development of the field of material culture studies. Both in extensive theoretical publications[20], as well as in his lectures and teaching he tries to develop these ideas and apply them to medieval and early modern archaeology and material culture. In this he influenced his PhD students, like the present author, who looked at a medieval landscape as a form of material culture, as well as international scholars like Chris Loveluck and Hugh Willmott. In this respect, he also became member of the Research Group on Foods Studies at Brussels Free University. The study of material culture and archaeology had no restrictions concerning neither themes nor times and this he brought in practice with the start of a PhD project on the material and iconographical discourse of a food retailer at the end of the 19th century[21].

Via the study of decorative arts, Frans also explored the relation between art history and archaeology. Notably the notion of transferring skills, styles, techniques and ideas in the decorative arts can provide interesting ideas in understanding technology and product development, themes that are at the heart of archaeological research. He developed these ideas not only in teaching and writing, but also in two scientific projects; the already mentioned project on late medieval and glass vessels in the duchy of Brabant, and a project in collaboration with Professor Van de Velde (Fine Arts) on highly decorated and carved wooden altars from Antwerp from the 16th century ('*retabels*')[22]. Another result of this was the high level conference on maiolica and glass in Antwerp in 2001[23].

Frans was and is also particularly interested in the contribution that natural sciences can bring in archaeology. In the project on the decorated altars for instance, the relation between decorative arts and dendrochronology was explored. The project on glass was a cooperation between Frans Verhaeghe and Professor Koen Janssens from Antwerp University, in order to develop chemical analyses of archaeological glass vessels, to provide information on production and provenance of glass vessels. His attention for trans- and interdisciplinarity in archaeology goes back to the period immediately after his PhD when he was responsible of the research program of the European Science Foundation – Committee for Archaeology. Between 1977 and 1979 Frans travelled throughout Europe in order to visit laboratories and map the use of natural sciences in archaeology in Europe. Between 1979 and 1984, this work was translated in recommendations to promote interdisciplinary research, the development of archaeometrical and environmental sciences in archaeology, and so on.

This work and his interest in natural sciences has since then been a returning issue in his career. Nevertheless the fact that Frans Verhaeghe remained modest about his contributions in this field we find him often in interesting projects and research groups, exploring the start of many innovations in archaeology. In 1985 he became member of The Study Group PACT of the European Council, aimed at the study of Physical and Chemical Techniques in Archaeology[24]. In this context, he was amongst others co-founder and director of a European network on petrographic and chemical ceramic analysis, including the creation of datasets and the comparison of methods. Because PACT had not provided the necessary finances for this last project, Frans quit his participation in the PACT-group in 1989. Following these projects, he also became member on the UK Science-Based Archaeology Committee (S.E.R.C.) (1985-1986). Frans was also co-founder and vice-president of the research group on Archaeology and IT, in 1986 (!), and co-founder and vice-president of VIANO, the '*Vereniging voor Interdisciplinair Archeologisch en Natuurwetenschappelijk Onderzoek*' (1982-89). Between 1992 and 1994 he started one of the first historical GIS projects in Europe at the Department of Adriaan Verhulst, by directing

20 **Verhaeghe 1996 and the very important but not very well known publication Verhaeghe 1998.**

21 **PhD in progress Nelleke Teughels, supervised by Dries Tys.**

22 **Van de Velde, Beeckman, Van Acker & Verhaeghe (eds.) 2005.**

23 **Veeckman, Jennings, Dumortier, Verhaeghe & Whitehouse (eds.) 2002.**

24 **Hart, Atkinson, Eglington, Ottaway, Tate, Verhaeghe & Game 1985.**

a project on the vectorisation and digitalisation of the historical parcel structure of Bruges.

6 Archaeological legislation, management and institutions

As soon as 1974 Frans Verhaeghe published his first views on the relation between the destruction of archaeological sites and preventive and pro-active archaeology (*supra*). These views look very update still today. In between, many of the advises he formulated in '74 have become fact (for instance protection of sites as archaeological monuments, the development of preventive archaeological trajectories and the start of central databases and inventories of archaeological sites). In Belgium, Frans Verhaeghe played a central role in the coming about of legislation on archaeological protection and management. Between 1985 and 1987, he was member of the National Governmental Commission on Archaeological Legislation in Belgium. In 1987, the matter became federalised, with the result that the legislative work had to be redone on the regional level in Flanders, Brussels and Wallony. Together with Professor Guy De Boe, director of the Flemish Institute for the Archaeological Heritage (IAP), Frans prepared and wrote the first legislation on archaeological management in Flanders, on request of the ministers Waltniel, De Batselier and Sauwens. The legislation was voted in June 1993 and published in September 1993. The legislation provided in means of in-situ protection for sites and an instrumentarium to start preventive ex-situ research. An archaeological council and a permit system were to protect the quality of the archaeological trajectories. Unfortunately the financing system did not survive the parliament. The most important in this legislation was that it provided the principles for the archaeological management in Flanders for the coming years, like the principle that every one has the duty to protect the archaeological heritage in his or her possession. In practice, this means that one has to prove that one is not destroying heritage or sites when ground works are carried out, which leads to the duty to carry out pro-active surveys and preventive excavations. What lacked in the legislation was a covering system of financing this preventive archaeology and the means to guarantee post-excavation research and means.

At the same time, Frans contributed also to the preparations of the legislation for the Brussels region. One of the new institutions that played a role in the archaeological management was the Flemish Archaeological Council, which was presided by Frans between 1995 and 2002. Frans was also member of the Scientific Board and the Board of Directors of the IAP and of the central Committee of the (Flemish) Royal Commission for Monuments and Landscapes (1993-2002). Frans thus played a central role in archaeological research and management in Flanders at the end of the 20th century. He protected the scientific profile of the IAP and instigated large-scale scientific projects in Raversyde and elsewhere.

Recently, Frans has been member of the Scientific Board of the *Institut National de Recherches Archéologiques Préventives (INRAP) of France*.

7 The communication and dispersion of ideas and thoughts

Very important to Frans was the communication of ideas, results and thoughts. We already mentioned the nearly 200 publications and the equal number of conference contributions. Frans has been redaction member of International Archaeological Journals like *Post-Medieval Archaeology*, *Archéologie Médiévale* and the new journal *Medieval and Modern Matters*. In Belgium and the Netherlands he was also redaction member of *Helinium*, *Corpus Middeleeuws Aardewerk*, *Natuur en Techniek* and *Archeologie*, in which he wrote innumerable notes on medieval sites and archaeology in Flanders, reviews of international literature and theoretical and methodological issues and thoughts. Frans has also been interested by public archaeology and has participated in the design of projects like ARCHEON in The Netherlands and the museums of Ename and Walraversyde in Belgium, where he regarded archaeological museums as experiments of Reflexive Archaeology, where ideas interact with the public.

Frans was also the co-organiser of no less than 22 international conferences and contributed to the success of a.o. the MPRG conferences, the *Lübecker Kolloquium zur Stadt-archaeologie im Hanseraum* and the International Medieval Congress in Leeds, but most of all he is renowned for his organizing skills of the Medieval Europe Conference in Bruges in 1997. Dave Evans testifies[25]:

As a ceramic researcher, one of the best conferences which I ever attended was the 1984 Bergen op Zoom MPRG conference, which Frans and others organised. Spanning two countries, and various excursions, it was a model of conference organisation – and one where I learnt a huge amount about Low Countries medieval pottery production and usage. But, not only was it a success in terms of its academic content, and the precision of its organisation: it was also an amazing success in terms of the social life and social networking which complemented the daytime lecture programme. It provided a yardstick by which to judge later conferences – and many of its successors were found wanting. Frans was to show here early promise of what later became readily apparent at the 1997 Brugge Medieval Europe conference – that he had a real flair for organising highly successful conferences.

And Bruges was successful. Not only because Frans Verhaeghe succeeded in publishing together with Guy De Boe no less than 12 conference volumes with heavy *status quaestiones* chapters at the start of the conference! It was the *summum* of the new discipline called Medieval Archaeology up to that moment, a discipline of which Frans Verhaeghe had been a close witness of

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25 E-mail Dave Evans to Dries Tys, 4 January 2010.

its coming of age. More than this however, Frans was and is one of its main contributors, through his research, his teaching and his innumerable theoretical and methodological contributions. Medieval Archaeology in Europe would not be what it is today without him. It is striking that what Frans has achieved, is continued by different people on different aspects: Koen De Groote has joined him in the ceramic studies, town archaeology and excavation techniques, Marnix Pieters in the research of settlement, material culture and public archaeology, the present author in landscape and settlement research, legislation and academic projects plus his teaching. This shows how science has developed itself, thanks to Frans, but testifies as well of the immeasurable force and enthusiasm of Frans and of what he means for Medieval Archaeology.

Dave Evans speaks for us all with these words[26]:

I have known very few archaeologists who are so widely read, and whose knowledge covers such a wide range of archaeological issues. During the 30 years in which I have known him, he has broadened my perceptions, taught me a great deal, and, in lighter moments, injected a modicum of decorum and conviviality into what would sometimes otherwise have been long drawn-out and lacklustre conferences. Whether relaxing in the corner of a bar, or sharing a meal in a restaurant, his conversation has always been a joy, and his sense of humour almost legendary; those gentle mocking jibes, that issue forth from behind a thick cloud of Belga smoke, and which can manage to deflate the most pompous of speakers, but in the nicest of ways.

Acknowledgements

Bibliography

All cited literature can be found in the publication list of books and articles of Frans Verhaeghe, elsewhere in this volume.

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26 **E-mail Dave Evans to Dries Tys, 4 January 2010.**

Admiration in clay, devotion on paper. Archaeology, context and interpretation of an *Anna Selbdritt* statuette (1475–1515) from the Hanseatic town of Deventer, the Netherlands, in the context of early Renaissance poetry by Rudolf Agricola and book printing by Richard Pafraet

Michiel H. Bartels

1 Introduction

Deventer is a Hanseatic town on the eastern bank of the river IJssel (fig. 1). Its origins go back to the 8th century, while it flourished as a major Ottonian trading centre between the 9th and 11th century[1]. The town gradually expanded during the 12th to 14th century, while the hitherto unoccupied sections within the settlement slowly filled up with religious institutions, secular houses and aristocratic mansions[2]. During the late 14th, 15th and 16th centuries Deventer was a thriving intellectual centre with many schools and new spiritual movements such as the Modern Devotion, alongside traditional religious institutions.

The main traffic route from Utrecht and the Veluwe ran right through Deventer and from the 8th century onwards the Lange Bisschopstraat (Long Bishop Street) followed its course. Starting at the crossing of the IJssel near St.-Lebuinus church, this street connected the town with its hinterland towards Oldenzaal, Osnabrück and Magdeburg. At least since the 9th century this was also the street were the town's wealthier inhabitants lived, and where from the 11th century onwards houses were built in tuff. During the 15th and 16th centuries merchants and skilled artisans such as goldsmiths and printers lived here in stately brick houses. One of them was the first Deventer printer, Richard Pafraet, who lived here from about 1477[3]. After 1480 he and his wife Stine inhabited a grand house at 29 Lange Bisschopstraat on an elongated plot which bordered at the back on an alley that was later named Striksteeg (Strik Alley)[4] (fig. 2).

2 Decay, renovation and rejuvenation

Between 1950 and 1980 the Deventer inner city area increasingly suffered from widespread poverty and decay, a fate which it shared with many Dutch cities. Money for large-scale restoration was lacking, and difficult choices had to be made. Deventer decided to restore the so-called Bergkwartier, an area of 13th-14th-century expansion with many 17th- and18th- century house fronts in the southern part of the old town. In the rest of the town some houses were torn down, others restored or simply left to decay. One of the sites which initially remained intact was the district formerly occupied by the congregation of the so-called Brethren and Sisters of the Common Life. This religious movement developed under the spiritual guidance of Geert Groote (1340-1384), a native of Deventer, on and around of the present Lamme van Diese Square (fig. 3). After the demolition of its buildings during the 1960's all that was left was a lifeless parking lot surrounded by the typical inner city's scruffy selvedge. The square mainly functioned as a delivery area for the shops which fronted on Lange Bisschopstraat. The floors above the fine historical shop buildings were unused, as they nowadays usually are in many cities. This led to a nation-wide initiative, taking shape in the project "Living above Shops", which aimed to make these spaces habitable once more. Access to the apartments via the shopping area was unacceptable to the real-estate- and retail sectors, and in many cases the decision was made to create means of access from the back instead. This required new facilities such as basements, elevators and stairwells. Preliminary to the construction of these facilities at the location 1 Striksteeg, the back of 29-35 Lange Bisschopstraat, Archaeology Deventer did some research there[5].

3 The finds from the Striksteeg waste pit

The houses on Lange Bisschopstraat are built on elongated plots which run until Striksteeg. The excavation was situated on the very end of the plots 29-35 Lange Bisschopstraat, which border on the former Ronnengang, now Striksteeg. Between 5

1 Bartels 2006; Mittendorff 2007.

2 Vermeulen 2006, 67-81.

3 Koch 1977, 55-57.

4 Cadastre 1832: 1115, 2008: E 11272, nowadays 35 Lange Bisschopstraat.

5 Vermeulen & Bartels 2005, 127-134.

FIG. 1   **Location of Deventer.**
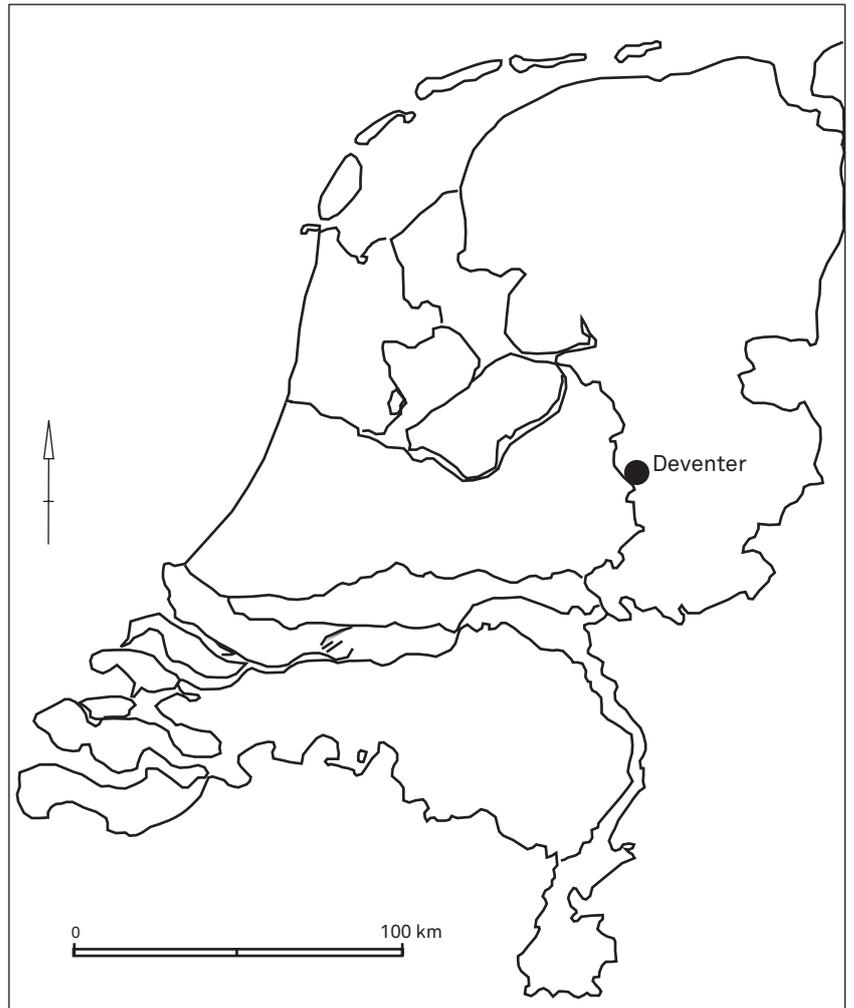
FIG. 2   **Cadastral map of Deventer in 1832.**

At least ten glass objects were recovered from the cess layer, including two rather low, dark-green, round *maigeleins* and two other *maigeleins* with a very high pontil. The exceptional thinness of the glass is accentuated by the ribbing. A highly translucent light-green, large drinking glass also has a very thin wall and some pointed prunts. Two convex beakers of opaque greenish-white glass have vertical ribbing on the cuppa. Also found were two rather large, light-green bottles and a fragment of a glass oil lamp. The ceramic finds represent at least 35 items including domestic, sanitary and drinking pieces. Stoneware pieces are represented by both middle-sized and small funnel-necked jugs and middle-sized beakers. Such objects are common in Deventer. Also present were five pouring jugs and a flask. One of these jugs is an almost complete pointy-nosed beardman jug[6], produced in either Aachen or Raeren[7] (fig. 4). All jugs except one have foot rings; the one exception has a flat base. A sixth jug, of Siegburg type, is large and white with brown slip[8]. It was used for either storing or pouring water. A rare type within this collection is a beautiful maiolica cup (fig. 5). It is white with monochrome blue decoration, showing on its exterior rim "mimosa" underneath short arches, and three series of small painted leaves on its belly. Its thin glaze and simple decoration seem to indicate that the cup was not produced in Italy but in some other centre of production, possibly Antwerp.

Tableware is represented by two middle-sized bowls in greyware, and two plates in red earthenware with white slip decoration. A bowl in Hafner ware was also found, as were two large storage jars in red-firing clay decorated on the outside with arches in slip. Cooking vessels included six pipkins and two middle-sized cooking pots in so-called Haffner ware, made in Cologne. Finally there were a small and a middle-sized dripping pan, one of which has the characteristics of a local product. Last on this list is a fragment of a pilgrim horn in white-firing clay, a rather common object in the 15th century.

From the same waste pit came fragments of two statuettes of white pipe clay which still carried recognisable traces of whitish-yellow slip, probably the foundation for polychrome decoration. This type of statuette was produced on a large scale between 1400 and 1500[9]. They fit in with an increased personalisation of faith which arose under the influence of movements such as the Modern Devotion. Especially the veneration of saints played an important role in this process as it spread from churches to lay peoples' homes and workshops.

Two types of statues can be distinguished during the Middle Ages[10]. The first group is smaller than 10cm. These statuettes are solid and were possibly carried about by their owner as an expression of devotion or in order to ensure protection. The second group is larger than 10 cm. These statues are hollow and composed of at least two assembled sections. This type probably stood in houses, domestic shrines and chapels.

The remaining finds from the waste pit include roofing slate, one piece of yellow flint, some cast iron nails and staples, and butchering waste. The bone material includes many bird bones and the skull of a young dog with a long pointed snout.

FIG. 3 **Lamme van Dieseplein parking lot and Striksteeg in 1994, looking south.**

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6 Type s2-kan-34 in the Deventer catalogue.

7 Ostkamp 2007, 10-18. The description of the finds follows the so-called "Deventer System". See Bartels 2005, 53-55 for an explanation in English.

8 Deventer type s2-kan-72.

9 Ostkamp 2001; Caron 1982; Henry-Buitenhuis 1989; Kleiterp 1989.

10 Caron 1982, 47.

FIG. 4   Stoneware jug with incised and applied
bearded facemask from the waste pit.

FIG. 5   Maiolica cup with monochrome
blue decoration.

4   Pipe clay statues: *Anna Selbdritt* and St. George

The first statue from the waste pit belongs to the group of larger, hollow statues (fig. 6). It is 23 cm high and has a base diameter of 12 cm (base height 6 cm)[11]. It depicts St. Anne, the Virgin and Christ. Anne, the grandmother, is seated with her crowned daughter Mary on her lap who in turn holds the infant (and grandchild) Jesus. The s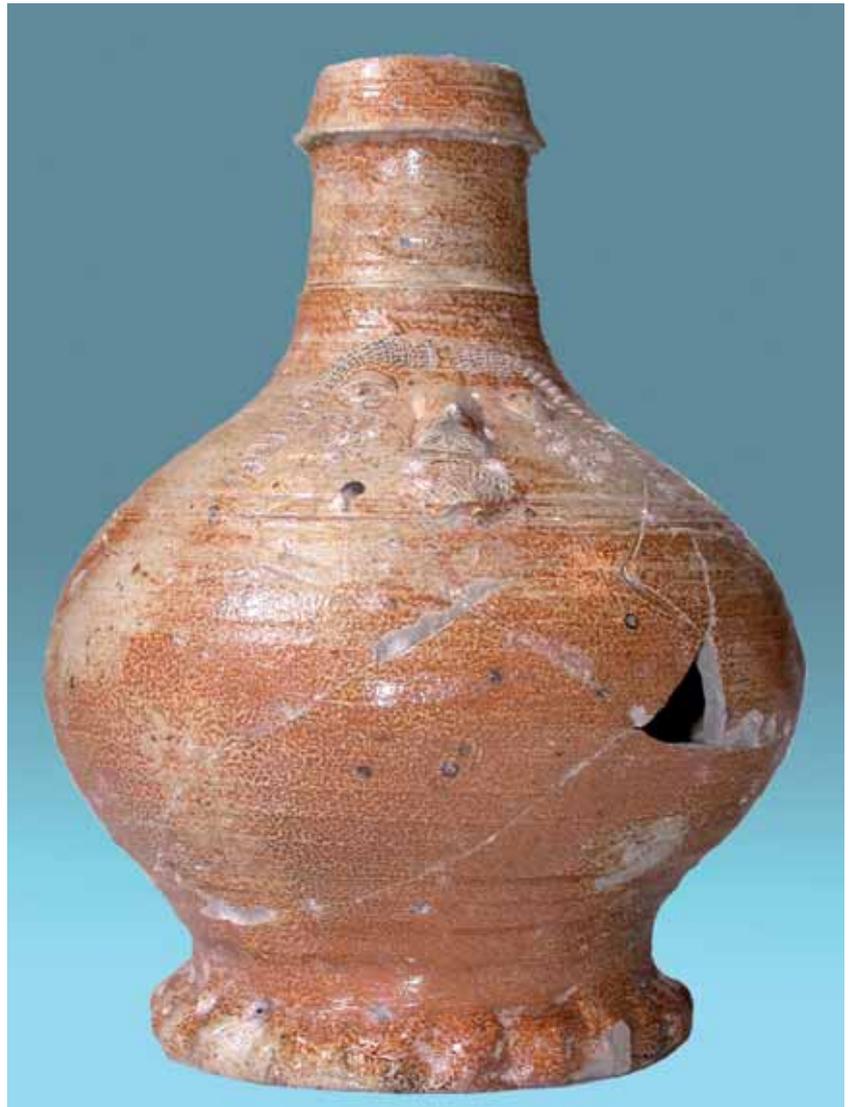tatue is made of white-firing pipe clay. The clay disk covering the bottom has been moulded along the inner edge, after which an 8 mm hole was cut into it from the outside. The statue stands on a pedestal which has three niches in which the heads of other figures can be seen. The niche on the left shows a monk-like figure with an open book in his left hand, at which he points with the index finger of his right hand. The central niche has lost its figure. The niche on the right shows a figure with long hair and a turban on his head. The workmanship of the statue is excellent, as is apparent from for example Jesus' hair, where extra detail has been added with some sharp tool. Only on St. Anne's coif have some traces of decoration been preserved, in the form of brownish paint. Statue and pedestal have been made in a composite mould.

A comparable but much less detailed statue has been found in Amsterdam[12]. Possibly a worn mould was used, but this wear may also have occurred after deposition. The Amsterdam statue had no pedestal. A statue of the Virgin with the same pedestal as the Deventer St. Anne stands in the church of Meerveldhoven, Noord Brabant province[13]. Other fragments of the faces on the Deventer pedestal have been found elsewhere[14]. A semisolid statuette, 10 cm high, with a different type of *Anna Selbdritt* was found in the village of Dirksland (Goeree-Overflakkee island, prov. of Zeeland[15]), and a comparable semisolid statuette possibly originates from the nunnery Leliëndale, inside the field called "Hoge Burgh" near Burgh on Schouwen island (prov. of Zeeland)[16]. These two statuettes are very similar. Yet another semisolid statuette, also roughly 10 cm high, comes from the Cistercian monastery in Midwolda, (prov. of Groningen)[17]. The terp Ankswerd (Friesland) also yielded a semisolid statuette of St. Anne holding in her right hand a closed book with a clasp[18].

This inventory is far from complete. It is striking that all statuettes which do not come from an archaeological excavation are approximately 10cm high and either solid or semisolid. This may reflect the way they were found, whereby loose fragments are not easily detected while solid objects are. However, it is clear none the less that most of these statuettes date from the period 1425-1525. This is true as well for other religious objects in wood and stone or pewter pilgrim's tokens which show either *Anna Selbdritt* or St. Anne in isolation[19].

FIG. 6 So-called *Anna Selbdritt* clay statuette (1475-1515), with the image of St. Anne, the Virgin and infant Jesus.

Of the second Deventer pipe clay statuette only the torso was found. This suggested an original height of about 10 cm. The cuirass and the weapon carried across the chest indicate a saint in armour: St. George or St. Adrian[20]. However, St. Adrian is usually shown with the executioners' sword which refers to his dismemberment. The Deventer statuette therefore probably depicts St. George piercing with his spear the dragon (now missing) crouching at his feet. No parallels of this statuette are known, and medieval statues of St. George are very rare in any case; this saint only became popular after the reformation.

5   Dating and interpretation

Both the simple funnel-necked jugs with their slightly convex cuppa and the maigeleins suggest a date for the collection of

11 Inv. no. 257-1-1 (excavated on December 12, 2004).

12 Carasso-Kok & Verkerk 2005, 241.

13 Leeuwenberg 1965, 156.

14 Leeuwenberg 1965, 157; Ostkamp 2001, 200.

15 Olivier 1994, 191; Brandenbarg 1992, no. 127, 151.

16 *Ibid.*, no. 120, 151.

17 *Ibid.*, no. 60, 123.

18 *Ibid.*, no. 61, 123

19 *Ibid.*, 99-142; Van Beuningen & Koldeweij 1993, 122.

20 Depictions of St. Adrian are rare, as are those of St. George (at least in this area). There is one example from Leiden; see Kleiterp 1989, 82. This publication also mentions similar examples from the Utrecht Central Museum and from the Zeeland Museum.

between 1450 and 1500. The absence of richly flamed and ornamented Siegburg products, in combination with the relatively simple decoration of the pointy-nosed beardman jug, indicates that the period 1450-1475 is hardly represented, if at all. On the other hand, the single stoneware flat based jug and the piece of early maiolica from the southern Netherlands both belong to the period 1490-1525. Typical Renaissance ornamentation is absent. All in all, the stoneware (Deventer type s2-kan-34), the flat-based jug and the maiolica make a closing date for the collection of somewhere between 1500 and 1525 very likely. The presence of rather early Cologne ware in the Hafner tradition as well as real Hafner ware accentuates the period 1475-1515[21]. Most Hafner types and real conical pipkins are absent, both of which are typical for the period 1525-1575.

Quality and status of the material are rather high for a middle-class context. There is an abundance of beer-drinking jugs and beakers and other first-rate products. The wine glasses too are of good quality and include some unusual types. The ratio between implements for beer and those for wine is 10:5, which is rather high. Three other domestic items, the pipe clay statues and the oil lamp, give a further impression of the household. Tableware included expensive beer- or wine jugs, fine glass bottles and a beautiful, and rare, maiolica cup. The cooking utensils on the other hand were average and sometimes of poor quality. There were also fewer of them than what is usually found in domestic refuse pits of the late 15th century. Possibly the bulk of the kitchenware was disposed of, or reused, elsewhere. At dinner pork, beef and poultry were eaten. The dog, a puppy, may have been a rare breed. It was certainly not a guard dog or lapdog.

Al in all the finds clearly suggest a well-to-do household, even without information about the historical background.

6   Historical research

From historical sources it is known who lived in the house 29 Lange Bisschopstraat towards the end of the 15th century[22] (fig. 7). His name was Richard Pafraet. Pafraet was born in 1455 in Cologne into a family of jewellers, but he himself became a printer. Possibly his ancestors came from the medieval pottery centre Paffrath, well known in archaeology, on the eastern bank of the Rhine. When exactly Richard Pafraet moved from Germany to Deventer is unknown, but it is certain that the first printed book in Deventer was produced on his press in 1477. Pafraet bought the house at 29 Lange Bisschopstraat in 1480, while he was already living there. In 1481 he was registered as burgher of Deventer. In 1479 Alexander Hegius (1439-1498) came to Deventer, having lived in Wesel and Emmerich before that, and moved into the same house as Pafraet. He became rector of the (Latin) St. Lebuinus school (from 1483 to 1498) and taught Latin, Greek and classical culture. On April 7, 1484 Hegius was visited by the famous humanist scholar Rudolf Agricola (1444-1485). Agricola brought with him a hymn to the life of St. Anne (*Anna Mater*)[23] (fig. 8). Central to this 310-line poem is an instruction into the ethics of early Renaissance humanism by means of the devotion to St. Anne: control of the inner emotions (sadness, love, fear), virtues (chastity, faithfulness, obedience) and ratio (peace with God, self-control through reason, health and temperance)[24].

FIG. 7 **Location of the find (*): 1: Lange Bisschopstraat; 2: Pafraet's house and plot at 29 Lange Bisschopstraat; 3: Striksteeg; 4: Pontsteeg and Lamme van Diese community house of the Sisters of the Common Life.**

21 **Bartels 1999, 151-152.**

22 **Koch 1977, 52- 69.**

23 **Bedaux 1998, 28.**

24 **Dörfler-Diercken & Schnäbel 1994, 293, 321-323.**

FIG. 9 **Detail of the woodcut (*post-incunabulum*) with the Virgin and the infant Jesus on her arm from the frontispiece of *Anna Mater*.**

The poem *Anna Mater* was printed by Pafraet in 1484[25] (fig. 9). Apart from a few printing errors Agricola was content with the result[26]. The copy in the Deventer Athenaeum library is the second or third edition from 1517 (fig. 10) It consists of 11 pages printed in relief with cast lead type, cut in quarto and folded. On the first page is a woodcut showing the Virgin with the infant Jesus on her arm, surrounded by an aureole and standing on a crescent moon. Outside the aureole in the corners are God the Father holding an orb, a pigeon representing the Holy Ghost, and two kneeling angels with hands lifted in prayer. The final page has a colophon with name, place and year of printing. Remarkably, this page has an 8 cm watermark with the outline of a saint which greatly resembles a wall painting of St. Lebuinus in the nave of St. Lebuinus church[27]. Perhaps one of Pafraet's paper suppliers produced paper with the logo of his town's patron saint[28]. Between 1477 and 1485 Pafraet printed no less then 81 different titles in varying numbers of copies, totalling 18.000 pages. He used large quantities of paper and was regularly in debt with his suppliers. The Deventer copy has

late-15th- or early-16th-century notes in Latin, in three different hands, which suggests that it was well studied.

In 1500 Pafraet bought a new house at the corner of Lange Bisschopstraat and Grote Poot, opposite the inn *De Steerne* (the Star), and moved there[29].

7   The cult of St. Anne

The cult of St. Anne gained momentum during the 15th century and reached its peak around 1500. It is a 'mother cult' in which the ties between mother and daughter are emphasized. This is expanded into the 'maternal triad' which accentuates the trinity grandmother – daughter – child. The focus is the incarnation of Christ within the Sacred Family. Mary, the mother of Christ the son of God, was conceived immaculate. This dogma logically demanded that her mother also be free from original sin, and therefore had to be of special descent. Anne was the daughter of Nathan, a man of the tribe of Judah and the royal

25 Bedaux 1998, 27-28; Dörfler-Diercken & Schnäbel 1994, 293-294.

26 van der Laan & Akkerman 2002, 195, 197, 219.

27 Mekking 1992, 10.

28 Koch 1977, 58.

29 *Ibid.*, 58-62, 73.

FIG. 10 Colophon of Paffraet's work:
'*Dauentriae ex officina typographica Alberti
Pafrad, Anno a natali christiano millesimo
quingentesimo decimo septimo mense augusto*'.
Translation: 'At Deventer, from Albert Pafrad's
printing house, in the 1517th year after Christ's
birth in the month of August'.
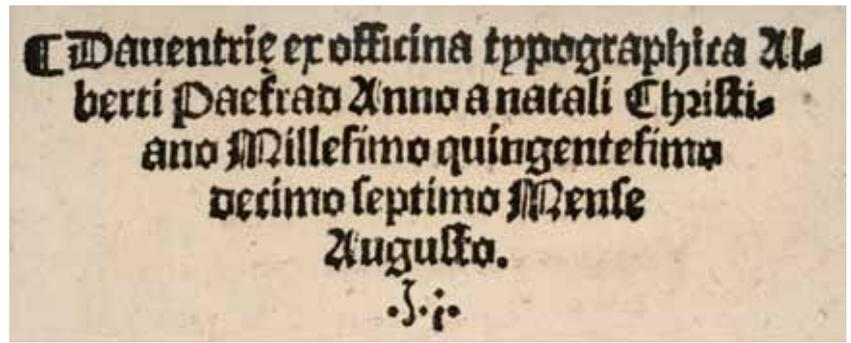
house of David. She was married to Joachim. The marriage between Joachim and the initially barren Anne remained childless for twenty years. Joachim retreated to the countryside in shame, and Anne bitterly lamented her barrenness. Then she noticed a sparrow's nest in the laurel tree near her house, and she vowed that if she were to bear a child after all, she would dedicate it to the service of God. At that an angel appeared who announced the birth of her daughter. The angel then changed into a young man who brought Joachim back, having announced to him that his wife would bear a child. Nine months later, after some further events, Mary was born. Anne conceived Mary immaculate and was thus predestined to become the grandmother of the Saviour.

Anne symbolises warmth, safety and security as well as a large offspring. The cult of Anne and Mary emphasized the female element within the family, and the 'cold' male element became less important. For the late medieval population Anne was the archetype of the old, wise grandmother, the centre of the family and a vehicle for the middle-class values of marriage and nuclear family. Amongst the aristocracy, on the other hand, Anne represented the dynastic power of the foremost family. Also, her chaste life and her heartfelt love (the name Anne means either 'the lovable' or 'mercy') guaranteed earthly prosperity[30]. Within the Tree of Jesse (father of David) Anne, as its female descendant within the Sacred Family, had the place of honour, hence the so-called '*Arbor Annae*' [31].

All these virtues called forth an intense devotion. For the church the cult was a useful tool to present its moral message in an attractive way, and for poets and writers it was a source of inspiration. Although some aspects of the cult had a popular flavour, early humanists such as Erasmus, Bostius and Rudolf Agricola also embraced it as a guide towards piety and a moral life and against depravity. The aspect of the mother cult, however, remained important[32].

8   Conclusion

The date of these finds from a closed context, 1475-1515, roughly coincides with the presence of Alexander Hegius and the Pafraet family (1480-1500) in the house at Lange Bisschopstraat, and with Rudolf Agricola's visit and the printing of his hymn *Anna Mater* (1484). The piety of the Pafraet family is evident from the fact that four of his daughters entered the Lamme van Diese community house of the Sisters of the Common Life in Pontsteeg, and also from his printing of *Anna Mater* and his contacts with humanists. To propose either Alexander Hegius or the Pafraet family as owners of the statue of St. Anne would be an attractive hypothesis. Perhaps part of the inventory of their households was damaged and thrown away when they left the house in 1500.

30 Brandenbarg 1992, 25-26.   31 *Ibid.*, 21-22.   32 *Ibid.*, 57-58.

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New Style Classification System

Hemmy Clevis & Jan Thijssen

1   Introduction

The 1980s saw the birth of a classification system for late and post-medieval ceramics and glass known as the 'Deventer system'. Hemmy Clevis, Jaap Kottman and Jan Thijssen were closely involved in the system's creation. The system was introduced in two publications in 1989: *Weggegooid en Teruggevonden* (Discarded and Recovered) and *Kessel, huisvuil uit een kasteel* (Kessel, domestic refuse from a castle)[1].

The system was intended to ensure uniform descriptions of ceramic and glass objects from closed find assemblages. It was based on the assumption that it would evolve organically, as new information became available over the years. At the time of the system's creation it would have been impossible to formulate a classification system based on published finds. Other researchers warned the authors that such an organic-growth approach would involve problems. Frans Verhaeghe was one of the greatest critics of the system. He predicted that there would be problems. His greatest doubt concerned the professional knowledge of the people who would use the system and provide part of the input. And of course he was proven right: although great efforts were made to control the input of data where possible, that is precisely where problems arose. Nevertheless, it was felt at the time that this would be the only way of arriving at a classification system, because there was no single ceramics and glass expert with all the know-how required to set up a comprehensive system.

Classification systems have in the past indeed been developed along similar lines in other countries. In the United Kingdom, for example, the Council of British Archaeology formulated guidelines for the purpose of improving the quality of publications by ensuring the use of uniform, standardised descriptions[2]. And in Germany various archaeological organisations have made efforts to realise greater standardisation in the description of ceramics[3].

So far, however, no catalogues based on those systems have been published. In the twenty years since its introduction, the Deventer system has found general acceptance, and more than 50 catalogues based on the system's code types have meanwhile been published in books that are consulted worldwide. By 'worldwide' we mean the areas to which products from north-western Europe have been exported: the east coast of America, the west coast of Africa, South Africa, Australia, Indonesia and all areas that were in bygone days visited by the VOC – the Dutch East India Company – (China and Japan), and also the Baltic states.

In the past decades, the number of finds has increased explosively. They include many new types, making the old system inadequate. The time had evidently come for the system to be revised. The three original authors assumed responsibility for this task and split the two material groups among them, with Jaap Kottman signing up for the glass and Hemmy Clevis and Jan Thijssen for the ceramics.

It was decided to start with objects made of industrial clay types – maiolica, porcelain, faience and industrial whiteware –, the main argument being that, in spite of the different techniques employed in their production, such objects are mostly imitations of other products in terms of type and decoration, so we assumed that this group would show the highest level of uniformity. We first focused our attention on maiolica, whose range of functional types – many of which are very beautiful – is quite limited. The range of functional types made of faience includes more than a hundred types, so we decided not to start with that material to avoid the risk of

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[1] Clevis & Thijssen 1989; Clevis & Kottman 1989.

[2] Blake & Davey 1983, later also Barclay & Hurman 1998.

[3] Bauer *et al.* 1987; Kunow *et al.* 1986 with a classification list of types in German, English and French; see also Erdmann *et al.* 1984 and *Idem* 2001 (English version).

not being able to see the wood for the trees. As our work progressed, we found that many inadequacies had over the years slipped into the Deventer system. They had to be corrected with minimum consequences for the original publications. In January 2008, after a year of preparatory work, the first step was taken towards an adapted classification system.

We based ourselves on two main points of departure. The first was to distinguish three categories within all ceramic groups. The first category consists of locally produced red-, grey- and white-fired products, the second of stoneware and Asiatic porcelain imports, and the third consists of products made of industrial clays such as maiolica, faience, European porcelain and industrial whitewares. Our second point of departure was to divide the main functional types into two groups: a group of frequently used types and a group of less frequently used types. The first group comprises plates, bowls, cups, etc., while the second group consists of products such as alembic stills and ointment pots.

2 Dishes and plates

Dishes and plates are open types without additions, with diameters that are several times the object's height. The original classification system distinguished additions to basic vessel bodies, for example handles and spouts, thumbed feet, footrings and pedestals (in the case of tripods). A distinguishing feature of any type is its base. A base is an integral part of a vessel, and not an addition. The group of plates comprises objects with many different functions, names and appearances: breakfast plates, soup plates, pancake plates, saucers belonging to sets of cups and saucers, plates for under flowerpots, etc. What all plates however have in common is that their maximum diameter is several times their height. In other words, plates represent a flat type. An increase in height brings us to a different type with a different basic shape and function: a bowl. Bowls may have additions such as handles and spouts. It is not really possible to draw a strict line between plates and bowls because in practice it is sometimes difficult to distinguish between the two. If you were to employ a formula to distinguish between the types you'd moreover have to use different formulas for different kinds of material. You wouldn't be able to use the same formula for, say, industrially fired goods and red-fired products made of Quaternary clay. For those of you who like using formulas and size correlations we can however give a guideline: red- and white-fired dishes may be assumed to be characterised by a ratio of 10 : 2.5. Such dishes have a diameter that is four or more times the object's height. Objects with ratios from 10 : 3.5 may then be classed as bowls. So there is a certain transitional area in which no clear distinction can be made. For industrial products you could adhere to a ratio of 10 : 2 for plates and a smaller ratio for bowls. As already mentioned above, a difference in height is the main criterion distinguishing bowls from plates. As a vessel's height approaches its diameter, or even exceeds it, we move from bowls to cups.

FIG. 1 16th-century dish, redware, from Zwolle Achter de Broeren.

There are two other flat types. They are both derived from plates, but have a different function, placing them in a different category. Those types are strainers and serving dishes. A strainer is in principle a type with perforations, handles and feet. A serving dish or tray may be square, polygonal or oval. It should be added that this distinction no longer holds today, as you will find the most surprisingly shaped dishes in restaurants.

The earliest known red-fired dishes in the Netherlands date from around 1400. Such dishes have been found for example near Olofspoort in Amsterdam,[4] near early-15th-century kiln sites at Hogelanden in Utrecht[5], in Aardenberg, in Kerkstraat in Amersfoort, Bergen op Zoom and 's-Hertogenbosch[6]. The dishes have integrated thumbed feet that were formed by drawing the clay of the body of the vessel down beneath the base angle. Part of the dish is decorated with trailing (linked) arches in yellow slip, another part with birds. According to Baart, this bird decoration was copied from maiolica products from the Italian town of Orvieto, examples of which were found in Dordrecht in 1977[7]. The same cannot be said of the vessel's shape. It has been suggested that ceramic dishes were derived from tin dishes, but that cannot be true, as red-fired dishes with flat bases did not exist before the 14th century. In those days, all red-fired vessels had a convex base, with or without feet, or with a pinched foot as observed in stoneware. It was simply not possible to produce a large flat-based dish from red-firing clay due to the risk of the vessel warping or cracking during the firing process. The Tertiary clay that was used for stoneware involved the same risk. This technical problem was overcome mainly by adding fine sand temper.

4 Baart *et al.* 1977, 252.

5 Bruijn 1979.

6 Bruijn 1979, 133; Groeneweg 1992, 20-33; Nijhof 2007; Nijhof & Janssen 2000.

7 Baart *et al.* 1977, 250-252 and 256, afb. 479 and ill. 78; Liverani 1960, Taf. 1-4.
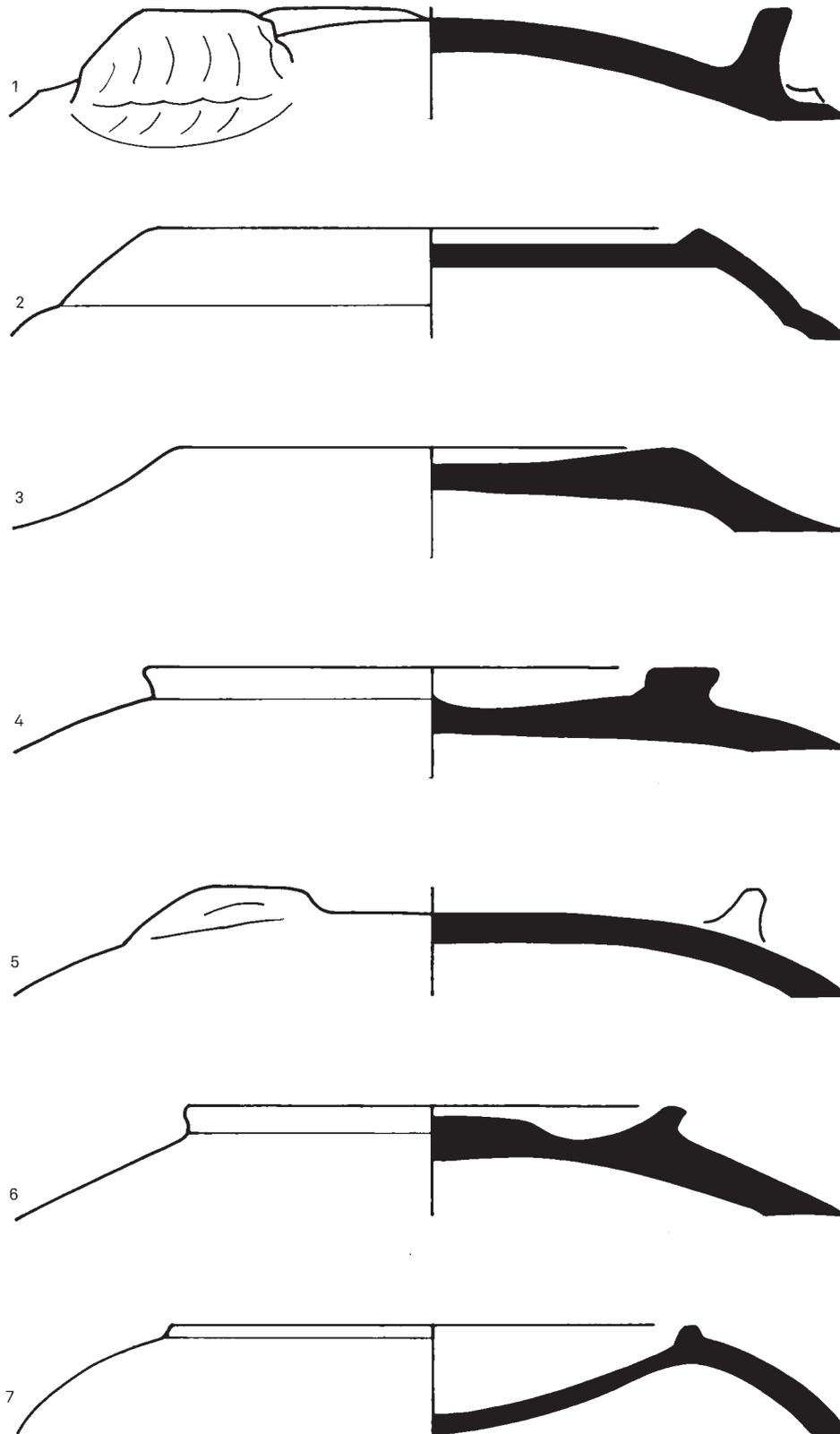
FIG. 2 Base types of dishes and plates. 1: thumbed foot scraped out; 2: footring milled; 3: flat base; 4: footring (maiolica); 5: thumbed feet added; 6: footring (redware); 7: footring (Delft ware dish for pancakes). No scale.

The first dish type referred to above is r-bor-1 in the 'Deventer system'[8] (fig. 1). It has a convex flange, a hammer-headed rim and a concave inside. The transition from flange to wall is sharp both on the outside and on the inside. The thumbed feet create the impression of a base angle. The other dish type also has a concave inside, characterised by a sharp transition to the slightly sloping wall, a flat flange and a hammer-headed rim[9].

These oldest dish types have thumbed feet, which in these early days could be produced under certain technical conditions. On the outside, these dishes are convex. The thumbed feet were shaped from the clay of the vessel's body. To make this technical aspect visable in cross-sectional drawings they are indicated in black (fig. 2: 1). In a later stage in the development of dishes in red fabric, separately shaped thumbed feet were attached to the vessel. They may consequently be regarded as additions, and should in our vision not be filled in in cross-sectional drawings (fig. 2: 5). Bruijn pointed out that these early dishes show very little wear at their centres. Most have one or two holes. Bruijn assumes that these dishes were used as serving platters, and were not intended for people to eat from them. They may also have been used as wall decorations, but in that case they will have been suspended on a support, because the holes are not in any relation to the thumbed feet and the inside of the dish would have been inclined towards the ceiling if the dish had been suspended without a support.

Dishes from this period do not have a pinched footring as observed for example in jugs, bowls and cups. The latter vessels have a convex base. The footring was either shaped from the clay of the body or made separately and attached to the body.

Later vessels have smooth footrings, sometimes formed in stages. A vessel was cut from the potter's wheel and left to dry until the clay reached a leather condition. Then the vessel was turned upside down and cut on the outside to create a pedestal, sometimes with a sharp transition to the body. Next, the inside of the base was scraped out to obtain a footring. Because of this procedure the footrings of such vessels should be indicated in black, as integral parts of the vessel, and not as additions (fig. 2: 2, 4, 6-7). This method of shaping vessels by scraping that began with red-firing clay continued in later industrially produced vessels in the form of milling. We know of vessels in which only the central part of the base was milled after the rest of the vessel had been shaped (f-bor-5) (fig. 2: 2; fig. 3).

The first stoneware vessels with flat bases (jugs) date from the early 16th century. Such vessels could only be produced using clay tempered with fine sand, and their diameter could not be too great because otherwise the base would become concave. Vessels with flat bases were produced from red- and white-firing clay tempered with fine sand from the late 16th century onwards (fig. 4; fig. 5). The clay in question had to be of Tertiary origin.

The most important conclusion that can be drawn from the above outline of the development of bases is that they are integral parts of dishes and plates. So vessels with different bases should be typologically differentiated. We distinguished three groups of dishes/plates using size as a criterion (table 1).

8 **Hurst** *et al.* 1986, 149, fig. 68.   9 *Ibid.*, 149 fig. 67.

TABLE I
Preliminary typological classification of part of the dishes/plates.

Description		Oriental porcelain	majolica	faience	industrial whiteware	European porcelain	industrial stoneware	redware	white-ware	west Germany	Werra	Wezer
curved wall without lip	01.01	p-bor 6,10		f-bor-8,16,17	iw-bor-1,3	ep-bor-1	S3-bor-1			d-bor-1		
curved wall without lip, mould	01.02	p-bor-7			iw-bor-1							
curved wall with lip	01.03	p-bor-1		f-bor-8,11,16	iw-bor-10	ep-bor-3,5	S3-bor-2,3					
curved wall with lip, mould	01.04											
curved wall, flat rim	02.01	p-bor-8	m-bor-17,zou-2	f-bor-9,15								
curved wall, flat rim, mould	02.02	p-bor-4										
steep wall without lip	02.03			f-bor-8	iw-bor-3	ep-bor-1,2						
steep wall without lip, mould	02.04	p-bor-11										
steep wall with lip	02.05	p-bor-2		f-bor-22	iw-bor-5							
steep wall with lip, mould	02.06			f-bor-12								
curved wall with 1	03.01			f-bor-7				r-bor-18				
double curved wall/rand	03.02							r-bor-9	w-bor			
steep wall with flange	03.03											
curved wall with flange	04.01							r-bor-30				
curved wall without lip	05.01							r-bor-33				
curved wall with lip	05.02							r-bor-34				
curved wall with flange	05.03							r-bor-8,26				
steep wall without lip	05.04							r-bor-33				
steep wall with lip	05.05							r-bor-23				
slooping wall with hammer-headed rim	06.01							r-bor-14,19	w-bor-6			plate
steep wall	07.01											
(slightly) curved wall, inverted rim	11.01		m-bor-10									
(slightly) curved wall, everted rim (lip)	11.02											
curved, carinated wall, serrated rim, mould	11.03		m-bor-14									
curved wall without lip	12.01		m-bor-2	f-bor-8,16	iw-bor-3	ep-bor-1						
curved wall without lip, mould	12.02	p-bor-9		(f-bor-7)								
curved wall with lip	12.03											
curved wall with lip, mould	12.04	p-bor-7										
curved wall with flat flange	12.05	p-bor-4	m-bor-3,8	f-bor-10	iw-bor-2,4							
curved wall with flat flange, mould	12.06	p-bor-4			iw-bor-2,4		s3-bor-5,6					
curved wall with concave flange	12.07			f-bor-7,10	iw-bor-2,4							
curved wall with concave flange, mould	12.08				iw-bor-2,4							
curved wall with collared rim	12.09			f-bor-11								
curved wall with flat rim	12.10			f-bor-12,15								
curved wall and flange, concave base	12.11			f-bor-13								
curved wall moulded rim	13.01							r-bor-3,4				
curved wall, drooping flange	13.02							r-bor-5,9,11				
curved wall with moulded rim, flange	13.03							r-bor-3,5,18,21				
slooping wall moulded rim	13.04							r-bor-4,9				
slooping wall moulded rim, drooping flange	13.05							r-bor-4,11				
slooping wall moulded rim, flange	13.06											

Left margin groupings: footring / pinched feet / flat base (8,5 – 13,5); footring (14 – 25)

3   The first group : small dishes/plates and saucers with diameters of 8.5-13.5 cm

There is only one small type with thumbed feet; a small redware vessel that is to be interpreted as a salt dish (fig. 6). Types with footrings are mostly of faience, industrial white clay, Chinese porcelain, European porcelain and industrial stoneware. A smaller number is of white- and red-fired fabrics and maiolica. The latter vessels are most probably likewise salt dishes, while the former are mostly saucers belonging to sets of cups and saucers, the earliest of which are made of Chinese porcelain. This is associated with the import of tea from China. Some of the small saucers made of maiolica date from the second half of the 16th century, so they cannot be parts of sets of tea cups and saucers.

Salt dishes were first produced in the 13th century. An inventory of valuable possessions of Count Floris V dating from 1297 mentions a silver salt dish[10]. Maiolica salt dishes are shaped like a deep round saucer. A similar type is known in tin, but then it rests on a pedestal. The catalogue of the 1976 'Salt at the table' exhibition in Rotterdam mentions numerous ceramic salt dishes in the form of a deep saucer on a pedestal, but no such dishes without a pedestal[11]. We have not been able to determine when – and on what grounds – such a maiolica saucer was first described as a salt dish in the literature.

The other saucers formed part of tea services. Their shapes were of course derived from those of Chinese porcelain saucers. The type was imitated in faience, industrial whiteware and industrial stoneware. Saucers were probably first produced around the end of the second quarter of the 17th century. They were incidentally imported to the Netherlands in the period of *kraak* porcelain. Tea was in those days transported in only small quantities. A source from 1643 mentions an extraordinarily large quantity of 1400 pounds of tea and 7675 pairs of tea cups[12]. Tea became an increasingly popular beverage in the second half of the 17th century, and the import of tea cups and saucers increased accordingly. They were first imitated in faience, later in industrial stoneware in small quantities, and later still in industrial whiteware and European porcelain. At first the type underwent virtually no changes. The diameter of saucers of this type remained the same. Saucers of these dimensions that have a different shape or a different diameter did not form part of tea services but had a different function. Maiolica small saucers (salts) all have a diameter of between 12 and 13 cm, those of faience have diameters varying from 8.5 to 13.5 cm, with a peak between 10 and 12 cm. The diameters of saucers of Asiatic porcelain vary from 9.5 to 12.5 cm, with a peak between 11 and 12 cm.

A few whiteware types (for example Weser Slipware) and some redware saucer types have a flat or a splayed base. The red-fired saucers may have formed part of tea services, in which case they will be imitations of porcelain or whiteware tea saucers[13].

FIG. 5   19th-century plate, Frechen white ware, from Zwolle Kranenburg.

A separate group of red-fired saucers are saucers that were used under flowerpots.

From what has been said above it will be clear that there is a relation between function, type of material and the time when the material in question was used. The same holds for the medium-sized and large dishes/plates (fig. 7; fig. 8; fig. 9; fig. 10).

4   The second group : medium-sized plates/ dishes with diameters of x[14]– 20 – 22 – 25 cm

Let us have a look at the functional aspects of medium sized plates/dishes. There are very few medium-sized plates/dishes of red- and whiteware from the 16th century and earlier times. They are all objects with thumbed feet, and for the similarity with small-sized items classified as saucers. Bruijn's interpretation of this type has already been mentioned above in relation to the small plates/dishes. The medium-sized plates/dishes
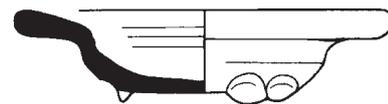

FIG. 6   Salt dish, redware, from Dordrecht.

10   Labouchère 1933.

11   Ter Molen 1976.

12   *Idem* 1978, 15.

13   See for instance Frisian ware published by Van der Meulen & Smeele, 2005.

14   The smallest diameter varies for the different ceramic groups. Faience 13.5 cm, maiolica 13 cm and porcelain 12.5 cm.

were used for displaying or serving food, just like decorated plates/dishes.

The 16th-century plates/dishes of red- and whiteware with a footring differ in shape from maiolica plates. These differences may be attributable to technical aspects, or to a difference in function. There are two types of maiolica plates. One type has a slightly sloping wall with a short flat edge and a raised lip. This type was derived from plates of the Italian tradition that were exported to Flanders and underwent further development in the northern Netherlands. It was first produced in Haarlem. The decorations on these plates sometimes also betray influences from this Italian tradition. This type is represented only in maiolica; no later versions are known. Some plates of this type have a lead pin at the centre. They feature in many Dutch still lifes as butter plates. Being very colourful, they were also used for serving food. Another type that is only represented in maiolica and comparable Italian wares is a plate with a sloping wall and a broad edge adorned with raised studs and sometimes a serrated rim. They were produced using a mould – a technique that was likewise borrowed from the Italian tradition. This type, which is very rare, was also used for serving food.

The medium-sized plates with a sloping wall with or without a lip, with a flat or slightly convex edge, produced with or without a mould were based on types of the porcelain tradition. They continued to be produced in the Kangxi and later periods. The porcelain plates of this type all have a foliated rim. They are also represented in other industrial wares. The plates with a sloping wall may be imitations of a similar type made of red- and whitewares. The pronounced transition to a broad edge was the outcome of a technical innovation that was first

used in the production of red- and whiteware in the 16th century. The bases of the vessels concerned were trimmed to make the vessels less heavy. This led to the observed marked transition to a broad edge.

In the case of the maiolica plates, part of the base was trimmed on the potter's wheel after the plate had been turned upside down and placed on a support; this led to a pronounced transition between the base and the rest of the body. Next, the inside of this base was scraped out to create a footring. Bruijn describes this process in relation to his research into misfired objects from a Deventer maiolica kiln (fig. 11). We have examined a large group of maiolica plates and have come to the conclusion that Bruijn's description is correct[15]. Whenever we mention a sharp transition in the body of a plate in descriptions we are always referring to the outside of the vessel. But a plate may also show a sharp transition on the inside, which need not necessary coincide with the transition visible on the outside.

The maiolica footring stands at the beginning of a new tradition in local wares, which was derived from the Italian tradition and was continued in red- and whitewares. Footrings of faience, industrial stoneware and whitewares are based on the Chinese porcelain tradition. There are however also faience and industrial white plates without a footring, and even plates of whitewares without a footring. This suggests that they are imitations of wooden (*teljoren*) and tin forerunners. They invariably have a diameter of between 20 and 22 cm. Plates of this kind are at present referred to as breakfast plates or dishes. Consumption patterns changed substantially in the 17th century and the ceramic industry played an important role in the changes. It was actually a matter of interaction.
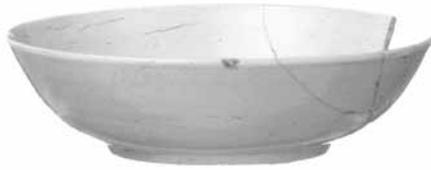
15 **Clevis 2007.**

FIG. 9 **Saucer, English white stoneware, from Nijmegen Smidstraat.**

FIG. 10 **Saucer with Chinese decor, Chinese porcelain, from Zwolle Ossenmarkt.**

Technical innovations in the ceramic industry created the possibility of producing much larger numbers of more lavishly decorated dinner services. This implied new impulses for great changes in consumption patterns. People began to eat their meals sitting at a table and eating not any longer from wooden but from ceramic plates. Faience plates made their appearance at the end of the second quarter of the 17th century (Italian examples incidently even earlier)[16]. The great majority of the plates are of the same – immediately recognisable – shape. This product faced severe competition from red slipware dishes from the Lower Rhine area, which were available at a much lower price. The quality of the latter dishes and their slip decoration was very good at first, but it soon rapidly deteriorated, and the plates actually began to look very cheap, too[17]. Made from a Tertiary red clay that was tempered with fine sand, they have a flat base, where they were cut from the potter's wheel. They were very popular for everyday use from about 1700 onwards[18].

A revolutionary change in the manufacture of ceramics caused a shock on the European (and American) market in the 18th century. The introduction of industrial whitewares enabled great changes in the shapes and decoration of tea services and tableware. For the first time ever, services consisting of more or less identical decorated items became available. Press moulds, casts and lathes replaced the potter's wheel. These technical changes were most immediately observable at the table, in the first place in a clear distinction between flat and deep plates. Deep plates were from this time onwards evidently reserved for the consumption of liquid food while flat ones were used for solid food. There had already been flat and deep plates made of other materials in the past, but there had never before been such a clear distinction between the two.

The range of plate types increased with the introduction of industrial whitewares, partly to suit the whishes of a broader public demand. An example of a new plate type is the serving plate (platter) – an oval, rectangular, square or polygonal plate, sometimes with cut-off corners. The well-known (rectangular) herring plates belong to this category. A second new plate type is the colander.

The first redware and whiteware plates with flat bases were produced in the second half of the 16th century. They comprise plates of Hafner ware and Werra/Weser slipwares. They again had to be produced using Tertiary clay that fired red (reddish/pink) or white (yellow). In the course of the second half of the 18th century a new kind of dish with a flat base, steep wall and heavy rim began to be produced at Bergen op Zoom. Having such heavy bases and steep walls, these vessels – dripping bowls – had to be made from a Tertiary clay. Plates with a footring were first produced in the 17th century. They were produced in large numbers especially at Frisian (maiolica) production centres, but they were also manufactured locally.

5 The final group of plates and saucers: vessels with diameters of more than 25 cm, in particular more than 30 cm

This group includes all red- and white-fired objects from the 16th century and earlier. The range of types was very limited in this period, but after the 16th century the degree of variation increased tremendously, and the range came to include many specialised regional products such as Weser and Werra slipware plates. Around 1700 a large range of flat and open types of slip-decorated plates already described above in relation to the medium-sized group began to be produced in the Rhineland. The group furthermore includes large whiteware plates from Cologne/Frechen, most of which show dated proverbs and folk sayings along the edge or even extending across the entire inside. The production centre at Bergen op Zoom produced large, heavy plates with a flat base (dripping bowls) while production centres in the province of Friesland produced large lids that doubled as plates.

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16 Baart 1990, 27-28.

17 Gaimster 2006, 144: price 1/3 of comparable items made of faience/maiolica and industrial wares.

18 Baart 1988, 160-161.

FIG. 11 **19th-century dish, Friesland maiolica, from Zwolle Kranenburg.**

Large types were produced of (Chinese) porcelain, maiolica, faience and industrial whitewares, too. Like the medium-sized types discussed above, many of the large maiolica and faience types were imitations of porcelain types. The same can be said of some of the industrial whiteware types. But the group also includes new types, whose production was made possible by the use of new clays and new techniques.

6 Conclusion

Today, we associate a 'plate/dish' with a specific ceramic type. In studying the ceramics of a period spanning approximately 600 years we have used the term 'plate/dish' to refer to a certain basic type, based on the type with which we would associate that term today. For people in past times the term will have had different associations, and the further back in time we go, the greater the difference will be.

We defined the basic 'plate/dish' type as an open type without any additions having a maximum diameter that is (at least) four times the greatest height. This size ratio of 4 : 1 was however not used too rigidly, and some objects that do not conform to this ratio were also interpreted as 'plates/dishes'. The ratio moreover varies from one type of ceramics to another. While it is around 4 : 1 (maximum diameter : height) in the case of plates and dishes of redware, it may be more in the direction of 10 : 1.5 in the case of industrial whitewares. When the ratio drops below 10 : 3.5 we start using the term 'bowl'. So there is a transitional area of open types without additions ranking between 'plates/dishes' and 'bowls'.

Three separate lines of development can be distinguished within the overall development of 'plates/dishes', which were largely determined by changes in the employed production techniques and clays. The first line of development characterises redwares of Holocene clay. The second evolved from Italian maiolica and the third from Chinese porcelain. Specific characteristics of the different materials influenced the different lines of development. Holocene clay is actually the least suitable for the production of flat, open types. The bases of such types made of Holocene clay were therefore supported with thumbed feet and, at a later stage, a footring. Vessels with flat bases were first produced in the second half of the 16th century, following the discovery that tempering with fine sand prevents the risk of warping and cracking during drying and firing. The addition of temper to Holocene clay makes the clay comparable with white and red Tertiary clays in terms of suitability for the manufacture of objects with a flat base. The next step was to mix different clays and tempers to obtain a mixture suitable for the industrial production of ceramics in which flat bases are no problem at all.

Setting up a classification system is no mean feat. Thorough, extensive knowledge of materials, technical possibilities and products is indispensable for classifying ceramic products into basic groups, types and subtypes. We think it is fair to say that we need more time.

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Céramique commune post-médiévale 'marquée', en provenance de Malines (Belgique, province d'Anvers)

Alexandra De Poorter

1 Introduction

Lors de la rédaction de ma thèse de doctorat[1], mon attention fut attirée par une quinzaine de récipients en céramique rouge glaçurée. Tous ces objets, conservés à l'état fragmentaire, étaient pourvus de petites marques en creux. Trouvés dans la *Jodenstraat* à Malines, les conditions de leur découverte sont, malheureusement, restées obscures. Ce lot de vaisselle me fut donné pour étude par un des inventeurs, Mr. Willy De Jonge, qui resta très vague à propos du lieu de trouvaille et du contexte exact de celle-ci. Actuellement, les objets sont conservés aux Musées royaux d'Art et d'Histoire à Bruxelles.

D'aspect très surprenant, ces marques s'avérèrent de plus totalement inconnues même par quelques sommités de l'archéologie médiévale interrogées à ce sujet. Par exemple, ni F. Verhaeghe (Prof. Em. v.u.b.), ni H. Janssen (Prof. Université de Leiden) n'avaient déjà vu de telles marques sur de la céramique. Connaissant la curiosité de mon promoteur, son intérêt marqué des nouveautés et son goût pour les objets archéologiques remarquables et hors norme, il m'a semblé tout à fait approprié de lui dédier ce petit article, comme un clin d'œil de reconnaissance pour ses conseils et son soutien lors de la préparation de ma thèse de doctorat.

Dans cet article, j'exposerai d'abord quelques réflexions relatives aux marques en général, puis je ferai référence à quelques phénomènes de marquage sur de la céramique commune dans la région objet de mon étude, que j'appellerai le 'Brabant méridional', et, enfin, j'approfondirai les trouvailles faites dans la *Jodenstraat* à Malines.

2 Les marques sur céramiques en général

2.1 Definition

En général , « les marques peuvent avoir un rapport avec une protection de la qualité des matières premières et/ou de la production, la concurrence entre centres et la protection d'une production propre, les limites de compétences entre artisanats, la répartition du travail et la sous-traitance. Les marques ont à voir avec les règles de jeu relatives à la collaboration économique et à la justice sociale ou elles font partie d'un réseau sophistiqué et raffiné de garanties, tissé entre artisanat, artiste, commerçant et client. »[2].

(Texte original : « *dat merktekens een verband kunnen houden met kwaliteitsbescherming van grondstoffen en/of uitvoering; met de concurrentiestrijd tussen centra en met bescherming van de eigen productie; met de bevoegdheidsgrenzen tussen ambachten, met het aspect werkverdeling en onderaanneming. Ze hebben te maken met de spelregels omtrent economische samenwerking en sociale rechtvaardigheid, of maken deel uit van een vernuftig en verfijnd netwerk van garanties, gespannen tussen ambacht, artiest, verkoper en cliënt.* »)

Il semble évident que le souhait d'un fabricant de se distinguer d'un autre soit lié à la volonté d'attirer une certaine clientèle. La pression de la concurrence joue certainement également un rôle. Même si le potier améliore la qualité de sa production, ses produits ne deviennent pas nécessairement reconnaissables parmi les autres: après tout, un pot reste un pot. Et le potier va donc chercher à identifier ses produits par l'apposition d'une marque distinctive[3]. Comme la demande d'un octroi, l'utilisation d'une marque doit généralement être considérée comme une tentative de monopolisation du marché.

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[1] De Poorter 2004-2005.

[2] Traduit d'après Smeyers 1990, XIV.

[3] On retrouve d'anciens exemples de l'utilisation de marques sur de la céramique attique et campanienne, sur des objets en terre sigillée ou, encore, sur des tuiles romaines (De Poorter & Claeys, 1989).

2.2   Signification

Des marques apparaissent sur divers groupes de céramique. Il est important de vérifier si les marques appliquées sur de la céramique commune l'ont été avant ou après la cuisson. Les vraies marques de potier, signes d'identification de son atelier, sont en effet apposées avant la cuisson. Toutefois, d'autres signes, appliqués avant la cuisson sur de la céramique mais n'étant indubitablement pas des marques de potier dans le sens d'une marque d'atelier, peuvent également être observés, la signification de ces derniers n'étant pas vraiment connue.

Les marques sur les produits en céramique peuvent faire référence au potier ou à son atelier, mais il existe aussi d'autres explications pour l'application des marques. Elles peuvent indiquer la ville d'origine de la production, comme par exemple à Bergen-op-Zoom, où les potiers signaient leurs produits avec les lettres BOZ à la fin du XVIIIe siècle[4]. On peut aussi se poser la question de savoir si la demande d'objets marqués ne résultait pas d'un certain snobisme. En effet, sans faire d'analogie avec les phénomènes de modes actuels, se vanter de posséder, par exemple, une cruche portant le nom du potier rhénan renommé Jan Emens peut avoir été considéré comme 'chic'[5]. Les produits signés étaient probablement considérés plus luxueux que les non signés.

2.3   Types de marquage

Ci-après, je citerai différentes possibilités de marquage avant cuisson que l'on peut rencontrer en Belgique:
– Céramique grise : les marques sur ce type de céramique sont exceptionnelles. Des dessins formés par des lignes verticales et horizontales qui se croisent en divers endroits ont, par exemple, été trouvés à Tournai. Il s'agit du site *'Les 12 Césars'*. Ces données ne sont pas encore publiées et une étude approfondie des marques doit encore être réalisée[6]. Quand on observe ces signes on se rend compte qu'ils sont nettement différents d'autres lignes gravées en tous sens sur de la céramique grise et on a l'impression qu'il s'agit ici vraiment d'une marque spécifique apportée dans un certain but, même si l'on en connaît pas la raison ni la signification. En Brabant méridional, je n'ai pas rencontré de telles marques.
– Céramique rouge : ici, les marques sont gravées ou estampillées dans l'argile. Différents exemples on pu être attestés dans le Brabant méridional et seront traités en détail ci-dessous.
– Céramique blanche : sauf erreur de ma part, aucune marque n'est connue. Je ne tiens ici volontairement pas compte des objets en terre à pipe qui ne sont pas de la vaisselle, comme par exemple les pipes qui, au contraire, sont souvent pourvues de marques.
– Faïence, majolique, porcelaine : les marques sont ici pour la plupart peintes sur les objets. Les produits appartenant à des fabriques en possession d'octroi seront marqués de plus en plus systématiquement. Toutefois, leur identification n'est pas toujours évidente. Ce n'est que lorsqu'on peut déterminer ces marques par l'intermédiaire d'autres sources (par exemple grâce aux archives), que certains objets peuvent éventuellement être attribués à des ateliers spécifiques.
– Grès : les marques peuvent être estampillées ou appliquées en relief à l'aide de moules. Pour ce qui concerne le grès, le marquage est assez répandu.

On peut aussi relever des marquages particuliers sur toute céramique travaillée à la main, à savoir des empreintes de doigts. Je pense entre autres aux impressions sur les pieds pincés ou sur certaines anses décorées. En se basant sur des empreintes de doigt observées sur les produits d'un seul atelier, la possibilité existe, en principe, d'identifier une ou plusieurs personnes au sein de cet atelier. Une étude scientifique de ce type a été réalisée, par exemple, dans le quartier de potiers, le Kerameikos, de l'antique Metaponto (dans le sud de l'Italie)[7]. Grâce à la collaboration entre l'Université de Lecce, le *Servizio Polizia Scientifica*, la *Soprintendenza archeologica della Basilicata* et le *PASTIS* (*Parco Scientifico e Technologico Ionico Salentino*) de Mesagne (Brindisi) différentes personnes ont pu être reconnues, sur base des empreintes de leurs doigts, sur des céramiques à figures rouges. Les empreintes appartenaient aux artisans qui produisaient et vernissaient les vases. Cette collaboration fructueuse a permis de jeter un regard plus clair sur l'organisation générale du travail au sein des ateliers. Un examen semblable a également été effectué à Mycène et à Chypre[8]. Pour la période médiévale, une étude identique fut réalisée à Bourne (Lincolnshire) et Ingatestone (Essex)[9]. Comme déjà dit, il s'agit de marquages très spécifiques qui ne donnent pas vraiment d'information sur la personne du potier médiéval ou postmédiéval. Son nom reste inconnu. Et même si les archives énumèrent un nom de potier, il reste impossible de reconnaître quel pot ou quelle cruche a été réalisé par la personne citée.

Il existe aussi des 'marques' appliquées après cuisson. Sur la céramique commune elles sont probablement même plus nombreuses que les marques avant cuisson. Je pense entre autres aux récipients décorés avec des marques de 'propriétaires' comme on en a découvert dans l'ancienne abbaye de Beaulieu à Petegem (Flandre orientale)[10]. Les lettres et symboles, gravés dans la pâte après la cuisson, plaident pour des indications réalisées par les propriétaires de ces objets. De plus, il est clair que ces signes ont été appliqués par différentes mains, aussi bien des auteurs expérimentés que des analphabètes ayant une écriture maladroite et illisible. Certains signes peuvent être des initiales, aussi bien de noms propres que de noms religieux. D'autres signes sont peut-être des abréviations d'ordre religieux. En plus des lettres, que ce soit en écriture romaine ou gothique, on retrouve aussi des symboles, comme des croix, des traits, une croix encerclée ou un trident[11].

4 Gieles 1968, 420.

5 Les cruches les plus anciennes connues du potier renommé de Raeren, Jan Emens, datent de 1566 à 1568 (Hellebrandt 1977, 47).

6 Information S. Challe, Direction de l'Archéologie de la Région Wallonne.

7 D'Andria 1997.

8 *Ibid.*, 39.

9 Moorhouse 1987, 184.

10 De Groote 2008b.

11 De Groote 1993, 373-376, fig. 25, 1-2.

2.4 Datation des marques

La datation des signes 'marqués' sur de la céramique n'est pas simple et il importe de distinguer la datation d'une marque de la datation de l'objet sur lequel cette marque a été appliquée. Dans certains cas, des céramiques portent une date absolue. Je pense, par exemple, aux assiettes en céramique rouge décorées à la barbotine. On peut raisonnablement penser que l'année mentionnée sur celles-ci fait, dans ce cas, référence à un événement précis. Il s'agit ici d'objets personnalisés qui furent produits à l'occasion de circonstances particulières, comme une naissance ou un mariage. Quelques exemples pris parmi les nombreux cas connus : un tripode en provenance de Noordeind (Pays-Bas) portant l'inscription : « MAERTIE CLAES 1651 »[12]; un tripode portant le texte : « NEELTJE ARIENS ANNO 1672 » provenant de Alkmaar (Pays-Bas)[13]; un pot de chambre avec la phrase : « SOETE LIEF KOM TE BET 1673 », également trouvé à Alkmaar[14], etc.

Les dates peintes sur des objets en faïence, majolique et porcelaine, leur donnent également une datation absolue. De pareilles datations ne sont toutefois malheureusement pas connues en association avec une marque, ce qui aurait permis de situer chronologiquement celle-ci.

Des produits en grès, par contre, portent souvent des indications chronologiques en combinaison avec des marques. Pourtant, la prudence reste de mise. Les années indiquées sur du grès font souvent partie d'un décor plus large, façonné à l'aide d'un moule. Ces moules ont pu être conservés et utilisés pendant un laps de temps assez long, et donc même après la mort du potier, d'où l'année indiquée n'offre plus aucune garantie pour la datation absolue de l'objet moulé. Par contre, l'année indiquée sur le produit fini permet d'établir un *terminus post quem* pour sa réalisation et fournit une datation absolue à la réalisation du moule et à la marque apposée dans celui-ci.

Pour dater les marques, les sources écrites peuvent également livrer une contribution importante. L'information relative à certains ateliers donne soit des dates précises soit au moins un *terminus post quem* pour certaines productions. Toutefois, il n'existe apparemment pas de certitude concernant les datations les plus anciennes.

Je prends Bergen-op-Zoom comme exemple : selon Gieles[15], les potiers y ont commencé à marquer leurs productions avec les lettres BOZ en 1798, malgré que leur demande de pouvoir appliquer cette marque datât déjà du 27 juin 1765. Selon Lauwerijs[16], par contre, certains potiers auraient déjà utilisé des marques typiques à Bergen-op-Zoom en 1650.

La tâche s'avère nettement plus difficile quand les données contextuelles manquent et que l'archéologue doit exclusivement faire appel à du matériel de comparaison. Sur base des particularités morphologiques des objets, des périodes chronologiques peuvent être proposées, pour autant que l'évolution typologique de la céramique soit connue.
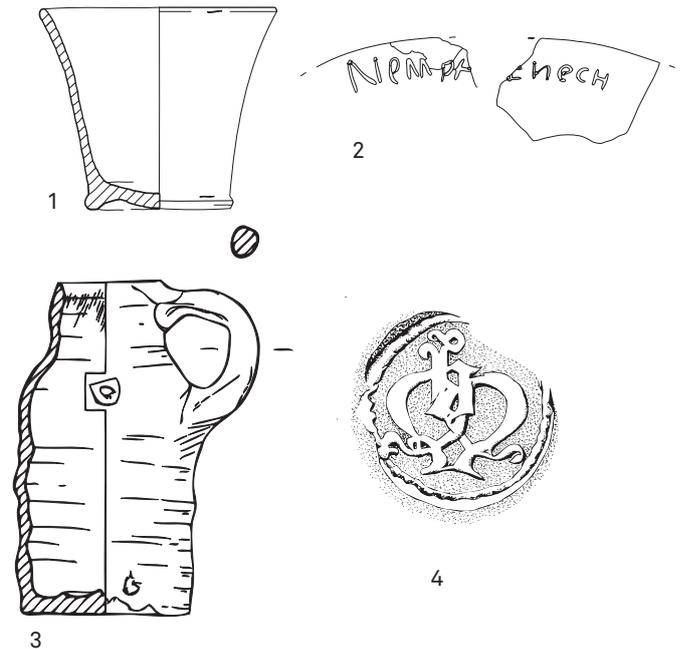

FIG. 1 **Céramique marquée de Diest (1-2), Bruxelles (3) et Malines (4) (dessin VIOE). Echelle 1:3 (1-3); échelle 1:1 (4).**

En général on peut avancer que dans nos régions les marques sur des céramiques apparaissent systématiquement à partir du XVIIe et surtout au XVIIIe siècle. Il s'agit alors de productions en faïence et porcelaine, ce qui n'implique toutefois pas que toutes les pièces soient systématiquement marquées. Les marques les plus anciennes connues pour Bruxelles, par exemple, concernent des objets de la production de faïence de la famille Mombaers, datant de 1705 et de 1707[17].

Sur les objets en grès, des marques apparaissent déjà dans la deuxième partie du XVIe siècle. L'indication la plus ancienne d'une année combinée à une marque sur un produit de Raeren date de 1573[18].

2.5 Marques sur archives

Pendant mon doctorat, j'ai rencontré dans les archives plusieurs marques sous forme de dessins. Elles appartiennent à l'un ou l'autre potier. Il est frappant de remarquer que ces dessins représentent souvent un tripode ou un pot. En voici quelques exemples :

⊙ A Malines, un testament fut signé le 23 octobre 1620 avec le dessin d'un tripode à une anse. Un des deux témoins signant le testament, un certain Jan Boxthuyns, pourrait donc avoir été un potier même si cela n'est pas dit explicitement[19].

⊙ Dans des archives gantoises, des signatures de potiers du XVIIe siècle furent découvertes. Le potier Jan van Eechautte

12 Communicerende vaten 1988, 55, fig. 69.
13 Ostkamp *et al.* 2001, 149.
14 *Ibid.*, 152.
15 Gieles 1968, 420 et 424.
16 Lauwerijs 1973, 121.
17 Mariën-Dugardin 1974, 143.
18 Kohnemann 1982, 52.
19 Archives de la Ville de Malines, nr. 1660, *notaire H. Sporckmans, testaments 1620-1621.*

utilisait un dessin de tripode à deux anses comme marque. Sur le même document se trouve une autre marque, à dessin géométrique, du potier Pieter Dierkens[20].

◎ A Bergen-op-Zoom, plusieurs marques sont également connues : Hendrick Hendricxss de Jonghe (production : 1638-1651) signait au XVIIe siècle par une roue (roue de potier)[21]. Cette roue se présente aussi dans des archives en France (entre autres, à Néhou, dans un registre de l'état civil du 2 avril 1714)[22].

◎ A Delft, finalement, des documents du potier Adriaen Cornelisz. Cater sont connus, signés par un dessin de tripode à une anse, datant de 1609, 1610, 1618 et 1635, ainsi qu'un document du potier Lijntgen Woutersdr., veuve de Claes Adriaensz. Cater, signé par un dessin de tripode à deux anses. Ce dernier document date de 1636[23].

Remarque : ce genre de marquage ne se rencontre que sur des documents. Rien n'indique jusqu'à présent que les potiers aient utilisé ce genre de signature pour marquer leur production. Les marques sur archives qui se réfèrent à des potiers n'ont pas de rapport avec une éventuelle 'protection' de leur propre production. Souvent, elles sont simplement une référence au métier lui-même : un tripode, une roue, etc. Tous les exemples connus sont datables à partir du XVIIe siècle.

3 Les marques sur de la céramique commune en Brabant méridional

Ci-après, je citerai par ordre alphabétique quelques villes où des marques ont été attestées.

◎ A Diest, un gobelet en céramique rouge, couvert d'engobe blanc, a été découvert. Il porte l'inscription gravée « Nemph… nech ». La signification n'en est pas connue. Cet objet appartient à une collection privée et il n'a pas encore été publié (fig. 1 : 1-2).

◎ A Bruxelles, différents exemples de marques sont connus.
· Au Grand Sablon, au coin de la rue de Ruisbroek et de la rue de Bodenbroek, une petite bouteille en céramique rouge intacte fut trouvée dans une fosse. L'objet porte, sur l'épaulement, une petite marque non identifiée. Celle-ci se présente sous la forme d'une estampille dans un cartouche (fig. 1 : 3).
· A la Place royale, dans l'ancienne *Cour d'Hoogstraeten*, deux récipients, en forme de bouteille, furent découverts portant chacun une marque non identifiée[24]. Ici il s'agit également d'une estampille dans un cartouche. Les marques sont identiques à celle attestée sur une petite bouteille en provenance de Malines, mentionnée ci-dessous. Plusieurs hypothèses ont été avancées quant à leur signification (*cf. infra*).

◎ A Louvain, un couvercle portant sur la face extérieure un « V » gravé fut découvert au 'Grand Béguinage'[25]. Ici également la signification de ce signe n'est pas connue.

◎ A Malines, différentes types de marques sont connues.
· Dans un puits en briques de la O. Van Kesbeeckstraat, deux bols ont été découverts, soudés l'un à l'autre par la cuisson. L'auteur du signalement date les objets du milieu du XVIe siècle (après 1527). D'après lui, les deux bols sont pourvus d'une « marque de propriété, une marque de qualité et une marque probablement 'malinoise' »[26]. Les deux marques sont quasi identiques, mais apposées de façon différente. L'un des bols porte une rose couronnée sur une anse, et l'autre un carré avec un bord perlé dans lequel se trouve un 'p' ou un 'd' traversé de deux lignes parallèles. Le dos de l'anse avec la rose porte les armes de la ville de Malines et l'on reconnaît, selon l'auteur, très vaguement, le personnage de St. Rombouts. L'autre bol possède une anse perforée et la rose et l'autre marque se situent donc toutes deux sur l'autre anse. Les armes de la ville se trouvent sur le dos de l'anse perforée[27]. L'argument sur lequel l'auteur se base pour identifier la rose comme une marque de qualité et le carré avec la lettre et les lignes parallèles comme une marque de propriété n'est pas fourni.
· Pendant les fouilles dans l'ancien couvent des Dominicains, deux fragments en céramique rouge marqués ont été trouvés[28]. Les tessons proviennent d'un puits à eau de la deuxième moitié du XVIIe siècle ou du début du XVIIIe siècle. Il s'agit, d'une part, d'un fragment d'un pot de chambre couvert d'une glaçure au plomb brune. Près de l'anse, on trouve le chiffre « VIII », également couvert de la couche de glaçure. L'autre tesson appartient aussi à un pot de chambre et porte sur le fond la mention « BR . . 81 ». La partie centrale de cette inscription manque. Le chiffre a probablement un rapport avec l'indication d'une année (1681 ?) tandis que les lettres représentent peut-être les initiales d'un potier.
· En 1980, une assiette en céramique rouge glaçurée fut trouvée dans la St.-Alexiusstraat portant un « M » gravé sur la lèvre. Les auteurs de la découverte datent l'objet, non représenté dans la publication, dans la deuxième moitié du XVIe siècle[29].
· Finalement, une petite bouteille en céramique à marque estampillée fut découverte dans un puits du XVIe siècle (fig. 1 : 4). Le lieu précis de la découverte ne nous est pas connu[30]. Concernant la signification de cette marque, différentes hypothèses ont été avancées. Selon certains, il s'agit des armes de la ville de Dendermonde[31]. D'autres y reconnaissent plutôt un « b » brugeois[32]. La forme de la lettre n'est d'ailleurs pas identique dans tous les cas. Des récipients semblables furent entre autres découverts à Bruges[33], Dendermonde[34], Petegem[35], Tournai[36], Courtrai[37], Bruxelles (*cf. supra*)[38] et Malines[39] et en France, à Arras[40],

20 Laleman 1997, 42.
21 Groeneweg 1992, 76.
22 Alexandre-Bidon 1996, 115.
23 Roodenburg 1993, 178.
24 Van Eenhooge 1999, 292 et fig. 24: 169.
25 Provoost & Vaes 1980, 79, fig. 4.39.
26 Vandenberghe 1974, 230.
27 Vandeberghe 1975, LV.

28 Anonyme 1980, 4.
29 Vandenberghe & Raffo 1981, 261.
30 Information de Stephan Van Bellingen.
31 Stroobants 1983, 62.
32 Information de M. H. Installé, Chef-Archiviste de la Ville de Malines (lettre du 4 mars 2002); N. Geirnaert, Archiviste de la Ville de Bruges (e-mail du 27 mars 2002).

33 Hillewaert & Verhaeghe 1991, 211.
34 Stroobants 1983, 62.
35 De Groote 2008a, 287 et fig. 229-230.
36 Vêche & Vilvorder 1988, fig. 90: 13.
37 Despriet 2005, 10, fig. 5: 3; fig. 10: 7.
38 Van Eenhooge 1999, 292 et fig. 24: 169.
39 Vandenberghe 1973, fig. 7: 35.
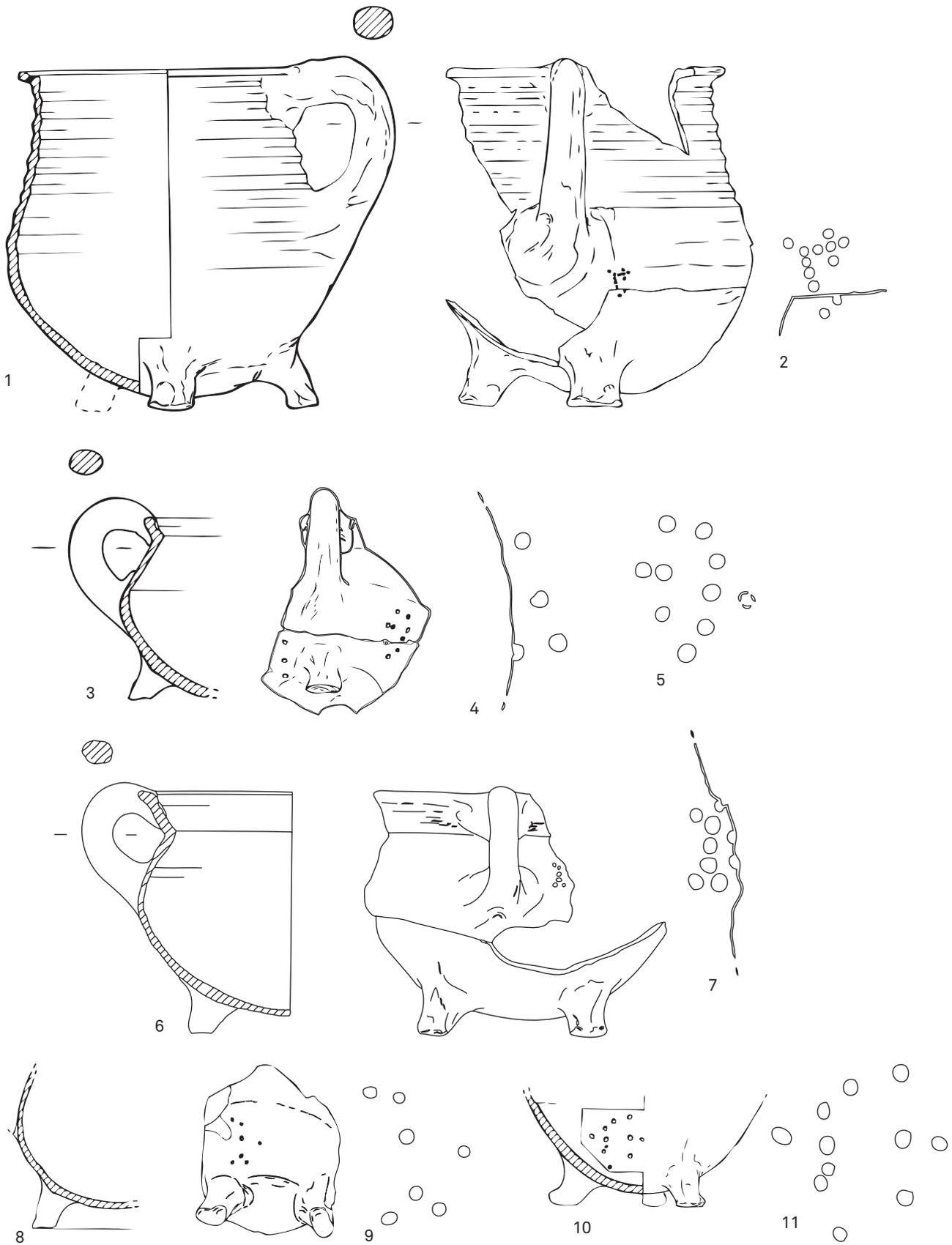40 Hurtrelle & Jacques 1984, fig. 42: 7, 9.

FIG. 2 Céramiques marquées de Malines, mentionées au catalogue (dessins de B. Vanhoebroeck, Musées royaux d'Art et d'Histoire, Bruxelles). Les dessins de la céramique sont à l'échelle 1:3, les marques sont à l'échelle 1:1.

FIG. 4 **Détail du marque au tripode, trouvé dans la *Jodenstraat* à Malines.**

FIG. 3 **Tripode marqué en céramique rouge glaçurée, trouvé dans la *Jodenstraat* à Malines.**

Lille[41], Béthune et Saint-Omer[42]. Une étude détaillée sur la fonction de ces 'bouteilles' a été publiée en 2005. L'auteur nomme ces objets des 'containers'. Ils auraient été utilisés au cours de tout le XVIᵉ siècle, mais principalement au milieu de ce siècle[43].

Toutes ces marques apparaissant à Malines ont un aspect tout différent des marques très particulières sur céramique rouge, en provenance de la *Jodenstraat* dans cette même ville, que je traiterai ci-dessous.

4 Les marques sur céramique commune à Malines

4.1 Description des marques

Au total il s'agit de quinze objets marqués; quatorze objets sont pourvus d'une seule marque, un objet en porte deux. Toutes les marques sont uniques. Elles sont appliquées sur de la vaisselle en céramique rouge, entièrement ou partiellement glaçurée, plus spécifiquement des pots (tripodes) et des écuelles. Les marques se situent toutes à l'extérieur des récipients, à hauteur des anses ou sur la partie inférieure du corps.

Toutes les marques sont formées de petites dépressions circulaires. On distingue d'une part des marques assez soignées, de l'autre des signes grossiers. Le premier groupe comprend des marques représentant un motif plus ou moins géométrique, le deuxième groupe consiste en marques peu soignées où il est impossible de reconnaître un dessin. Toutefois, on ne distingue ni lettres ni chiffres. On peut aussi différencier des marques fines avec de toutes petites dépressions très rapprochées et des marques avec des dépressions nettement plus grandes et relativement éloignées l'une de l'autre.

A l'exception d'un récipient, toutes les marques ont été apposées sur des surfaces non glaçurées. Elles semblent avoir été appliquées à l'aide d'un objet pointu. Dans le centre de chaque dépression se trouve une petite cavité qui pourrait résulter de l'enfoncement du bout conique d'un clou. La méthode exacte du marquage reste obscure. A-t-elle eu lieu avant ou après la cuisson ? Dans certains cas l'existence de petits bourrelets autour des évidements suggère un marquage dans la pâte encore molle. Dans d'autres cas les cavités semblent résulter d'une usure par frottement dans la pâte durcie. Enfin dans le cas du récipient où glaçure et marquage sont associés, la glaçure est éclatée à la périphérie des creux. Deux hypothèses semblent possibles : soit la glaçure a été transpercée par un objet pointu après cuisson, soit la glaçure couvrant les cavités n'a pas résisté lors de la cuisson de l'objet. Façonnés après la cuisson, les creux

41 Gubellini 2002, fig. 6: 16.

42 Information de M. B. Castelain (lettre du 10 janvier 2002).

43 Despriet 2005, 36.

devaient nécessairement être réalisés un par un ; appliqués avant la cuisson ne pourrait-on pas aussi penser à l'utilisation d'un poinçon ? Il est en tout cas très surprenant qu'aucune marque ne soit identique.

4.2   Catalogue

1. Tripode, couvert à l'intérieur entièrement, à l'extérieur localement de glaçure orange brun à vert brun; partie supérieure du corps cannelée; traces de brûlure sur le fond. Sous l'anse se trouve une marque complète (fig. 2: 1-2; fig. 3-4) . Dimensions : H : 19,5 cm; diam. bord : 13,5 cm.

2. Tripode. Il s'agit probablement d'un exemplaire à une anse; glaçure orange brun à l'intérieur ; à l'extérieur, de part et d'autre du petit pied conservé, une marque complète et une incomplète (fig. 2: 3-5). Dimensions : H : env. 10 cm.

3. Tripode couvert de glaçure orange brun à l'intérieur; une anse verticale conservée. Brûlé à l'extérieur. Une marque incomplète se trouve à côté de l'anse (fig. 2: 6-7; fig. 5). Dimensions : H : 11,5 cm.

4. Fragment de fond d'un tripode, couvert à l'intérieur de glaçure orange brun. Le fond est légèrement brûlé. A l'extérieur se trouve une marque complète (fig. 2: 8-9).

5. Fragment de fond d'un tripode couvert de glaçure orange brun à l'intérieur. A l'extérieur on distingue une marque complète (fig. 2: 10-11).

6. Fragment de bord d'un tripode, couvert de glaçure orange brun à l'intérieur; une anse verticale brûlée est conservée (fig. 6: 1-2). A côté de l'anse se trouve une marque, probablement complète.

7. Fragment de bord d'un tripode, localement couvert de glaçure orange brun des deux côtés; à l'extérieur se trouve une marque complète (fig. 6: 3-4).

8. Fragment de paroi d'un tripode avec l'amorce d'une anse verticale; à l'intérieur de la glaçure orange brun; à l'extérieur une marque complète (fig. 6: 5-6; fig. 7).

9. Fragment de paroi d'un tripode avec une anse verticale partiellement conservée; de la glaçure brun vert à l'intérieur; à côté de l'anse se trouve une marque incomplète (fig. 6: 7-8).

10. Fragment de bord d'une écuelle, couverte de glaçure brun clair; à l'extérieur se situe une marque complète (fig. 6: 9-10). Dimensions : diam. bord : 17 cm.

11. Fragment de bord d'une écuelle couverte de glaçure brun clair à l'intérieur; à l'extérieur se trouve une marque incomplète (fig. 6: 11-12).

12. Fragment d'une écuelle dotée d'une petite anse horizontale; à l'intérieur, engobe blanc couvert de glaçure verte; à l'extérieur, glaçure orange brun; une marque complète se trouve également à l'extérieur (fig. 6: 13-14). Dimensions : diam. bord : 15,2 cm.

13. Fragment de bord d'une écuelle, couverte de glaçure orange brun à l'intérieur; à l'extérieur, une marque très probablement complète (fig. 6: 15-16; fig. 8).

14. Fragment de fond sur un anneau de base retravaillé à la main; à l'intérieur, glaçure orange brun. Une marque complète se trouve à l'extérieur (fig. 6: 17-18; fig. 9). Dimensions : diam. fond : 9 ,7 cm.

15. Fragment de paroi couvert de glaçure brune à l'extérieur, où se trouve une marque incomplète (fig. 6: 19-20).
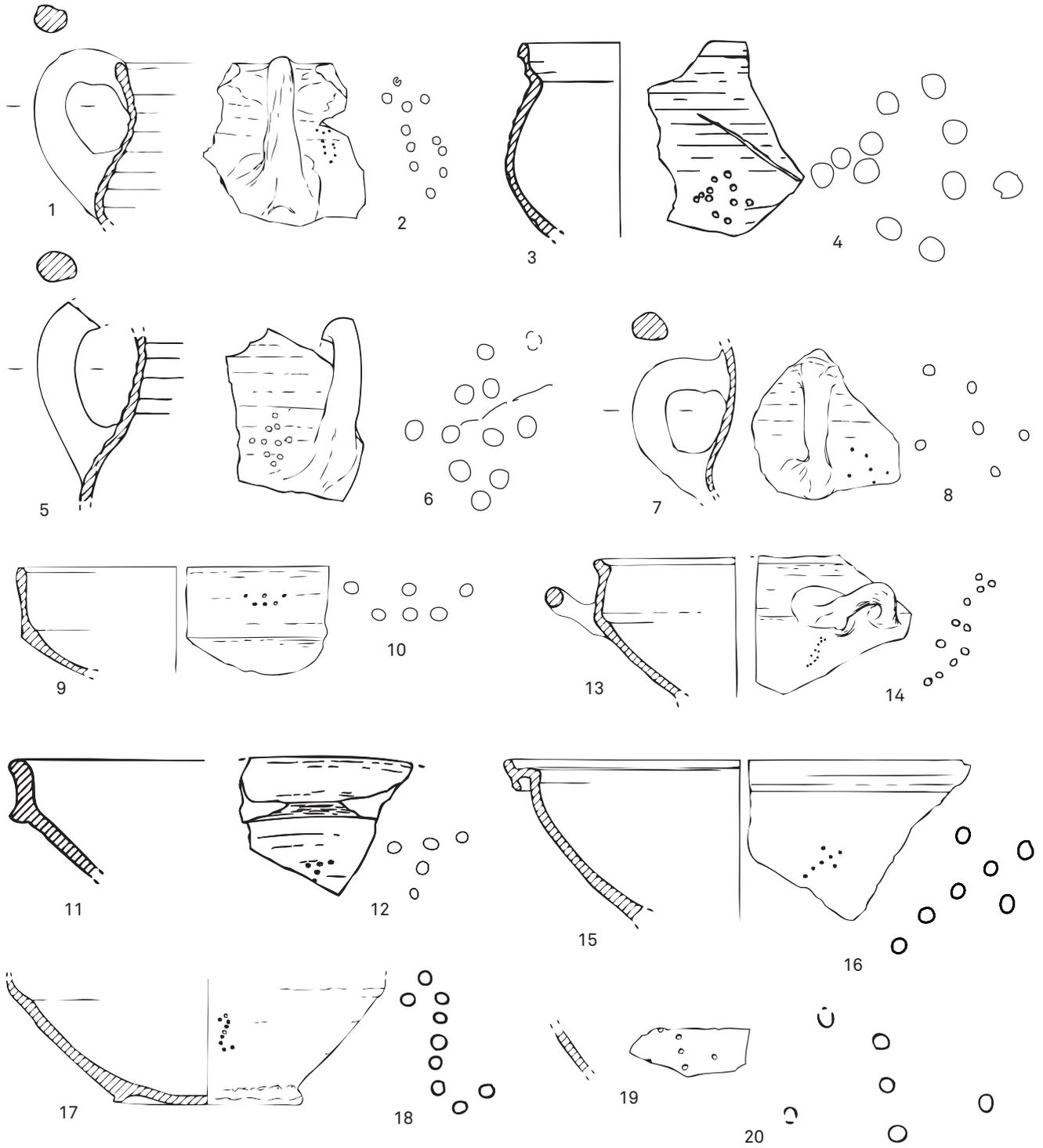
FIG. 6 Céramiques marquées de Malines, mentionées au catalogue (dessins de B. Vanhoebroeck, Musées royaux d'Art et d'Histoire, Bruxelles). Les dessins de la céramique sont à l'échelle 1:3, les marques sont à l'échelle 1:1.

FIG. 7 **Détail d'une marque complète.**

FIG. 8 **Fragment d'une écuelle marquée en céramique rouge glaçurée, trouvé dans la *Jodenstraat* à Malines.**

4.3 Datation

Par manque d'informations sur les conditions de trouvaille et le contexte précis de ce lot de vaisselle marquée provenant de Malines, seule une comparaison typologique avec des formes identiques de la région peut nous donner quelques éclaircissements. Sur base du matériel de comparaison, les objets, et donc également les marques, doivent très probablement dater de la première moitié du XVIe siècle.

4.4 Interprétation

Lors de la découverte d'un objet marqué, un premier problème surgit au moment de l'observation même de la marque. S'il s'agit d'un signe qui – comme c'est le cas pour les objets de Malines – ne nous fait pas immédiatement penser à quelque chose que l'on connaît, le danger existe que le signe soit peut-être tout simplement ignoré. Un deuxième problème concerne l'interprétation de la marque. Il est très important de lire les marques correctement. Dans le cas d'objets archéologiques l'interprétation d'une marque est d'autant plus risquée que, souvent, on ne dispose pas d'archives qui décrivent l'utilisation et la fonction des marques.

Comme déjà dit plus haut, le contexte de la découverte des objets de la *Jodenstraat* n'est pas connu. Proposer une signification pour les marques découvertes est donc purement spéculatif :
– Ces marques appartiennent-elles à un atelier de potier bien déterminé où différentes personnes travaillaient, chacune avec son propre poinçon et sa propre marque ?

Le fait que nulle part ailleurs à Malines de pareils produits estampillés n'ont été découverts rend cette hypothèse plus que douteuse. Ce serait vraiment un très grand hasard que des récipients en provenance de cet atelier n'aient été retrouvés qu'à un seul endroit (c'est-à-dire dans la *Jodenstraat*) à Malines. Et cela même si on imagine que des marques identiques à d'autres endroits de la ville puissent avoir échappé à l'attention de quelques archéologues.
– Ces marques ont-elles un rapport avec une commande spécifique pour une personne ou pour une destination précise ?
Il est alors très bizarre qu'il y ait tant de marques différentes et qu'une même marque n'apparaisse même pas deux fois.
– Ces marques sont-elles l'indice de l'une ou l'autre fonction des objets ou d'un traitement particulier de ceux-ci ?
Par manque de données supplémentaires il est actuellement impossible de décoder leur signification.

5 Conclusion

De la céramique marquée et datée reste exceptionnelle, aussi bien à l'intérieur qu'à l'extérieur du Brabant méridional. De plus, il n'existe apparemment pas de certitude concernant les datations les plus anciennes.

Même si les marques sur céramique rouge que j'ai rencontrées à Malines sont 'illisibles' et difficilement interprétables, elles ont bel et bien été appliquées intentionnellement avant ou après la cuisson, la question reste posée. Même si leur nombre est restreint, leur contribution au répertoire des marques est certainement importante : d'un côté, ces marques sont la

FIG. 9 Ecuelle marquée en céramique rouge glaçurée, trouvé dans la *Jodenstraat* à Malines.

preuve que la céramique commune rouge pouvait faire l'objet d'un marquage, d'autre part, il est démontré ici que ces marques ont été appliquées bien avant les XVII⁰-XVIII⁰ siècles. Les marques de la *Jodenstraat* à Malines sont en effet les plus anciennes du Brabant méridional, à savoir de la première moitié du XVI⁰ siècle.

Il s'impose par ailleurs qu'il ne s'agit pas de signes appliqués dans l'intention de conquérir un certain monopole du marché, comme les marques de fabrique distinctives dont j'ai parlé plus haut. Il est plus que probable que ces marques soient liées spécifiquement à un lot donné de vaisselle pour des raisons inexpliquées.

Il faut donc faire la distinction entre ce que l'on pourrait appeler les vraies marques qui se réfèrent à un potier déterminé ou à son atelier et les marquages, tels que ceux trouvés dans la *Jodenstraat* à Malines, dont on ne connaît pas (encore) la signification.

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Medieval and later trade in textiles between Belgium and England. The picture from some finds of cloth seals

Geoff Egan

1   Introduction

What follows has been compiled by the writer over a number of years through the kindness of archaeologists, curators and other correspondents in Belgium and elsewhere, who have made the information available and expedited examination of collections of finds during a couple of visits. Almost certainly significant material in Belgium will have been missed by the writer, for which he can only apologise. The evidence then available for this complicated subject was briefly summarised in a single paragraph some fifteen years ago[1]. Since then not only have many more seals pertinent to the two-way trade been found and identified, but issues from production centres then unrepresented by finds have also emerged. Potential seals of Brussels or Bruges with little more specific than a prominent letter B currently present problems of identification (at least for a researcher based in England). Some of these and other seals have what looks like a 'Belgic' lion as a prominent feature of the stamps. For most cloth seals wherever they are found, close dating evidence is scarce. This paper must inevitably be considered only a preliminary listing and it will hopefully be superseded by further work particularly by Belgian colleagues.

2   The sealing of cloth

The historical background of the medieval textile industries in the area of modern Belgium and their trade and subsequent development are very well documented[2]. For the English speaker, several of the works of John Munroe are particularly useful, as are the publications of Harding[3]. The diligent research by economic historians has traced the scale of production in thousands and even hundreds of thousands for decades on end for several of the most significant production centres.

The use of seals, presumably of lead, to mark individual, newly woven cloths as being of good enough quality for the market (determined by examination by local officials) was part of the quality-control of this important industry. Different regulations were in force in each production centre, and different fabrics, too, required specific stipulations and particular seals. The earliest north-European cloth seals known to the writer among English finds are stamped with the lion rampant of Flanders, and seem to date from the late 13th century onwards. The tradition of sealing textiles in Belgium continued at least into the early 18th century (and perhaps into the early 19th century) reflecting the fortunes of the various branches of production there.

3   Seals from cloths woven in the area of modern Belgium found in England

3.1   Introduction

Most items found in London are in the Museum of London (MOL) – these have excavation-site codes or individual accession numbers, and others are in the British Museum (BM); items found in Salisbury are in the Salisbury and South Wiltshire Museum (SSWM); all items lacking collection attributions are in private hands. Finds discovered in circumstances other than formal excavation from 1996 onwards are in PAS = Portable Antiquities Scheme (for website database see under finds.org.uk).

All seals in the listing below are of the two-disc type, apart from those originating in Brussels and Salisbury, which have four[4].

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1 Egan 1995b, 320.

2 *e.g.* Laurent 1935; De Poerck 1951.

3 Munroe 1983; *Idem* 1994; Harding 1987; *Idem* 1998.

4 *cf.* Egan 1995a, viii.

Conventions used in seal descriptions below:

// = next disc

/ = next line

- = no stamp

.. = single character missing

... = two or more characters missing

(...) = characters in brackets not fully legible

[...] = characters in brackets are suggested

Lettering is in roman script unless indicated otherwise.

<...> = registration number (for items from Museum of London excavations, for which the individual codes are given)

3.2   Antwerp

One seal, perhaps for one of the satins or druggets manufactured there[5] has been found in London:

> - // three-towered castle in perspective, two open hands to sides (arms of the city - cf. fig. 1: 1), .. to sides of double-headed eagle displayed above this.

In the 16th century, Antwerp was a very important centre for the finishing of cloths woven in England[6] and it is surprising that more seals assignable to this origin have not been identified in the U.K. A range of Antwerp issues have been identified elsewhere[7].

3.3   Bruges

Bruges had one of the most dynamic textile industries of late medieval and early-modern Flanders, which has received a lot of detailed attention from historians[8]. The seals listed comprise three basic varieties, one presumably from the late-medieval period, while the others are assignable to the late 16th to mid 17th centuries.

The earliest example was found in London[9]:

> lion rampant // (?B)R(V)/(G)E(O)/..(IS) (lombardic lettering; two rivets)
>
> (?)15th/16th-century; the legend is presumably *Brugeoni*s.

Also known, each from single examples from London, are two later seals:

> BRV/GES in square cartouche // (missing)
>
> (?)16th/early 17th-century[10].

Brug/gue // (?) P

> (?)late 16th/17th-century.

A much more common seal, with more than a dozen known and featuring the city's device (as still in use today) on one side, and either a lion or different privy marks on the other is of 16th/17th-century date (fig. 1: 2-3):

> coronet on stem of blackletter b, border of S-like strokes (sometimes reversed) // crowned lion rampant in similar border (alternatively, at least three, possibly four different privy marks have been recorded[11].

At least eight have been found at Thames-side excavations in London: with the lion stamp[12]; with TR ligature (lombardic lettering) and four small mullets[13]; with PRO privy mark and rose[14]; with PERO privy mark and stemmed rose[15]; one disc with b and coronet only survives[16]; further examples have been recorded from the Thames foreshore[17].

Others have been recorded in Gainsborough (Lincolnshire)[18], Salisbury (Wiltshire)[19], Besthorpe (Norfolk)[20] and Yorkshire. The trade to England is well documented[21].

3.4   Brussels

Two separated discs (presumably from four-part seals) have been found in London, and tentatively ascribed to the 17th century, are definitely from Brussels. They may be for fabrics known as '*Brissels*'[22]:

> towered townscape, BRVSSELS/ five cinquefoils

Several other seals have been claimed as having this origin on the basis of one or more prominent letters B, though none gives the full name[23].

3.5   Courtrai/Kortrijk

This was an important centre for linen production from the late 15th century up the 1580s, when much of the workforce transferred to Haarlem[24]. Trade is represented in Britain by four seals[25]; one is from Mursley (Buckinghamshire). These are probably of post-medieval date:

> crown over shield with: in a border engrailed, a chevron (the arms of the town - *cf*. fig. 1: 4), CORTRICK around // A34 (only legible on the first referred to)

5 Dietz 1972, xvii.

6 See on the English seal found in Antwerp.

7 Arts 1998, 183 fig. 12 from Eindhoven, the Netherlands (a large seal with the hand symbol alone); Liebgott 1975, 41 fig. 21 from Ålborg, Denmark.

8 *e.g.* De Poerck 1951; Endrei 1983; Munroe 1994, giving production figures.

9 Egan forthcoming a: VRY89 <1181>.

10 *cf*. Nijhof 2007, 238 fig. 32: 3 found in s'Hertogenbosch.

11 It is not known whether these relate to officials or textile manufacturers.

12 Egan forthcoming a: ABO92 <1486> and <1475>, MOL 88.107/17.

13 *Ibid*., VRY89 <2488>.

14 *Ibid*., BRA88 <124>.

15 *Ibid*., ABO92 <1232/1234>, while BRA88 <118>, contextual dating of former *c*. 1630-1650, may be a further variant with P(ER) legible and stemmed roses to each side.

16 *Ibid*., BRA88 <130>.

17 *e.g.* MOL 88.107/47 with a ?variant PRO mark.

18 Egan 2006b, 98.

19 Lion (Egan 2001a, 71-72 & 85 fig. 26 no. 157).
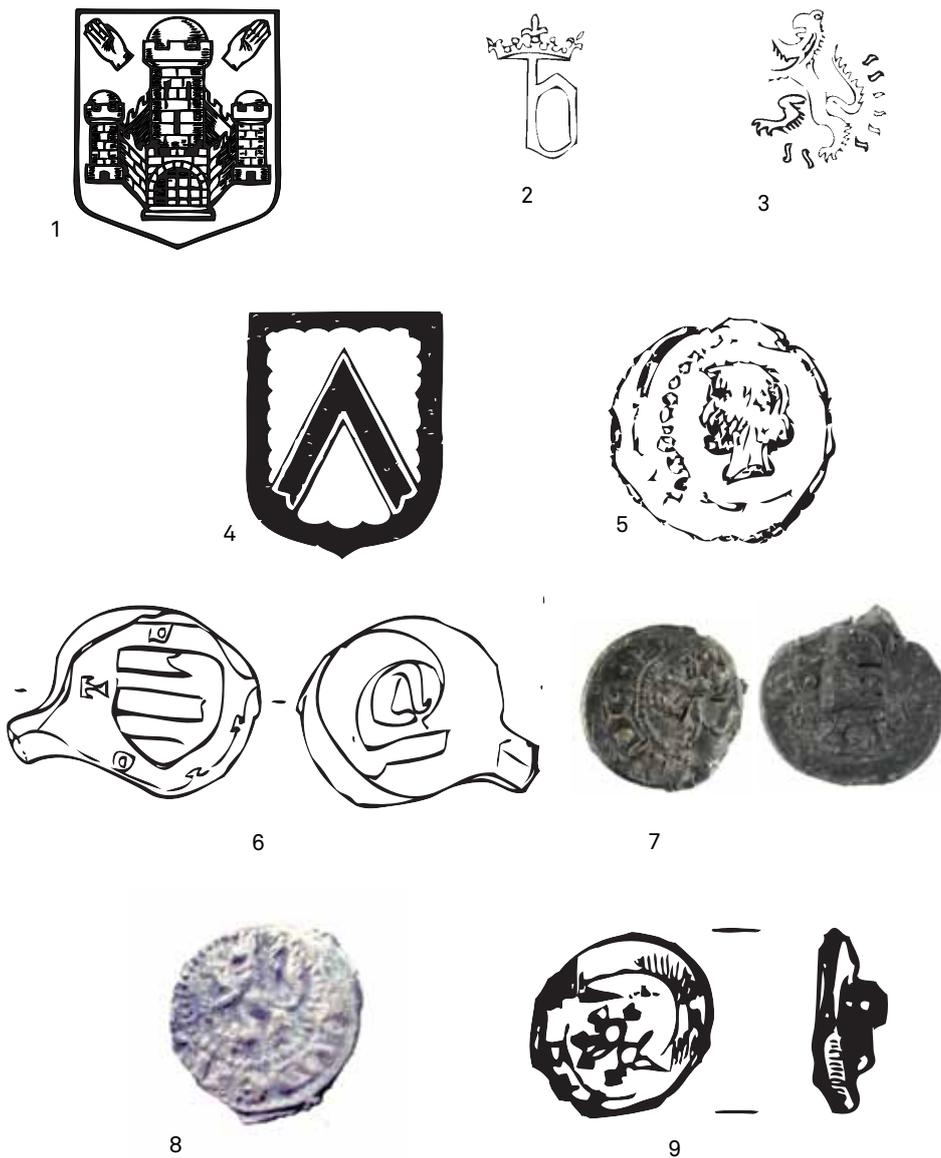
20 PRO mark and rose.

21 Dietz 1972, *e.g.* xvii & 83 no. 522.

22 *Ibid*., 8 no. 46.

23 See Uncertain Provenances below.

24 Courtrai is the location of the National Flax Museum, *cf*. De Wilde 1987.

25 Mitchiner 1991, 953 nos. 2958-2959a: two of the three are described as London finds.

FIG. 1 Basic stamps and seals: 1: arms of Antwerp; 2-3: basic stamps of Bruges seals (from Egan 2001a, drawings by N. Griffiths); 4: arms of Courtrai; 5: Diest seal with head stamp (from Hume 1863); 6: Diest seal with arms, from 's-Hertogenbosch; 7-8: Flanders seals from London; 9: Flanders seal from Hull (from Watkin 1987). Scale 1:1 (2-3, 6); scale approx. 3:2 (5, 7-9).

3.6   Diest

A few medieval seals are known from this town. It seems possible that textiles referred to in contemporary trade records (in England at least) as coming from the nearby major city of Louvain (Leuven)[26], were actually woven in the former and passed through the latter en route:

> shield with two fesses (arms of the town) // bearded man's head

At least seven have been found in London[27]. A probable example recorded in the 19th century from Meols (Cheshire, north-west England, fig. 1: 5) is now lost[28]. A later example with the town name around the arms has been excavated at 's Hertogenbosch[29] (fig. 1: 6).

3.7   Flanders

Several seals from this important region of early woollen manufacture, with a plumed close helmet and a Flemish lion, are apparently from the late 13th/14th century, and possibly into the 15th (fig. 1: 7-9). These early issue have small flans (diameters *c.* 15 mm), two rivets and no connecting strip. The legends are in lombardic lettering (no completely registered example has yet been recorded):

> lion rampant (usually alone but sometimes in a shield), SIGILLV (FLANDEN)... around // close helmet with plumes (usually three), +(?FL)ANDEN... around

26 Munroe 1983, 33; 1983, 130-131; Van der Wee & Van Mingroot 1983, 131-132

27 *e.g.* TEX88 <6356>, UPM05 <402> (context dating late 14th-century), 88.427/10, 91.205/18.

28 Hume 1863, pl. 13.21; Egan 2002, 270; *Idem* 2007, 174 no. 2203 pl. 34.

29 Hans Janssen pers. comm.

Most of almost thirty known examples have been found in London[30]. Two both have the lion in a shield. Mitchiner takes the legend around the lion to refer to Ghent, presumably from reading it as VILL GANDENSIS[31]. This seems to be a misreading of the SIGILLV FLANDEN on other examples. Ghent is, nevertheless, along with Ypres, a plausible centre for the origin of many sealed Flanders cloths. A damaged example was excavated in Hull (Yorkshire) in a deposit assigned to the late 13th/early 14th century (fig. 1: 8)[32]. There is considerable variety in the stamps here. Some of the different devices that accompany the lion stamp may point to specific centres, which, like full details of chronology for the series, have yet to be elucidated. Those with a shield may be later than those without (?late 13th-/14th- vs. 14th-/15th century). Orduna publishes several seals from Denmark as Flanders issues but this is not convincing[33].

3.8 Ghent

See preceding for seals found in England published as Ghent issues, otherwise this important medieval centre is so far elusive among those recovered[34].

3.9 Huy

Two seals found in London have been recorded:
- // Houuy (blackletter) on scroll

The design of the stamp is notably similar to those on some seals from Ulm in southern Germany thought to be of 16th-century date[35]. If there is any specific connection, it remains to be elucidated.

3.10 Malines/Mechelen

This important centre in Brabant for the production of woollens is represented by over a dozen finds, mainly from London, where the trade is documented[36]. These early seals have two rivets but no connecting strip (fig. 2: 1). There are several variants of the main devices. For some reason the flans of the seals,

at around 15 mm, were consistently too small to accommodate the complete stamps satisfactorily.

> shield with three pales, FLO. BERTHVL' around // crozier above, EPS. LEODI around

The arms are those of the city, and the legends refer to Florent or Floris Berthoult, a local potentate (fl. *c.*1275-1331+), and to the bishopric of Liège, the authority of which was acknowledged by Malines from 1305. An example found in Yorkshire has a different legend on the first stamp, referring to 'Walter' Berthoult, who was the predecessor of Florent[37].

Most finds are from London, e.g. from an early 14th-century deposit[38], from a deposit perhaps datable to c.1270-1350[39] and from a deposit assigned to the late 14th century[40]. Two are from Lincolnshire[41] and another is from Norfolk[42].

There are some much larger local seals in the Busleyden Museum in Mechelen, probably dating from the 16th or 17th century, but none of these is known in England.

3.11 Tournai

The important textile centre of Tournai was part of France through most of the period of its cloth production[43]. The city's symbol of a tower is often accompanied by one or sometimes two fleurs de lis[44]. Tournai textiles were known in England as '*doornicks*'.

One certain seal is recorded in England:
> stylised tower // fleur de lis in quatrefoil, …TOVRNAI (or Y) around

Similar seals (fig. 2: 2) are also known from Novgorod in Russia[45], Turku in Finland[46] and Lund in Sweden[47]. The dating proposed is late 14th/15th-century, though this may be slightly early. Others are less definitely attributable[48]. An example from London is a large seal with a tower flanked by fleurs de lis and the legend illegible[49].

30 Egan forthcoming a: VHA89 <540>, VRY89 <78>, <1275>, <1974>, <3137> & <3522>; SUN86 <1034>, RKH06 <265> & <278>, MOL 86.439, UPM05 <19> and <346>: context dating late 14th and early 15th century; the helmet on the latter appears to have a single plume flanked by two cinquefoils and the legend around the other disc seems to be SIG.LUIK... – possibly a reference to Liège? – and <384> has a key on the other stamp from that with the lion (context dating 15th century)

31 Mitchiner 1991, 948-949 nos. 2936-40; *cf.* 953 no. 2956; all provenanced ones found in London.

32 Watkin 1987, 206-207 fig. 118 no. 279; not identified in the text.

33 Orduna 1995a.

34 A seal with G found in Denmark published as a Ghent mark is not convincing: Orduna 1995a, 154 & 161 no. 245; *Idem* 1995b, 6 fig. 5 no. 5.

35 Egan 2001b.

36 *Idem* 1998, 262-263.

37 Van der Wee & Van Mingroot 1983, 131.

38 Egan 1995, 112-113 & 194 fig 43 nos. 325-326; *Idem* forthcoming a: VHA89 <1566>, and <1973>; VRY89 <2700>, and record cards 3183 and 3256 (deriving from the same site, in private collections).

39 Egan 1998, 262-263 fig. 204 no. 812: BWB83 <2417>.

40 *Ibid.*, SWA81.

41 Egan 2006, from Gainsborough, and PAS database NLM-AFB63 from Marsh Chapel.

42 PAS database NMS-6B2A45 from Cawston.

43 That it was briefly occupied by the English for less than six years from 1513 (Cruikshank 1990, 135-162) may possibly be relevant to some of the later finds in England, though dating for the seals is currently not close enough to furnish a reliable perspective on this.

44 Distinguishable from the arms of Tours, which are a tower and three fleurs.

45 Rybina 1992, 202 fig. VI.3.

46 Taavitsainen 1982, 26 fig. 1.

47 Wahlöö 1987, 57 & 59 fig. 7.

48 Egan 2001a, 72 & 85 fig. 26 no. 160 lacking the quatrefoil border, also 74 & 86 fig. 27 no. 169, which is in a poor state of preservation but has a central fleur de lis, both from Salisbury (Wiltshire).

49 Mitchiner 1991, 953 no. 2957.

3.12 Turnhout

This town produced linen textiles recorded as being traded to London in 1567-1568 under the name '*Turnhout ticks*', which were used for bedding[50]. The arms on the stamps are the former ones of the town. A detailed report on the Turnhout seals found in Britain is in preparation[51]. Two basic varieties are known in England. Imprints on both are of a twilled fabric.

⊙ Small seals (fig. 2: 3) of which several variants are known (production values for the engraving of the dies were not high, and the legend can be very difficult to read):
　　shield with pale, TVRNOVT around (blackletter) // hexagram with pellets in the triangles

Several seals are from London[52]. Outside the capital, two were found in Salisbury (Wiltshire)[53] and single examples are known from Kingsholm, Gloucester (Gloucestershire)[54], King's Lynn (Norfolk)[55] and Brightstone (Isle of Wight)[56]. The devices are similar (but differ in details such as the shape of the shield and the number of the star's points) to those for *petits scéaux* on a matrix formerly in a local collection[57]. Peter was the town's patron saint.

⊙ Large seals (fig. 2: 4):
　　standing, long-robed figure of St Peter holding two keys, (P)I(ETER...) around // ornate shield with pale, (T)VRN-HOVT around

50 Deetz 1972, xvii & 3 no. 18.

51 Egan forthcoming c.

52 *e.g.* Egan forthcoming a, ABO92 <2311>.

53 *Idem* 2001a, 72-73 & 85 fig. 26 nos. 161-162.

54 *Idem* forthcoming b.

55 Here the legend is so stylised as to be indecipherable, (published on a postcard from the early 1900s).

56 *Idem* 2005, 232 fig. 6 no. 6.

57 Fierlandt 1853, pl. facing 245. The present whereabouts of the items referred to is unknown (Harry Kok, archivist of Turnhout, pers. comm.).

Several have been found in London[58]; one comes from Deal (Kent)[59]. Another, found at the American colonial site of Jamestown, Virginia[60] may well have been on a textile shipped through London. Similar but not identical devices are shown on a matrix used for the local *grands scéaux* for cloths[61].

3.13   Wervik

The import of textiles from this small town are attested by seals found widely in England (fig. 2: 5). Imprints from the fabric that have registered on the inner surfaces of several seals suggest that Wervik's '*carpetene*'[62] were very coarse, extremely loosely woven fabrics. The recorded stamps are all essentially the same, though several different matrices were used (the last letter of the placename is consistently omitted):

WERVI (blackletter) // double rose

The majority have been found in London[63]. Another comes from Salisbury (Wiltshire)[64] and there is one from Gainsborough (Lincolnshire)[65].

3.14   Ypres/Ieper

Several local medieval seals for the local woollens have been excavated at Ypres itself – at least three with the city's badge of the double-armed (patriarchal) cross of Lorraine[66]. The textiles woven at this Flemish centre have left a relatively modest trace in England that has so far been recognised as relating to the city's considerable medieval trade across the North Sea.

The earliest seals, from the 14th century, are relatively small: mitred head of bishop facing // two-armed (patriarchal) cross

One was found near Whissonsett (Norfolk) and another has turned up at Gainsborough (Lincolnshire)[67].

Slightly larger seals found on the continent have S O to the sides of the bishop's head[68]. A seal with a different stamp, found at New Romney (Kent) (fig. 2: 6)[69], is presumably later, perhaps from the end of the medieval period or into the early-modern era:

two-armed cross with Y P R E between arms // lion rampant

A further example has the full arms of the city (cross vairé, on a chief a two-armed cross) on one side and part of a legend

which would almost certainly have been LEIDS GVET – 'goods of Leiden' in the Netherlands around saltire keys (the arms of that city) on the other[70]. This curious double attribution may perhaps relate to cloths woven in one centre and finished in the other. Presumably from Ypres (though the letter could perhaps indicate Tournai – perhaps a similar phenomenon as for the preceding item) is another London find[71]:

lombardic letter T // two-armed cross

Other seals assigned to Ypres have been published: from Viborg, Denmark[72]; Vilnius in Lithuania and Hungary[73]. Three seals from Lille (France) have also been erroneously assigned to Ypres[74]. Of less certain attribution are two seals with a tower (perhaps suggesting Tournai) and an AB ligature found at Salisbury (Wiltshire)[75], though these appear to be paralleled by a London find which may have the arms of Ypres (this remains to be elucidated).

3.15   Possible Belgian Seals – Uncertain Provenances

A possible Flanders or Tournai seal found in London (fig. 2: 7) has a lion seated under an ornate canopy on one side, and a tower over the cipher 49 (=1549?), all within a multiply lobed border on the other. The first device is very similar to the gold *lion heaume* and *lion d'or* coins, respectively issued by Louis de Male as count of Flanders 1436-1484 and by Philip the Good as count of Holland 1433-1467[76].

A few small medieval cloth seals found in London, with flans similar in form to the earliest dumpy Diest, Flanders and Mechelen ones noted above, have not yet been identified, *e.g.* those with DV (or W) with a suspension mark on one stamp, and a raised hand on the other[77] (fig. 2: 8). These are perhaps from Diksmuide.

Seals with lions rampant may be from Flanders, *e.g.* perhaps those with (?)a G-like motif on a stand on the other disc[78]. These await future research before it can be determined whether or not they are from the area of modern Belgium. A later seal with a lion rampant on one side, and on the other a cross on stepped pedestal, all within a large (?)D (which appears to have a loop curving to clasp the cross shaft) may be related[79].

Ten large seals with lions rampant, all but one found in London, may well be from the area of modern Belgium. There seem to

58 Egan forthcoming a: ABO92 <1065> context assigned to the last quarter of the 17th century; MOL acc. nos. 87.49 & 87.99/3.

59 Dover Museum acc. no. O.2122.

60 U.S. Parks Dept. acc. no. J-29791.

61 Fierlandt 1853, pl. facing 245 - see above.

62 Kerridge 1985, 222.

63 Egan 1995a, 112-113 & 194 fig. 43 no. 327.

64 *Idem* 2001a, 73 & 85 fig. 26 no. 163.

65 *Idem* 2006b.

66 De Wilde & Ervynck 1995, 13; De Wilde & Van Bellingen 1998, 67 fig. 15. A further three with the

lion rampant may be local issues or they could be from elsewhere in Flanders.

67 Egan 2006b, 98.

68 Kvizikevičius 1998, see below.

69 Fig. 10B.

70 *Mitchiner 1991*, 952 no. 2951.

71 *Ibid.*, no. 2952, also a London find.

72 Liebgott 1975, 38 fig. 6.

73 Kvizikevičius 1998, 436 figs. 5-8; Endrei & Egan 1982, 49 fig. 1, the claim that these are the earliest known issues from Tournai no longer holds.

74 Mitchiner 1991, 949 nos. 2942-3a.

75 Egan 2001a, 74 & 86 fig. 27 nos. 170-171.

76 Friedberg 1976, 54 & 326.

77 Egan 1995a, 113 & fig. 44 no. 329. Another has been found at Greifswald Market in Germany (Prof. G. Mangelsdorf pers. comm.).

78 Egan 2001a, 75 & 86 fig. 27 no. 172.

79 *Idem* forthcoming a; ABO92 <2310> from a late 17th-century context.

be two varieties. Brussels appears to be the most likely origin at least for the first of these, of which there are four examples recorded[80]:

- // lion rampant, B L to sides at top, all in wreath

The second variety, similar but with the lion crowned (the crown is only evident in the first and third noted) and apparently lacking the letters and wreath, is known from six finds[81]:

- // (crowned) lion rampant

Probably related is a seal found in Cockington (Devon), also with a lion rampant but with BL D below, that has been assigned to Brussels because of the letters[82].

Besides these, several (?)16th/17th-century two-disc seals with devices featuring one or two conjoined prominent letters B have been suggested to be from Belgium, with Brussels or Bruges as the likeliest candidates for their origin. Some four-disc seals with similar devices and probably from the same date have similarities with German issues from Bocholt and Wesel (and perhaps Cologne), warning against Belgian identifications being taken as certain at this stage[83]. Some seals from Leiden in the Netherlands also had two Bs[84].

A large seal with two rivets stamped with two crowned Bs and with an imprint from a fine textile (cf. say) from London is similarly enigmatic[85]. Another candidate has an incuse crowned B and a partly illegible (?)owl stamp[86].

4   Seals from England found in Belgium

There is apparently no national survey of cloth seals in Belgium and relatively few seem to have been published since Laloire's (1898) brief account focussed on 18th-century seals. The main work so far on earlier evidence is at Ypres on local issues recovered from excavations[87]. Several have been excavated at Raversijde near Ostende have yet to be identified[88]. There is also a collection from Italy of 148 items donated in 1938 to the Bibliothèque Royale de Belgique, Brussels[89]. Seals from English cloths found in Belgium are only beginning to be recognised.

Excavations in Antwerp have produced a single, Tudor–period issue[90] which is likely to be from a somewhat enigmatic series that has so far only been found on the continent:

(crown) over shield with arms of Tudor England supported by (?) lions // double-headed eagle displayed

No precise parallel is known for this apparently English seal, which its second stamp suggests may possibly have had a Hanseatic connection. Several seals with the arms of England, and a rose on the second stamp, have been found across Europe, as far distant as castles in Hungary, where they are thought to have come from kersey cloths given as payment in kind to garrison troops in the 16th century[91]. The discovery of only a single seal from this series from England itself suggests that, despite their official appearance, they may have been put by middlemen traders on export cloths (they are similar in several ways to a more extensive group of seals attached by a different method than the familiar rivet of the Antwerp and Buda finds[92]).

In the early/mid 16th century, as many as 4,000 English textile finishers settled in Antwerp[93]. Some of their efforts must have been expended on the tens of thousands of English unfinished cloths (in some months amounting to two-thirds of exports from London) that were exported annually by the Merchant Adventurers from England to the city, most for further distribution to the markets of central Europe[94]. In 1564 over three thousand illicit English cloths were hidden in private houses in Antwerp[95] – this could be a scenario for the use of seals of the present type. It is possible that the above seal and some of the others with English devices found further into Central Europe were actually put on the cloths in Antwerp, following finishing (though the single find in England suggests this was not the case). The large volume of English cloths passing through Antwerp, and in many cases undergoing fulling, shearing and dyeing there, mean it is even more remarkable that there is at present so little archaeological trace known, in the form of industrial plant of appropriate date or of assemblages of seals (contrast the great concentrations along the Thames in London, which are thought to derive largely from rough handling during textile finishing at riverside dyers' premises[96]). The question has been specifically considered by Veeckman, who sees the archaeological evidence for the major trade in English cloths to the market at Antwerp as minimal with the majority of the goods with their labels presumably just passing through to consumers in Germany and Central Europe[97].

A few seals in private hands presumably from the Mechelen and Bruges areas have been examined by the writer, including some English issues[98]:

80 Egan forthcoming a - AB092 <986>, <1069> & <1671>, all assigned to the last three quarters of the 17th century, the first two being assigned to c. 1630-50.

81 Egan 1995a, 114 no. 330; *Idem* forthcoming a - AB092 <916>, <990>, <1049>, <1056>, <2416>.

82 Read 1995, 122-123 no. 782.

83 Egan 1995a, 193 no. 316 from Wesel and parallel to right from Bocholt; *cf.* no. 320.

84 Orduna 1995a, 75 & 219 no. 155; *Idem* 1995b, 6 fig. 6. They are assigned to Bruges, but a note in the first work cited appears to prefer Leiden.

85 BLU91 <76/64>.

86 MOL acc. no. 86.59/6.

87 De Wilde & Van Bellingen 1998.

88 *cf.* Pieters 1997.

89 Cornagga collection – Inv. II 31.021 drawer 373, *plumbs de merchandises*; this includes several issued in Florence (Atwell 2003).

90 Veeckman 1999, 127 fig. 3 left.

91 *e.g.* Liebgott 1975, 40 fig. 15 from Æbelholt Monastery, Denmark; Huszár 1961, 188 & pl. 31 no. 10, excavated at the fortress of Buda and described as bronze, though this is presumably erroneous - is arguably closest in style to the present item.

92 Egan 1989, 50.

93 *cf.* Ramsay 1986, 40.

94 Ramsay 1975; *Idem* 1986, 63.

95 Ramsay 1957, 269.

96 Egan 1991, 16-17 fig. 2.10; *Idem* 2006b, 48-9 & 52 fig. 3.

97 Veeckman 1999, 123.

98 Through the kindness of Stephane Vandenberghe and of the Busleyden Museum.

◉ Mechelen Museum ('diverse finds 1973'):
  - // portcullis
Perhaps a late 16th-century county seal with the legend missing[99].

  fleur de lis, R to right // (disc missing)
Presumably an Elizabeth-I period seal for one of the towns in Devon[100].

  (large, inner disc from a four-part seal) shield with four fesses, incuse numerals 58 added separately
The arms are those of the city of Salisbury in Wiltshire, as specified on the other missing inner disc (known from finds in England), which has a double-headed eagle (one of the two supporters of these arms) and a label reading SARVM ('Salisbury'). The numbers give the length in yards, as individually measured, of the cloth to which the seal was originally attached[101] (fig. 3) The large, relatively heavy seal, probably from the late 16th/early 17th century, suggests the textile itself was probably a traditional woollen.

◉ Bruges Museum (noted from records):
  0.2911 XXIII: AR privy mark /// madderbag (incomplete)
A London Dyers' Company regulatory seal from the 1610s. This was almost certainly attached to a cloth that was dyed at a Thames-side dyehouse at Vintry in the City of London[102] – in all almost a score of these are known in England.

  0.2903 XXIII: - // 21½ // PETER SCOTT EXON // -

Early 18th-century(?) seal for a textile 21.5 yards long from the important production centre of Exeter (Devon) with the name of the clothier.

5 Conclusions

More than a dozen production centres in the area of modern Belgium are represented among cloth seals recorded in Britain (overall there is about one continental import in every thirty identified). There are several other major places of manufacture yet to confirm among finds in England – for example, late-medieval seals from Poperinge, stamped with an episcopal glove holding a crozier[103].

The earliest textiles exported from Flanders and Brabant to England were regularly made from exported English wool. Many but not all of the later textiles traded to England from the Low Countries were linens or half linens, which England had not developed as a major line of manufacture. The sateens and other specialised products of Bruges included woollens of varieties not then available in bulk from English looms.

Ramsay has suggested that the closure of the Antwerp market to the English in 1563-1564 was the occasion for a major re-allignment of imports of linens to England with German textiles replacing those from Flanders, Brabant and Hainault[104]. There were doubtless changes at this time, but at the present stage of investigation finds of cloth seals are too few and not closely enough dated to see whether or not the same pattern is evident from this source. Several Bruges and Wervik seals are assigned to a later period, apparently continuing well into the 1600s, though these were probably for specific textiles different from everyday linens. It would be useful to know if the earliest of the very large numbers of 16th/early 17th-century seals for Augsburg fustians (half linens) recorded in England[105] are definitely from before this potential watershed.

99 *cf.* Egan 1995a, 9; *Idem* 2001a, 60.
100 Crediton and Tiverton are known among finds in England (Egan 2001a, 50 & fig. 19 nos. 5-7).
101 *cf.* Egan 1980, 186 pl. 1 (found London); *Idem* 2001a, 56 & 80 fig. 21 no. 42 (found Salisbury).
102 A number of seals with the same privy mark have been found at one location on the City of

London waterfront: Egan forthcoming a: VHA89 <41>, <51> & <953> (the first two being woad seals); *cf.* also *Idem* 2006b, 52 fig. 5.
103 Known in Russia, Lithuania and a French collection: *e.g.* Rybina 1992, 202 fig. VI.3 (not recognised in text); Sabatier 1912, 474; a possible example from Swaffham Museum

(Norfolk) has still to be checked (Stephen Ashley pers. comm.).
104 Ramsay 1975, 265.
105 Egan 2001, 70.

Doubtless there are many seals relevant to the present theme that await recognition, not least ones in private collections both in England and Belgium. Many questions of attribution and exact dating remain open for improvement. This first attempt to examine this question suggests that the main developments traced by economic historians are broadly reflected by the archaeological record. The pertinent excavated material appears at the moment to be still quite meagre. On the other hand, the prominence of Wervik seals in England perhaps comes as a surprise. If this present tribute to Frans Verhaeghe stimulates others to examine these and other finds in detail, and take the study further it will have achieved its dual purpose, and made a contribution to his interest in the archaeological evidence for medieval and early-modern period trade across the North Sea.

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'Throw some more fuel on the fire'. The stove tiles of medieval Scotland

George Haggarty & Derek Hall
with a contribution by Dr. Simon Chenery

1   Introduction

Frans Verhaeghe's visits to Scotland in the 1980's coincided with the establishment of a number of new research programs on Scottish medieval ceramics, mainly arising from the ground breaking work of George Haggarty, Ian Cox and others[1]. Frans' examination and identification of Low Countries Wares from excavations in Perth, Aberdeen, and Elgin[2], prompted the few active specialists to consider what might be gained by a comprehensive study of the large assemblages of medieval ceramics being recovered from the many urban rescue excavations that were then underway[3]. With that in mind, this brief catalogue and discussion of sherds from six stove tiles recovered in Scotland, is submitted (fig. 1).

2   Historical background

Although 12th-century Scotland was on the periphery of medieval Europe, recent archaeological and historical analysis[4], suggests that in the 12th century Scotland was by no means the cultural backwater as described by many commentators. Several of these writers viewed Scotland as a land inhabited by savages, and as a country of little consequence. For example, the 12th-century Arab geographer al-Idris, shared the common view that Scotland was in fact an island adjoining England. He tells us that Scotland "adjoins the island of England and is a long peninsula to the north of the larger island: it's uninhabited and has neither town nor village. Its length is 150 miles"[5]. The Irish regarded Scotland as provincial, while others considered it outlandish or barbaric. The author of the *De expugnatione Lyxbonensi* '*On the Conquest of Lisbon*'[6] posed this rhetorical question: "Who would deny that the Scots are barbarians?". To their English and French neighbours the Scots, in particular the Galwegians, were the barbarians *par excellence*. This slur ceased to apply after much of Scotland was reorganised on

Anglo/Norman lines by David I (*c.* 1084-1153), and his introduction of numerous religious houses. Despite this, throughout the High Middle Ages the term *barbarus* was still used to describe the Scots, as well as a large number of other European peoples. This characterisation of the Scots was very often politically motivated, with the most hostile writers based in areas frequently subjected to Scottish raids. English and French reports of the Battle of the Standard contain many accounts of Scottish atrocities. For instance, Henry of Huntingdon tells us that the Scots: "...cleft open pregnant women, and took out the unborn babes; they tossed children upon the spear-points, and beheaded priests on altars: they cut the heads of crucifixes, and placed them on the trunks of the slain; and placed the heads of the dead upon the crucifixes. Thus wherever the Scots arrived, all was full of horror and full of savagery."[7]. Archaeological evidence, however, leads us to believe that for much of the medieval period, Scotland's ties with North West Europe were closer than they were with England, and that such adverse concepts of the country were grossly exaggerated. Proof lies in several finds from Scotland which reflect a comparable cultural renaissance to that in France[8]. Much of this cultural influx can be ascribed to both the Anglicisation of the country and the introduction of major monastic orders from the mid-12th century onwards, mainly instigated by King David I.

The burghs of Perth, St. Andrews, Edinburgh Canongate, and Leith, were all cosmopolitan trading centres during the medieval period. But it was mainly merchants from the Forth Burghs who held shipping links to the Baltic, exporting skins, herring, coal, and salt, to Königsburg and Danzig, bringing back timber, tar, etc.[9]. More important, however, was trade with the Low Countries from where, in the 15th and 16th centuries, stove tiles were shipped downstream from the Rhineland, and assembled for customers. There is evidence that some of these

1 Haggarty 1984, 395-397; Cox 1984, 386-395.

2 Verhaeghe 1983; Verhaeghe & Lindsay 1983.

3 Hall 1996.

4 Hall 2002; Haggarty 2006, word file 38.

5 Beeston 1949.

6 David 2001.

7 Greenway 2002.

8 Hall & Owen 1998.

9 Ditchburn 1996, 264-5.

FIG. 1 **Location of findspots of stove tiles in Schotland.**
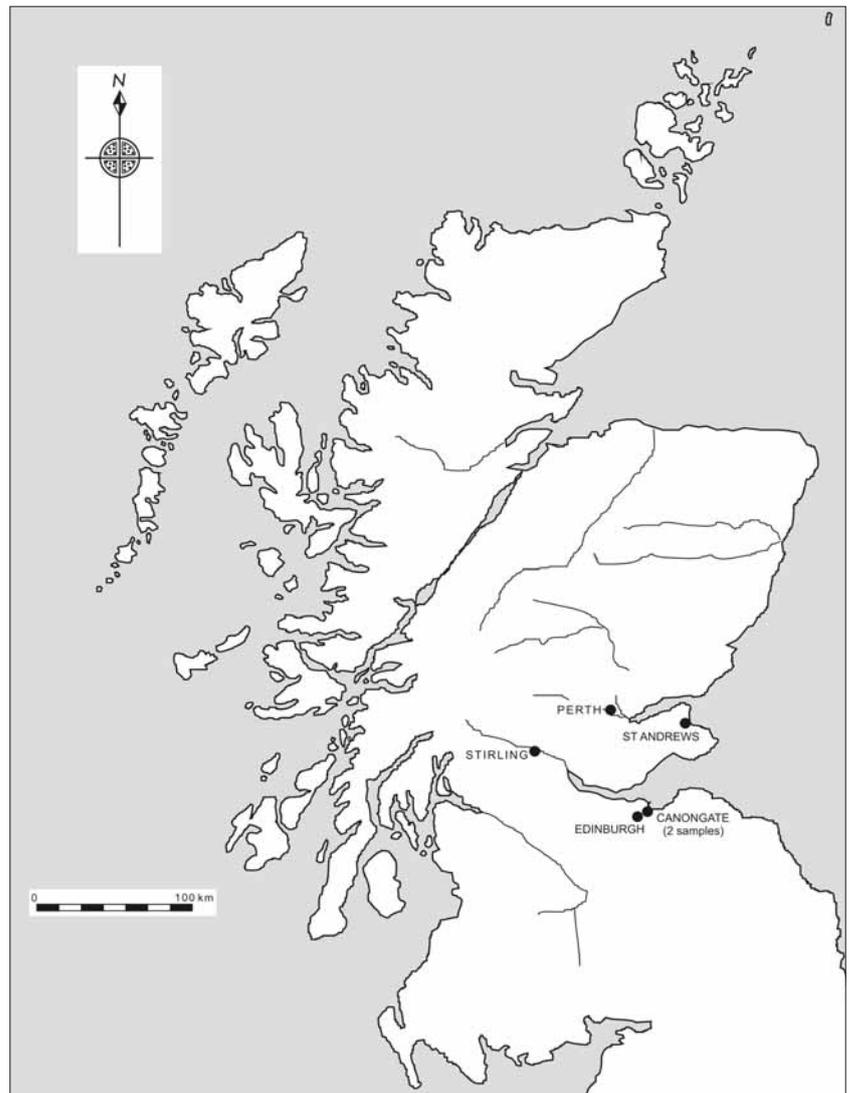
were manufactured in that area[10]. From 1508 the Walcheren port of Veere was the compulsory entry port (or staple) for Scottish shipping to the Low Countries. This trade was predominantly in the hands of Edinburgh merchants through the port of Leith, and consisted principally of wool, woolfells, hides, skins and fish. Occasionally, Scottish ships also called in to Rotterdam, Dordrecht, Bergen op Zoom, Vlissingen, Sluys, Bruges, and Antwerp[11].

The use of purpose built smokeless stoves from North Germany was relatively common in England in the 15th and 16th centuries. Initially found purely in monasteries, in later centuries they become popular high status objects in a domestic setting. By 1990 thirty-five findspots for continental stove tiles had been recorded in Britain, and of those approximately twenty-five were in the Greater London area[12]. The fragment found furthest north was from Fountains Abbey in North Yorkshire, with Scotland drawing a blank. The recently identified, copper rich, monochrome, white slipped, lead glazed, stove tile fragments from six Scottish sites under discussion in this paper, all seem to have been recovered from later middens, or soils, of 16th- or 17th-century date. Three tiles are without doubt from either religious institutions or royal castles, while the two Canongate examples could well have come from similar sources. The Perth sherd, however, is most likely to be from high status secular buildings, as yet unidentified. It is probably no coincidence that the generally accepted date bracket given to these tiles includes the onset of the 'Little Ice Age', when an already cold Northern Europe became at least a few degrees colder; a good reason for those who could afford it to fit central heating[13].

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10 **Gaimster** *et al.* **1990, 10.**

11 **Lynch and Strang, 1966, 239.**

12 *Ibid.* **1.**

13 **Lamb 1972.**

3 The stove tiles

3.1 St. Andrews: site of a Leper Hospital

Three small, decorated, stove tile sherds, with two conjoining, were recovered during excavations of the site of St. Nicholas Leper hospital in St. Andrews. The red/brown sandy matrix is covered in a copper rich lead glaze over a white slip. The context (100) also contained white gritty ware of late medieval date, 17th-century Post Medieval Oxidised Wares, and a small shard of Chinese porcelain[14].

3.2 Edinburgh: St. Giles: ecclesiastical (fig. 2)

This highly decorated piece of stove tile is green glazed over a white slip, and was recovered, but not identified, during excavations inside St. Giles Cathedral on the Edinburgh High Street, in 1981. It was later recognized as part of a tile, and published by Hall[15]. The decoration is thought to represent a bearded saint from a pre-Reformation devotional niche-tile of 15th-century date[16]. If that theory is correct, then this is currently the only identifiable example from Scotland.

FIG. 2 Fragment of a stove tile from St. Giles Cathedral in Edinburgh.

3.3 Edinburgh Canongate, Calton Road: Trinity hospital in vicinity

This very badly abraded, orange coloured, green glazed, shard has traces of raised decoration, and is almost certainly part of a stove tile, possibly reused. It came from an excavation carried out in Calton Road, the back lands of Canongate Edinburgh, and was recovered from a 17th-century context (232), along with a number of other high status Low Country and German imports, including hammer-headed Weser slipware dishes[17]. During the medieval and later periods several of the Scottish nobility had town houses in the Canongate, and Trinity Hospital was nearby. This Hospital, associated with the Collegiate church, was demolished in 1884, as was Trinity College, founded *c.* 1460 by Mary of Gueldres, to make way for the construction of the Waverley Station.

3.4 Edinburgh Canongate: Holyrood Palace/ Abbey close by (fig. 3)

This piece of green glazed, decorated, tile, was recovered during excavations of the site of the new Scottish Parliament in the medieval Burgh of Canongate[18]. It appears to be from a border tile that would have formed part of the stove surround, and there are various theories for its presence on this site; for example, both the Royal palace of Holyrood, and the Augustinian abbey of Holyrood, lie directly adjacent to the excavation. Or, but less likely, it could have originated from one of the previous late medieval domestic dwellings on the Canongate.

FIG. 3 Fragment of a stove tile from Edinburgh Canongate.

3.5 Perth: unknown secular building (fig. 4)

This green glazed, decorated, Perth stove tile shard has traces of underlying white slip, and was recovered during a watching brief on the redevelopment of a building on the Skinnergate, a street which lies on the main medieval route between the castle and the parish church. This thoroughfare may have been the location of high status secular buildings, there is a reference to the king's constable having a stone house (*domus lapidarius*) in Skinnergate in the early 13th century[19].

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14 Haggarty 1999, 97-101.

15 Hall 1986, 51.

16 Gaimster 2001, 51-66, fig 14.

17 Haggarty forthcoming.

18 Hall 2008, 37.

19 Scone Liber 1843.

3.6   Stirling: Castle/Palace (fig. 5)

This stove tile fragment (ID no.1748), comprising two conjoining pieces, was recovered from excavations on the Lady's Lookout, immediately to the west of the Palace, constructed *c.* 1539-42. Both came from Trench 21, the first from a midden layer (context 21033, Phase 10), dated by clay pipes and other finds to *c.* 1660/70. The second came from an overlying layer (context 21019, Phase 11). The 17th-century midden also contained huge amounts of domestic garbage, building materials etc., apparently used as make up over the bedrock of the Lady's Lookout, and might relate to a major palace refurbishment. Dated to the early/mid 16th century by David Gaimster it is possible that it was part of the original Palace interior, *c.* 1540. However, it could equally have come from any one of a number of other buildings nearby, including the old Chapel, the King's Old Building, etc. It is interesting that Henry VIII had a stove installed at Whitehall around the same time[20].

4   Discussion and conclusions

The ICP-MS chemical analysis on the stove tiles found in Scotland (see Appendix) was carried out as part of a very large research program, funded by Historic Scotland, on Scottish medieval and later redware pottery. The results of the ICP-MS data show conclusively that none of the stove tile sherds recovered from Scotland matches our local redwares. This is important, as in some countries, local potters, lacking the necessary skills to cut their own moulds, are known to have produced stove tiles using traded moulds[21]. As part of our redware program we have compared the results of the analysis of the Scottish samples with ICP-MS data from sherds from three kiln sites in the Low Countries, Utrecht, Haarlem and Dordrecht (see below). The authors hope that these initial results from Scotland can be used in any similar future analysis of stove tiles from other sites across Europe.

Acknowledgments

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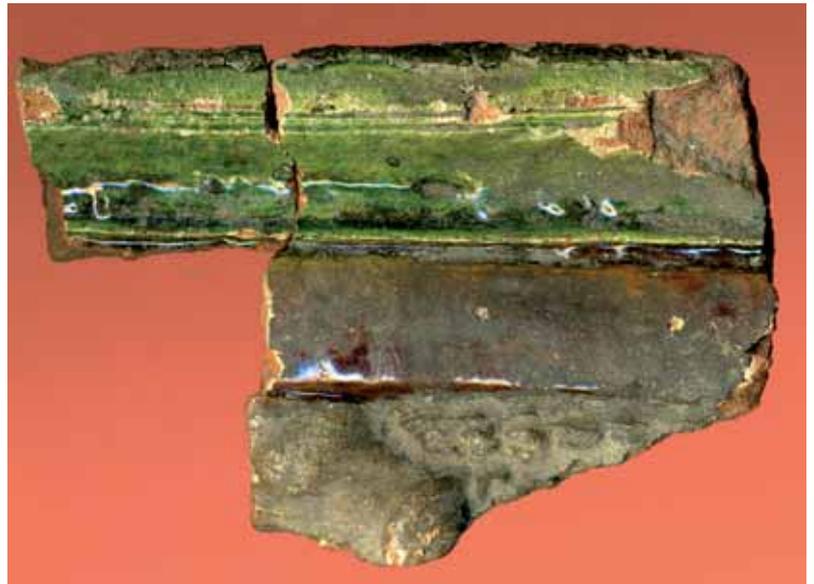FIG. 4 Fragment of a stove tile from Perth.

FIG. 5 Fragment of a stove tile from Stirling.

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20 Gaimster & Nenk 1997.   21 Gaimster *et al.* 1990, 10.

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Appendix: ICP analysis of Scottish stove tile samples

Dr. Simon Chenery

Initial comparison between the Scottish stove tile samples and Gaimsters Dutch-London data suggests three clusters of samples

Three clusters:
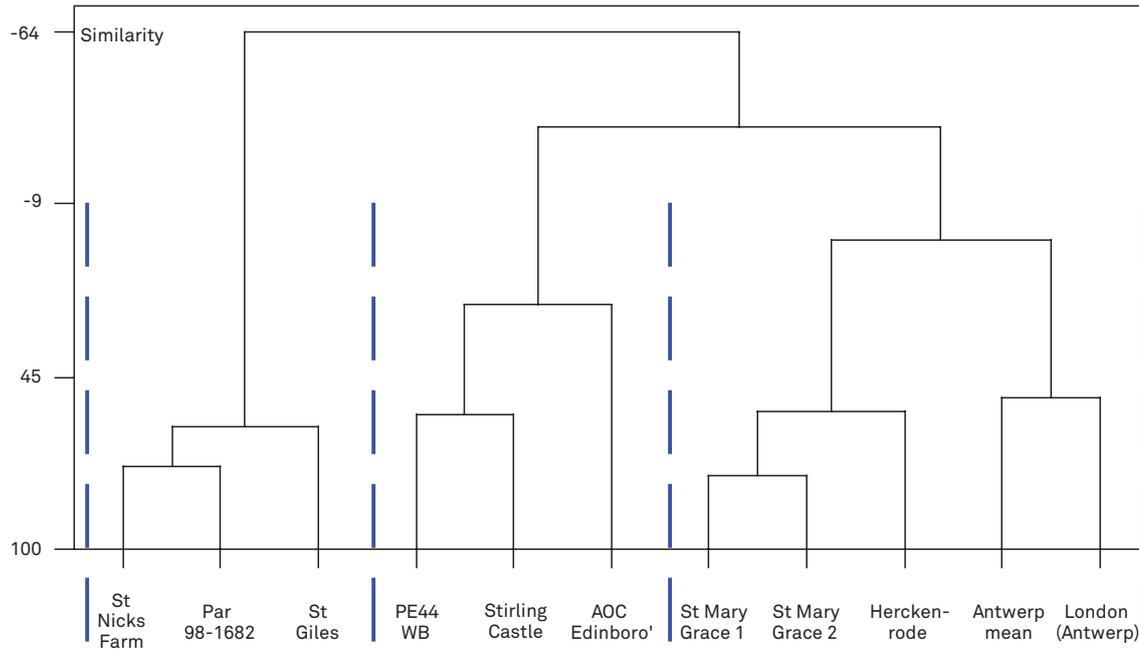
(i)   St. Nicks Farm + Par 98-1682 + St. Giles
(ii)   PE44WB + Stirling Castle + AOC Edinboro'
(iii)   St. Mary's Grace 1 and 2 + Herckenrode + Antwerp (mean) + London (Antwerp)

These groups are backed up by Principal Components Analysis (PCA)
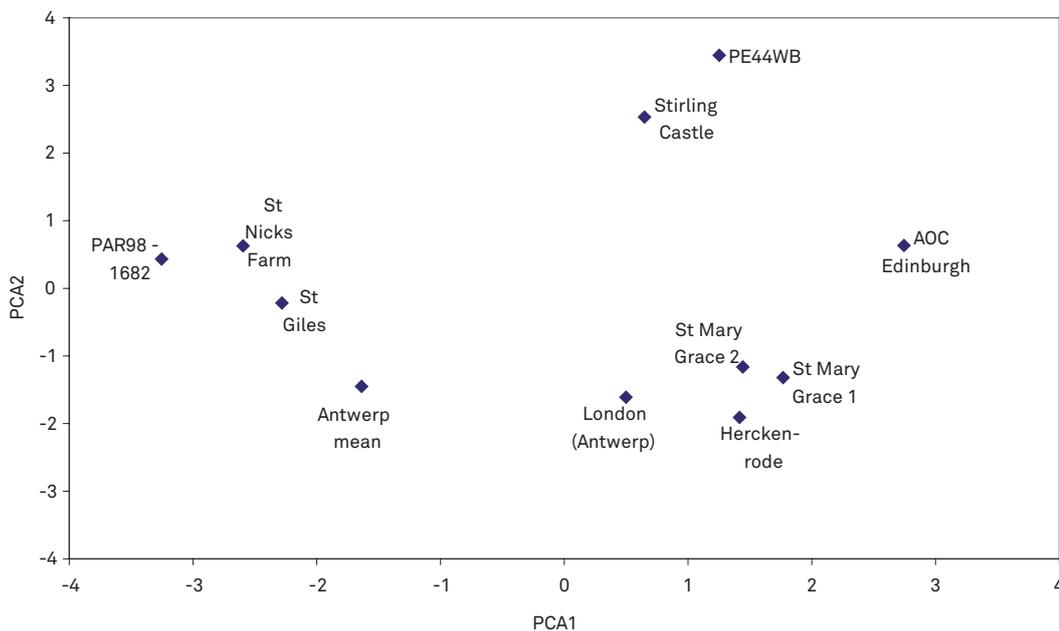
All the above data were then run against the 'Dutch redware' group (DOET, HAR and UTRE) using cluster analysis. The DOET samples have a closer similarity to the Antwerp and St. Mary's Grace samples than the others; whilst the HAR and UTRE have a closer similarity with the remaining samples. However, there is no evidence that the DOET, HAR and UTRE samples have a relationship to either the Antwerp or Scottish samples.

Similarity
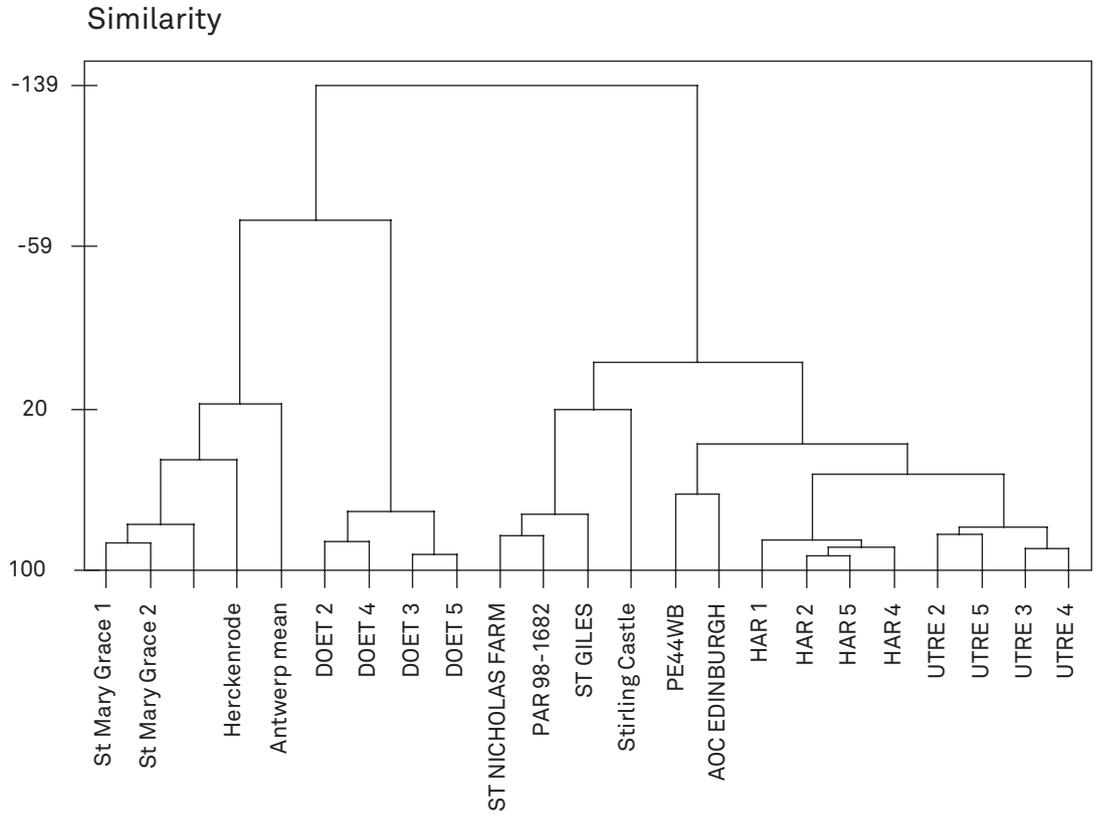
These lack of relationships are born out by Factor Analysis. Graph below showing 1st and 2nd principal component factors (FA1 and FA2).
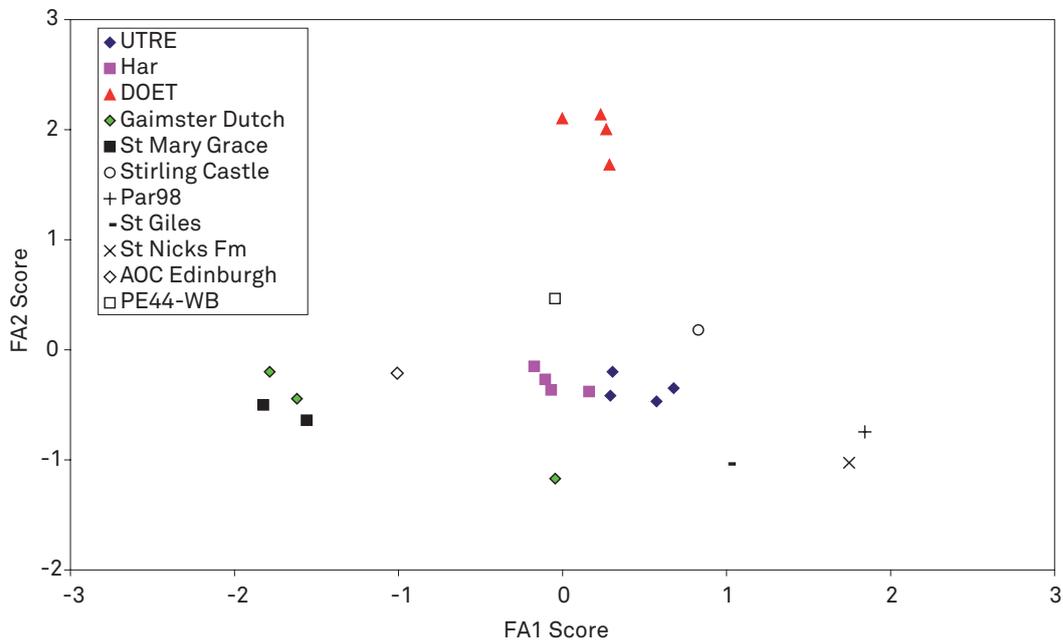
A jug on a jug.
Some thoughts on decorative function
or functional decoration

Bieke Hillewaert

1   Introduction

The documentary evidence on the appearance and use of medieval pottery is extremely varied. There are references to purchases of hundreds of vessels for a particular banquet, culinary recipes, household inventories, menus and books of etiquette. Sculptures in wood and stone, paintings and marginalia in manuscripts show people using vessels[1]. An exceptionally rare category of evidence, however, is supplied by the ceramics themselves.

The subject of this paper is a small sherd found during the excavations in the deserted town of Monnikerede. It is a fragment of a vessel in Flemish highly decorated ware on which a small, but detailed jug is depicted. Does this miniature jug have a pure decorative function, or is it a functional decoration? Was the vessel linked to a specific occasion? This paper will deal with these and other thoughts on highly decorated wares, decoration and function.

No one will doubt that the name of Frans Verhaeghe is connected with the Flemish highly decorated wares. It is his merit to have re-identified the so-called 'Aardenburg ware' as a group of Flemish luxury pottery, produced in centres as Brugge, Gent and Ieper. His numerous contacts with friends and colleagues all over Europe lead to the recognition of Flemish highly decorated wares around the North Sea as far as the Baltic area[2]. Frans Verhaeghe demonstrated the mechanisms of distribution and commercialisation of this ware, its economic importance, the role of diffusion, competition and other aspects which have lead to a more holistic and interdisciplinary way of interpretation[3]. In respect for this contribution, it gives me enormous pleasure to dedicate present modest paper on the smallest of finds to a great tutor and inspirator.

2   Context and find

The subject of this paper is a sherd from Monnikerede, which used to be a flourishing settlement with a surface of a little less than 120ha, situated on the left bank of the Zwin, between Damme and Hoeke. Today the remains of this 'deserted site' are to be found on the territory of the commune of Oostkerke, on both sides of the canal Brugge-Sluis. The topography of the ancient site of Monnikerede is still partly visible in the present landscape.

The origin of Monnikerede[4] remains obscure, due to the lack of historical documents. The settlement was mentioned for the first time in an English act of 1266. In the middle of the 13th century the settlement received privileges, such as an own bench of alderman, in function of its role in the international trade of Brugge. The privilege was probably followed by an extension of the habitation and the organisation of the settlement around a market square, the economic and social centre of the small town, and along the Hoogstraat, situated on the outer dike of the Zwin. From the 13th to the early 15th century, Monnikerede seems to have been a kind of miniature town, however without any fortifications and even without a proper church. Several documents mention the presence of large houses and a certain richness of the inhabitants. Monnikerede seems to have been a port of transhipment, although of less importance than Damme. The economic decline of Brugge and the Zwin area had a strong influence on Monnikerede and gradually lead to the shrinking and eventually the desertion of the town.

In 1984-1985 excavations were carried out on several locations of the small deserted medieval town of Monnikerede. The aim was to evaluate the remains of the settlement. One of the excavation trenches was intended to become a cross-section on

1 McCarthy & Brooks 1988, 97.

2 Recent research shows that highly decorated wares also found their way to the south. They seem to be present as far as Basque Country (information Patricia Prieto Soto).

3 Verhaeghe 1996.

4 Hillewaert 1983.

the Hoogstraat and the adjoining area. In a top layer, among lots of late 14th-15th century material, a small, peculiar sherd[5] was found. The fragment has a surface of less than 4 cm² and is probably part of a highly decorated jug[6] in a sandy red fabric, covered with white slip and a yellowish-green lead glaze (fig. 1). Remarkable is the presence of a decorative element in the form of a small jug on the outside of the vessel. The decoration is pressed from the inside into a jug-formed mould. The only 2 cm high miniature jug is extremely well recognisable and is characterised by a ribbed cylindrical neck, a fairly slender body and a rod handle. The base of the jug is missing but one may suggest that it was a thumbed foot ring. The depicted jug is a typical object from the second half of the 13th - early 14th century. These kind of jugs were part of a local production by Flemish potters – probably from Brugge – and were produced in a grey as well as in a red fabric (fig. 2).

3   Highly decorated ware

The highly decorated pottery constitutes a special group of red wares, forming an assemblage of luxury products which is typical for Flanders, northern France and even Dutch Zeeland. In the Netherlands there may have been a somewhat later local production, especially in the coastal areas.

As far as the body fabric is concerned, there are no differences from the ordinary red wares. The main characteristic of the group is the often fairly complex decoration, with white-firing slip as the common basic element. The potters made deliberate use of the opportunity to obtain a number of colour effects; the red body of the vessel, in combination with the white slip, some touches of red slip and the adding of copper to the glaze, resulted in a range of yellow, green and red tinges. The Brugge wasters belonging tot this group suggest that the objects were made with particular care and were subjected to double firing[7].

The majority of the produced items are to be looked for among the table wares and seem to be jugs, followed by dripping pans, plates, cups, salt cellars and dish covers. Next to these there are objects in the hygienic sphere, such as basins and lavabos. Architectural decoration by means of finials and roof ventilators and eventually toys close the rank[8].

The highly decorated pottery appears at the end of the 12th century and becomes relatively popular as a luxury ware from the early 13th century onwards. By the end of the 14th century, the use of the applied slip has been watered down to the decoration of more common objects with simple lines; by then the complex decoration has mostly disappeared[9].

4   Decoration

A large part of medieval and post-medieval pottery has been decorated in one or another way. A whole range in decorative techniques is present; impressed, incised, applied and painted decorations are widespread. Among the highly decorated wares rouletting and applied elements, such as pellets, scales, strips and pads of clay are a particularly common form of decoration. In many cases different decorative techniques are combined.

FIG. 1   A miniature jug as decoration on a jug in highly decorated ware, found in Monnikerede (Oostkerke/Damme) (photo Raakvlak).

5 Inv. nr. OM/85/IV/1a/1033.

6 Given the fact that jugs are the most common vessels among the Flemish highly decorated wares,

it is supposed that the decorated fragment is part of a jug.

7 Verhaeghe 1983.

8 *Idem* 1989, 81.

9 *Idem* 1983.

All have aesthetic value, which can be combined in ornamental or symbolic fashion. The surfaces to be decorated are usually those most prominent from the point of view of the onlooker, that is the shoulders, necks, rims and handles of hollow wares and the internal surfaces of flat wares.

Certain motifs recall features familiar from other aspects of daily life. In some cases applied strips with pellets resemble ornamental ironwork on doors or chests. Applied strip work is also used to depict brooches or buckles. Some designs may resemble heraldic motifs[10].

Religious symbols are occasionally in evidence. Crosses may have religious significance, whilst motifs such as the scallop shell are a reminder of pilgrim badges. It may be surprising to find that religious motifs and scenes are not more widely used on medieval pots, given the overwhelming importance of the church at all social levels.

More sophisticated decorations show complex schemes with human figures. Examples of animals are not common; when they do occur it is usually as an accessory, for example a horse with a knight. The decoration of a bearded figure often occurs in the Nord Sea area. Sometimes the face decorates the rim and neck of a jug or pitcher. In certain cases these decorations tend to real anthropomorphic vessels[11]. The more spectacular examples of those are the so-called minstrel's jugs, playing the fiddle[12]. A number of vessels make use of phallic images, which possibly spring directly from the potter's (and customer's) bawdy sense of humour.

Pottery vessels sometimes have marks, letters or inscriptions, usually incised, but sometimes applied, which may have symbolic significance, although the precise meaning is usually unclear. Marks or letters that were incised before or after firing may indicate ownership. Several markings, however, might be no more than pure decorative. One may be correct in attributing symbolic significance to some of the designs, but it should be remembered that many were simply part of the visual language of the period. Symbols are messages in code, witch may be specific to a potter and/or his client, or generally understood within society[13].

Several decorations in relief do not only have a pure decorative or even symbolic function. Applied bands may serve as a reinforcement of the body of the vessel or may prevent a pot from slipping away between one's hands.

5   Chronology

The Monnikerede sherd provides several dating elements. First there is the context, a top layer, sealing the remains of a 13th century wooden construction, and probably dating from the late 14th - 15th century.

The fabric of the sherd, belonging to the group of the highly decorated wares, suggests a 13th- or early-14th-century date.
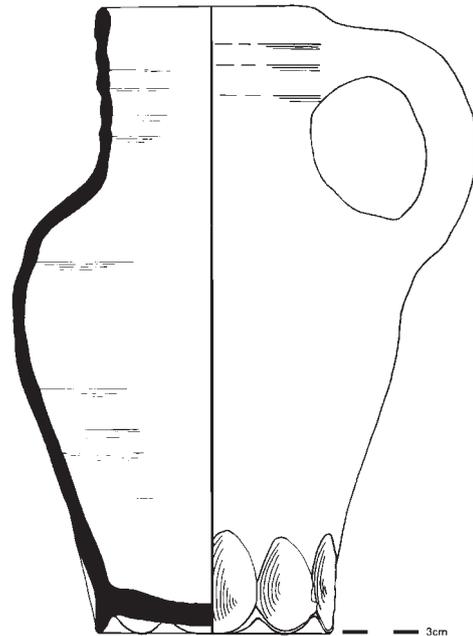
FIG. 2   A second half 13th- or early-14th-century jug type with ribbed cylindrical neck, rod handle and thumbed foot ring from Brugge, produced in grey as well as in red ware (drawing Raakvlak).

The decoration, being a fairly slender jug with a ribbed cylindrical neck, a rod handle and probably a thumbed foot ring, seams to be characteristic for the second half of the 13th - early 14th century. Clearly in this case the decoration offers the best chronological basis for the find, being the second half of the 13th - early 14th century.

The late 14th - 15th century context in which the sherd was found, suggests that the peculiar decorated fragment possibly had a second life as a pick-up in a later period.

6   Discussion

People communicate using verbal and non-verbal meanings. The decoration on medieval pottery is a less obvious example of the latter. In which way does the picture of a small jug on a highly decorated vessel communicate?

Firstly the illustration on a vessel is part of the visual language of a specific period. In some cases the representation is given with such a sense for detail that it is even useful as an element to date the vessel. Detailed head-dress and coiffure of one or more ladies illustrated on a jug, for example, may be recognised as a so-called fillet and barbette and in this way can offer a valuable chronological element[14]. In a comparable way the miniature jug can date the vessel on which it was moulded in the periode second half 13th - early 14th century.

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10 Le Patourel 1986.

11 Verhaeghe 1983, 239-242.

12 Janssen 1983, 138-140; Verhaeghe 1989, 49-50.

13 McCarthy & Brooks 1988, 129.

14 Hillewaert 1992.

Several factors may have determined the motifs to be employed. These include the vessel's intended function and the potter's perception of what kind of decoration will please or sell. Function is an important determinant, with table wares tending to be more elaborate than ordinary domestic vessels. The functional link between vessel and decoration may even be more direct. A Ham Green jug, for example, shows several ladies participating in a dance. This decorative scheme may mean that the jug was related to a specific feast or at least a feast involving dances[15].

The meaning of the miniature jug, probably on a jug of normal size, is hard to guess. At present there is no other example known, certainly not for a jug and hardly for any other domestic utensil, depicted in detail, as a decorative element on a vessel. One possible example is the applied fiddle, depicted on the so-called minstrel's jugs. Other decoration patterns, possibly recalling features familiar from other aspects of daily life, are the above mentioned applied strips and pellets which may be interpreted as ornamental ironwork on doors or chests and brooches or buckles.

One may assume that the miniature jug was part of a larger decorative design. Presumably this design must have been situated in the sphere of a meal or at least in the serving of liquids. Did this unique sherd belong to a special jug[16], probably for a special occasion? Was it a special command? An experiment of a potter? In view of the absence of identical or even comparable material, it remains difficult to answer these questions.

Various interpretations of the decoration on medieval pottery are possible, but for the most part these must remain in the realm of speculation, for we have no means of confirming or refuting them. The non-verbal meaning of decorative elements is hard to get. The potter's imagination, sense of humour and flair for design must be taken into account, however[17].

Regarding the fragment with the miniature jug, at last one other function must be considered. It is likely to suggest that the sherd had a post-vessel life as a pick-up with a remarkable decoration. A link between function and decoration after all? —

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15 *Ibid.*, 134.
16 Exceptional or unique vessels do occur, as for example the so-called 'the Three Kings' jug, found at Reimerswaal; Verhaeghe 1989, 51 & fig. 122.
17 Verhaeghe 1989, 138.

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Red-painted and glazed ware of the early medieval period in western France: new data for previous interpretations, an assesment for northwestern Europe

Philippe Husi

1 Introduction

One of the aims of this paper is to propose a division into regions of northwestern Europe, by attempting to show to what extent these regional subdivisions confirm or raise questions regarding more or less well established interpretations of early medieval period. The locations involved are sites of urban or rural consumption in the middle Loire basin (Angers, Tours, Blois, Orleans, Poitiers, Bourges, Chinon, to only present most known). We have also taken into account evidence from a handful of workshops, though such sites (Saran, near Orleans) are rather rare and tend to predate the period that concerned here.

The study gathers work by researchers from different institutions whose common field is medieval pottery – and more precisely speculating on supply networks – in the Loire basin, the area of central-western France traversed by the river Loire and its principal tributaries[1]. The final goal of the research is to attempt to extrapolate a clearer analyse of mechanisms of exchange, competition and fashion, across the historical great period by focussing on a manageable field of study.

In the last part of the paper, we will reconsider well-established accounts and interpretations of the presence of red-painted or glazed wares throughout northwestern Europe in the light of new data. This paper does not pretend to pose fundamental questions of existing hypotheses for the whole of this extensive area, but rather to complete them by interpreting this data.

2 A selected corpus and a common methodology

The best way to tackle questions of trade/supply is to establish a common methodology and to be very strict on the selected corpus of study. As a matter of fact, it is quite difficult, impossible even, to comprehend pottery facieses and

their evolution in an area like the Loire basin without dating them as accurately as possible. We have selected material only coming from stratified levels and have given particular attention to large stratigraphic urban sequences to give accurate chronological marks, without eliminating rural sites, which must be considered too if achieving a fuller understanding of socio-economic factors.

In order to provide a better explanation of chronological and typological problems, it was important to establish a common vocabulary, and therefore a common repertoire of forms and fragments. At this moment we are in the process of developing these for early medieval pottery, just as we have previously done for more recent periods[2]. The recent methodological results are presented on the website of the network of 'Medieval and Modern Ceramic Information' (ICERAMM : http://iceramm.univ-tours.fr). Next, we had to choose common techniques for quantification of the material, through minimum individual number of vessels count (MINVC) by fabrics and minimum individual typological vessels count, as well as a common protocol to apply these techniques, which enabled us to build up socio-economic conclusions with greater certainty.

We should underline, by way of conclusion, that the only way to understand better the mechanisms of supply or dissemination of pottery is to carry out an exhaustive, quantified analysis of the material, on the basis of a controlled corpus.

3 Red-painted and glazed pottery: strong presence in western Europe

The intention here is not to provide detailed results concerning red-painted, red-burnished and glazed pottery, but rather to offer a general statement of what we know and understand of how western France was linked to the trade networks of northwestern Europe at the end of the early medieval period.

[1] Husi 2003; *Idem* 2006a, 173-175.   [2] *Idem* 2003.

The principal motors for diffusing technical expertise are, on one hand, the impact of fashion and competition among products, and on the other, networks of communication which allowed the acceleration of dissemination through the creation of distinct cultural pottery areas.

The development of a cultural pottery area can be defined by the strong concentration of a given tradition of fabrication, in a more or less circumscribed space and following a well-established chronology. This study deals more with supply to the consumption sites than with the dissemination of the products. This choice was influenced by the lack of known workshops producing red-painted or glazed pottery in central-western France.

The evolution of red-painted ware, with stripes or commas, is easier to make out and seems to occur for the first time in the west of the Loire basin at the beginning of the 8th century, becoming more frequent during the course of the 8th and the 9th centuries. Although the precise boundaries of the region remain blurred, it is possible to define an area of concentration of production between Tours and Poitiers, with the rivers Vienne, Loire and Indre as the axes of dissemination.

Red-burnished ware, being pottery totally covered with a sometimes polished paint, can be found along the Loire itself from as early as the 8th century, though it has not been possible to map a clearly defined area. Three poles seem to emerge; the first around Orleans and Saran[3], the second around Blois and the last one along the valley of the river Vienne, near Chinon[4]. Anjou marks the limit of the red-burnished ware zone because not one discovery of this type has been made in Angers or to the west.

The distribution of glazed ware is still not very precise. Although examples have been found throughout the Loire basin, this fabrication tradition seems to appear very early at Tours, towards the beginning of and in substantial quantities throughout the 9th century and in the 10th century. Elsewhere it's only occasionally represented and then only from the 10th and certainly the 11th century onwards.

In conclusion, so-called 'remarkable' productions are quite common in our area of study, appearing as early as the 8th century, or the 9th century at the latest. Although the Loire is an inevitable axis, tributaries such as the Vienne, Indre and Cher were fully active corridors for the dissemination of these wares. As we have already established for the later periods and also for the Merovingian and Carolingian periods, we can also consider an east/west partition of the Loire basin to have existed at the end of the early medieval period[5]. If this hypothesis is confirmed in the years to come, it is interesting to remark that – in the long run – the role played by the tributaries is more strongly structuring than that of the river Loire itself.

To support better these hypotheses it requires changing the scale of analysis, and consequently, a better grasp of the pottery productions themselves rather than the general traditions of fabrication. This research, which will take much longer to organise since it deals with comparing each grouping of technique, then each grouping of recipients, is currently being worked out. Initial observations reveal the existence of a large amount of different, local 'remarkable' productions and a small variety of forms almost exclusively comprising large jugs. Apart from their use at the table, these large decorated liquid recipients certainly had a display function. A better socio-economic interpretation of them is hardly possible at this scale of analysis, which is why, in turn, it is necessary to interpret our regional outline in the wider north-west European context, while trying to show to what degree such a micro study questions previous interpretations.

4   New data for northwestern Europe

Questions regarding the mechanisms of exchange and the causes of the reappearance of glazed and red-painted wares at the end of the early medieval period are not new and have provoked various interpretations. Researchers tried to understand this phenomenon, distinctive to northwestern Europe, as early as the 1960s. The evolution of archaeological interpretation is closely linked to the number of sites revealing the presence of these traditions of fabrication, to the number of thorough studies in the field, and to the chronological reliability of the findings. Before adding our reflections, a brief historical account is necessary.

Archaeologists began to tackle the question at the northwestern European macro-level in the 1960s and early 1970s. At that time an idea developed that the north and east of the continent could be defined by the utilisation of red-painted ware, distinct from a centre and west where glazed ware was prevalent. The most commonly accepted idea was that painting and glazing, both forgotten since Antiquity, came from the East or the Islamic world, either through Italy or Spain, and reached the Rhineland and England. Another hypothesis is that these traditions of fabrication have a northwestern origin and were not necessarily imported from the East[6] (fig. 1: 1 and 2).

Such arguments were the natural conclusions of the principal discoveries of the time. On the one hand, there was red-painted pottery in the east, such as the output from the Rhenish workshops of Badorf and Pingsdorf, uncovered in excavations in the south and above all in the east of England, and not forgetting the productions of the Beauvais region of France. On the other hand in the west, for glazed pottery, there were French discoveries at Doué-la-Fontaine, and also at Beauvais and Andenne[7]. The idea had already been advanced that the technique of glazing had been disseminated through France towards the northwest of Europe, and served coincidentally to underline the lack

3 Jesset 2004.

4 Husi 2006b.

5 *Idem* 2003.

6 Dunning *et al.* 1959; Whitehouse 1966; Hurst 1969, 119; De Boüard 1976.

7 Borremans & Warginaire 1966; Hurst 1969; Leman 1972.

of references and studies for France itself[8]. western France, so the argument went, held the key to understand the spread of these techniques.

From the mid-1970s and in the course of the 1980s, the prevailing view was that the appliance of painting as well as glazing was widely adopted between the 10th and the 12th century in northwestern Europe, notably to the north of the river Seine and as far as Poland, or further west as in England (*e.g.* Hamwih, Exeter and a workshop in Stamford), or as at Saint-Denis and in the Loire valley[9].

The strong presence of red-painted or glazed pottery discovered at Tours and Saint-Denis partly contradicts the idea of a partition between glazing in the west and red painting in the east. Tours is thus considered as an exception in the far west of Europe for red-painted pottery[10]. The use of glazing is observed in different places of northwestern Europe, though no clear axis of dissemination emerged (Doué-la-Fontaine, Andenne, Winchester, Stamford). Besides, chronological problems which considerably weaken the argument, cannot be overlooked. John Hurst suggested early on that red-painted or glazed pottery was of French rather than Rhineland origin, offering as proof material excavated in France, dating from the beginning of the 9th century[11].

Most thinking at that time was also underpinned by the general idea of the confrontation between large socio-economic areas. Red-painted pottery was linked to the wine trade, with the Carolingian aristocracy acting as a vector of social dissemination. The competition between Rhinish and French wine appeared to be reflected through the distribution of red-painted pottery imported into England; in the south and the west of the country, so-called 'Norman' products were uncovered, whereas in the east, excavations revealed mostly wares from the Rhineland. Although the Norman Conquest emphasised this phenomenon, economic relations already seem to have existed in the 8th and 9th centuries[12]. In other words, English excavations, in particular at Ipswich and Hamwih, show a dichotomy between eastern England trading with the Rhineland, and southern England with France[13].

Over the last fifteen years, the increasing number of excavations and a more systematic study of pottery finds, particularly in France, have enabled us to verify certain hypotheses, and to raise new questions. The strong presence of red-painted potteries across northern and western France, especially in the Loire basin, seriously questions the version of the dissemination of red-painted ware from east to west. The idea of an opposite flow, as Hurst suggested, is perfectly reasonable, since the red-painted potteries of the Loire valley, the north of

France, Belgium, the Netherlands or the Rhineland were rare before the end of the 8th century and are mostly younger than the 9th century. This theme has been pursued by a number of writers[14]. New studies appear to testify far better in favour if not for the idea of dissemination from west to east, then for the simultaneous appearance of these techniques in different parts of northwestern Europe. Apart from the fact that red-painted pottery is very often of local tradition, it frequently occurs as far back as the 8th century, as in Namur or in the Ile-de-France, at the beginning of 8th century in the Loire valley or in Alsace; at the beginning of the 9th century in Flanders in the north of France[15]. The introduction of these techniques in England does not seem to be later than the 9th century and in some cases has been proved to be as early as the 8th, as Brown confirmed for Southampton. Red-painted ware does not exist in London before the 12th century[16]. At this level of analysis we have to make a distinction between wares with red-painted stripes, commas and dots and those entirely covered, which are often called 'polished and painted'.

When trying to group the first category of red painted wares into broad poles of concentration (domestic contexts or workshops) and along axes of communication, and setting aside multiple local differences, distribution can be interpreted in the following manner. From east to west, one can distinguish a large part of the Rhine valley: a zone stretching from the Alsace downstream to Badorf and Pingsdorf in the Rhineland and to Dorestad in the Netherlands; the Meuse valley around Huy, from Namur to Maastricht; the north of France and the Scheldt valley from Douai over Tournai to Ghent and maybe to Bruges (Flanders); the Seine and the Marne valleys, from Upper Normandy, including Rouen, to the Ile-de-France, and taking in the eastern middle Loire valley, and most particularly its southern tributaries such as the Cher, the Indre and the Vienne, with a concentration of productions between Tours and Poitiers, as far as the river Charente with the later productions of Andone and perhaps Angoulême. This picture of the continent matches to what's suggested by English excavations, and especially the existence of workshops like Stamford as early as the 9th century, and a dissemination of continental products as well from the west (the Seine valley and most probably the Loire valley) and the east (the Meuse and the Rhine valleys).

The second category of red-burnished wares seems to be concentrated around much more precise poles. From east to west: the Ile-de-France, with strong representation in Saint-Denis; part of the middle Loire valley between Saran and its principal centre of consumption, Orleans; further down the Loire, Blois, where local production of this type has been discovered in domestic contexts, even if no workshop has been discovered yet; a pole of concentration along the valley of the Vienne

8 Verhaeghe 1968.

9 Kilmurry 1977; Hodges 1977a, 43-50; *Idem* 1981, 63-64; Randoin 1981; Galinié 1982; Verhaeghe & Janssen 1984.

10 Galinié 1982.

11 Hurst 1976, 341-342.

12 Hodges 1977b, 250-252.

13 Hodges 1981, 92-93; Hurst 1982, 233; Keller 1995.

14 Leman 1972, 192-193; Van Es & Verwers 1975; *Idem* 1993; Jacques 1976, 73-86; Gentili 1988; Raveschot 1989, 240; Demolon & Verhaeghe 1993, 395-396; Dijkman 1993, 223; Hollevoet 1993; Lefèvre 1993; Verhoeven 1993, 209-215; Keller 1995, 22-23; Giertz 1996, 56; Tilkin-Péters 1997, 342; Dufounier, Lecler & Le Maho 1998, 151-160; Châtelet 2002, 130.

15 Lefèvre & Mahé 2004, 122-128; Collette *et al.* 2006; De Groote 2006; Husi 2006a; *Idem* 2006b; Lefèvre 2006; Vince 2006.

16 Kilmurry 1977, 183-184; Hodges 1981, 62-63; Blackmore 1993, 143; Macpherson-Grant 1993, 183; Brown 2006.
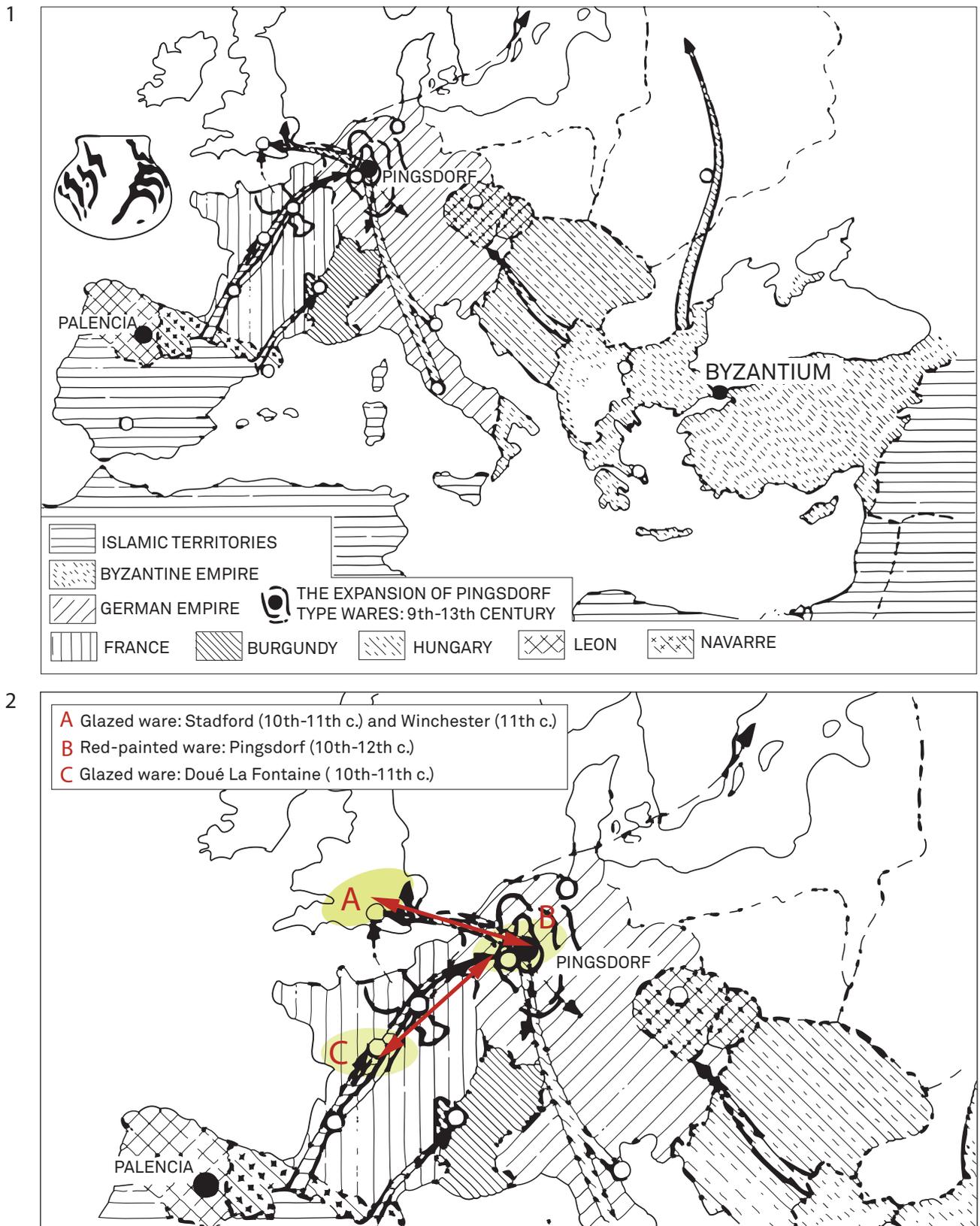
FIG. 1   Evolution since the 1960's of the interpretation of red-painted and glazed ware dissemination in northwestern Europe, at the end of the early medieval period.

1: Published by J.G. Hurst in Medieval Archaeology XIII, 1969; 2: Idea in the 1960s and the 1970s of the representation of ware dissemination: east of the continent with red painted and west of the continent with glazed ware (drawn from Hurst 1969 and supplemented by P. Husi); 3: An other hypothetic representation of red-painted, red-burnished and glazed ware dissemination (drawn from Hurst 1969 and supplemented by P. Husi); 4: The most probable representation of red-painted, red-burnished and glazed ware traditions (drawn from Hurst 1969 and supplemented by P. Husi).

3
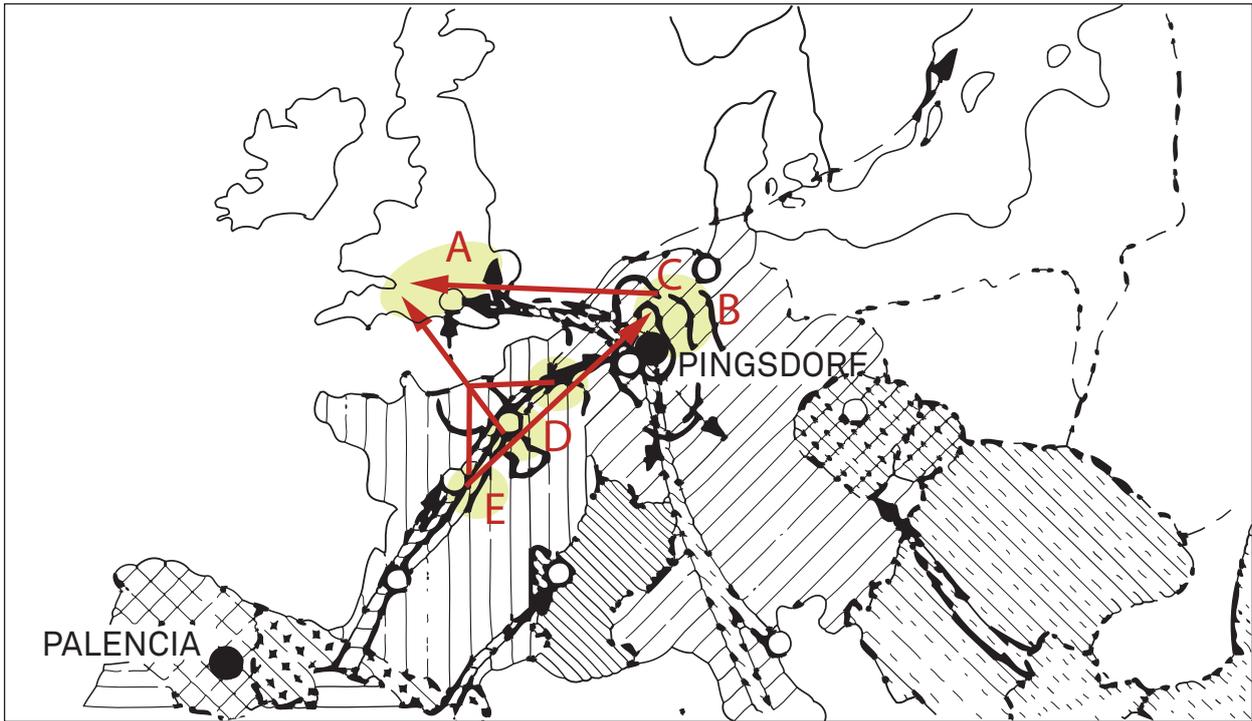
A South England: red-painted ware (first time at the end of the 8th c.) and glazed ware (at the end of 9th c.?)

B Rhine Valley: red-painted ware (first time at the end of the 8th c.) and glazed ware (at the end of the 9th c.?)

C Meuse Valley: red-painted ware (first time at the middle of the 8th c.) and glazed ware (at the middle of the 9th c.)

D Seine Valley: red-painted and /or red-burnished ware (first time at the beginning of the 8th c.) and glazed ware (at the middle 9th or 10th c.)

E Loire valley: red-painted and red-burnished ware (first time at the beginning of the 8th c.) and glazed ware (at the beginning of 9th c.)

4
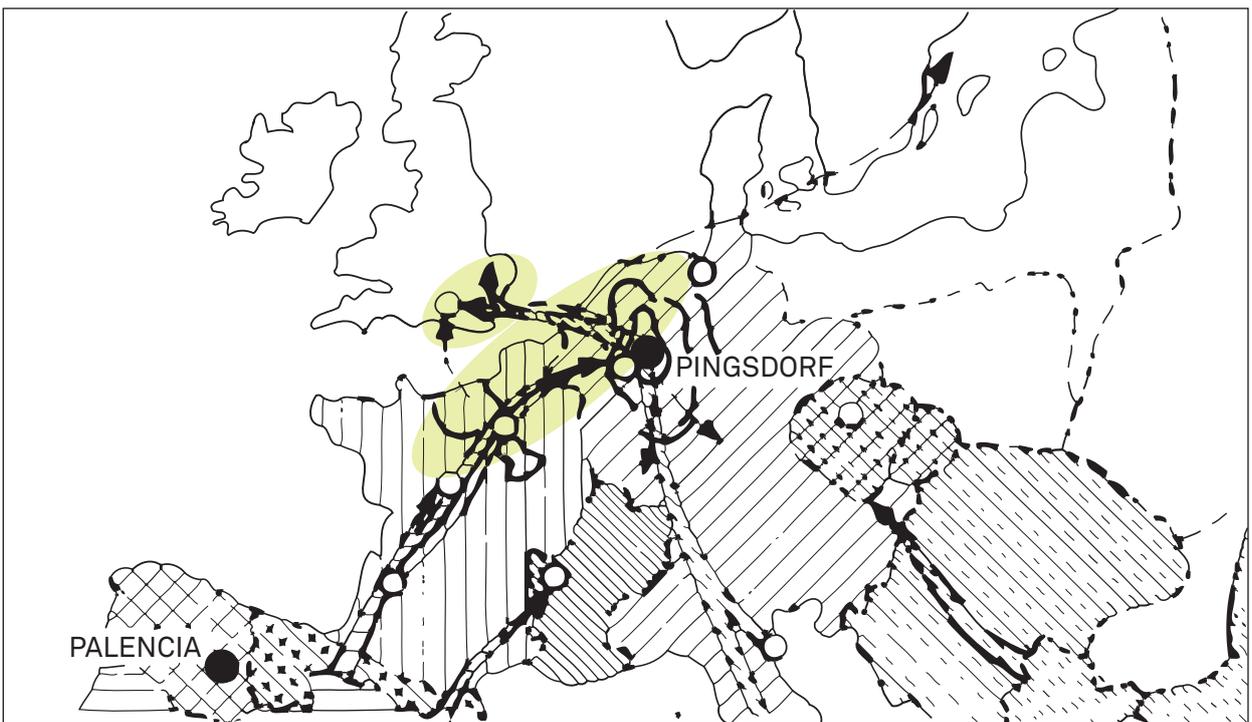
The appearance, almost simultaneously, of large decorated recipients right across this extensive European space and during a very precise periode (8th and 9th c.)

and more particularly at Chinon, with an equally strong representation of these productions in domestic contexts; and finally, a pole that is still to be confirmed in the lower Garonne valley. The discovery of red-burnished ware at British sites such as Hamwih, Ipswich or Chester can be considered, hypothetically, as imports from the Seine or the Loire valleys, and specifically from Saran[17]. The variety of productions excavated in the middle Loire valley, however, casts some doubt on these interpretations.

It is difficult to study these painted productions without either imagining them to be in continual use between Antiquity and the early medieval period, or, on the contrary, being briefly abandoned in the 6th or maybe 7th centuries. With the exception of the red and black burnished ware of Mayen (fabric B), whose production in the form of open bowls and dishes can be attributed to a Merovingian tradition[18], there is no serious evidence to suggest continuity of use, while the absence of painted recipients in the 6th and at the beginning of the 7th century appear to be confirmed across northwestern Europe. A further problem exists, moreover, in dating Mayen red-burnished wares, because they never occur in large quantities and the majority of examples are funerary items, dated to the 6th or 7th centuries[19].

In general, whether one is dealing with productions from the east like *terra sigillata* from Argonne, or from the west like the brushed or sponged ware, the productions of late Antiquity, which show a coating of red clay, disappeared at the end of the 5th century or at the beginning of the 6th. It is difficult to imagine the reappearance of paint as the transmission of knowledge from late Antiquity, particularly given that the repertoire of forms was totally renewed in the 8th century.

As for glazed ware, no doubt the use of this technique in the Loire valley and most particularly at Tours, is early, possibly dating from the beginning, and certainly no later than the middle of the 9th century. There is no evidence to contradict the scenario put forward by M. de Boüard of a pole of primitive dissemination at the western extremity of Europe, and dissemination to north-eastern Europe, through the Ile-de-France, the Rhineland and England; the chronological evidence points that way. However, when referring purely to sites that have yielded important and regular quantities of glazed ware, no pattern emerges suggesting dissemination from a single site or group of sites, nor of particular axes of communication which could be regarded as privileged for the whole of this huge area of study. The main poles and the oldest from which large amounts of glazed ware have been extracted correspond to: 1) the Meuse Valley with Huy and Maastricht, then later Andenne; 2) the Seine valley with Saint-Denis and Rouen; 3) the middle Loire valley and most particularly Tours; and 4) the numerous English discoveries including the Stamford workshop, which confirms the existence of centres of production in France from the middle of the 9th century.

The almost simultaneous appearance of glazing, in the course of the 9th century, in geographically separate areas with no proven economic relations, reveals the limitations of theories of dissemination. The notion of the dissemination of glazing along the Loire towards the Meuse valley is difficult to imagine. All the arguments seem to contradict the idea of transmission of knowledge coming from the Middle East. Glazing appeared in the Loire valley at the beginning of the 9th century, whereas no trace of local production of this type existed before the 13th century in the south and, more particularly, the southwest of France, thereby repudiating the possibility of circulation via Spain[20] (fig. 1: 3).

The cause of the development of glazing must be looked for in the dynamism of the local economy and the capacity for innovation or quick integration of new techniques, probably linked to increasing local, mainly urban, demand. It is probable that the use of glazing was related to the development of other activities, such as the use of metals, a hypothesis already proposed for the glazed ware produced in Huy[21]. Knowing how to glaze indicates that the potter has mastered new firing techniques and is able to secure a supply of new materials too, such as lead, and implies thorough integration into the local economy.

Although skewed by the frequent absence of detailed analysis of exchange at the local level, the techniques of burnishing and painting or glazing, realised almost exclusively on large recipients for liquids, appear in the 8th century across northwestern Europe. It must always be borne in mind that at least one of these three techniques is always present and that their use is more decorative than functional. The technical demands and esthetical choices are certainly due to a more or less rapid development of one or the other of these uses. The appearance, almost simultaneously, of large decorated recipients right across this extensive European space and during a very precise period suggest a commerce which should be considered as prestigious or at least having high added value. The use of these recipients has often, and for obvious reasons, been linked to the wine trade, where the quality of the decoration of the jug or pitcher used to carry the wine from the cask to the table, might be taken as an outward sign of the quality of the wine itself. Is it possible that they were first designed to serve wine, and then were very quickly imitated locally, creating heavy demand? Could we speak of these recipients as the vectors of dissemination of expertise that was very rapidly copied locally? It would appear, in any case, that the large centres of urban or monastic consumption served as new poles of dissemination within the local context. The archaeological image of this trade translates into a series of pottery facieses, which includes the great centres of consumption and follows the main fluvial axes of northwestern Europe (fig. 1: 4).

17 Hodges 1981, 72.

18 Redknap 1987, 87-99.

19 *Idem* 1988, 13-14.

20 Hanusse *et al.* 1998.

21 Giertz 1996, 56.

5   Five main continental regions

Given the state of what we know today, which remains incomplete for some regions of northwestern Europe, it is possible to imagine five main continental regions. Firstly, the middle and lower Rhine Valley with the workshops of Badorf and Pingsdorf; secondly, on the upper Rhine Valley, Alsace, which has no evident contact either with the Rhineland workshops or with those of the Meuse such as Huy and therefore forms an isolated entity. These two areas provide partially painted potteries. Thirdly, an area which could be called northern France and Belgium and which includes the Meuse and the Scheldt valleys, centred on partially painted and glazed wares, notably with Huy and Andenne. A fourth area around the Seine valley, with, on the one hand the production of the Ile-de-France, and on the other, those of the lower Seine valley in places like Rouen, where evidence of all three decorative techniques has been found. Finally, the fifth area corresponds to central-western France, with as its principal axis the middle Loire valley and its principal tributaries, as far south as Poitiers on the river Vienne, where the three traditions of fabrication can also be found.

These five regional divisions must not be allowed, of course, to obscure local, intra-regional differences such as one finds between manufactures in the lower part of the Seine valley (Rouen) and the Ile-de-France, or between the middle Loire valley (Orleans and Blois) and the southwestern zone (Bourges, Tours, Angers, Poitiers). Nor should they allow us to pass over such enigmatic examples as discoveries in the Beauvais area which seem so utterly different from productions in either the Ile-de-France or Rouen; nor should it prevent us from comparing and interpreting discoveries from southwestern France, centred for the one part around the Charente, with the painted potteries of Angoulême and the glazed potteries of Andone, and for the other part in the Bordeaux region and the Languedoc, with their pottery that is wholly painted and burnished[22]. Nor should this schematic and generalised picture be allowed to blur the chronological differences of two centuries that separate the appearance of glazed pottery at Tours and at Andone or the late transition in 10th-century Ile-de-France from painted and burnished pottery to the pottery painted with stripes[23].

Finally, we should also point out those regions where the decorated recipients are absent, such as Lower Normandy or Brittany[24]. Apart from the discovery of painted pottery in Lunel and Psalmodie, described as highly atypical, the use of these techniques appear to be completely absent from southeastern France in the early medieval period[25]. The contrast between the south and the north of Europe in the use of these techniques reinforces the idea of spontaneous appearance and not of the transmission of knowledge from the Oriental world through Italy or Spain. The numerous facieses observed reflect more local economic dynamism derived from a luxury product than the idea of distinct cultural entities of northern and southern Europe. The probable commercial competition between French and Rhenish wines is confirmed by the points of contact between products of French or Rhenish fabrication. Pierre Demolon and Frans Verhaeghe have already argued that this was the case both in Flanders and England[26].

6   Conclusion

Frans Verhaeghe showed in the conclusion of the recent conference of Caen on pottery of the 5th to 10th century that the diversity and the richness of the pottery data collected since ten years ago, result in a greater complexity of the socio-economic interpretations[27]. The ideas presented in this paper are purely hypothetical and more important work has yet to be carried out. At some point in the future we will have to return to the sherds and compare them and we also have to refine the bibliography which is incomplete here.

Acknowledgments

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22 Fabre-Dupont Maleret 1995, 207-210.

23 Mahé 2002; Gentili *et al.* 2003, 88.

24 Couanon *et al.* 1993; Saint-Jores & Hincker 2001.

25 Leenhardt *et al.*1997; Faure-Boucharlat 2001.

26 Demolon & Verhaeghe 1993, 396.

27 Verhaeghe 2006, 395.

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Fifteenth-century pottery production in 's-Hertogenbosch.
The excavation of two pottery workshops

Hans L. Janssen & Eddie Nijhof

1   Introduction

Frans Verhaeghe is famous for the production of large articles with massive sets of references and bibliographies, summarizing and evaluating all available archaeological evidence he is able to lay his hands on, pointing at research opportunities missed, problems still unsolved but above all stressing our fundamental lack of knowledge. In this process urban archaeology belongs to his main hunting field and the medieval urban industries and artisanal activities are among the main targets of his attention[1].

One of the most remarkable aspects of the archaeological evidence is the abundance for some and the absence of evidence for other industries, resulting in an over-representation of some and an under-representation of other crafts. The wasters and the remains of the pottery industries belong to the most indestructible imaginable. Consequently the evidence for urban pottery production is clearly the most strongly represented industry from the 12th century onwards with, as Verhaeghe did point out, around a third of the relevant industrial sites[2].

Frans Verhaeghe himself has devoted a large part of his early career to the study of the medieval urban pottery industries in the Low Countries and northern France. This has resulted into a fairly good insight into the urban pottery production in these regions in the 13th and 14th centuries. The 15th century, however, is a relatively unknown period. Nevertheless, in the town of 's-Hertogenbosch, belonging to the medieval duchy of Brabant, there is abundant evidence for pottery production in the 15th century. Therefore it seems a proper tribute to Frans' efforts to devote our contribution to this particular subject.

From 1977 onwards the municipality of 's-Hertogenbosch has carried out a programme of systematic archaeological research within the town of 's-Hertogenbosch and its hinterland, preceding building activities and up to now consisting of *c.* 150 large rescue excavations and more than 250 smaller observations and watching briefs. The choice of excavations and watching briefs has been based upon an operational research programme[3], some results of which have been published[4]. Medieval industries belonged to the focal points of this programme and among the excavated sites are the remains of two pottery industries, excavated by the department of town archaeology in 1984 and 1995. Both pottery industries dated from the first half of the 15th century and were located on adjacent sites. Thus far only a few short interim reports were published[5].

It is a huge undertaking to process and publish the excavated waster material, consisting of tens or even hundreds of thousands of sherds, dumped into a few dozen pits, on both sites dug by the potters to bury their waste. In fact, during the eighties and nineties, before the Malta legislation became into force in 2007, it was almost impossible to find enough time and money for such undertakings within the stressed municipal budgets and staffs. For this publication we have decided to unearth the main results of these two excavations by selecting first the general context and information about medieval pottery production in 's-Hertogenbosch and secondly the basic structural excavation evidence of the two sites, mentioned above, the site Pieterskerk (1984) and Loeffplein (1995), consisting of the remains of kilns, pits and buildings and a selection of the contents of three selected pits from the Pieterskerk site and three selected pits from the Loeffplein site filled with waster material from both pottery industries.

1 Verhaeghe 1995.

2 Verhaeghe 1995, 285-286.

3 Janssen 1983a; *Idem* 1990b.

4 See especially Janssen 1983; *Idem* 1986; *Idem* 1990a; *Idem* 1990b; Janssen & Treling 1990; Boekwijt & Janssen 1988; *Idem* 1997; Janssen 2007; Janssen & Thelen 2007.

5 Janssen 1988, 57-59; Treling 2007a; Nijhof 2007.

An investigation into the written sources, carried out by dr. M.W.J. de Bruijn, made it possible to identify the potters involved in the excavated remains and to date their activities. The pottery industry, active on the site of the Pieterskerk, excavated in 1984, could be dated to the period before 1437. The activities of the potters from the site Loeffplein, excavated in 1995, could be dated to the period between 1437 and 1461[6].

2   Pottery production in 's-Hertogenbosch before the fifteenth century

Thus far the archaeological record does not show any indication for the presence of pottery production in the town of 's-Hertogenbosch before the 15th century. This is remarkable, as the archaeological evidence shows 's-Hertogenbosch to have been one of the largest and fastest growing economic boom towns within the present Netherlands during the 13th and 14th centuries[7]. It is a general pattern for this type of towns in this period in the Low Countries that pottery industries were situated in the outskirts of or just outside these towns[8]. So we know urban pottery industries, dating from the 13th-14th centuries from the towns of Bruges[9], Aardenburg[10], Haarlem[11], Leiden[12], Utrecht[13], Amersfoort [14] and Delft[15]. For the duchy of Brabant and the eastern part of Flanders wasters from pottery production are known from the towns of Breda[16], Bergen op Zoom[17], Oudenaarde-Pamele[18] and Mechelen[19].

Considered from this angle it would be very strange if 's-Hertogenbosch would not have known local pottery industries supplying the town during the period of its economic boom *c.* 1250-1375. However, for local pottery production Holocene clay deposits are necessary which are not present in the subsoil of the town itself. These deposits, however, are ubiquitously present in an area with a radius of 2-8 kms to the north, north-east and north-west of the town along the borders of the Meuse in the villages of Orthen, Engelen, Bokhoven, Deuteren and Empel (fig. 1). In these villages pottery production may have been present at least from the 14th century onwards. In any case we know from the written sources the names of a few potters in this area: '*Jan die potter*' in 1443-44 from the nearby village of Orthen and a certain '*Ghene de potter*' from the village of Engelen in 1485-86[20]. We also have abundant documentary evidence for the related production of bricks, floor tiles and roofing tiles in and near these villages during the 15th and16th centuries[21], but even earlier brick kilns are mentioned in the written sources for 1320 and 1380[22]. There is also archaeological evidence for the presence of these industries. So a complete brick kiln, dating from the second half of the 14th century, has been excavated in Empel in 1990, while in

the village of Bokhoven wasters of roofing and floor tiles have been documented in 1985[23].

Given this situation, it could be expected that traces of a local pottery production from these villages would show itself when surveying the pottery consumption within the town of 's-Hertogenbosch during the general period *c.* 1250-*c.* 1350. This, however, is not the case. The pottery used within the town during this period seems to have been imported, albeit from not too distant areas. The largest components are coming from the Lower Rhine such as Elmpt-Brüggen for table-, storage and cooking wares, the Rhineland (Siegburg) and the area between Rhine and Meuse (Langerwehe a.o.) for tablewares. Smaller components, mainly consisting of jugs, pitchers and luxury tablewares were coming from the Meuse area further to the South (Southern Limburg and Andenne a.o.) and Flanders and elsewhere in Brabant[24]. The small numbers of red and grey wares among these finds show typological characteristics which indicate they may have been imported from Flanders and Brabant. Only from the middle of the 14th century onwards, the finds contain grey and red wares with characteristic typological features which show resemblance with the pottery production as we know it from the county of Holland in the west and the town of Utrecht in the centre of the present Netherlands. It may be significant, that wasters from pottery production which can be dated to this period, with exactly these typological characteristics, were excavated in the outskirts of the nearby town of Heusden in 1983[25]. In conclusion, Heusden may be a source for the red and grey wares found in 's-Hertogenbosch, to be dated from the middle of the 14th century onwards, or perhaps a few decades earlier. It cannot be excluded, however, that the same wares have been produced in the above-mentioned villages just to the north of 's-Hertogenbosch.

3   Fifteenth-century pottery production in 's-Hertogenbosch: the written evidence

The earliest potters, active in 's-Hertogenbosch, are mentioned in the written sources between 1437 and 1461. They can be connected with the excavated kiln sites in the Tolbrugkwartier, discussed hereafter (fig. 2). The written sources, however, prove that more potters were living and probably making their products in this area of the town during the 15th century. These sources also prove that the potters produced not only pottery, but also special functional objects such as ridge tiles and (probably) roof finials. The first example is '*Gerart den potmeker*', living and probably having his workshop '*Achter de Tolbrug*', in the Tolbrugkwartier in 1476-1477, when he delivered twelve ridge tiles to the municipal Almshouse[26]. The second example

6   de Bruijn 1997b.

7   Janssen 1990b; Janssen & Treling 1990; Janssen 2007.

8   Janssen 1983b, 143-157.

9   De Witte 1981; Verhaeghe & Jacobs 1980.

10   Trimpe Burger 1974.

11   Schimmer 1979; van der Leeuw 1979.

12   Suurmond-van Leeuwen 1979.

13   Bruijn 1979; Pot *et al.* 1988; De Groot & van Rooijen 1990.

14   Bruijn 1979, 133-148.

15   Van Haaften 1984, 1-6; *Idem* 1987, I, 100-101, 108; II, 302-309; Bult 1995; *Idem* 1996, 109-11.

16   Van den Eynde 1990, 100.

17   Weijs 1970; Groeneweg 1992.

18   De Groote 1993.

19   De Poorter 2001.

20   Kappelhof 1988, 90.

21   *Idem* 1988; Hollestelle 1961, 119-120.

22   Janssen 1986, 77.

23   *Idem* 1986, 77-78, fig. 5.

24   Janssen 1983c, 192-196; Janssen & Treling 1990, 91.

25   Janssen 1988, 59.

26   Kappelhof 1988, 90.
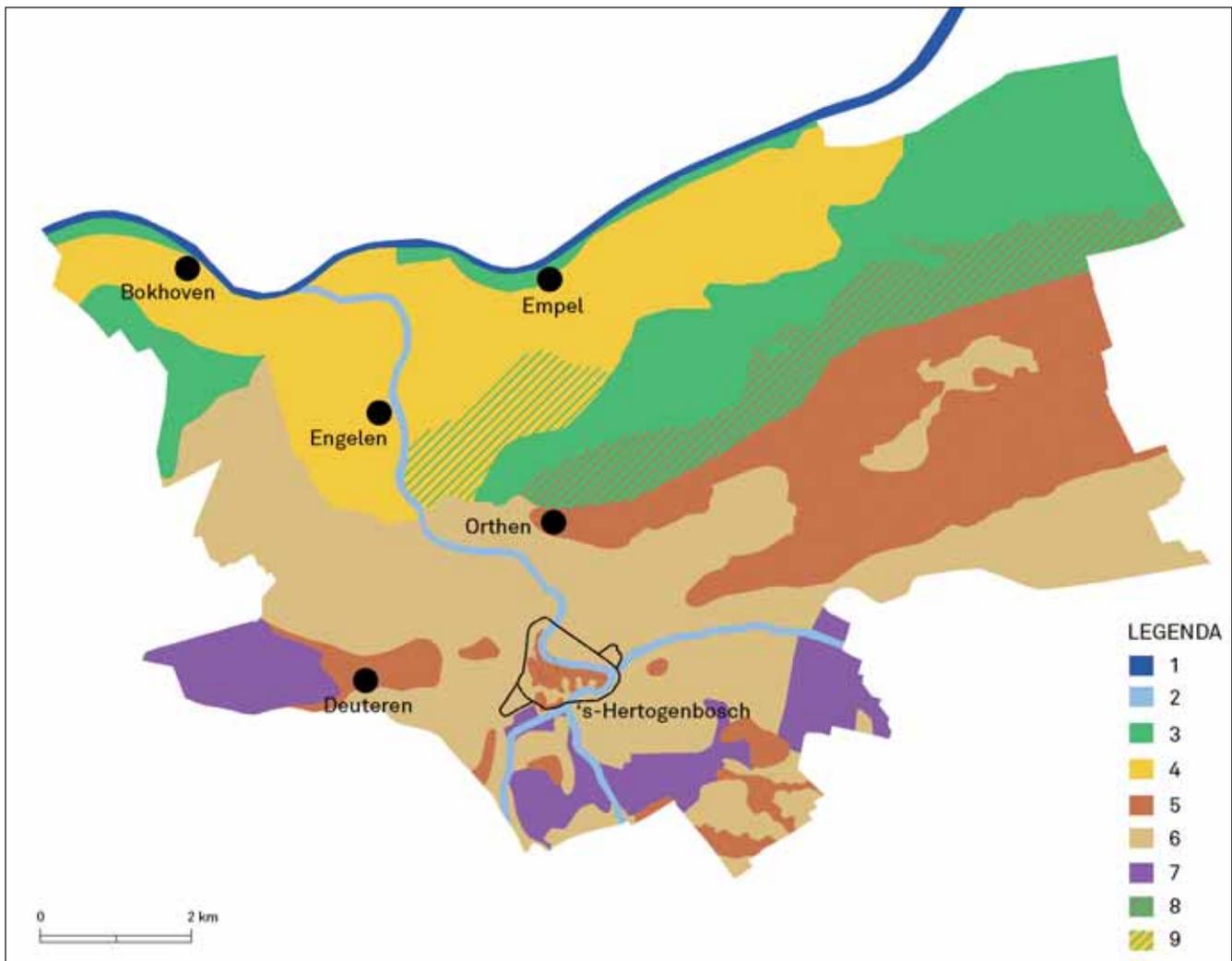
FIG. 1 **Location of villages between 's-Hertogenbosch and the river Meuse, mentioned in he written sources in connection with the production of pottery, bricks and roofing tiles. The villages are plotted on the physical-geographical underground. 1: river Meuse; 2: stream valley of rivers Aa and Dommel, from 's-Hertogenbosch onwards called Dieze; 3: basin-clay deposits; 4: levee; 5: blow-sand ridge; 6: blow-sand plain; 7: peat; 8: basin-clay over blow-sand ridge; 9: basin-clay over levee. Drawing F.C. Schipper (BAM), Municipality of 's-Hertogenbosch.**

is '*Daniel van den Yser die potter*', mentioned in charters from 1456 onwards. A later charter, dated to 1491, shows '*Goetstu Potters*' to have been his widow and then also living '*Achter de Tolbrug*' at the other side of the same street[27]. Another source, mentioning '*Goetschuwe der potster'* as delivering eighteen ridge tiles to the same above-mentioned Almshouse in 1473-1474, shows her as a widow to have continued the business of her (then probably) deceased husband Daniël van den Yser[28].

So the combined written evidence proves at least three pottery workshops to have been active along both sides of the street in the Tolbrugkwartier between 1437 and 1477 and, it may be surmised, some decades before and after these dates. The location of the pottery industry is remarkable, as these streets are located within the medieval town walls.

This seems to be in contrast to the general policy in the towns of the Low Countries. Here pottery workshops and kilns seem to have been banned to locations outside the town walls from the mid-14th century onwards. Generally this situation has been interpreted as a measure taken against crafts which were considered hazardous because of the danger of fire or pollution. It may be, that somewhat later this policy has also been applied in 's-Hertogenbosch, as a general survey for 1552 shows the names of five potters, who are active in the suburbs and nearby villages. Only one potter may have been working within the town wall[29]. In 1597 another potter is mentioned, Jan Albert Cornelis, who was using premises, situated near one of the main town gates, the Orthenpoort. In this year the town council allowed to use Cornelis' premises for the erection of a windmill. From a town resolution, dated March 7th, 1597 it

27 de Bruijn 1997b, 2.   28 Kappelhof 1988, 90.   29 van de Laar 1979, 97.

FIG. 2 Map of the present-day built-up area of the town of 's-Hertogenbosch. The rectangle indicates the location of the Tolbrugkwartier. A: the first town-wall, dating from the beginning of the 13th century; 1: excavation Pieterskerk (DBPK, 1984); 2: excavation Loeffplein (DBLO, 1994-1996). Drawing F.C. Schipper (BAM), Municipality of 's-Hertogenbosch.

appears that this windmill (and Cornelis' premises), was located just within the town wall, that is to say at the outer edge of the Tolbrugkwartier[30].

In any case we may presume that during the 15th century the town council did allow the potters along the street '*Achter de Tolbrug*' to exercise their business in this quarter of the town. The deciding factor may have been the fact that during most of the 15th century it was a very low-lying, marshy and largely uninhabited part of the town in which the presence

of a potentially dangerous and polluting pottery industry could be tolerated. Only shortly before, during the second half of the 14th century, this area had been brought within an extension of the town walls. Gradually, during the first half of the 15th century, these new grounds were reclaimed by raising the ground level with the dumping of town refuse, followed by the building of new houses and three new nunneries, the *St.-Elisabeth Bloemkampklooster* (1456), the *Geertruiklooster* (1451) and the Nunnery of the *Groot-Zieken-gasthuis* (*c.* 1470)[31].

30 Stadsarchief 's-Hertogenbosch, inv. nr. 303-142, fol. 97vso; *Idem*, Town Resolutions A23, fol. 34 vso. We thank Mr. N. Jurgens for these references.
31 Janssen 1983a, 16-17; De Bruijn 1997a; Treling 2007b; *Idem* 2007c, 57-62.

For the pottery workshops the main reason to settle down in this new quarter of the town must have been the easy access to the urban market of 's-Hertogenbosch. This probably compensated for the disadvantage of the extra transport costs for the clay and the fuel needed as raw materials, as the subsoil of the town itself did not contain suitable clay deposits. Probably the clay derived from the borders of the river Meuse, a few miles to the north. The transport costs of clay and fuel were probably bearable, as most locations within this town quarter were easily accessible by means of the different waterways of the '*Binnendieze*'.

4 The excavation of the fifteenth-century pottery industry in the 'Tolbrugkwartier'

4.1 Introduction

Two pottery workshops, located in the Tolbrugkwartier and archaeologically dated to the first half of the 15th century, have been partly excavated in 1984 and 1995 (fig. 2; fig. 3). Both excavations took place in the middle of a modern townscape with concrete apartments, shops and offices, which had been built after the complete demolition and restructuring of this until then partly still medieval quarter of the town in the fifties and sixties of the last century. This modern development in its turn was again partly demolished and redeveloped in 1994-1996.

4.2 The excavations in 1984 and 1995: context, general aims and results

The first excavation in 1984 (site Pieterskerk, code DBPK[32]) took place as a rescue excavation prior to the building of modern apartment blocks on the site of the late baroque church of St. Peter, built in 1842-43 and demolished in 1983. The presence of pottery kilns on this site was unknown and quite unexpected. The aim of the Pieterskerk excavation was to establish the exact location and stratigraphical position of the first town wall and ditch of 's-Hertogenbosch, constructed in the beginning of the 13th century. Excavations from 1972 onwards had revealed the general layout and construction of this town wall and from extrapolation of the then known information its presence on this site could be expected[33]. As the archaeological layers on the site had been destructed to a great depth as a result of the building and subsequent demolition of the church, the excavation was concentrated on two long and narrow strips to the south and the north of the original church (fig. 4).

Indeed, the excavation delivered the expected remains of the town wall (fig. 5; fig. 6), in addition to parts of the town ditch, which could be sectioned. The parts of the wall which were
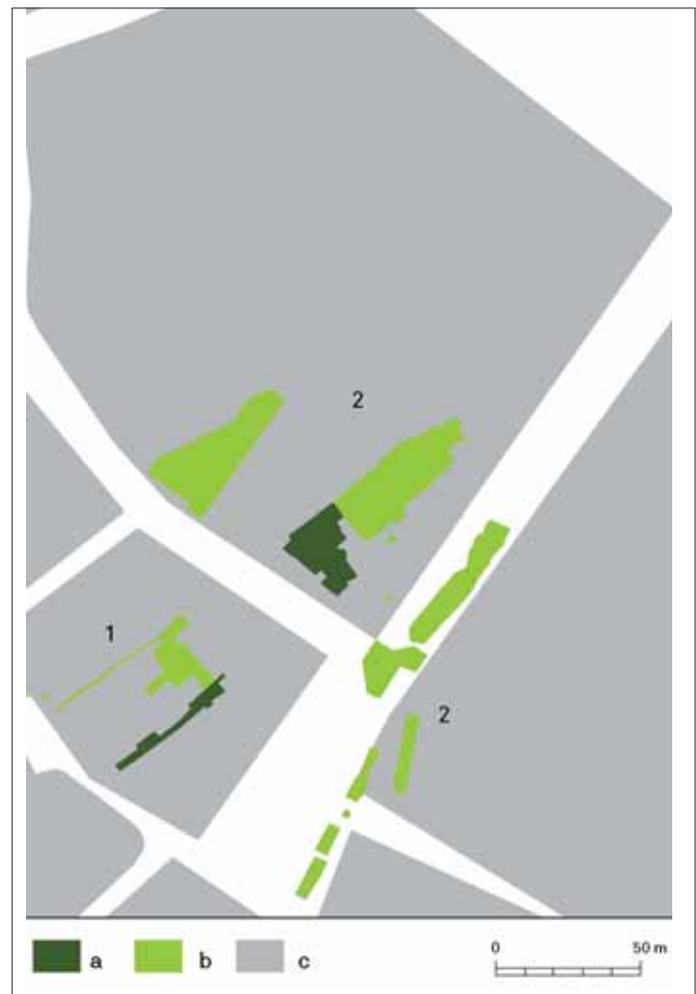
FIG. 3 **Location of the excavated areas within the Tolbrugkwartier. 1: excavation Pieterskerk 1984; 2: excavation Loeffplein 1994-1996; a: parts of the excavations with the remains of pottery production, excavated in 1984 (DBPK) and 1995(DBLO); b: excavated parts where pottery production remains are absent; c: present-day built-up area. Drawing F.C. Schipper (BAM), Municipality of 's-Hertogenbosch.**

preserved, consisting of five piers with fragments of underground arches springing from them, could be documented[34]. A separate feature consisted of the remains of a 14th-century brick-built house, (F-252; measuring *c.* 5.25 m x more than 9.60 m outward appearance), free standing on the inside of the town wall and provided with a brick paved hearth along the west side[35]. Another feature was the occurrence of a rectangular brick-built cesspit (F-33)[36] on the inside of the town wall under one of its arches, possibly belonging to the house mentioned

32 The excavation took place from 27/08/1984 to 18/12/1984 with a short extension from 23/02/1985 to 01/03/1985. The excavation was organised and paid for by the municipality of 's-Hertogenbosch. Director of excavations H.L. Janssen, municipal archaeologist; site supervisor E. Nijhof.

33 Janssen 1983d; *Idem* 2007, 110-111.
34 The brick sizes of the town-wall were 27.5/29.5x13.5/14.5x6.5/8.0 cm. The most frequent size was 28.5x14.3x7.3 cm. The bond applied was the so-called Flemish bond.

35 The brick sizes of this building were 27.0/28.5x13.0/14x5.5/6.5 cm.
36 Brick sizes 24.0/25.5x11.5/12.0x4.5/5.5 cm.

FIG. 4 Excavation Pieterskerk (DBPK)
1984. Location and numbering of the
excavation trenches. 1: concrete
20th-century office blocks;
2: plan of the Pieterskerk demolished
in 1983; 3: presently (2009) built-up
area. Drawing F.C. Schipper (BAM),
Municipality of 's-Hertogenbosch.
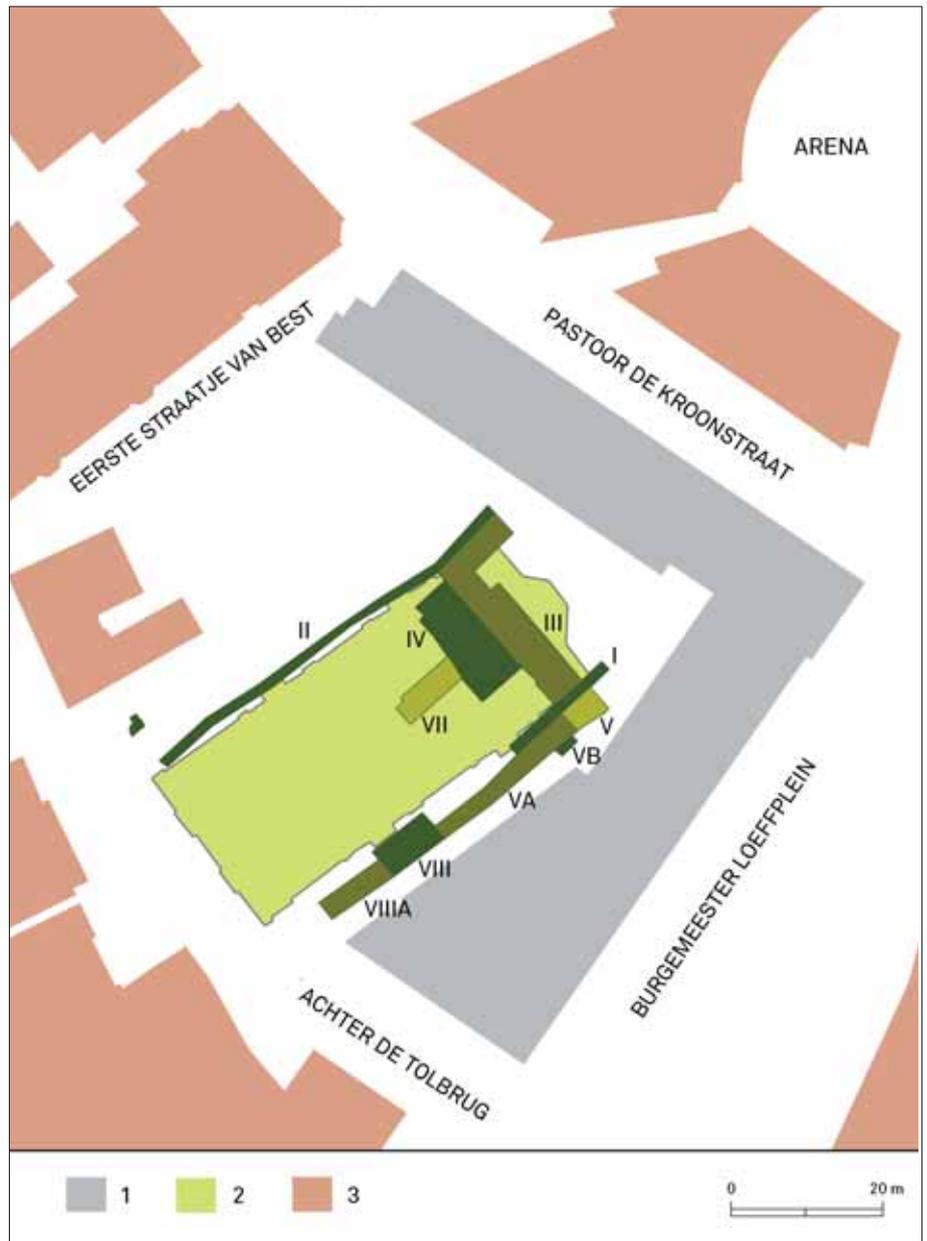
before or to a house of which no trace remains. The date of the cesspit was difficult to determine, as the content delivered, apart from cess[37], almost no datable material. The most probable date, however, is the beginning of the 15th century[38].

A surprise was the occurrence of pits, filled with wasters of pottery production in the most southern excavation trench, a few metres to the west of the cesspit F-33. This led to an extension of this trench to the south-west (fig. 4: VIII; fig. 5; fig. 7). Here the remains of kilns and a house, possibly the potter's dwelling, were encountered (fig. 5, 7-12). This whole strip of land was

situated between two branches of the river Aa, one of which functioned originally as harbour, the other, before the extension of the town wall, as town ditch (fig. 6).

Within the excavation the traces of pottery production were limited to a narrow strip to the south of the church, jammed between the destructed archaeological layers caused by the 1983 demolition of the church on the one side and the destruction by the new buildings of the sixties and seventies on the other side. Within this narrow strip of approximately 1 m wide the remains of two kilns were excavated (F225 and F241) and

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37 For a botanical analysis of the cess, see van Haaster 2008, 29-30.

38 The only datable object was an early-15th-century iron rowel-spur with a rowel with an extreme large number (at least 30) of points (Kempkens 1988, 80-81).
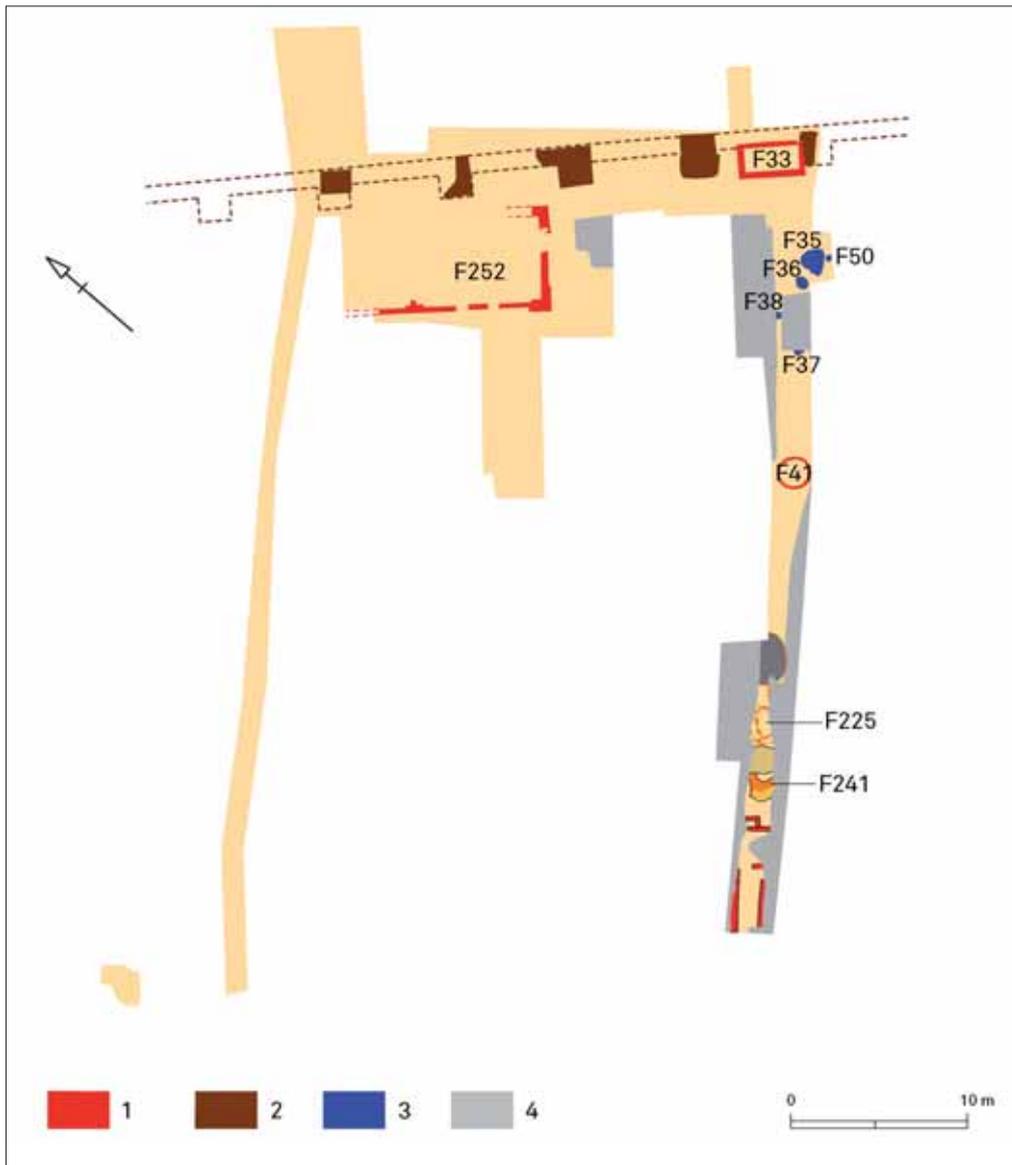
FIG. 5 Excavation Pieterskerk (DBPK) 1984. The main excavated structural elements: 1: brick-built walls; 2: town-wall; 3: pits with wasters; 4: modern disturbance. Structural elements: F-252: house (first half 14th-early 15th century); F-33: cess-pit (early 15th century); F-35, F-36, F-37, F-38 and F-50: 15th-century pits filled with wasters; F-41: brick-built water-well; F-225: fragmentarily preserved 15th-century kiln; F-241: fragment of 15th-century kiln (flues). Drawing F.C. Schipper (BAM), Municipality of 's-Hertogenbosch.

five pits with wasters were recovered. Thus far only the waste material from three of these pits (F35, F38 en F46) could be analyzed (fig. 5)[39].

The second excavation took place in 1995, as part of a much larger rescue excavation (site Loeffplein, code DBLO[40]) prior to the building of the 'Arena', a large-scale new oval building with shops and apartments, being a redevelopment of the site

of the police headquarters. In its turn they were built in 1975 on the site of the demolished 18th-century barracks, which had succeeded the medieval *St.-Elisabeth Bloemkampklooster*, a nunnery founded in 1456 along the medieval Tolbrugstraat. The results of the excavation of this nunnery, barracks and a succession of other buildings, together with thousands of movable finds have been the subject of a larger book[41].

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39 Janssen 1988, 50-52.

40 The excavation took place from 01/12/1994 to 27/02/1996. The excavation was organised and

paid for by the municipality of 's-Hertogenbosch. Director of excavations: H.L. Janssen, municipal archaeologist; site supervisor: J.R. Treling.

41 Janssen & Thelen 2007.

FIG. 6 Projection on the oldest cadastral map of part of the Tolbrugkwartier (1823). A: 13th-century town-wall; B: excavations of pottery workshop Pieterskerk (DBPK) 1984; C: excavation of pottery workshop Loeffplein (DBLO) 1995; D: foundations of the most western buildings of the Elisabeth Bloemkampklooster, as excavated in 1995; E: foundations of the St. Elisabeth Bloemkamp nunnery, as measured by a survey of van Veen in 1707. The 18th-century Tolbrugkerk on the map is an earlier church than the Pieterskerk, built in 1842-43 on the adjacent parcel. Drawing F.C. Schipper (BAM), Municipality of 's-Hertogenbosch.

FIG. 7 Pieterskerk kilns (DBPK) 1984. Detailed ground plan of the excavation of trench VIII-VIIIA. Occupation level of kilns, ca 4.50 m +NAP. Legend: a: brick walls; b: modern disturbance; 1: yellow-greybrown sand with small pieces of mortar, slate and brick; 2: brownish-black sand with many slate fragments and tiny fragments of charcoal and mortar; 3: dirty black soil with fragments of brick and slate; 4: dirty black soil with pieces of burnt loam and many burnt pottery sherds; 5: brown sand with a few tiny pieces of mortar and charcoal; F-239 and F-233: side and back-wall of a medieval 14th-century house with later 15th-century additions (F-234, F238 and F-232). Within the house a brick floor (F-237) and a possible hearth place (F-253) were present; F-241: parts of pottery kiln, consisting of first the bottom of the brick flues, secondly the layer below a part of the support, consisting of broken bricks and pieces of burnt loam and thirdly outside the flue a part of the robbed-out outer wall of the kiln, consisting of yellow sand and burnt pieces of loam (see also fig. 11); F-242: 17th-century pit, almost exclusively filled with brick rubble; F-225: parts of largely demolished kiln with traces of flues of burnt loam and the fill of the stoking pit F-222. The ground level under the demolished kiln consisted almost exclusively of burnt loam (see also figs. 8-10 and fig. 12).

FIG. 8 Pieterskerk excavation. Reconstruction (dotted lines) of the excavated groundplan of kiln F-225: a: bricks of the wall of the kiln and the support *in situ*; b: loam floor of the flue; c: stoking pit. Drawing E. Nijhof/F. Schipper (BAM), Municipality of 's-Hertogenbosch.

FIG. 9 Pieterskerk excavation. Reconstruction of horizontal section of kiln F-225, just below the dome at the top of the support and fire-grate. The quarter section to the right is shown at the level of the flues. a: brick; b: brick (wall of kiln and support); c: burnt loam (floor of flues); d: fill of support; e: stoking pit. Drawing E. Nijhof/F. Schipper (BAM), Municipality of 's-Hertogenbosch.
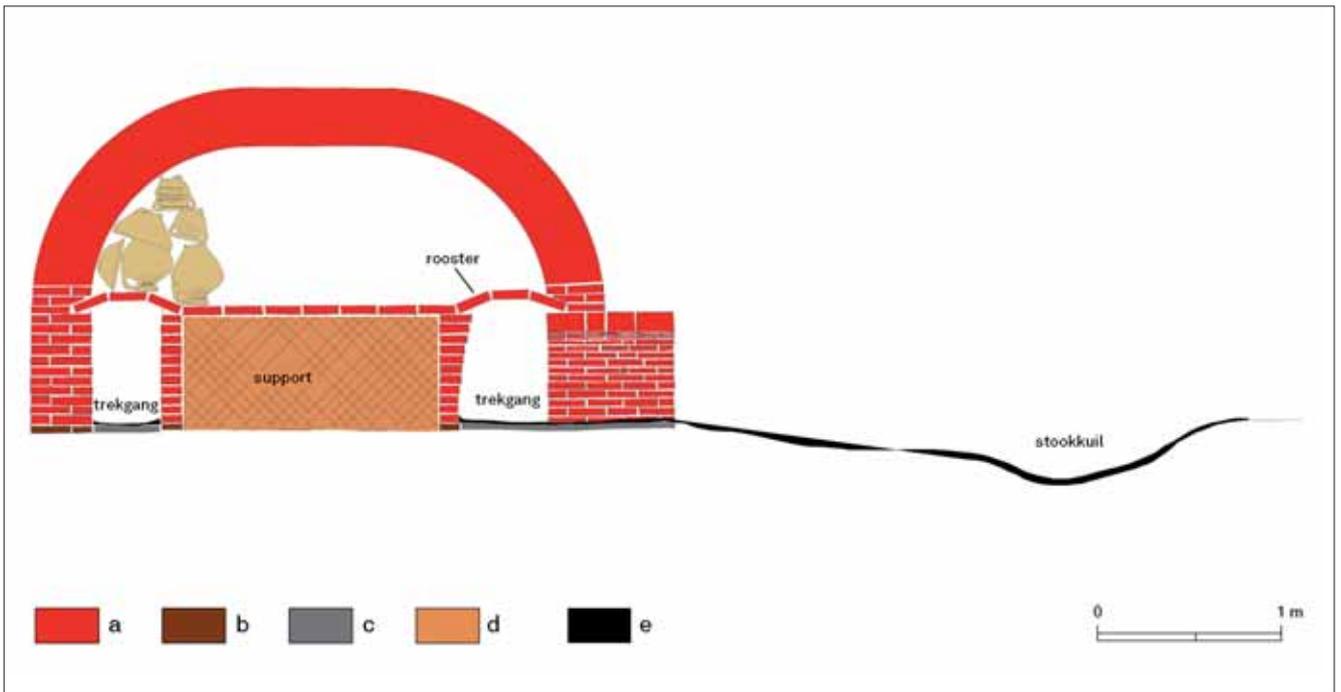
FIG. 10 Pieterskerk excavation. Reconstruction by E. Nijhof of kiln F-225 of the Pieterskerk excavation. Vertical section: the dome is speculative and not fully reconstructed. Undoubtedly the dome was provided with a stacking hole, a heat exit and spy-holes. *Trekgang* = flue; *Support* = support; *Stookkuil* = stoking hole; *Rooster* = fire-grate. Drawing E. Nijhof (BAM), Municipality of 's-Hertogenbosch.

FIG. 11 Excavation Pieterskerk kilns (DBPK, 1984). The fragment of kiln F-241 during excavation. View from the north. Photograph BAM, Municipality of 's-Hertogenbosch.

FIG. 12 Excavation Pieterskerk kilns (DBPK, 1984). The remains of the support and part of the flues of kiln F-225 during excavation. The outline of the support is indicated by scratched lines. View from the south. Photograph BAM, Municipality of 's-Hertogenbosch.

The site of the pottery workshop and kiln came to light just outside the walls of the St. Elisabeth Bloemkamp-nunnery (fig. 2-3, fig. 6 and fig. 13). The workshop and kiln was originally situated along a small canal, part of the 'Binnendieze', originally dug in the beginning of the 15th century as a drainage ditch for the reclamation of the low-lying, wet area outside the town wall. The finds consisted of the remains of a kiln, further a brick building which may have functioned as a shed for the production of pottery, and fifteen pits, filled with sherds and wasters[42].

The kiln site, excavated in 1984 was located just inside the first town wall, the kiln site excavated in 1995 just outside the first town wall. The archaeological dating evidence suggests a slightly earlier date in the 15th century for the 1984 Pieterskerk-site than for the 1995 Loeffplein-site. The written evidence makes it possible to identify the Loeffplein-site as a parcel being 63 foot (= c. 18.90 m) wide ("...in latitudine continente..."), reckoned from the street onwards. It was granted in 1437 to a certain Robbrecht Arnoud Robben, in 1446 mentioned as 'Robbrecht de potter'[43]. We know that the standard size for a smaller parcel in 's-Hertogenbosch during the 15th-16th centuries was 21 foot[44]. So it seems Robbrecht's parcel of 63 foot consisted of 3 smaller parcels of 21 foot, c. 6 m each. Still it is difficult to locate this parcel with certainty on the earliest cadastral map, dating from 1823, as the street from which this 63 foot was measured, is unnamed. The cadastral map of 1823 shows two streets, the Korte Tolbrugstraat and the Lange Tolbrugstraat (fig. 6). The excavation evidence proofs that Robbrecht's workshop at least contained the plots along the Korte Tolbrugstraat. Translated to the map of 1823 Robbrecht's plot might have comprised the four cadastral plots nrs 417-420, originally adjoining the nunnery of St. Elisabeth Bloemkamp[45] (fig. 6).

Considering the excavation results it seems that only part of Robbrecht's workshop has been excavated. Within the excavation parts of three parcels were discernible (fig. 6; fig. 13). The south-western parcel showed no evidence of pottery workshops or waste. On this plot (fig. 13) the highest preserved medieval levels consisted of dumped layers of sand and some town refuse in order to raise the general ground level. A horse burial (F-117) indicates the plot at this period was probably lying waste. The whole parcel was pierced with recent disturbances.

Almost all traces of the pottery industry, however, including a shed, traces of a kiln and pits with wasters, were concentrated on the parcel in the middle of the excavation. On the parcel next to it to the north-east; a few traces (among them a pit filled with waste material) of the activities of the potter could be spotted. This plot, however, could only be excavated from half a metre lower (c. 3.50 m +NAP) than the other two plots,

as the upper layers had to be legally sanitized before excavation because of recent oil pollution. The plot adjacent to it further to the north-east could not be excavated because of the same sanitizing operation. If this general interpretation is correct, only two of Robbrechts' three plots have been excavated, the most northern one at a lower level.

In 1461 Robbrecht and his son Jacob were forced to sell their premises to their mighty new neighbour, the St. Elisabeth Bloemkamp nunnery[46]. So it is probable that the kiln site, excavated in 1995, was active between 1437 and 1461. Based on the dating of the excavated material, the kiln site excavated in 1984 seems to precede the 1995-site, so it is possible the 1984-site was active before 1437. Unfortunately we have so far no written evidence which can be connected with the pottery industry, excavated in 1984. It might be possible, however, that both pottery industries originally were situated on the same parcel, in which case the original parcel had been extended on the other side of the town wall after the extension of the wall in the 14th century (fig. 6). In that case it might even be possible that the grant of new premises to Robbrecht the potter in 1437 in fact meant that his business had been transferred to that site. The reason behind such a transfer might have been that the danger of fire from the potter and his kiln might have been considered too great at the Pieterskerk site, while a new location outside the town wall further from the town centre in the low-lying newly reclaimed land could be tolerated.

4.3 The kilns

4.3.1 Introduction

Both sites contained the fragmentary remains of a number of pottery kilns. The stratigraphical position of the kilns on both excavation sites indicates that they belonged to the first systematic occupation of the site. In the 1984-excavation this general level was situated at c. 4.50 m +NAP, in the 1995-excavation the level with kiln activity was situated somewhat lower, at c. 3.80 m +NAP, although the workshop building itself was in use already earlier, on a level around 3.30/3.40 m +NAP.

4.3.2 The kiln sites of the excavation Pieterskerk in 1984

In the 1984-excavation a number of incidental activities preceded the general occupation level belonging to the pottery kiln. This especially concerned the building of the town wall in the beginning of the 13th century, corresponding with a general occupation level at c. 3.30 m +NAP. In the following century the general level was raised by large sand deposits to c. 4.50 m +NAP, incidentally disturbed by the digging of pits for the disposal of waste. The only building on this site in this

42 Preliminary reports: Treling 2007a; Nijhof 2007.

43 '...quadam hereditate, sexaginta tres pedatas ante iuxta communem vicum in latitudine continente, sita in Buscoducis ultra pontem die Tolbrugge...' (De Bruijn 1997b).

44 van Drunen 2006, 84-85.

45 We would expect Robbrecht's original premises comprised three small plots of each 6 m wide. However, if we plot the excavated workshop on the cadastral map of 1823, the individual plots are smaller than c. 6 m wide, which might be caused by a later reallotment. However, the four smaller plots nrs. 417-420 together comprise a total width of

18.50 m, which roughly corresponds with 63 foot. The Lange Tolbrugstraat can be excluded as the location of the premises of the potter, as no combination of parcels on the cadastral map of 1823 in the neighbourhood of the excavated workshop along this street totals 63 feet.

46 De Bruijn 1997b.

period seems to have been the earlier mentioned free-standing brick-built house (F-252) built at a distance of 1.5 m from the town wall (fig. 5). Based on the dating of the brick sizes used and the pottery in the floor levels and foundation trenches, the house was probably built during the first half of the 14th century and functioned until the beginning of the 15th century, when the house was deserted, demolished and the level was raised by sand deposits, town refuse and even a horse burial. The earliest floor levels of this house were encountered between 3.85 to 4.00 m +NAP. Although the latest occupation phase of this house might be contemporary with the pottery production, no clear connection with this production was present, as no waste material was found in connection with it. In fact, if we plot the remains of the pottery kilns and waster pits on the earliest cadastral map of 1823 (fig. 6), it might be that the free-standing house was situated on another plot. The cesspit F-33, however, certainly was situated on the same premises as the remains of the pottery workshop, but again, as no waste material was present, no connection could be established. It is possible that both structures, the house and the cesspit, preceded the activity of the pottery workshop (fig. 5). This fits in with the fact that the general occupation level of the kilns was somewhat higher, around 4.50 m +NAP, while all known pits were dug from a level above *c.* 4.35 m +NAP.

In the south trench of the 1984 excavation the remains of two kilns were discernible, immediately after removing the recent disturbance. From the ground plan of these kilns only a very small slice of just over 1 m wide was preserved between the disturbance of the building and demolition layers of the church of St. Peter to the north and the demolition caused by the concrete office blocks of the sixties to the south. Within this small slice the side wall (F-239) and back wall (F-233) of a medieval 14th-century house[47] with later 15th-century additions (F-234, F238 and F-232[48]) was present on the west side. Immediately to the back of this house the remains of two kilns could be discerned (fig. 7).

The remains of the first kiln (F-241) consisted of a large part of the floor of the flue of the back of a kiln, located at a distance of just over 1 m from the back of the house. More than half of the kiln, including the stokehole had been destroyed by the building of a stratigraphically somewhat later kiln (F-225), the floors of the flues and the superstructure of which in its turn had been demolished as well. Under the floor of these kilns the remains of older stoking pits made clear that these kilns had predecessors at the same location.

Both kilns belong to the type of the vertical up-draught kiln with a circular or oval ground plan. Both kiln fragments belong to the subtype with a central oval support, consisting of a raised, brick oven floor[49]. The principle of this type of kiln is to create a horizontal separation of a superimposed fireplace and firing chamber by a raised kiln floor, perforated by vents.

Generally the raised floors were designed in different ways, by means of bridging the flue channels, being the distance between the central support (or pedestal) and the outer kiln wall by plate-like stones or arches of mobile clay objects or (in the case of a brick kiln) three bricks forming an arch (see also fig. 9-10). The superstructure of this kiln type was (probably) closed by a dome, of which, however, no remains are known. Around the central support for the firing chamber, a flue channel, rising at a gentle gradient towards the back, leads the fire. The kiln is fired from a lower-lying, sunken stoking pit, serving as the work space for firing the kiln through the fire (or stoke) hole. The date-range of this type of kiln stretches from the second half of the 13th to the second half of the 15th century.

The fragments, remaining of the two kilns, allow attributing them to this general kiln type (fig. 7-12). The basic structure of the Pieterskerk kilns consisted of brick, which allowed for an independent dating element on the basis of the brick sizes used. These were for both kilns more or less comparable: F-241: 20.1/20.2 x 8.6/9.0 x 4.1/4.2 cm and F-225: 22.0 x 11.3 x 4.8 cm and fragments with the sizes 9.5/10.0 x 5.5/5.0 cm. Generally these sizes allow for a date-range between the first half of the 15th century to the beginning of the 16th century. Although these sizes are remarkably small for the first half of the 15th century, it is, however, a regular phenomenon in the archaeological evidence in 's-Hertogenbosch in this period that for small round structures (kilns, wells, cesspits, etc) smaller brick sizes are being used than for larger structures such as houses. This might be in accordance with the fact that we know the town issued a bye-law in 1486 (but it might have been come into force earlier, from 1463 onwards), which only allowed the use of two separate brick sizes, a large one and a small one. Moulds for both sizes were attached to the front gable of the town hall. Unfortunately the dimensions of both sizes are not mentioned[50].

Both kilns were provided with a central oval support. None of these supports, however, were intact, but their size could be roughly reconstructed. The remaining fragment of Kiln F-241 was demolished to the level of the bottom of the flues, paved with red-burnt bricks (fig. 7; fig. 11). The support was only recognizable by the inner lining of the flues. From these measures the smallest diameter of the support could be reconstructed as *c.* 80-90 cm. The widest diameter of the oval could not be measured. The flues had an internal measure of 48 cm. The kiln fragment clearly concerned the back of the kiln, as the level in the remaining fragments rose from 4.47 m +NAP to 4.67 m +NAP. At the highest point at the back a small almost square 30 x 32 cm extension was noticed, which is difficult to explain. It certainly was not a part of the stoke hole, as the level of the flue in this part was still rising and no stoking pit was present west of this extension. Possibly it concerned the foundation for a chimney at the back of the kiln. For such a construction, however, no parallels are known.

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47 The brick sizes of both walls were 25.0/26.0x12.0/12.5x5.0/5.5 cm

48 The brick sizes of these three walls were 22.0/23.0x 11.0/12.0x 4.5/5.0 cm.

49 See Heege 2007, 45-57, for a survey of excavations of this type of kiln in north-west Europe.

50 Van den Heuvel 1946, I, 305-306; Kappelhof 1988, 88.
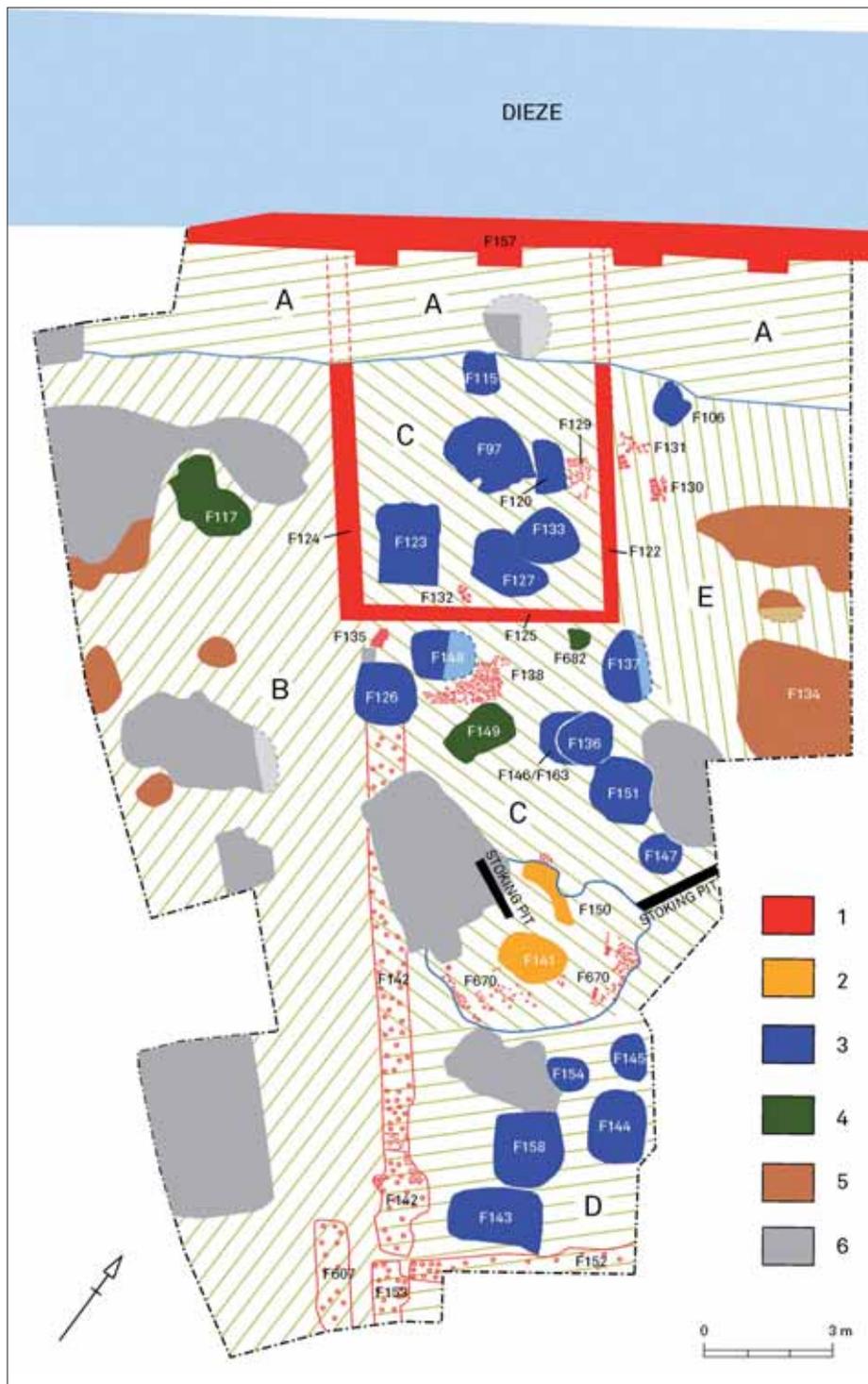
FIG. 13 Loeffplein kiln-site (DBLO, 1995). Detailed ground-plan of the occupation level of the kilns at *c.* 3.80-3.90 m +NAP. The excavation concerned three parcels. The parcel to the right (E) was excavated at a lower level (ca 3.60 m +NAP due to earlier sanitizing because of oil pollution). 1: brick walls; 2: burnt loam, remains of the kiln(s); 3: pits filled with pottery wasters; 4: pits with animal burials; 5: pits filled with dirty brown sand, humous cess and small pieces of brick and charcoal, F-34 also containing a large amount of pottery waste; 6: recent disturbance; A: foundation trench of quay wall F-157, 18th century, filled with dirty brown sand with brick rubble, pieces of mortar, slate and tiny speckles of charcoal; B: humous dark brown sand with tiny speckles of brick, mortar and charcoal; C: occupation level of kiln and workshop, consisting of loamy sand with small pieces of brick, charcoal and loam. Only parts of an older, demolished brick pavement remain (F-129, F-132, F-135, F-138); D: raised layers of sand with town-waste, sloping down to the river. No occupation level present any more; E: humous dark-brown sand, raised layers sloping down, at a lower level than D; F-122/125/124: walls of the pottery workshop; F-142/152/153/607: robber trenches of garden or parcel walls; F-141/150: Burnt and baked loam, remains of demolished kiln(s); F-670: Burned brick rubble, remaining after demolition of kiln; F-130/131: Remains of demolished brick pavement at 3.30 and 3.42 m +NAP.; F-117/149/682: pits with animal burials (F 117, F-149: horse; F-682: three dogs).

The remaining fragments of Kiln F-225 were almost flimsier than those of Kiln F-241 but at least they just made it possible to recognize and even reconstruct roughly the main ground plan of the kiln (fig. 7 -8; fig. 12)[51]. The support was completely demolished, but its outline was recognizable by a few remaining bricks of the base of the support and the imprint of the inner line of the flues. The support consisted of one row of longitudinally laid bricks, the inside of the support probably consisting of brick rubble, mortar and slate fragments. The estimated diameter of the oval support lies between 0.80 and 1.60 m which probably is very much comparable to the size of the support of Kiln F-241. Seen from the stoking pit the base of the support gradually rose to the back of the kiln as is proven by the fact, that the lowest layer of bricks of the support was shifted to a higher level.

The internal size of the flue of Kiln F-225 could be measured as 32 cm, albeit at one spot only. In contrast to Kiln F-241 the floor of the flues of Kiln F225 consisted of burnt clay. The 15th-century floor level at the moment of firing could be established at 4.56 m +NAP, being the boundary between burnt and unburnt bricks.

To the east of the kiln itself the remains of a rather shallow stoking pit were encountered, gradually rising from the bottom and merging into a horizontal level of charcoal. The distance between the support and the stoking pit was approximately just over 1 m. Due to recent disturbances the exact position of the stoking hole could not be established. Nevertheless, the few elements which were preserved, added to the necessities needed for a working kiln, allowed for a possible reconstruction of the kiln F-225 (fig. 8-10). Underneath the support a working floor was found, consisting of tamped burnt loam and brick rubble. This could be the remains of an earlier kiln. Also pits filled with charcoal underneath Kiln F-241 could be the remains of stoking pits of earlier kilns.

4.3.3 The kiln site of the excavation Loeffplein in 1995 (fig. 13)

The kiln site, excavated in 1995 belonged to the first systematic occupation of this site, situated outside the first town wall, after the systematic raising of the ground level to *c.* 3.30/3.40 m +NAP. Immediately on top of this level the foundations were laid for a building, at some stage belonging to the pottery workshop and discussed hereafter.

No remains of the kiln structures themselves could be excavated in the 1995 excavation. Even the floor level(s) belonging to the kiln(s) were largely removed by later medieval destruction levels, lying in its turn immediately under massive 20th-century destruction levels. Hence the location of the kiln only made itself clear by the burning of the subsoil under the original kiln as a vague, irregularly rounded structure of *c.* 5 x 4 m diameter with a central oval burnt area of *c.* 1.6 x 1.2 m (fig. 14). At the edges of the structure fragmented bricks were present with sizes 10.8/11.0 x 4.5/5 cm. Possibly this structure represents the remains of the demolishment of the dome and flues

of a few each other succeeding kilns at roughly, but not exactly the same position. The general level of (these) burnt subsoil(s) varied between *c.* 3.80-3.90 m +NAP and *c.* 4.10 m +NAP. Based on this rather high-lying level we may assume this (these) burnt imprint(s) belonged to the latest kiln(s) on this site, shortly before its demolition. To the north-east and north-west of the kiln, remains of stoking pits, filled with pitch-black, sticky burnt loam and charcoal, were clearly discernible. Probably these stoking pits represented different phases of the working-life of the kiln(s). It is logical to assume this (these?) kiln(s?) also belonged to the same general type of vertical up-draught kilns as the two kilns in the 1984 excavation.

4.4 Buildings and structures, associated with the kilns

In the 1984 excavations no buildings could be associated with the kilns with certainty. Nevertheless, the fragmentarily preserved house (F-233/239 with additions F232/234/238) immediately to the west of Kilns F-225 and F-241 (fig. 5; fig. 7) might have been the potter's dwelling. The general level of this house was situated around 4.50 m +NAP. Further to the back (=east) of the same plot, the waste pits of the potters were encountered, five of which have been excavated (F-35, F-36, F-37, F-38, F-46; see fig. 5). The original level from where they were dug could not be established due to the recent disturbance. Anyway they were dug from a level higher than 4.35 m +NAP.

The kiln site, excavated in 1995 was situated along a small canal, part of the *Binnendieze* and probably used by the potter for supplying clay and fuel to the kiln (fig. 6; fig. 13). In the 1995 excavation the kiln was located outside a brick-built house or – more probably – a shed (F-122-124-125), adjoining the canal. This building was 6 m wide and probably *c.* 9.5 m long. The building probably served as a workshop of the potter or/and as a drying shed for drying the finished objects before firing. The exact length of this building could not be established with certainty because it was destroyed by a later reconstruction of the quay wall along the canal, to which it adjoined. The south-west side of this building functioned as the boundary of the potter's premises. These premises certainly extended further to the south-west, as is indicated by the robber trench of a garden wall (F-142). The most southern part of the potter's premise, which could be excavated was limited by the robber trenches (F-152/153) of two other garden walls(?). Further to the south the site was completely destroyed by modern disturbance and could not be excavated.

The building date of this supposed workshop is somewhat of a problem. The building was constructed almost immediately after the reclamation of the area and the raising of the ground level. It was given a very shallow foundation trench of *c.* 20 cm, after which it was built on the then present ground level, situated at *c.* 3.30/3.40 m +NAP. It was built from bricks with the sizes 24.0/24.5 x 11.0/11,5 x 4.5/5.5 cm with a secondary use of some larger bricks with sizes 27.5 x 12.5/13.5 x 6.0/6.5 cm. The

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51 On December 17th 1984 the excavation was visited by the late Anton Bruijn (then State Service for Archaeological Excavations), who discussed and advised on the results and its interpretation.

dominant smaller brick size is characteristic for the period around 1400[52]. The building has known at least two periods of functioning, corresponding with two levels of pavement, only the last of which can be tied with certainty to the functioning of the pottery workshop. The building was demolished almost contemporaneously with the construction of the St. Elisabeth Bloemkamp nunnery, as the occupation layer, covering the foundation trench of the nunnery was identical with the demolition layer of the pottery workshop.

The interpretation of the working life of the pottery workshop was hampered by the fact that the demolition of the concrete office blocks belonging to the modern police headquarters built in the seventies and demolished in the early nineties, had left a crater-like landscape with partially preserved medieval layers (varying between *c.* 3.80 and 4.20 m +NAP), punctured by modern disturbances. Fragments of the first floor within this workshop, consisting of bricks, were situated at 3.46 m +NAP[53]. Fragments of brick pavements outside the building, north-east of it on the neighbouring parcel were encountered at 3.30 and 3.42 m +NAP (F-130[54] and F131[55]). Fragments of a second floor within the workshop (F-129[56]) could be documented around 3.70 m +NAP. A tiny fragment of an even higher floor-level (F-132[57]) was noticed between 3.83 to 3.89 m +NAP. Outside the building on the same parcel fragments of a second brick pavement could be recorded varying between 3.68 to 3.78 m +NAP (F-138[58]). So it seems two general floor levels were present inside the house, an earlier around 3.46 m +NAP and a later one around 3.70 m +NAP. These levels could correspond with two levels of pavement outside the house: the lower one from 3.30 to 3.42 m +NAP, the second one between 3.68 to 3.78 m +NAP. It is only the second (higher) level of pavement in- and outside the workshop, which can be tied with certainty to the activities of the pottery workshop. It might be possible this higher floor level was raised in a later phase to a level

between 3.83-3.89 m +NAP. Between the garden wall F-42 and the pottery workshop an opening, probably a door was present. Despite some modern disturbance fragments of a possible stair could be noted with a fragmentary step on 4.00 m +NAP.

Apart from all sorts of recent disturbance the fragmentation of the levels of the workshop and the work floor outside the building has mainly been caused by a great number of 15th-century pits filled with the waste of misfired pottery and demolished kilns. These pits had been dug during the last phases of the pottery workshop and had destroyed most traces of earlier activities. They can be divided in different chronological groups. Firstly it concerns pit F-148. Although this pit has been secondarily filled with waste material of the kiln, it was originally a steep, probably wood-lined pit of 1.10 m deep, inserted within pavement F-138 and dug in from this level (*c.* 3.70 m +NAP). As the inside of this pit was surrounded with a lining of clay, its original function might have been a pit, in which the potter collected the clay for his activities. This lining of clay within the pit and a secondary fill with waste material was also encountered within pit F-106. This pit also might originally have been a clay pit for the potter, but the original level from where the pit was dug in, could not be established anymore due to later disturbance. The same might apply to pit F-146 and F115.

The other pits filled with wasters dug in within and outside the workshop and around the location of the kiln were dug after the demolition of the workshop. The earliest of these pits (F-151, F-136, F-147, F-97 and F-120) were dug from or just above the pavement and/or occupation level varying between *c.* 3.70 m +NAP and 3.80 m +NAP. Associated with this same level but dug from *c.* 10 cm higher and perhaps statigraphically a fraction later were the pits F-123, F-127 and F-133 within the workshop, while F-127, cutting through F-133, is stratigraphi-

52 Janssen 1986, 77.

53 The situation on this level on the parcel of the pottery workshop is not illustrated. Very little of it remained, due to the later medieval disturbances.

Fragments of pavements, however, could be recorded (F-614).

54 Brick sizes 22.0x10.5/11x4.0/4.5 cm.

55 Brick sizes 23.5x11.0/12.0x4.5/5.5 cm.

56 Brick sizes (fragmented) 10.5/11.0x 4.5/5.0 cm.

57 Brick sizes (fragmented) 10.0/10.6x4.7/4.8 cm and 11.7/12.0x4.8/5.7 cm.

58 Brick sizes 22.0x9.5/10.0x4.5/5.5 cm.

FIG. 15 Section of pit F-126 (excavation Loeffplein 1995), filled with waste material from the pottery workshop. To the left modern disturbance by a concrete pillar. View from the south-west. Photograph BAM, Municipality of 's-Hertogenbosch.

cally a fraction younger. All these pits were stratigraphically contemporaneous with or shortly later than the demolition of the walls of the workshop and the garden wall. Pit F-136 was dug through the earlier pit F-146.

An even later phase of pits was dug from a level higher than *c.* 4.10-4.20 m +NAP (F-126 [fig. 15]; F-143; F-144; F-145, F-154). In doing so, these pits were dug through the floor levels within and the brick pavement outside the workshop. Accordingly they have to be dated later than the workshop. Obviously the workshop was already out of use before the potter stopped his activities, as is also proven by the fact that the pit F-126 was even dug through and was consequently later than the robber trench of the garden wall F-142. The end of the functional use of the workshop building might have been caused by disaster of some sort, possibly a fire. An indication for such an event might be found in the presence of three complete skeletons of small dogs in pit F-682 against the wall of the building amidst pottery waste and burnt material.

5　The products of the kiln sites Pieterskerk 1984 and Loeffplein 1995

5.1　Introduction

All kiln products consist of grey wares, glazed red wares and a small proportion of white firing wares and red wares provided with a priming of white slip. Some of the red wares are provided with a slip-trailed decoration.

The following discussion of the products of the kilns is in fact a provisional interim report as it is based on the analysis of the content of three pits from the 1984 Pieterskerk-excavation (F35, F38 and F46) and the content of one pit (F115) and parts of pits F144, F127 and F163 from the 1995 Loeffplein-excavation. It gives a qualitative impression of the range of products. Further study of the material ought to confirm whether the following impression is a correct one.

The Pieterskerk excavation yielded a total of 232 reconstructible vessels[59]. Fitting sherds from pits F35 and F38 suggest that both pits were filled more or less at the same time. From the Loeffplein excavation only pit F115 could be completely analysed. It yielded a total of 82 reconstructible vessels. From pit F144 only the red ware material could be analysed completely: it yielded 95 reconstructible vessels. The grey ware from this pit has been visually scanned, but (with the exception of fig. 25: 2) not used for this typological survey. It concerned at least *c.* 100 vessels, mainly pitchers, large bowls and storage jars. Further some material from pits F127, F136 and F146/163 was selected.

Of course there is a risk the picture from these limited amounts of pits might be misleading as the content of the pits could easily represent dumps of special, complicated products with a greater risk of misfiring instead of a representative picture of the total production. Especially the interpretation of the proportion between the total production of red and grey wares could be distorted, as the possibility exists the contents of a pit would contain arbitrary selections, either the misfiring of a dump of grey wares or of a dump of red wares without giving any indications how often a load of grey or red ware products was fired. Nevertheless, it seems most pits have been used more than once, as they generally contain dumps of red and grey wares.

Therefore we assume to have reason to believe the following survey gives a qualitative impression of the real production. First the general range of production will be surveyed, secondly the production of the 's-Hertogenbosch kilns will be evaluated as a stage in the production of medieval pottery in the Netherlands. So far, the general range of production can be distinguished in a number of different shapes.

59　F35: 142; F38: 70 and F46: 19.
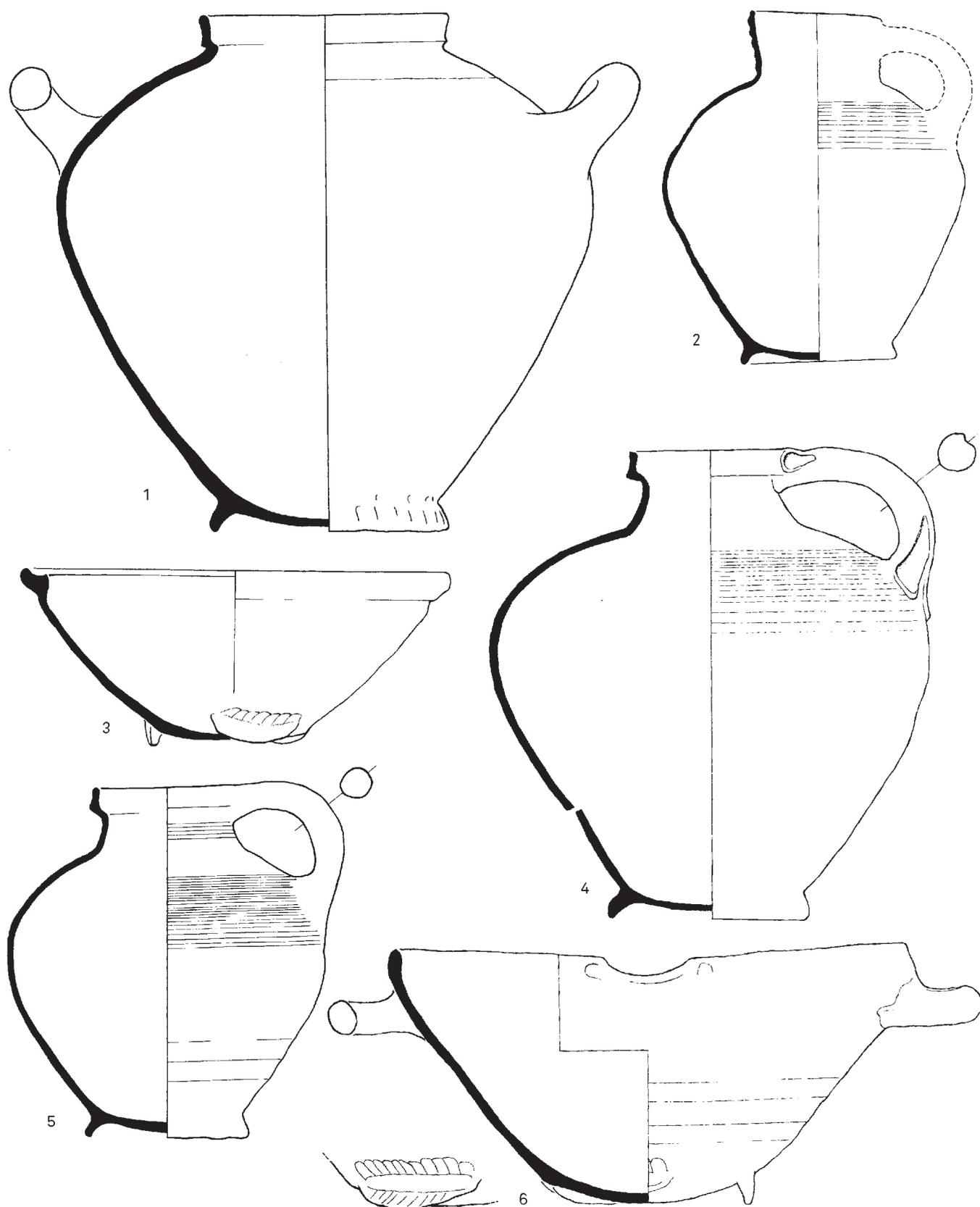
FIG. 16 Pieterskerk kiln. Greyware pitchers, bowls and storage jars: 1: storage jar (F-38, inv.nr. 418); 2: jug (F-38, inv.nr. 441); 3: bowl (F-38, inv.nr. 410); 4: pitcher (F-38, inv.nr. 2465); 5: jug (F-38, inv.nr. 2743); 6: bowl (F-35, inv.nr. 2486). Scale 1:4. Drawing J-E. Dilz.

5.2   Pitchers and jugs

Pitchers and jugs occur in different sizes, large and small, in grey and red ware. Pitchers have a function in the household and are mainly used for transport and pouring, incidentally perhaps for storage. There is almost no typological difference between vessels of the 1984 and 1995 kiln (Pieterskerk: fig. 16: 4-5; fig. 17: 1, 3-5; Loeffplein: fig. 24: 1-3; fig. 25: 1-4). All pitchers have a frilled base, a rather globular body, a short neck with fine rilling and a heavy collared rim. Most of the large pitchers and some of the smaller ones are provided with very characteristic thumb impressions, one at both sides of the attachment of the rod handle to the rim and three thumb impressions at the attachment of the handle to the body of the vessel (fig. 18). A general difference in the production of grey and red ware pitchers in both kilns is the fact that the number of grey ware pitchers seems to be significantly less than the number of red ware pitchers.

All examples in grey ware are characterized by a carination zone between shoulder and belly (fig. 16: 2, 4-5; fig. 24: 1, 3). In two cases the zone between belly and shoulder is moreover decorated with three bands of differently scratched wavy lines and a handle, completely decorated with thumb impressions (fig. 24: 2). All examples in red ware are provided with a shallow groove at the transition between belly and shoulder, at the upper side of the attachment of the rod handle to the belly (fig. 17: 1, 3- 5; fig. 25: 1-4). Almost all examples in red ware are decorated on the shoulder, the examples from the Pieterskerk-site mainly with vertical or horizontal slip-trailed arcs, sometimes combined with dots into a stylized flower motif (fig. 17: 1-5; fig. 31: 1-6) The examples from the Loeffplein-site, however, probably active between 1437 and 1461, have a much more ubiquitous slip decoration. Here horizontal slip-trailed arcs, even in double or triple rows with stylized flower and tree motifs are almost the rule (fig. 25: 1-4; fig. 31: 7-15). Also an even more abundant decoration motif occurs, in which religiously-tinted cross-like motifs with two- and three-armed crosses surface (fig. 31: 16). Quite an exception, being a remnant of an earlier decoration technique, is a body sherd of a pitcher with a slip-trailed decoration of a bird with features highlighted with sgrafitto lines and dots (fig. 31: 17).

Jugs are generally smaller and used for pouring and drinking. They are much less common than the pitchers and occur only in the production of the 1984 Pieterskerk kiln. They are characterized by a globular body, a frilled base and a straight cylindrical neck with heavy rilling and a simple straight rim. They occur in greyware (fig. 16: 2) as well as in redware with slip-trailed decoration (fig. 17: 2). These types do not occur in the Loeffplein 1995 kiln. In the later period, when this kiln was active, their function may have been taken over by the imported stoneware jugs.

5.3   Tripod two-handled cooking pots

Tripod two-handled cooking pots in red ware occur in both kiln sites in 's-Hertogenbosch (Pieterskerk-site, fig. 19: 1-3; Loeffplein-site, fig. 26: 1-3). The handles are rod handles, which are flattened on the side. They have a short funnel-shaped neck with a sharp angle to the body. Two rim forms occur: a straight, everted rim and a sharply undercut rim, hollowed out on the inside, forming a lid seating. They have a globular to somewhat pear-shaped body, with carination on the upper half, but no slip-trailed decoration. The body is often accentuated by two or three ridges, where the body is bent at faint angles (fig. 19: 2; fig. 26: 2; fig. 34). A substantial percentage (10 % in the 1984 kilns and 30 % in the 1995 kiln) is also provided with lead glaze with an iron or manganese wash, resulting in a black shiny surface (fig. 26: 2-3; fig. 33). Incidentally smaller two-handled tripod cooking pots occur (fig. 19: 5). They follow the general characteristics of the even smaller one-handled tripod pipkins, including the slip-trailed decoration

5.4   Tripod pipkins

Red ware tripod pipkins with one rod handle, not flattened on the side, are produced by both kiln sites. Two basic shapes occur: pipkins with a globular body and – much less common – an oval pear-shaped body. Generally the pipkins are much smaller than the two-handled tripod cooking pots, but the larger pipkins often have a size, comparable to the smaller two-handled tripod cooking pots (fig. 19: 4; fig. 26: 4). They are almost always provided with a thickened, slightly everted or squarish rim. Incidentally the larger pipkins are provided with a pulled lip. With a few exceptions all pipkins are carinated on the upper half of the body, while generally they are moreover decorated with slip-trailed arcs, once even with a stylized flower motif. (fig. 19: 6; fig. 26: 4-5).

Among the waste of the Loeffplein kiln two very small one-handled pipkins with a pulled lip occur, the one with a frilled base, the other with three pinched feet. They are provided with a priming of white slip on the inside (fig. 28: 5-6).

5.5   Skillets

Red ware skillets with a sagging base and a pulled lip occur in both kiln sites from 's-Hertogenbosch. They are provided with hollow handles (fig. 20: 8; fig. 27: 10). In one case only, in the 1995 kiln, a solid handle occurs (fig. 27: 11). In the 1984 kiln two smaller skillets occur with a hollow handle, one of them a tripod (fig. 20: 10), the other standing on three pinched feet (fig. 20: 9).

5.6   Dripping pans

Incidentally red ware dripping pans were found among the waste of both kiln sites. These oblong vessels, being handmade and internally glazed, were used under the spit. From the Pieterskerk kiln an example is known, which – although heavily incomplete at the crucial places – seems to be somewhat crude and simple (fig. 22: 1); the waste of the Loeffplein kiln has delivered a somewhat more normal and developed shape (fig. 29: 1).

5.7   Large and medium-sized bowls

Large and medium-sized bowls with varying rim forms, standing on three large pinched feet, occur in small quantities in both red and grey wares in both kiln sites. The larger examples with 30-40 cm maximum diameter are occurring in both kilns in grey and red ware. They are mostly provided with simple, (vertical or everted) moulded rims, a pulled lip and two horizontal handles (Pieterskerk kiln: fig. 16: 6, grey ware and
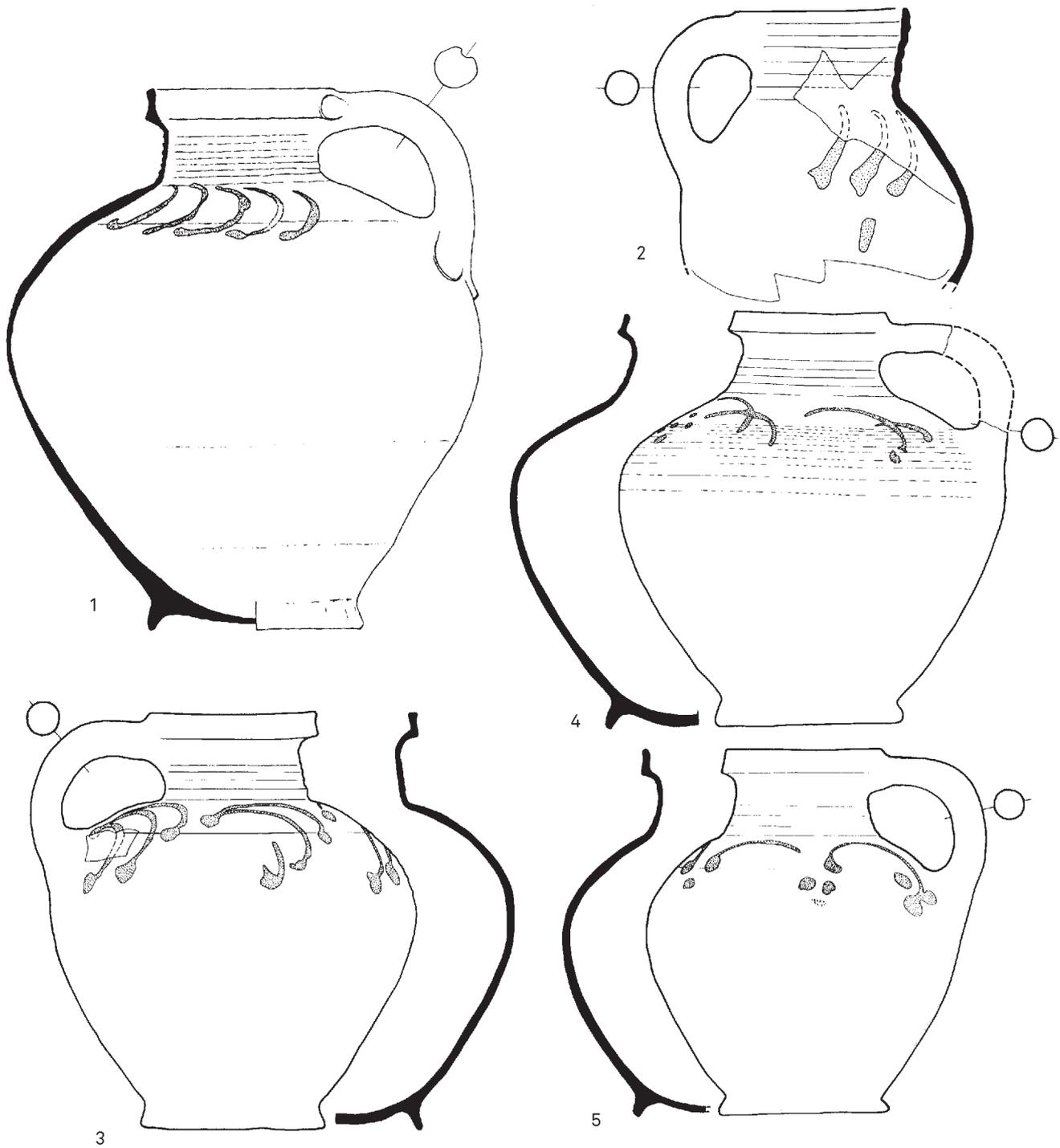
FIG. 17 **Pieterskerk kiln. Redware pitchers and jugs: 1: pitcher (F-38, inv.nr. 412); 2: jug (F-35 and F-38, inv.nr. 420); 3: pitcher (F-35, inv.nr. 514); 4: pitcher (F-35, inv.nr. 512); 5: pitcher (F-35, inv.nr. 515). Scale 1:4. Drawing J-E. Dilz.**

FIG. 18 Pieterskerk kiln. Attachment of the handle to the rim and body of a greyware pitcher (F-35, inv.nr. 3322). Photograph G.de Graaf, 's-Hertogenbosch.
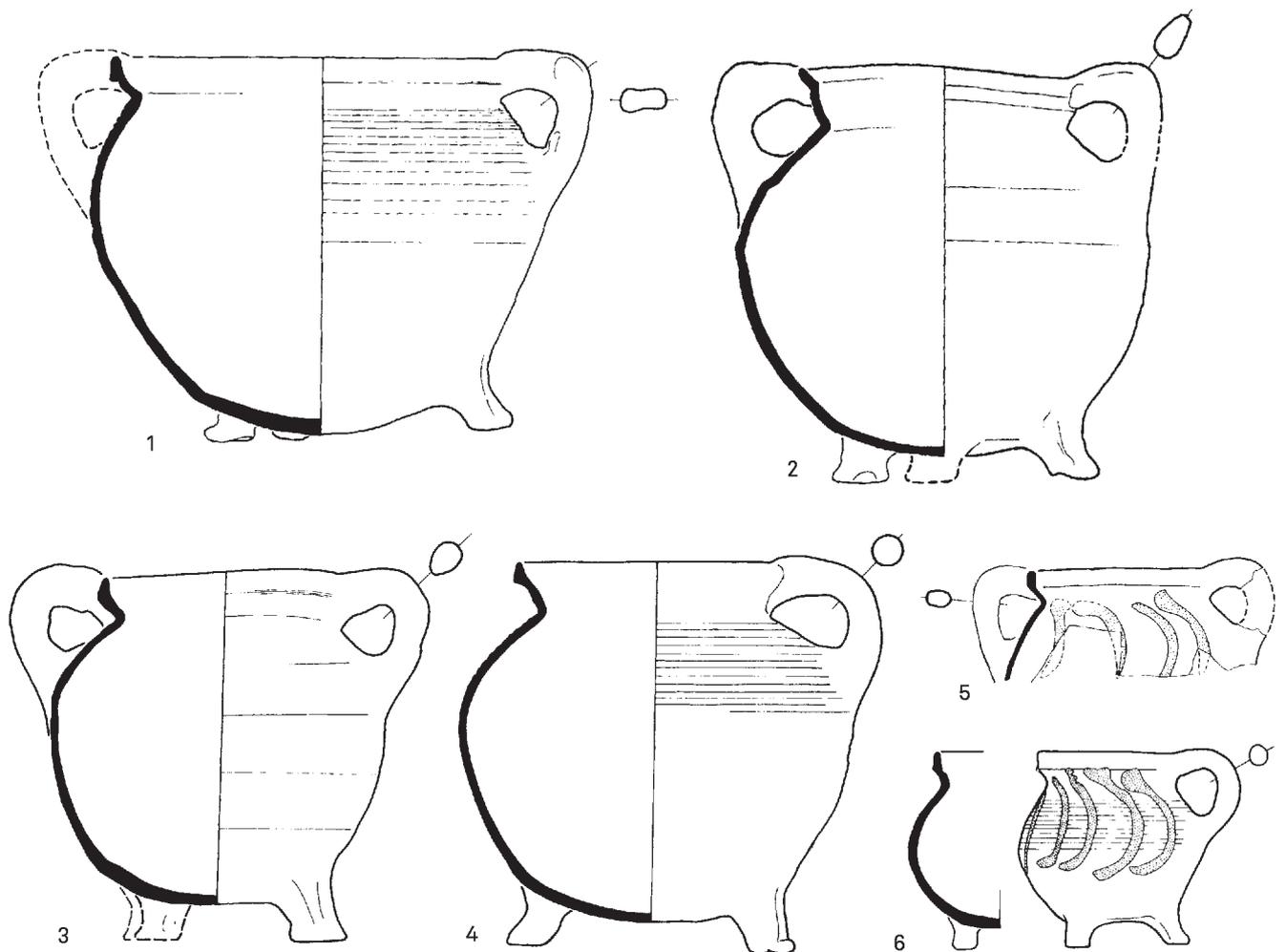
FIG. 19 Pieterskerk kiln. Redware tripod cooking pots and pipkins: 1: two-handled cooking-pot (F-35, inv.nr. 2158); 2: two-handled cooking pot (F-35, inv.nr. 2733); 3: two-handled cooking pot (F-35, inv.nr. 487): 4: large pipkin (F-35, inv.nr. 2731); 5: small two-handled cooking pot (F-35, inv.nr. 2121); 6: small pipkin (F-35, inv.nr. 502). Scale 1:4. Drawing J-E. Dilz.
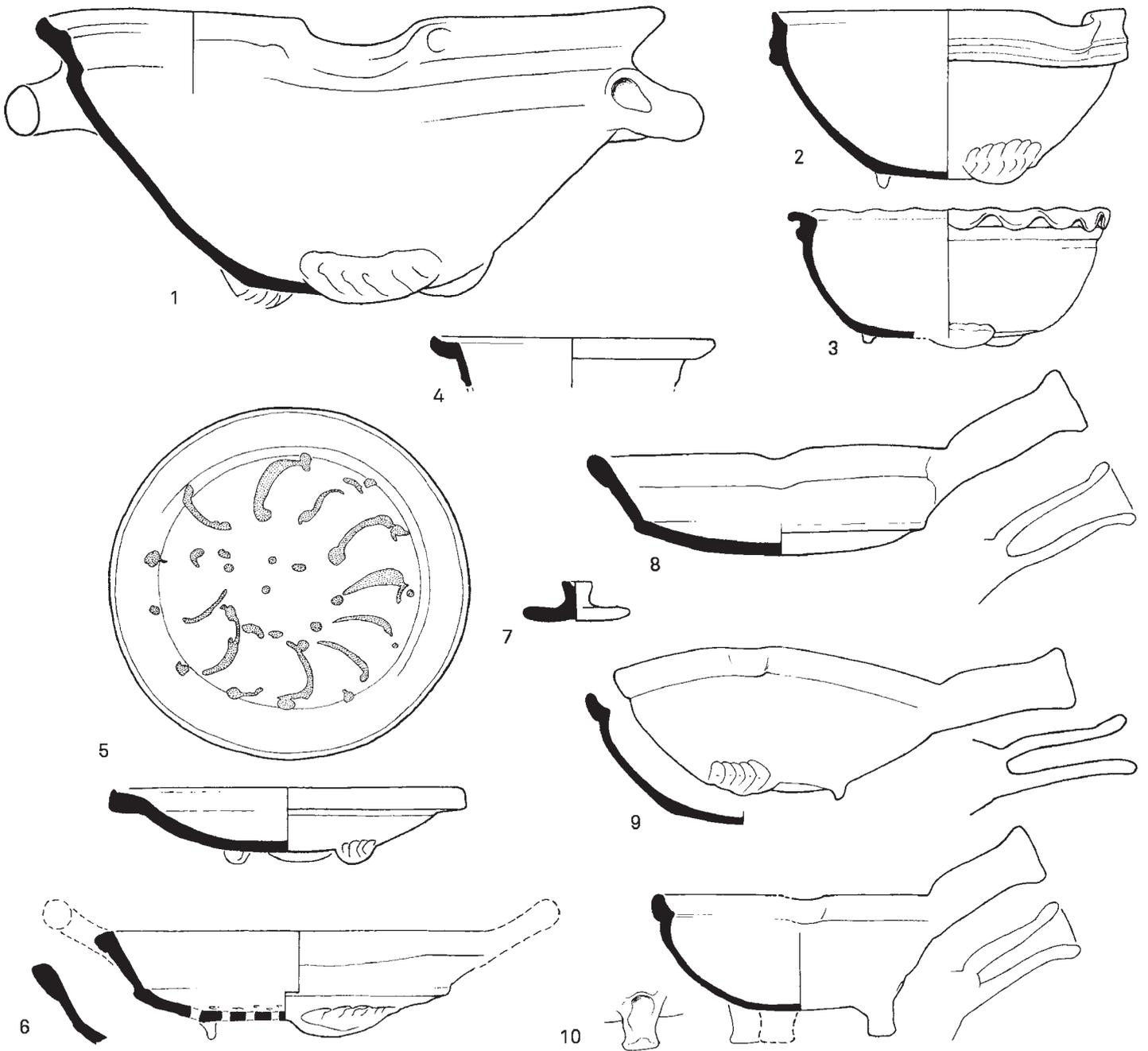
FIG. 20 **Pieterskerk kiln. Redware bowls, skillets, dish, colander and lid: 1: two-handled bowl (F-35, inv.nr. 2738); 2: small bowl (from F-35, inv.nr. 506); 3: small bowl, the inside with a priming of white slip (F-38, inv.nr. 417); 4: small bowl, the inside with a white slip and cupriferous lead glaze; 5: dish with a decoration of slip-trailed arcs (F-35, inv.nr. 2145); 6: colander (from the fill of the flue of F-241, inv.nr. 2747); 7: lid (F-38, inv.nr. 434); 8: skillet (F-35, inv.nr. 493); 9: skillet with pinched feet (F-35, inv.nr. 492); 10: tripod skillet (F-35, inv.nr. 2126). Scale 1:4. Drawing J-E. Dilz.**
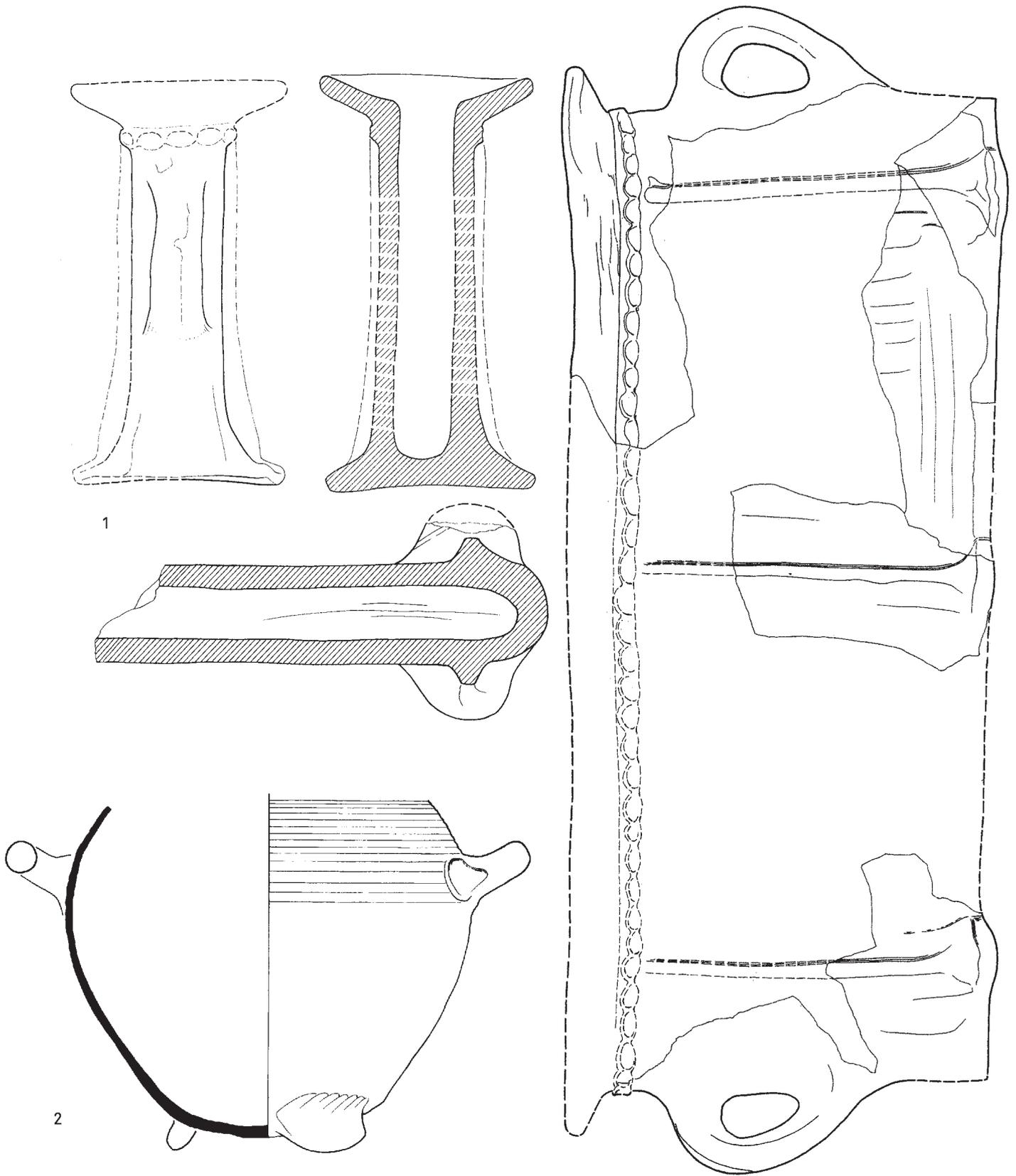
FIG. 21   **Pieterskerk kiln. Greyware: 1: candlemakers' trough (F-35, inv.nr. 3273); 2: storage jar with pinched feet (F-46, inv.nr. 451). Scale 1:4. Drawing J-E. Dilz.**

fig. 20: 1, red ware; Loeffplein kiln: fig. 29: 2, grey ware and fig. 27: 4, red ware). Some of the red examples from the Loeffplein kiln are provided with a white slip on the inside[60].

A second group of marginally smaller bowls has the same general form, having everted, thickened or collared rims, but no horizontal handles. They occur in grey ware (Pieterskerk kiln: fig. 16: 3; Loeffplein kiln: fig. 24: 4), but also in red ware. These large bowls are generally thought to be intended as milk tubs for the keeping of milk and the separation of the cream from the milk. Nevertheless they could also be connected with all sorts of industrial uses.

5.8   Small bowls

Small bowls in red ware occur in modest quantities among the finds of the Pieterskerk kiln. They were mainly used as table wares. They have a sagging base, three pinched feet, internal lead glaze and often a collared rim with rilling (fig. 20: 2). Sometimes everted rims occur (fig. 20: 4), in one case even a flanged rim with horizontal thumbing (fig. 20: 3). Very few of these earlier bowls are provided with a priming white slip on the inside (fig. 20: 3), in one c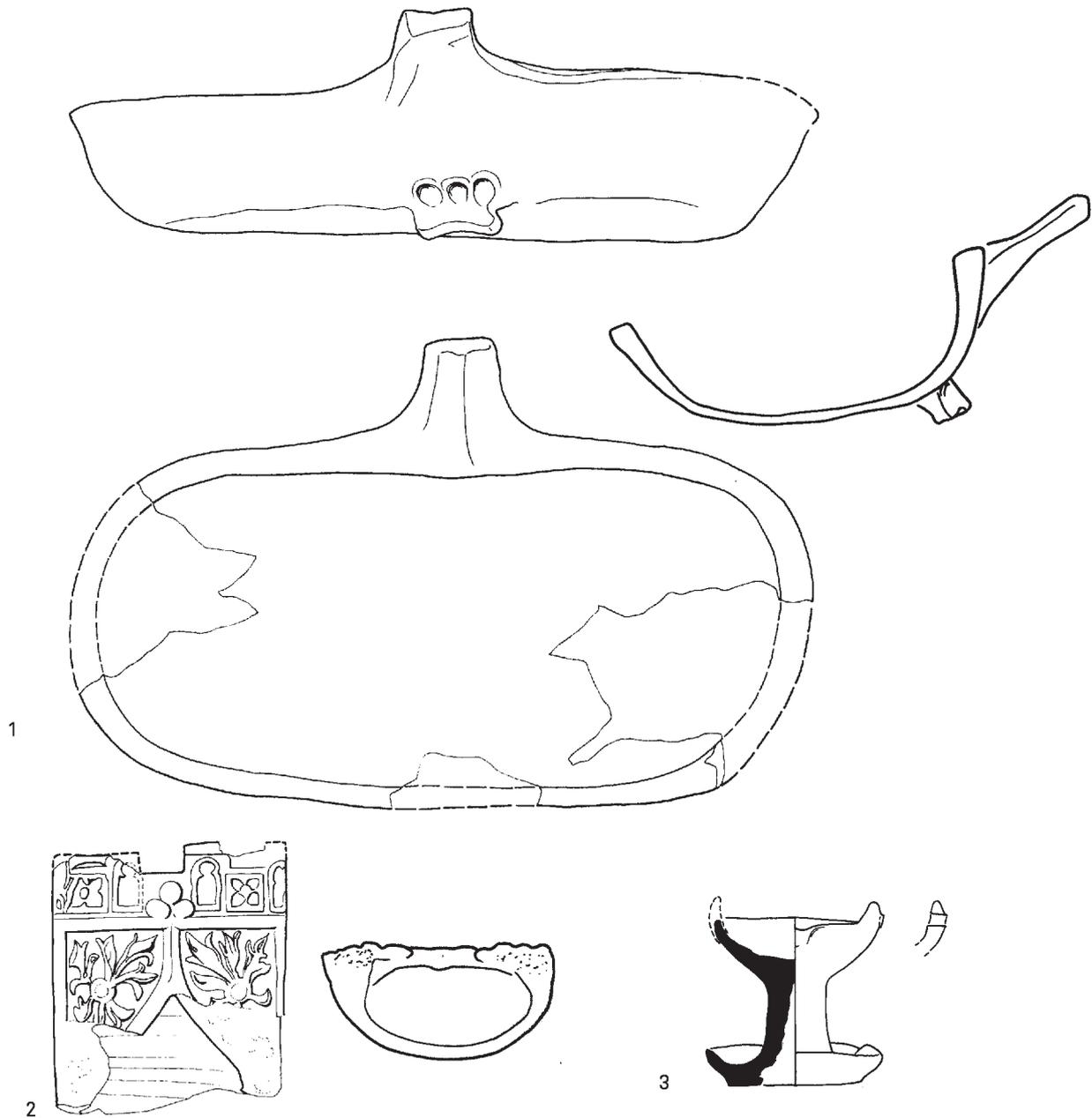ase under a green cupriferous lead glaze (fig. 20: 4). The small bowls are much more numerous among the finds of the somewhat later Loeffplein kiln (fig. 27: 7-9). The small bowls from this kiln are characterized by an internal, sometimes cupriferous lead glaze under a priming of

white slip. In one case (fig. 27: 8) the cupriferous lead glaze over the priming has been used only on the outside; the inside had a lead glaze. The bowls have a bewildering variety of shapes. They occur with no, one or two vertical rod handles on the side or on the upper side of the rim (fig. 27: 7-9; fig. 28: 2) and (often) a pulled lip. The rims are mostly simple and slightly inverted. In one case the rim is flanged with horizontal thumbing (fig. 27: 7).

A rarity is the fact that in the earlier Pieterskerk kiln, excavated in 1984, a few small bowls occur, made from white-firing clay, which are discussed later (fig. 23: 4-5). Their morphology does not differ very much from the red ware examples.

5.9   Dishes

Small quantities of red ware dishes with a flanged rim, standing on three pinched feet, were encountered among the waste of both kiln sites. The inside of the dishes is always glazed and generally decorated with slip-trailed arcs, dots and blobs (fig. 20: 5; fig. 27: 6). Once, in the Loeffplein kiln, a stylized flower motif occurs (fig. 27: 5). Some dishes from the Loeffplein kiln are provided with a priming of white slip before being glazed with (often) a cupriferous lead glaze[61]. The sgrafitto technique does not seem to have been used for dishes in neither of the two kilns.
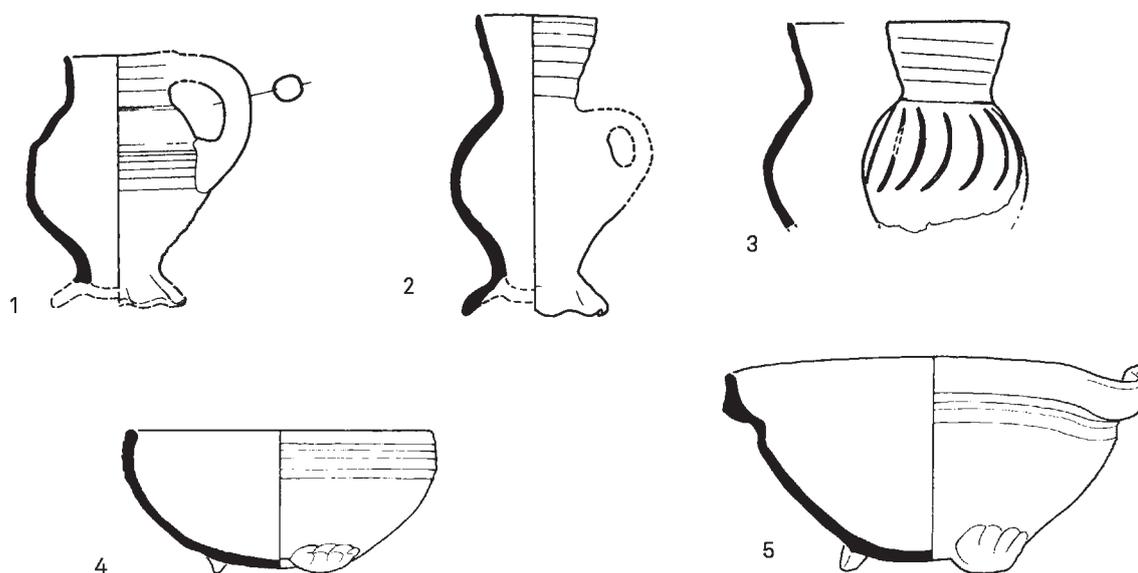
FIG. 23 **Pieterskerk kiln. Whiteware: 1: small jug with cupriferous lead glaze (F-35, inv.nr. 2739); 2: small jug with cupriferous lead glaze (F-35, inv.nr. 2740); 3: small jug with lead glaze and decorations in slip-trailed red-firing clay (F-35, inv.nr. 2741); 4: small bowl with lead glaze on the inside (F-38, inv.nr. 403); 5: small bowl with cupriferous lead glaze on the inside (F-35, inv.nr. 2742). Scale 1:4. Drawing J-E. Dilz.**

60 Examples are DBLO, inv.nr. 8482, diam. 38 cm (from F-144) and DBLO, inv.nr. 9546, diam. 37 cm (from F-144).
61 An example is DBLO inv.nr. 9589 from F-144.

5.10 Storage jars

Large storage jars mainly occur in grey wares in both kiln sites. They have a frilled base, a simple collared rim and two horizontal undecorated handles (fig. 16: 1). In the Pieterskerk kiln still occur examples on pinched feet (fig. 21: 2). Most examples from the later Loeffplein kiln have decorated handles with continuous thumbing on the handles and three thumb impressions at the attachment of the handles to the body (fig. 24: 5). Very occasionally smaller, red ware, glazed storage jars occur. They have no handles, a frilled base, a moulded collared rim and are decorated with slip-trailed arcs and dots into stylized flower motifs on the shoulder (fig. 28: 1).

5.11 Chamber pots

Red ware chamber pots are only known from the Loeffplein kiln site. They have simple, flattened, everted rims and a high kicked-up base, apparently to make them stable in the night and easier to clean. They generally are somewhat pear-shaped with a low maximum diameter and mostly decorated with slip-trailed, horizontal or vertical arcs (fig. 27: 1-2). One example (fig. 27: 3) has a more globular form, an expanded triangular or bead rim with a faint trace of a lid seating, resembling very much the rim form of the tripod cooking pots.

5.12 Oil lamps

Red ware oil lamps, internally glazed, are rare, but occur in the waste of both kiln sites. With the wick burning in the upper part, the lamp could be used free standing or suspended on a cord in a free swinging position (fig. 22: 3; fig. 30: 3).

5.13 Lids

Red ware lids with a central knob are present in very limited quantities (fig. 20: 7).

5.14 Candlemakers' troughs

It is generally accepted, that the so called candlemakers' stoops or troughs were produced for the making of candles. Filled with hot tallow the candles were made by dipping the wicks in and out[62]. It concerns very narrow but comparatively long vessels in different sizes, varying from *c.* 15 to *c.* 90 cm, dependent upon the size of candle used. Especially the larger examples were subject to misfiring and in both kiln sites wasters have been found of very large examples. A misfired grey ware example (fig. 21: 1) is known from the Pieterskerk kiln (*c.* 90 cm) and a glazed red ware example (*c.* 60 cm) from the Loeffplein site, repaired after a first misfiring (fig. 30: 1). These large vessels are provided with two vertical handles, sometimes vertical ribs as strengtheners or buttresses and decorated with thumbed strips under the rim and – in the case of the glazed example – obliquely crossing thumbed strips.

5.15 Miscellaneous objects

A small number of miscellaneous objects were recovered, of which so far generally not more than one copy is present. Nevertheless most shapes are also known from medieval pottery production elsewhere in the Netherlands. It concerns a bewildering variety of household utensils such as a large fragment of a crenellated chafing dish with vertical rod handles (fig. 28: 3), an open – mostly but not in this case segmented – box for sorting or feeding chickens, decorated with a thumbed rim (fig. 30: 2), a colander (fig. 20: 6), a very small handled tray, glazed on the inside and elsewhere identified as an oil lamp[63] (fig. 27:12) and two toy horses; a grey ware unsaddled one and a red ware saddled horse (fig. 29: 3-4). Another rare, but regular customer is a small globular pot (not illustrated), completely pierced with holes from the outside and generally considered to be firepots, intended for the transportation of burning coals or the rekindling of almost extinguished coals[64]. A few grey ware fragments of these pots were present within the waste of the Loeffplein kiln.

A luxury item might have been a vessel in the form of a one-handled basket, the handle decorated with thumbing, and a decoration with horizontal double slip-trailed arcs and dots on the shoulder (fig. 28: 4). Even industrial wares for unidentified purposes were found (not illustrated) [65]. A unique object is a fragment of a red ware highly decorated glazed stove tile, associated with the waste of the Pieterskerk kiln (fig. 22: 2; fig. 37). The fragment is decorated with plant motifs and stylized window motifs within a crenellation. Thus far highly decorated red ware stove tiles are not yet known from kilns producing red ware pottery in the Northern Netherlands during the Middle Ages.

5.16 Objects made from white-firing clay

Some of the most striking products among the wasters of the Pieterskerk kiln consist of a small number of small bowls and drinking vessels, made of lead glazed white-firing clay. Probably this is the same clay the potter used for the trailed slip decoration on redware jugs, dishes and other vessels. Most remarkable among this technical category is a small group of beakers and drinking vessels (fig. 38), two of them in the form of stoneware beakers (fig. 23: 1-3) with a frilled base. In one case (fig. 23: 3) the basic white-firing material was used by the potter to decorate the shoulder with slip-trailed arcs in red-firing clay. The small bowls, made from white-firing clay, have no handles, were provided with three pinched feet, a pulled lip, small everted or collared rims and as its most prominent feature a cupriferous green lead glaze on the inside (fig. 23: 4-5). Vessels, made from white-firing clay are not found any more among the wasters of the later 1995 kiln. Here the white clay is only used as a priming slip on the inside of an increasing number of small and large bowls.

62 Janssen 1983b, 157 and note 117; Hurst, Neal & van Beuningen 1986, 140.

63 De Groote 2008, I, 243 and fig.190: 4; 244 and fig. 192; 245 type 4; De Groote 2008, II , pl. 87: 13-14.

64 Janssen 1983b, 167.

65 It concerns a vessel with the shape of a cucurbit, used in distilling (Moorhouse 1972, 88-89, 97, fig. 28: 111-113). The essence of a cucurbit, however, is that the bottom is closed, while the example

from the vessel from the Pieterkerk kiln (inv.nr. 2183, from F-35) has a very beautifully made round hole of 1.5 cm in the bottom.
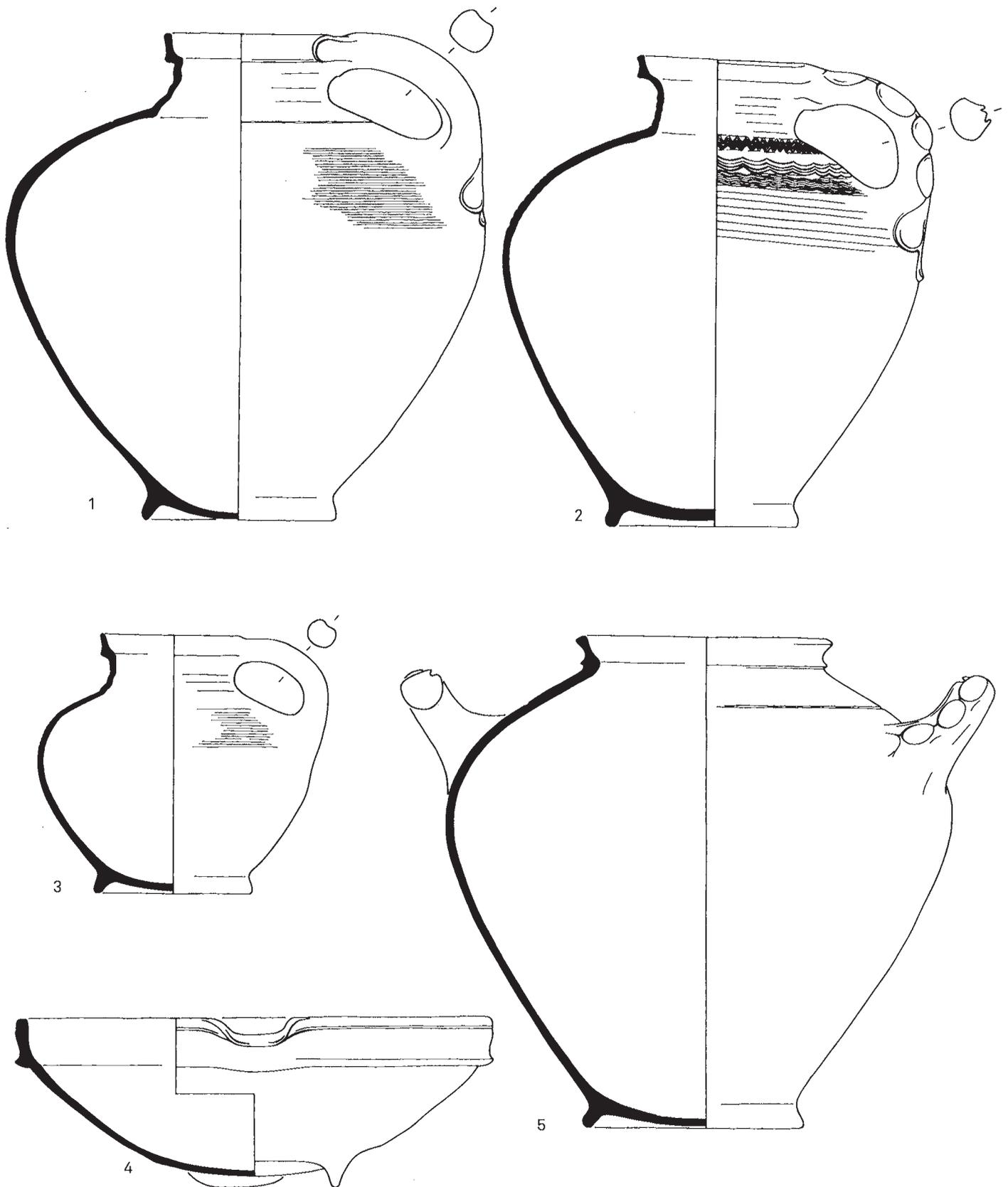
FIG. 24 Loeffplein kiln. Greyware pitchers, bowl and storage jar: 1: pitcher (F-115, inv.nr. 7744); 2: decorated pitcher (F-144, inv.nr. 9567); 3: small pitcher (F-115, inv.nr. 7744); 4: bowl (F-115, inv.nr. 7748); 5: storage jar (F-115, inv.nr. 7757). Scale 1:4. Drawing I. Cleijne.
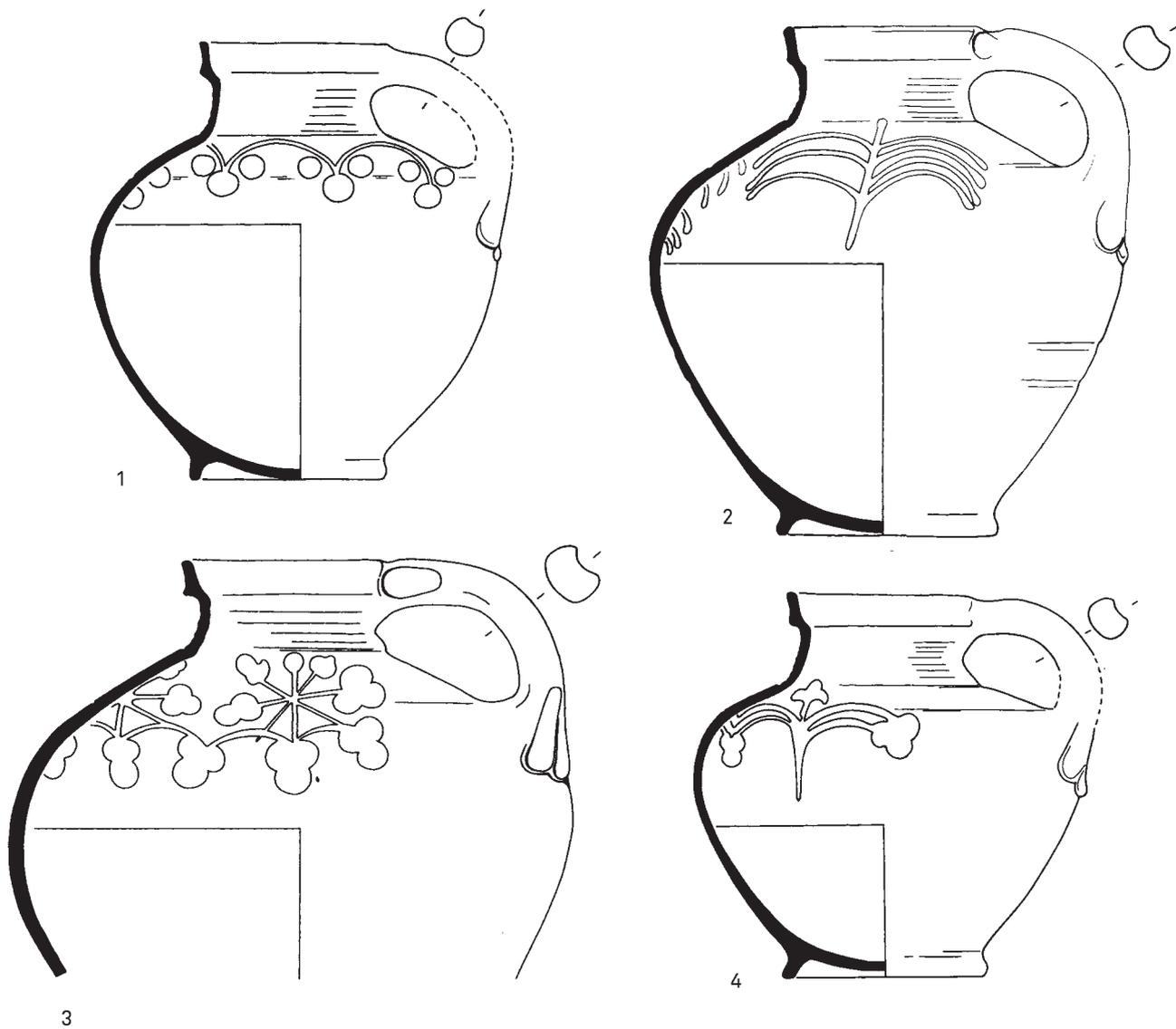
FIG. 25 **Loeffplein kiln. Redware pitchers, decorated with slip-trailed patterns: 1: F-115, inv.nr. 8453; 2: F-144, inv.nr. 9552; 3: F-144, inv. nr. 9585; 4: F-136, inv.nr. 19931. Scale 1:4. Drawing I. Cleijne and H. Nijhof-van Kuilenburg.**

5.17   Potmaker's implements ?

There are a few objects, found among the wasters, which did not belong to the waste, discarded because of being considered misfired products. It concerns from the Pieterskerk site a used and heavily worn, bulky grey ware two-handled storage jar with a frilled base, a relatively wide opening and a rim, decorated with thumbing (fig. 32). This specific type of storage jar does not occur among the production of the potter. The wear is especially visible on the inside of the rim and the inside of the bottom, consistent with the use of a large spoon. From the Loeffplein site derives further a very crudely made grey ware open box[66] and a grey ware spoon (not illustrated). The very wide storage jar might have been used by the potter for the mixing of the lead glaze. If so, the jar might have had the same function as a few examples known from the Utrecht kiln[67]. The crudely made open box could have functioned in the potter's workshop standing permanently beside the thrower for the moistening of his fingers during his work.

66 Illustrated by Nijhof 2007, 69, afb. 42.
67 Bruijn 1979, 36, afb. 11: 1, afb. 14.
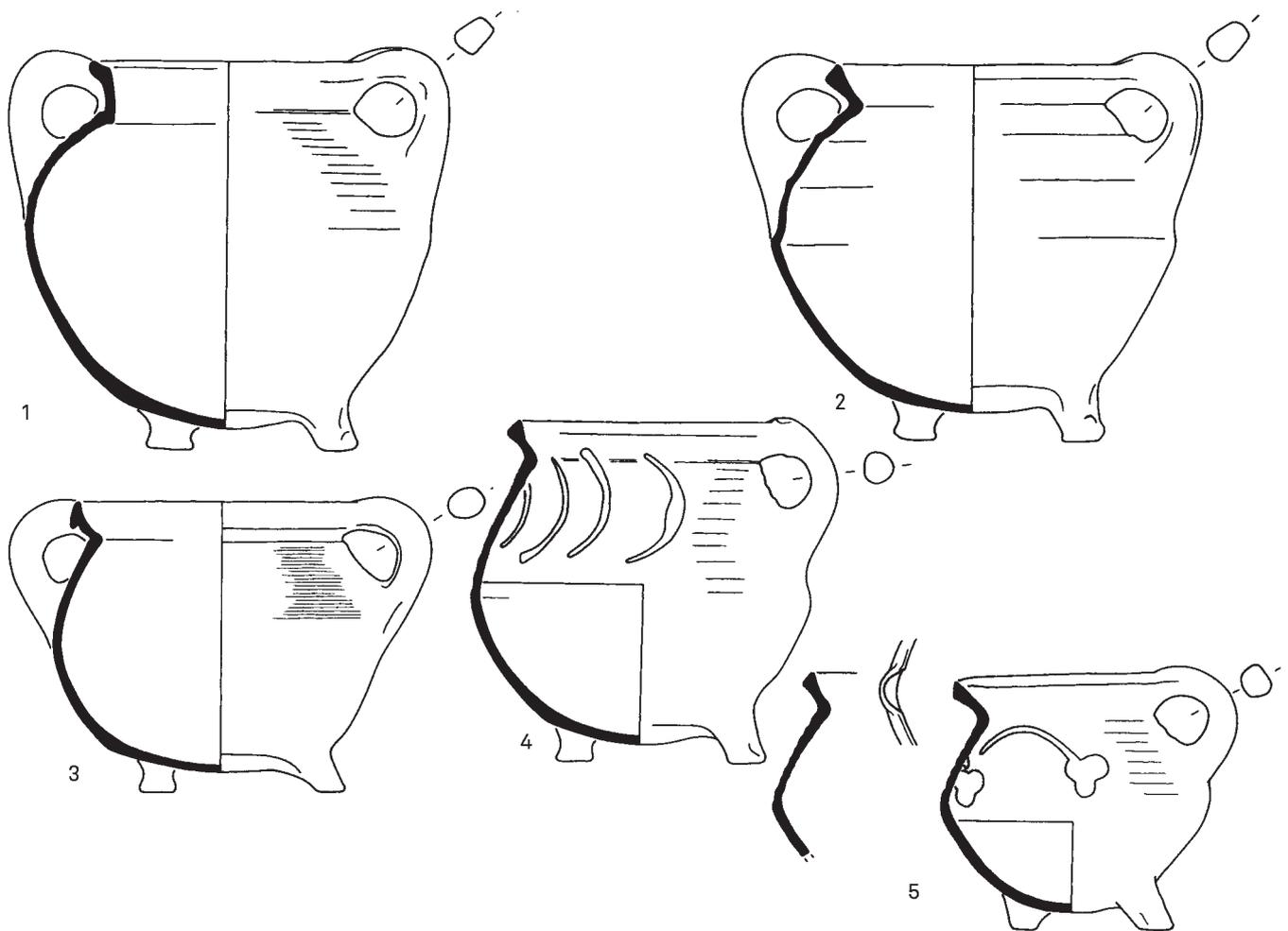
FIG. 26 **Loeffplein kiln. Redware handled tripod cooking pots and pipkins from F-115: 1: two-handled cooking pot (inv.nr. 7736); 2: two-handled cooking pot with black iron wash (inv.nr. 7724); 3: two-handled cooking pot with black iron wash (inv.nr. 7725); 4: pipkin with slip-trailed decoration (inv.nr. 7738); 5: pipkin with slip-trailed decoration (inv.nr. 7712). Scale 1:4. Drawing I. Cleijne.**

6   The production range in 's-Hertogenbosch as a stage in the medieval pottery production in the Netherlands

6.1   Introduction

The nearest parallel for the general production of the kilns of the 1984 and the 1995 excavations, datable to the first half of the 15th century, can be found in the general range of products as is known from the kiln, excavated in Utrecht in 1972, then dated around 1400[68]. There are, however, small but significant differences with the products from this Utrecht kiln due to general chronological-typological developments, but also to regional varieties. Also the products of the 1984 Pieterskerk and 1995 Loeffplein kilns in 's-Hertogenbosch differ among themselves and show a certain typological development. The following general observations are relevant.

6.2   The proportion of red and grey wares

A general tendency in the pottery production in the Netherlands is the increase of the production of red wares and a decrease in the production of grey wares from the second half of the 14th century onwards. Generally speaking this process of increase of the red wares, forcing back the grey wares to the cheaper household utensils as storage jars, large pitchers and bowls etc., develops faster in the present western Netherlands than in the middle and southern parts of the country. In the Utrecht kiln production around 1400 the process of decrease of the grey wares is noticeable, but still a substantial part of the production consists of grey wares. A few decades later in time, in the more southern region of 's-Hertogenbosch it can be remarked that both kilns still produced red and grey wares, although in both kilns the red wares are much more numerous. In the earlier Pieterskerk site the grey wares are limited to about 16 % of the total number of vessels and are mainly limited to pitchers

68 *Idem* 1979; Janssen 1983b, 151-157.
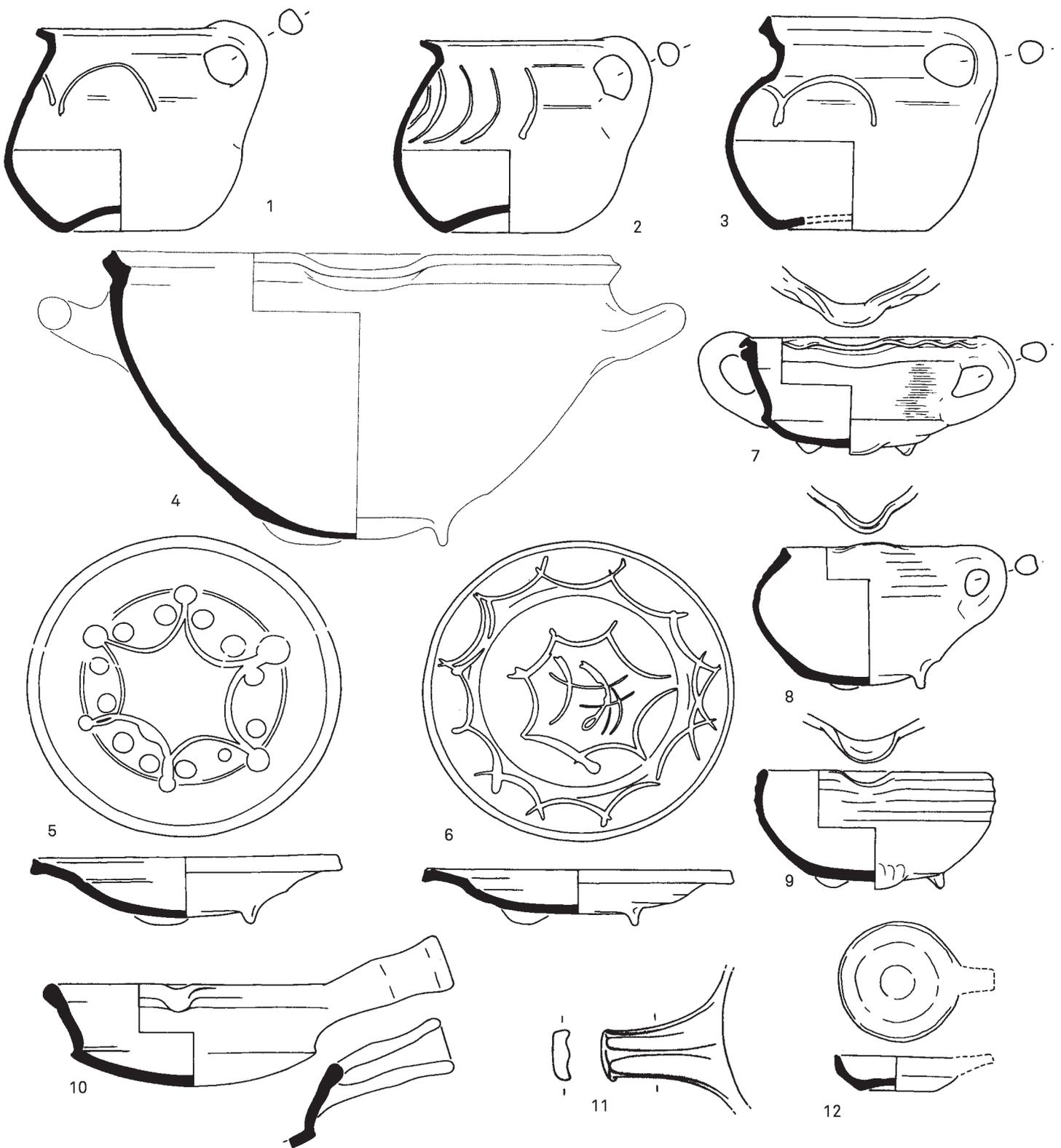
FIG. 27 **Loeffplein kiln. Redware chamber pots, bowls, dishes and oil-lamp (?). 1: chamber pot with slip-trailed decoration (F-144, inv.nr. 9557; 2: chamber pot with slip-trailed decoration (F-115, inv.nr. 7717); 3: chamber pot with slip-trailed decoration (F-144, inv.nr. 8498); 4: two-handled large bowl, the inside provided with a priming of white slip (F-144, inv.nr. 8482); 5: dish with slip-trailed decoration (F-144, inv.nr. 9563); 6: dish with slip-trailed decoration (associated with F-144, inv.nr. 15079); 7: small two-handled bowl the inside provided with a priming of white slip and cupriferous lead glaze (associated with F-144, inv.nr. 15078); 8: one-handled small bowl, priming of white slip and cupriferous lead-glaze on the outside (associated with F-144, inv.nr. 16860); 9: small bowl with a priming of white slip under lead glaze on the inside (F-144, inv.nr. 8479); 10: skillet (F-144, inv.nr. 15076); 11: solid handle from skillet (F-115, inv.nr. 7769) 12: small handled tray (oil-lamp?) (F-144; inv.nr. 9556). Scale 1:4. Drawing I. Cleijne.**
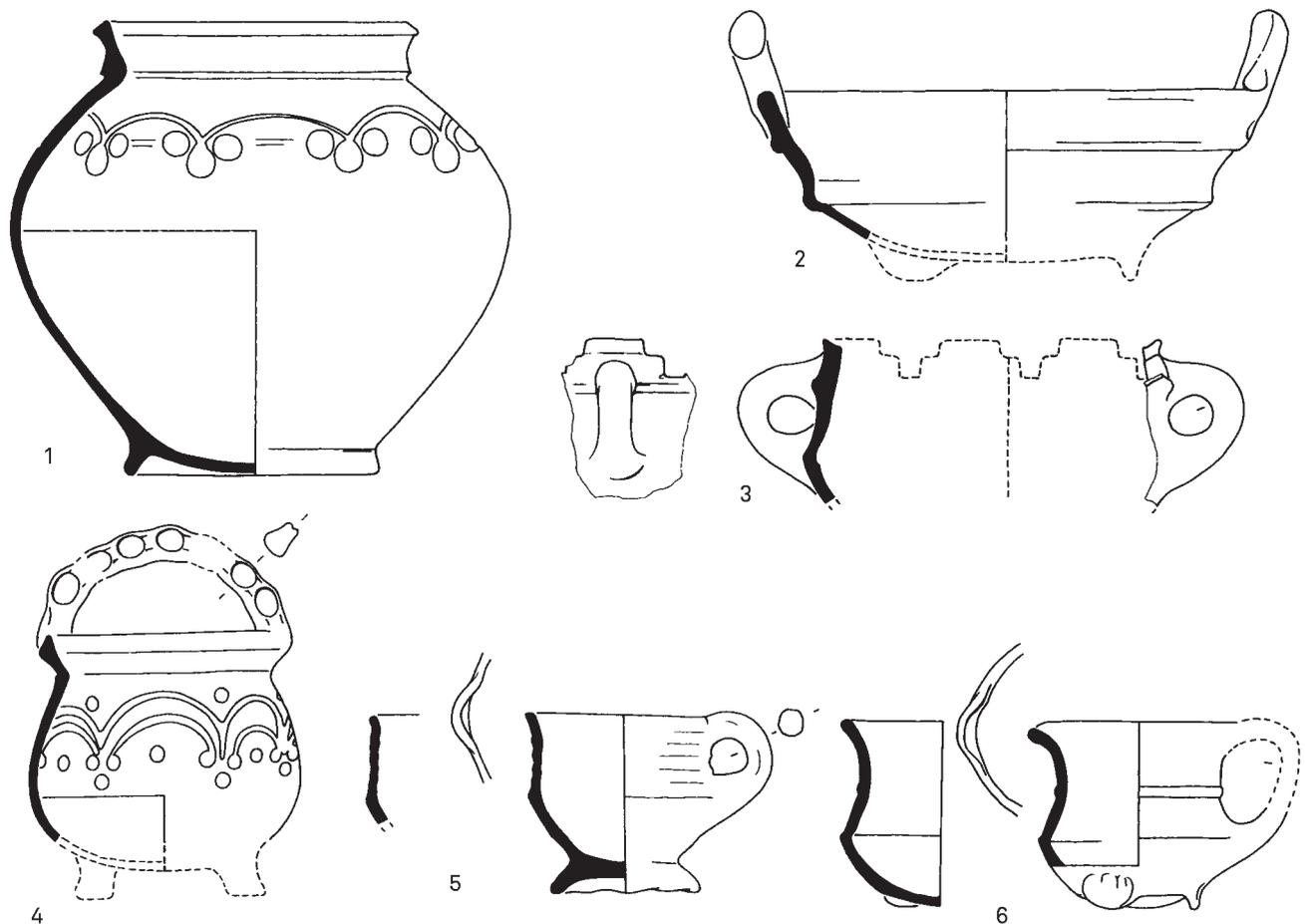
FIG. 28   **Loeffplein kiln. Redware miscellaneous household utensils: 1: small storage jar with slip-trailed decoration (F-144, inv.nr. 9575); 2: bowl, with a priming of white slip on the inside (F-115, inv.nr. 7759); 3: chafing dish (F-163, inv.nr. 19930); 4: one-handled basket (F-136; inv.nr 19929); 5: small pipkin on three pinched feet (F-144, inv.nr. 8483); 6: small pipkin with a frilled base and a priming of white slip on the inside and the upper part of the outside (F-115, inv.nr. 7760). Scale 1:4. Drawing I. Cleijne.**

and to a lesser degree to storage jars and bowls. In the Loeffplein site the proportions of the grey and red wares are still almost the same.

6.3   The range of shapes, produced in Utrecht and in 's-Hertogenbosch; similarities and differences

The general range of shapes produced in 's-Hertogenbosch seems very much comparable to the range of shapes produced in Utrecht including some of the rarer objects like the candle-makers' stoops (fig. 21: 1; fig. 30: 1), the one-handled baskets (fig. 28: 4) and the so-called fire pots. The similarity can even be extended to some of the rarer decorations like the abundant incised decoration on a grey pitcher (fig. 24: 2), which is closely

comparable to an example from the Utrecht kiln[69]. It applies also to the earlier mentioned sherd in the Loeffplein waste of a zoomorphic slip-trailed motif with features highlighted with sgrafitto lines and dots (fig. 31: 17). This sherd has very much resemblance to the technique and the motifs occurring in the earlier kilns of Utrecht and Aardenburg[70].

Nevertheless a few typological differences occur. So thus far in contrast to the Utrecht kiln chamber pots do not occur in 's-Hertogenbosch in the early-15th-century Pieterskerk kiln site. They first occur in the Loeffplein site, active between 1437 and 1461 (fig. 27: 1-3). A second difference with the Utrecht production is that most skillets in both kilns from 's-Hertogen-bosch are provided with hollow handles, although incidentally a solid handle occurs (fig. 20: 8-10; fig. 27: 10-11). In Utrecht

69   Bruijn 1979, 118 fig. 67: 3.

70   *Idem* 1979, 94 fig. 51; Hurst, Neal & van Beuningen 1986, 146-148.
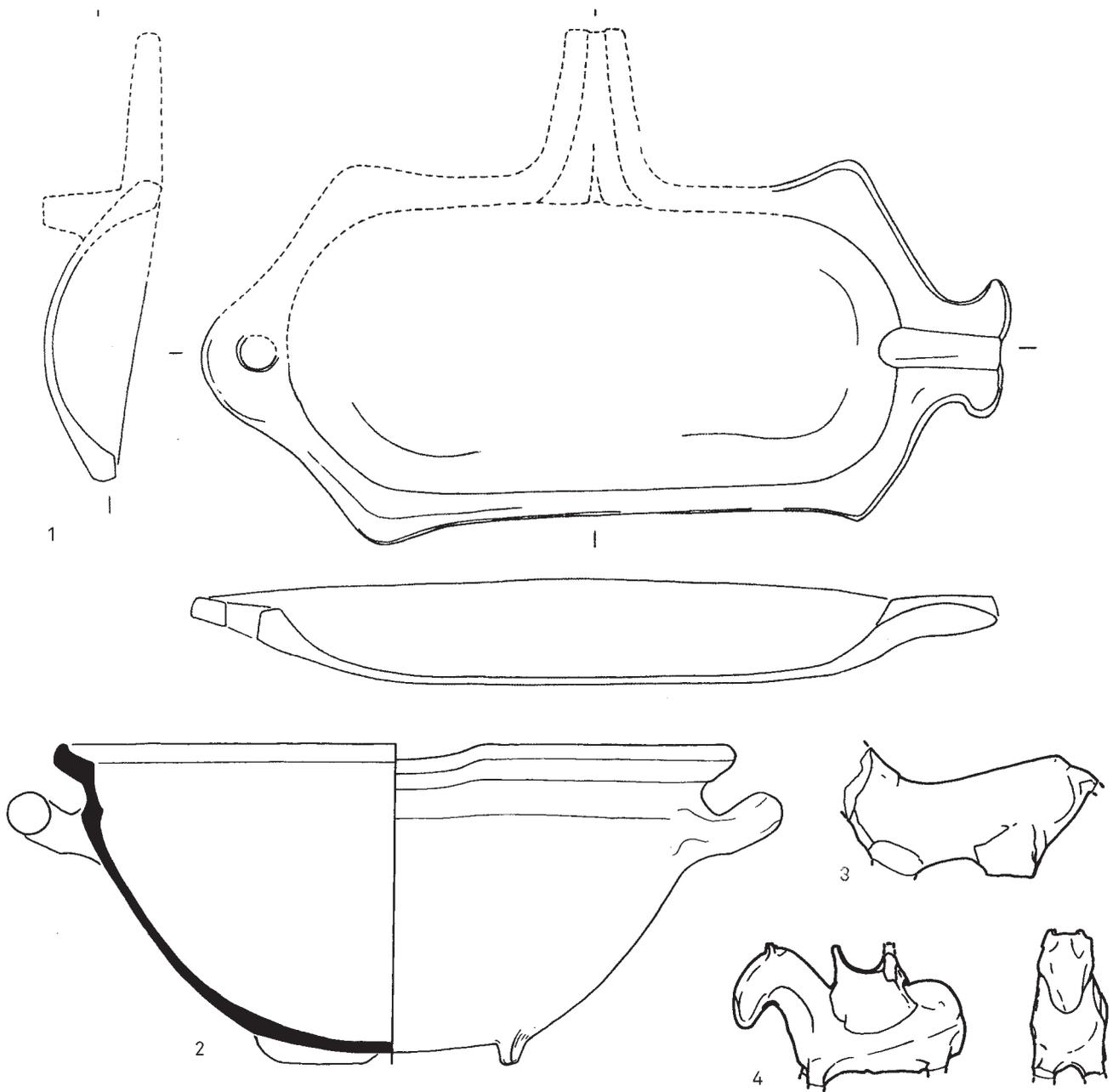
FIG. 29   Loeffplein kiln. 1: redware dripping pan (F-115, inv.nr. 7768) (scale 1:4); 2: greyware two-handled bowl (F-144, inv.nr. 20061) (scale 1:4); 3: fragment of greyware toy horse (F-163, inv.nr. 20068) (scale 1:2); 4: fragment of saddled redware toy horse (F-140, inv.nr. 13563) (scale 1:2). Drawing H. Nijhof-van Kuilenburg.
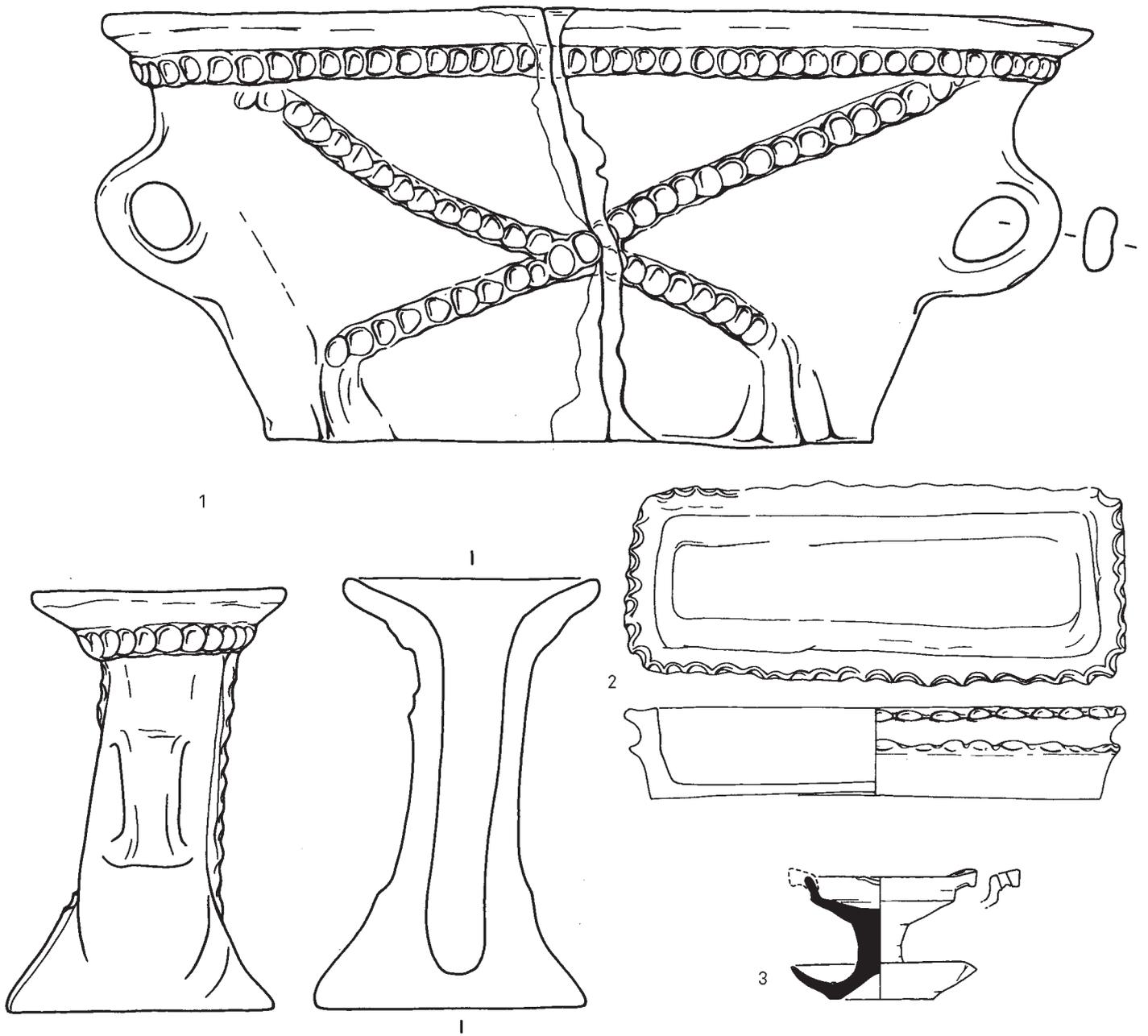
FIG. 30 Loeffplein kiln. Redware: 1: candlemaker's trough (F-127, inv.nr. 17065); 2: rectangular box (F-123; inv.nr. 15075); 3: oil lamp (F-127, inv.nr. 6228). Scale 1:4. Drawing I. Cleijne.
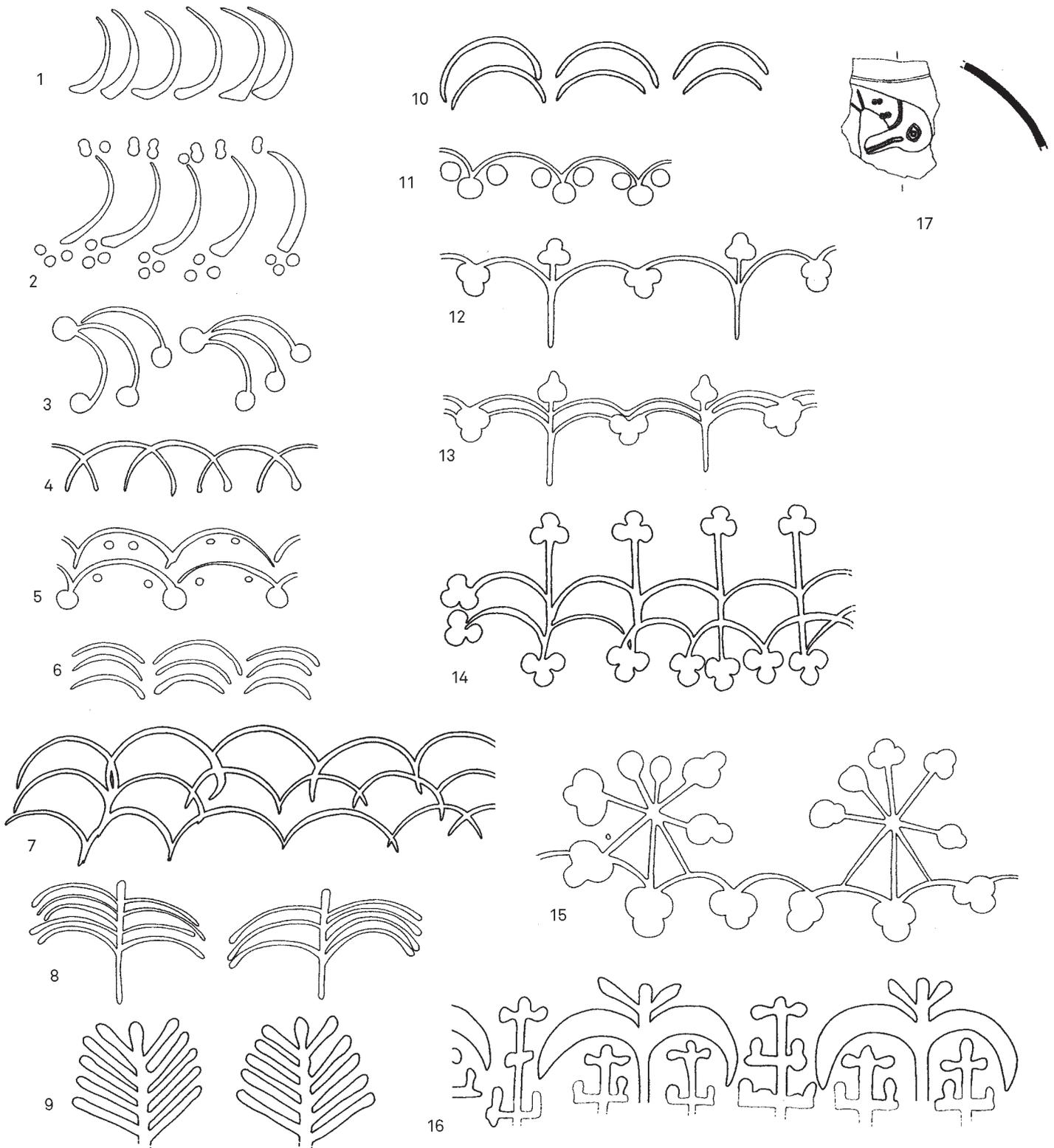
FIG. 31 Decoration patterns, occurring on the redware pitchers from the Pieterskerk kiln (1-6) and the Loeffplein kiln (7-17). Drawing H. Nijhof-van Kuilenburg.

almost exclusively solid handles occur. A third difference is that jugs with a straight cylindrical neck – mainly in red ware – with heavy rilling are common in Utrecht[71], and do still occur, albeit rarely, in the early-15th-century Pieterskerk kiln in 's-Hertogenbosch in red and grey ware (fig. 16: 2; fig. 17: 2). They are not present any more, however, in the later Loeffplein kiln in 's-Hertogenbosch, active between 1437 and 1461. A fourth difference concerns the bases: all the 's-Hertogenbosch' bases of jugs and pitchers are frilled instead of the older type of base with three or more pinched feet, still common in Utrecht.

The explanation for these typological differences is difficult to pinpoint exactly. Partly they might be explained by general chronological-typological developments, occurring almost everywhere during the first half of the 15th century. Examples are the dying out of jugs and pitchers with a straight cylindrical neck and the substitution of the pinched feet for jugs and pitchers by a frilled base[72]. Partly they might be the consequence of a regional difference. This might apply to the hollow handle, which is the general form of handle on skillets further to the south in Flanders and Brabant[73]. Another factor causing typological differences might be found in different hygienic customs, in the sense that the specific shape of the chamber pot in 's-Hertogenbosch appears rather late, possibly after 1437. A characteristic urine accretion on the inside of all sorts of pots from dated contexts before this period suggests its function to have been taken by a variety of pots like tripod handled cooking pots, pipkins and bowls, originally made for other functions.

6.4   A regional characteristic: 'black' handled tripod cooking pots

A clear regional characteristic is the occurrence in both kilns in 's-Hertogenbosch of red ware handled tripod cooking pots with lead glaze with an iron or manganese wash, resulting in a black shiny surface (fig. 26: 2-3; fig. 33). The percentages of handled cooking pots, provided with this wash, vary from 10 % (the Pieterskerk kilns) to 30 % (the Loeffplein kiln) of the handled cooking pots. This characteristic is a regional difference between the northern and southern Netherlands, as manganese oxide on red ware products can be found in the southern part of the Netherlands and the present Belgian part of the medieval duchy of Brabant as a general feature in 15th century contexts[74]. In 's-Hertogenbosch and the Dutch province of Noord-Brabant a manganese wash occurs even earlier, in the 14th century generally on white firing handled tripod cooking pots, but incidentally also on other reddish-brown- and orange-firing clays[75]. Within the excavated 14th- and 15th-century material in 's-Hertogenbosch this group forms a small, but consistent group of pottery[76]. The occurrence of this feature within the 's-Hertogenbosch production of red ware cooking pots

might be interpreted as an influence of the white-firing cooking pot production in the Meuse area. In the Utrecht kiln this variant is unknown[77].

6.5   A regional characteristic? : faceted handled tripod cooking pots

The handled tripod cooking pots within the products of both kilns, whether they have a manganese wash or not, are often provided with a characteristic feature: two or three ridges where the body is bent at a faint angle, the space between two ridges moulded more or less flat, giving the impression of a faceting of the body of the pot (fig. 19: 2; fig. 26: 2; fig. 34; see also fig. 33). This characteristic, especially when it is combined with a black iron wash, might be interpreted as an effort to imitate the black metal cooking pots. So far it is not clear whether this characteristic is exclusive for the 's-Hertogenbosch kilns or not. Our provisional impression is that this is is probably not the case. At least one example of the potteries at Bergen op Zoom shows the same characteristics[78].

6.6   A local characteristic? : the increase and diversification of small bowls

Another difference between the waste of the two kilns in 's-Hertogenbosch is that in the Loeffplein kiln a substantial increase seems to occur in the number of and variation of shapes of the small bowls with and without handles and pouring lips (fig. 27: 7-9). Although the specific shapes might have local characteristics, they are following a general trend in the Northern Netherlands of increase and diversification of the shape of small bowls, pointing to a diversification of foods consumed and an intensification of table manners. This goes together with an increase of the use of a priming of white slip on the inside. This might be the cause why the production of small bowls, completely made of white-firing clay, occurring in small numbers within the waste of the Pieterskerk kiln (fig. 23: 4-5), went out of use. The same result, even when the potter wanted the inside of his bowls to become green by the addition of a cupriferous lead glaze, could be reached by priming the inside of the red ware bowls with white slip. On a smaller scale, the priming of the inside of red ware products with white slip can also be noted on the dishes, produced by the Loeffplein kiln.

6.7   Unique features: the pitchers

The production of both kilns in 's-Hertogenbosch shows a number of typological characteristics and developments, which so far seem to be exclusive for the 's-Hertogenbosch production and are not known from Utrecht or elsewhere in the northern Netherlands. This concerns for instance the pitchers which have very characteristic thumb impressions at both sides

71 Bruijn 1979, 113-125.

72 Janssen 1983b, 163.

73 This applies for instance to the Flemish region of Oudenaarde near the western border zone with the duchy of Brabant (De Groote 2008, I, 250). In the wasters of the pottery workshops of Bergen op Zoom, however, dating from the second half of the

15th century, only solid handles occur (Groeneweg 1992, 30 fig. 7; 32 fig. 9).

74 See for instance Dewilde & Van der Plaetsen 1994, 77, 88, fig. 3.26: 3.

75 A production centre is known from Maastricht (Janssen 1983b, 131).

76 Janssen 1983c, 206.

77 The same seems to be true for the 15th-century wasters of the pottery production in Bergen op Zoom, active from the second half of the 15th century onwards, where no iron or manganese wash is mentioned (Groeneweg 1992).

78 Groeneweg 1992, 30, fig. 7: 26.

FIG. 34 Pieterskerk kiln. Redware handled tripod cooking pots with faceted body (F-35, inv.nrs. 495, 2157, 3261). Photograph G. de Graaf, 's-Hertogenbosch.

FIG. 35 Loeffplein kiln. Pitchers with slip-trailed decorations (F-115, inv.nr. 8453; F-144, inv.nr. 9585; association with F-125, inv.nr. 15073). Photograph Tom Haartsen, Ouderkerk aan de Amstel.

of the attachment of the handle to the rim and the three thumb impressions at the attachment of the handle to the body of the vessel (fig. 18). It occurs as a decoration on all large pitchers and on some of the smaller ones, in grey as well as red wares These vessels invariably are further characterized by a frilled base, a rather globular body, a short neck with fine rilling, a heavy collared rim and a decoration of vertical or horizontal slip-trailed arcs or stylized flower motifs on the shoulder. A further tendency might be noted towards a more ubiquitous slip decoration on these pitchers in the products of the Loeffplein kiln, active between 1437 and 1461.

6.8 Specific characteristics: the decoration patterns on pitchers

Another significant difference between the waste of the two kilns in 's-Hertogenbosch concerns the enormous increase in the Loeffplein kiln of the variety and abundance of the slip-trailed decoration patterns, especially on the red ware pitchers (fig. 31: 5-16). The basic decoration pattern is already present in the waste

of the Pieterskerk kiln. It consists of horizontal or vertical arcs with a few incidental dots (fig. 31: 1-4), while rarely double or triple arcs occur. It has been argued this type of motifs might be interpreted as symbols of fertility, regeneration and defense[79]. The waste of the Loeffplein kiln delivers not only these variants, but substantially more double and triple arcs and also stylized tree, branch, clover and flower motifs (fig. 35; fig. 36). An even more abundant decoration motif consists of a combination with religiously tinted cross-like motifs with two- and three-armed crosses (fig. 31: 16). So far such abundant slip-trailed decorations, especially on pitchers, are not known on red ware pottery produced in the northern Netherlands in the 15th century until around 1460. Thus far only simple variants consisting of horizontal or vertical arcs and crossing lines are known from the Utrecht kiln and incidentally also elsewhere[80].

The pitchers with these abundant decorations might have had a representative function. It has been argued such a representative function, for instance as a wedding gift, might be attributed to a group of jugs and pitchers from layers, chronologi-

79 Ruempol & Garthoff-Zwaan 1988.   80 *Ibid.* for a survey.

cally following on the production of the Loeffplein kiln. They generally date from the first half of the 16th century and are decorated with slip-trailed motifs representing the female saints Barbara, Catharina and Agatha[81]. Dishes with the same religious motifs and probably the same function, but executed in sgrafitto technique for texts and symbols and perhaps having a slightly earlier date, are even more numerous in 's-Hertogenbosch[82]. It is interesting to note, however, that dishes in sgrafitto technique do not occur among the waste of the Pieterskerk or the Loeffplein kiln. They occur for the first time in some medieval layers, stratigraphically covering the demolition layers of the kilns[83].

Although the fully developed sgrafitto technique does not seem to have been present in the Pieterskerk and the Loeffplein kilns, there is one sherd from the waste of the Loeffplein kiln, mentioned before, which might be considered as a clue, that an older technique, occurring in the Utrecht kiln, using highlighting a slip-trailed decoration with sgrafitto lines and dots, was still present in 's-Hertogenbosch in the middle of the 15th century. It is a heavily burnt body sherd of a pitcher with the decoration of a bird with a curved neck, possibly representing a phoenix or a pelican (fig. 31: 17). The sherd is remarkable, not only because of the technique used, but also because of its zoomorphic decoration. It seems almost an exact continuation of the motifs and tech-

nique occurring in the Utrecht kiln[84]. The main difference is that this sherd is a fragment of a pitcher instead of the Utrecht examples, which are all fragments of dishes.

6.9 Innovative efforts

Among the waste of the production of the two kilns in 's-Hertogenbosch there are two attempts at introducing new products. Both occur among the waste of the Pieterskerk kiln. The first is the introduction of a novelty, a new shape in the red ware production, a half-cylinder niche or stove tile, the second is the introduction of imported white-firing clay and producing from it imitations of white-firing imported products.

Until the middle of the 14th century the stove tiles produced in the northern Netherlands concern undecorated hollow, closed vessel-shaped forms, combined to a stove. They occur in grey and red ware among the products of kilns in Utrecht[85]. From the middle of the 14th century a new type of stove tile was introduced as imports from the Rhineland: niche tiles in the form of a half-cylinder with a representative, decorated front. The earliest of these tiles can be dated on castle sites in the Rhineland before 1352. Some rare examples are known from castle sites in the Netherlands[86]. It seems the half-cylinder highly decorated stove tile from the Pieterskerk kiln (fig. 22: 2; fig. 37) is one of the earliest products in red ware.

81 Nijhof & Janssen 2000, 264-265, 267, 269- 270, 277, afb.7.

82 *Ibid.*; shortened version of this article without notes: Nijhof & Janssen 2008.

83 Treling 2007c, 91, fig. 78. See also Nijhof & Janssen 2000, 262 fig. 4: 4, 265, fig. 6: 2.

84 See Bruijn 1979, 94 afb. 51; 97 afb. D; 97-98.

85 Information T.J. Hoekstra, H.L. de Groot and C. van Roijen.

86 See Friedrich *et al.* 1993, 486; van Genabeek 2001, 49-50, fig. 46: 12, 16.

FIG. 37 **Pieterskerk kiln. Fragment of redware highly decorated stove-tile (associated with F-35; inv.nr. 2484). Photograph G. de Graaf, 's-Hertogenbosch.**

It does not seem to have set a trend, as they are not known from 's-Hertogenbosch or elsewhere[87]. Instead, almost all stove tiles from occupation sites from this period onwards seem to have been imported from the Rhineland and made from white-firing clay.

The second innovative effort which can be attributed to the Pieterskerk potter, concerns the use of white-firing clay for pottery production, probably the same clay the potter already used for the trailed slip decoration on the jugs, dishes and other vessels. As the wasters show, the potter has tried to use the white firing clay for the production of small bowls, sometimes provided with a cupriferous lead glaze on the inside (fig. 23: 4-5). By introducing these forms as part of his production, he might have been influenced by the white-firing bowls which during this period in small quantities were imported into 's-Hertogenbosch from the Meuse area[88]. The second new group made from white-firing clay the potter introduced into his products, consisted of small funnel-shaped beakers (fig. 38), glazed with a green cupriferous lead glaze and in one instance (fig. 23: 3) with a (yellow) lead glaze and even decorated with vertical arcs of red-firing slip. The introduction of these new forms can be interpreted as an

imitation of Siegburg stoneware funnel shaped beakers and probably (in the case of fig. 23: 1) the Langerwehe small green-speckled earthenware vessels. That imitating and even improving on the Siegburg products might have been the potter's deliberate intention is also shown by the find of two real Siegburg sherds, which were re-glazed by the potter with a cupriferous green lead glaze. One was found within the 1984-kiln itself, the other among the waste of the Loeffplein kiln. Although re-glazed Siegburg vessels with a colourless yellow or (more often) cupriferous green lead glaze are a general product of 14th-15th-century pottery kilns in the Northern Netherlands[89], so far the production of straight imitations of Siegburg funnel-shaped beakers is not known from pottery production elsewhere in the Low Countries. It seems the potter's innovation was not rewarded by the conquering of the market for the finer table wares, which in 's-Hertogenbosch as elsewhere was and remained dominated by the Siegburg and Langerwehe products. White-firing imitations of Siegburg funnel-shaped beakers are not found among the wasters of the later Loeffplein kiln and are not known from the material from excavations elsewhere in 's-Hertogenbosch. So we may conclude this effort failed. What remained, however, as a result of the experiments was the general procedure of prim-

87 There is some controversy, however, as to a stove-tile found in Utrecht, first published by Dubbe 1966, 49 and afb. 11 which is reported to have been made in red ware, although Dubbe thought the tile was produced in the Rhineland, which seems also stylistically correct. A later published colour photograph of this tile (Thuis in de Nederlanden 1980,95, fig. 21) however, although repeating the red ware fabric, shows a white-firing to pinkish fabric.

88 Janssen 1983c, 198.

89 Hurst, Neal & van Beuningen 1986, 128-129; van Beuningen in Bruijn 1979, 130.

FIG. 38 **Pieterskerk kiln. Small jugs and bowls in white firing clay with cupriferous lead-glaze. The fragmentary jug to the right is provided with lead-glaze and decorations in slip-trailed red-firing clay (F-35, inv.nrs 508, 2739, 2740, 2741).**

ing the inside of red ware bowls, dishes and other vessels with white slip.

6.10 Distribution pattern of the 's-Hertogenbosch production

The last and final question to be asked concerns the impact of these kilns. Which distribution pattern can be established for them? Were they producing for the urban market only or as well for the town's hinterland? This question is difficult to answer, as from the town and from its hinterland there are not very many closed occupation contexts excavated dating from the first half of the 15th century. Moreover, not all available contexts have been studied and reported upon. Therefore we have to confine ourselves to some preliminary observations.

For the beginning of the production the finds from the excavation Sint Janskerkhof are important, as they have a closing date of 1419, when the area was burnt down by a large fire, after which the houses have been demolished and not rebuilt. In cesspits destroyed in 1419 dishes occur with slip-trailed decorations and typical grey ware and red ware (with slip-trailed vertical arcs on the shoulder) pitchers with all general characteristics, among them thumb impressions at both sides of the handle[90], apart from possible but not very characteristic products of the Pieterskerk and Loeffplein kilns like large bowls and storage jars[91]. Important is also the absence of chamber pots in

these contexts. Therefore it might be possible that the destruction of the houses along the Sint Janskerkhof in 1419 chronologically coincides with or perhaps precedes a few years the beginning of the pottery workshop at the Pieterskerk site.

For the heyday of the production period of the kilns, centring around the second quarter of the 15th century, the most striking observation is that the characteristic products of both kilns, as described before, seem to be very rare in occupation contexts. There is one characteristic large red ware pitcher with thumb impression at both sides of the attachment of the handle and trailed slip decoration on the shoulder, coming from a 15th-century cesspit[92]. A grey ware pitcher deriving from the cesspit of the town's general hospital (*Groot Ziekengasthuis*) and dating from the second half of the 15th century, could quite well have been produced by the Pieterskerk or Loeffplein potter[93]. The same cesspit delivers a few characteristic pear-shaped chamber pots with-slip-trailed arcs on the shoulder[94]. Three comparable chamber pots were found in the cesspit of the Keizershof (unpublished), dating from the third quarter of the 15th century[95].

Tripod handled cooking pots with-a manganese wash and tripod cooking pots with two ridges resulting in a faceting of the body are more characteristic for the 15th century as a whole than for both kilns specifically. They occur regularly in 15th-century contexts[96]. There are other products which are even

90 van de Vrie & Janssen 1997, 115, fig. 36: 9 (red pitcher), fig. 41: 1 (grey pitcher), fig. 36: 11. A small pitcher with slip-trailed arcs without thumb impressions has a different neck and rim form, which is rare, but might occur in the Pieterskerk kiln (van de Vrie & Janssen 1997, 112, fig. 39: 10).

91 See for instance van de Vrie & Janssen 1997, 113, fig. 40, 114, fig. 41.

92 Janssen 1983b, 163, fig. 9.21: 1; *Idem* 1983c, 210-211, fig. 26: 1.

93 Janssen 1983c, 216, fig. 30: 2.

94 Janssen 1983c, 211, 213, fig. 27: 1. A few other chamber pots of the same type from the same context are unpublished (inv. nrs. DBGZ: i. 1934, 2874).

95 Inv. nrs HTKZ: i. 12821, 12823, 12824.

96 A number of examples occurs in cesspit F-67 of the excavation DBSP; see the survey photograph in Janssen 1983c, 215 fig. 29. See further HTVH (F126) i. 15063, i. 11467, i. 11462 and i. 15064 (unpublished).

less specific. Further study of the kiln products and the products from the excavated occupation sites in 's-Hertogenbosch will be needed to clear this question.

7   Summary and conclusion

This article contains the main results of the excavations in 's-Hertogenbosch in 1984 and 1995 of two 15th-century pottery kilns and their waste products, buried in waste pits on the potter's premises. The excavation results have shown both pottery workshops to have been using the type of brick-built vertical updraught kilns with central oval supports. In one of the workshops a workshop building or work shed could be excavated. Both pottery workshops probably succeeded each other and were active during the first and second quarter of the 15th century. The accompanying research of the written sources made it possible to attribute the second workshop to '*Robbrecht de potter*', active between 1437 and 1461.

The importance of the excavated workshops lays in the fact, that for the first time in the Northern Netherlands we have got an insight into the range of production and typological development of an urban pottery industry during the 15th century. A remarkable aspect is that the workshops were situated within the medieval town walls, one street away from the central urban marketplace. Despite the fact that the workshops were located in a low-lying, marshy and largely uninhabited area, the location is remarkable because the potters had the disadvantage of having to import their raw materials – the clay and the fuel, (probably) by ship – and the town had to endure the dangers of fire and pollution. Nevertheless the advantages of this location for both parties must have outweighed the disadvantages. Only when the St. Elisabeth Bloemkamp nunnery established itself as the potter's neighbour in 1456, the potter's workshop had to move in 1461, possibly because the potter's fire and smoke, coming permanently to the nuns with the prevailing western winds, could no longer be tolerated.

Generally the pottery workshops' products have the same range as the products of a kiln in Utrecht, to be dated around 1400, but there are further chronological-typological developments and regional varieties. Among them can be mentioned faceted tripod handled cooking pots, often provided with an iron wash, which are characteristic for the southern parts of the Low Countries. Another characteristic is the relative late appearance of chamber pots, only occurring in the later kiln, albeit often having a somewhat uncommon pear-shaped form with slip-trailed decorations on the shoulder. Thumb impressions around the attachment of the handle of

pitchers to the rim and the body of the vessel are a specific characteristic of the production of both kiln sites in 's-Hertogenbosch. Two other specific elements of the production of both kilns which increasingly seem to develop from the earlier to the later kiln are first the abundance of slip-trailed decorations, especially on the pitchers, increasingly acquiring a representative function, and secondly the increase of the number and diversification of shapes of the small bowls. Remarkably, however, neither of the pottery workshops used yet the sgrafitto technique.

Two innovative attempts, being the introduction in the first kiln site of highly decorated red ware stove tiles and the introduction of white-firing clays for the production of imitations of luxury small stoneware, were clearly not successful and were not continued in the production of the second kiln. Nevertheless the use of white clay as a priming of white slip under the lead glaze, often with a green cupriferous lead glaze, remained and was increasingly used, especially on dishes, small and larger bowls.

Although the attempts at imitating Siegburg products were not successful, other imitations such as the faceting and 'black-washing' of the tripod handled cooking pots, copying metal cooking pots, were already being used in the first kiln and clearly remained a popular product in the second kiln as well.

The general impression is both workshops produced not only simple household utensils but also highly decorated representative relative luxury products, while they were actively trying to initiate new products. The market segment of the relatively well-to-do might have been the potter's main target. Their central location within the town, being one street away from the central market place, the main commercial and administrative centre and within a few hundred metres of the main ecclesiastical centres like the Franciscan and Dominican friaries, three nunneries and the parochial church of St. John, might have helped. It is even probable that special products like stove tiles and the enormous candlemakers' troughs were especially made-to-order, the last ones for instance by the ecclesiastical institutions. This is in line with the special order the municipal almshouse placed some decades later with the successors of our pottery workshops in the same street for (decorated?) ridge tiles. This general impression might also be in line with the relative rarity of the characteristic productions of our pottery workshops in occupation contexts. The concluding picture is one of pottery workshops fully directed at and integrated in the urban economy.

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Prototype or Skeuomorph?
A lead urinal from Jervaulx Abbey,
North Yorkshire (England)

Sarah Jennings †

1 Introduction

Jervaulx Abbey was founded in 1147 and moved to its present site in 1156, one of a series of Cistercian foundations in North Yorkshire along with Fountains, Rievaulx and Byland Abbeys and Kirkham Priory[1]. Jervaulx is some 16km due south of Richmond and lies between Mashem and Leyburn in Uredale, North Yorkshire. In 1994, during clearing out an eight metre section of the drain adjacent to the lay brother's infirmary of Jervaulx Abbey, a collection of objects, window glass and pottery fragments was recovered from the lowest silty sediments at the bottom of the drain. Amongst this material was the rare survival of a lead vessel, a urinal, complete and intact except for a few very small holes in its base and with a dent in one side caused by impact, probably when it was thrown away (fig. 1). This paper presents the lead urinal and includes brief comment on the pottery found with it.

2 A lead urinal

The urinal was constructed from a sheet of lead rolled into a cylinder and the two edges joined from bottom to top at what was to become the back of the urinal (fig. 2). The domed top was formed by cutting out five V-shaped segments from one end of the cylinder resulting in five pointed chevron-shaped projections between 7 and 8 cm in length; four of these are of equal width at the bottom whilst the fifth section which incorporates the vertical join of the cylinder is the widest. These pointed sections were bent inwards with a slight curve and the edges joined or welded together to form a closed top to the urinal. The shoulder is slightly lower and flatter at the front of the urinal than it is at the back. A flat, circular disc set into the bottom of the cylindrical body forms the base and was joined to the body by adding molten lead, which extends 12 mm onto the outer edge of the disc. The roughly circular opening was cut into the front of the shoulder between two of the welds, and a semicircular handle crudely welded or soldered onto the top with added molten lead used to cover the junctions. The

FIG. 1 Lead urinal from Jervaulx Abbey (photo Sarah Jennings).

roughly semi-circular loop handle was formed from a rectangular sheet of lead with rounded edges folded over into a strip, and the ends flattened and splayed outwards to form the attachment points.

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[1] Burton 2003, 90-3.

The urinal is 19.4 cm high to the top of the handle with a body height of 16.6 cm and a base diameter of 12.2 cm; it weighs 1989 g. The opening has a chamfered edge and measures 3.6 by 3.8 cm; at that point the lead sheet is 3.4 mm thick. It has not been possible to measure the thickness of the base with any accuracy but it seems likely that it is slightly thinner than the main sheet used for the body, perhaps some 3 mm thick. The surviving surface is in good condition, it is flat and reasonably smooth except at the joins, and the only marks on the surface are a series of short and shallow parallel lines on the shoulder of the right hand side. The composition of the lead is not distinctive in any way but is standard for the later medieval/early post medieval period[2].

3   Ceramic urinals

Amongst the pottery found with the lead urinal were sherds of at least seven ceramic urinals (fig. 3: 1-3) and with one exception all of these have the same basic shape as the lead urinal – a circular opening and a loop or basket handle attached to the top of the vessel (fig. 3: 2-3). However, in the case of the ceramic versions their bodies are globular not cylindrical, the opening is circular and formed by the inturned rim at the top vessel, while the handle is not vertical but is placed on the shoulder at an angle leaning away from the opening; the attachment points on the shoulder are approximately one third of the circumference apart (fig. 3: 2). Three of these have rod handles and the forth a strap handle, the handles of the other two are missing. Only one of the ceramic urinals has a knob top as opposed to a loop handle (fig. 3: 1). This was formed by elongating and narrowing the neck before widening the rim and then folding it inwards until it closed; the roughly oval opening was cut into the bottom of the neck. This is not a common form of urinal in the region where nearly all are variations of globular forms with an opening at the top and some form of loop handle.

Purpose made ceramic urinals first occur in the late medieval period and are more common in the Midlands, northern England, and Scotland than the south[3]. Urinals are frequently, although not exclusively, found on monastic sites and would have facilitated the collection of urine which had a number of uses including in tanning and cloth making. The ceramic urinals found at Jervaulx came from a number of different production centres showing that the Abbey was being supplied from several sources within the region.

4   Archaeological context

In common with the destruction that took place at all of the great abbeys Jervaulx's drain probably went out of use during the time of the Dissolution in the late 1530s and any material in its fill was deposited by that date, much of it abandoned when the abbey was finally deserted. The pieces of earlier ceramic vessels found in the drain represent small numbers of casual losses over several centuries, but the bulk of the vessels

date to the 15th or the earlier part of the 16th century. Because the section of the drain cleared in the 1994 operation that yielded the lead urinal was relatively short, only eight metres, it is difficult to tell if any or most of the later vessels were deposited intact or were already in a fragmentary state when they went into the drain, as additional sherds could easily be outside the area excavated. Certainly the smaller numbers of earlier vessels are noticeably less complete and these are mainly jugs and pipkins of types widely available in the region. There are a few sherds dating to the late 12th or 13th century including a horn and body fragment covered with flattened pellets from a Scarborough ware aquamanile in the form of a ram[4]. Slightly later in date are a number of jugs of Thirlby, Humber and Brandsby wares[5] dating to the late 13th and 14th centuries and pipkins with hooked handles[6]. The range of local ceramics vessels probably deposited at the same time as the lead urinal, and likely to be contemporary with it, is fairly limited, in the main drinking vessels, urinals and jugs. There are no cooking pots in the later pottery and only one in the earlier group; none of the pipkins, also associated with cooking, show signs of having been used for that purpose but at least two of the jugs have sooted bases.

Only a few imported wares were found, all from the early post medieval period. These are the top of a Low Countries red ware jug or one-handled pipkin with a small lip[7], two Rhenish stoneware mugs, and part of the central medallion from a South Netherlands Maiolica ring-handled flower vase or jug which were common finds in England in the early 16th century[8]. Drinking vessels are represented by fragments of two typical Langerwehe/Raeren stoneware mugs of the type with frilled bases, a largely complete elaborately decorated Cistercian mug (fig. 3: 6), and fragments of a smaller simpler mug decorated with applied circular motifs (fig. 3: 7). Similar stoneware mugs were recovered from Dissolution deposits from one cell at the Carthusian Priory at Mount Grace, some 30 km to the east of Jervaulx, but in greater numbers and with a wider range of imported vessels[9]. A single urinal was also part of this group. Although these stoneware mugs are not nearly as common on inland sites in the north of England as they are in East Anglia, London, and particularly along the southern coast[10], they are found in places with contacts outside their immediate area. Together with decorated Cistercian drinking vessels stoneware mugs represent the better quality ceramic drinking vessels available in North Yorkshire in the earlier 16th century. Two elaborate lobed bowls, one in Humber ware and the other Hambleton ware also date to the late 15th or early 16th century. Both have numerous tight lobes and the Hambleton ware bowl (fig. 3: 5) has two irregular concentric circles of rosette-shaped stamped motifs in the base and two handles while the Humber ware example has a moulded tree like form projecting from the inner base (fig. 3: 4). No handle for the Humber ware lobed bowl was found but sufficient of the sides survives to show that there could only have been one at the most. These lobed bowls are also associated with drinking but usually thought to be for

2   Pers. comm. David Dungworth.

3   McCarthy & Brooks 1988, 115.

4   Watkins 1991, 98 fig 85 no. 254.

5   Jennings 1992, 24-9.

6   cf Didsbury & Watkins 1992, 116 fig. 63 no. 315.

7   cf Watkins 1987, 140-1 and fig. 102 no. 360.

8   Hurst 1999, 91-106.

9   Roebuck and Coppack 1987, 16-20.

10   Allen 1983, fig 4.1.

FIG. 2 Lead urinal. Scale 1:2.

FIG. 3 Early-16th-century pottery associated with the lead urinal. Scale 1:4.
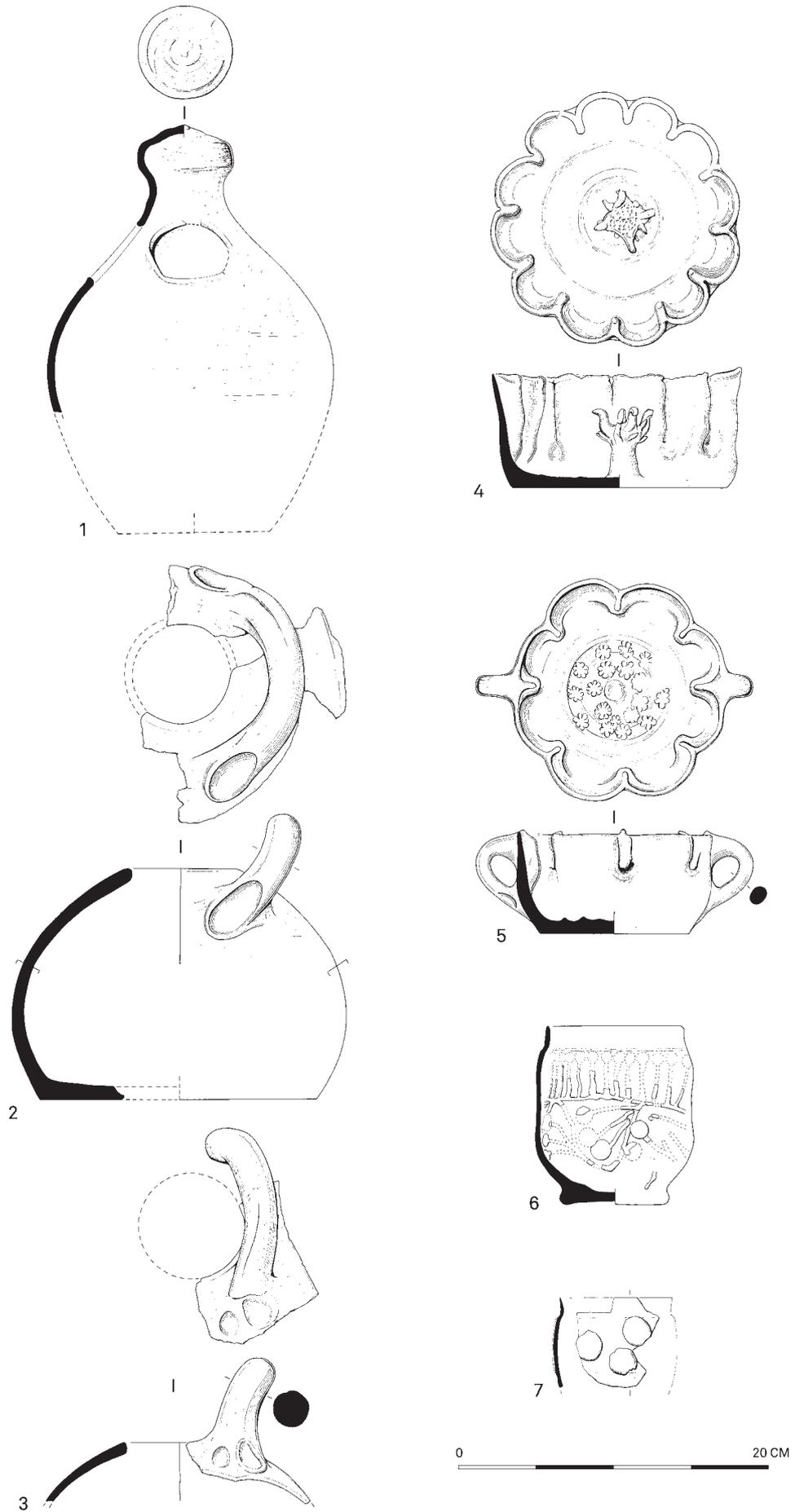
communal use. The single bowl and the later, more complete jugs are all either Hambleton or Humber wares.

5   Interpretation and conclusion

The date of the lead urinal can only be established by inference as no parallels for it have so far been located, but it seems highly likely that it was abandoned at the time of the Dissolution at Jervaulx in 1537 along with the other substantial amounts of lead found with it. These include two large sheets of lead, both apparently purpose cut and specifically shaped roof tiles probably used as flashing; many other pieces of lead including came and off-cuts, and some window glass still set in its came were also recovered. Lead on this scale is virtually never just abandoned because of its value and the ease with which it can be melted and recycled, but in 1537 the stripping of Jervaulx cloister alone took five days, and in total nearly 400 tonnes of lead valued at £1.000 were removed from the abbey over a period of three months[11]. In that context the lead recovered from the drain would be regarded as a very minor element. Apart from quantities of ceramic buildings material other finds are smaller and more limited and include ten silver coins (not identified but probably pennies), a couple of copper alloy rings and a pair of tweezers, small animal bones and shells, and iron nails. It is hoped to publish the whole group in detail in the future.

Acknowledgements

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11 Greene 1993, 185.

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Twice three fishes from Walraversyde (Ostend, Belgium)

Marnix Pieters

1   Introduction

For this festschrift dedicated to Professor Emeritus Dr. Frans Verhaeghe, I opted for an essay which addresses two remarkable and interrelated archaeological objects: one in wood and one in metal, originating from the late medieval and early modern fishing community Walraversijde (Ostend, Belgium).

There are three good reasons for this choice. First and foremost, this essay ties into the type of research for which Professor Dr. Frans Verhaeghe is internationally known and respected, namely the research of medieval material culture of the Flemish coastal area, also including Bruges, among others. Secondly, he belonged to a small group of pioneers who dedicated themselves to obtaining government funds for research of the extremely well-preserved archaeological site Walraversijde (Raversijde, Ostend). Due to this, quite a lot has become possible regarding archaeology of this site since the 1990s. Thirdly, Professor Dr. Frans Verhaeghe supervised the dissertation[1] – defended on December 12, 2002 at the VUB by the author – entitled (translated) 'Aspects of the material living world in a late medieval fishing community in the southern North Sea area' a dissertation which for a major part was based on the collaborative research carried out in Raversijde since 1992 by the province of West Flanders and the Flemish Heritage Institute (VIOE).

In this contribution, after the description of the two objects from Walraversijde in their respective contexts, the comparative material known to the author will be presented and analysed within the corresponding contexts, both archaeological and other, followed by an overview of the meanings as presented in the literature for these three intertwined fishes. The conclusions examine what presents itself in particular from the analysis of the archaeological data concerning the possible interpretation of this symbol.

2   Twice three fishes from Walraversijde

2.1   Introduction

This paper deals with three fishes carved into a wooden netting needle discovered in 1996 in one of the excavated structures of the late medieval fishing settlement Walraversijde and three fishes depicted on a metal object present in the collection of the Ostend historical museum 'De Plate' at Ostend and likely originating from the beach of Raversijde, in other words found in a zone of the same fishing settlement that was occupied in the 13th and 14th centuries[2].

2.2   Three fishes on a wooden netting needle

The wooden[3] netting needle[4] (2056.24) is 17 cm long and up to 2 cm wide. On one side, three neatly intertwined fishes are carved into the wood. On the other side, a star-shaped mark is applied which can be interpreted as a mark of ownership.

The three stylistically depicted fishes have, about halfway across the back, a strongly pronounced, nearly pointy dorsal fin and a very clearly forked tail fin (fig. 1). No ventral fins are depicted. A double line in the front separates the pointy head from the rest of the body. Despite the strong stylization, the fishes do show similarities with herrings or herring-like fish. The depiction of the three intertwined fishes is 20 mm high and 18 mm wide and shows great artistic skill of the one who carved it into the netting needle. These three fishes are depicted on an object that is very typical for a fishing community, namely on the tool with which the fishing nets, in this case the herring nets, were produced or in any case, repaired. It could not be more appropriate than that.

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1 Pieters 2002.

2 Ostend Historical Museum 'De Plate', Langestraat 69, B-8400 Oostende.

3 The kind of wood has not been determined.

4 Pieters 1997, 175; Idem 2006, 42, 44.

2.3   Three fishes on a metal object

The three fishes are applied to a metal object, most likely of pewter or in any case an alloy with tin, which clearly is cast and in terms of shape looks like a metal scabbard for a dagger or the metal tip of the sheath of a sword. This can be deduced from, among others, the presence of, on the one hand three cast eyes – two on the non-decorated side near the open end of the object and one on the side near the tip – and on the other hand from a slot on one side of the hollow inside, for the housing of the blade of a sword or dagger.

The object has the following measurements: length: 17.25 cm; width at the open and straight end: 2.64 cm; width in the middle at the level of the depiction of the rose: 2.85 cm; width at the closed and curved end: 3.35 cm; thickness at the open end: 1.31 cm. The thickness gradually decreases from the open end to the closed end to 0.9 cm. In general, the object is elongated and it shows a silhouette of a fish. One side of the object is decorated with a series of five individual depictions in relief; the one near the closed and curved end shows three intertwined fishes (fig. 2). The other side is undecorated. The fishes on this object show a clearly forked tail fin and a V-shaped dorsal fin. This makes them very similar to the fishes on the wooden netting needle from the late medieval phase of Walraversijde discussed above.

To the left of the fishes the pilgrim badge of Wilsnack[5] – three hosts connected to each other, of which the upper most two are crowned with a cross – is depicted, as well as two crossed pilgrim staffs connected by means of a scallop shell. Further to the left, a diamond-shaped shield with a two-headed eagle is depicted, surrounded from left to right and from above to below, by the letters R O M A placed in the four corners. The double eagle was the symbol of the Holy Roman Empire of the German Nation, and in this sense 'ROMA' is indeed meaningful. In the imperial escutcheon the double-headed eagle did not appear officially until 1417[6].

To the left of the eagle a rose is depicted with IHS in the flower button, of which the long leg of the letter H is given a crosswise mark by which a crucifix is also inserted. In every flower petal a letter is placed: clockwise we read 'M.A.R.I.A.' The letters surrounding this, however, cannot be clearly identified (Anna?). In this latter case this could point at Anna, Mary and Christ (in dutch '*Anna te Drieën*' or in latin '*Trinitas terrestris*').

5 **Van Beuningen & Koldeweij 1993, 145-146.**

6 **Dreesen 1999, 22. With thanks to Frans De Buyser (VIOE) for his help with the identification** and interpretation of the representations on this object.

FIG. 2 Three intertwined fishes depicted on a metal
object found on the beach of Raversijde,
late medieval/early modern period.

Finally, near the open end a diamond-shaped shield is depicted surrounded by four letters (A L R B), which may point at the proprietor or proprietress of the object. The shield looks very similar to the one depicted on certain coins of Philip the Fair and emperor Charles, only the order of depiction of the weapons is different. On the coat of arms depicted on the sheath appear from left to right and from above to below the following coats of arms: Austria, Old Burgundy, New Burgundy, Flanders and/or Brabant, depending on the coat of arms that is present on the small central shield. Compared with the coat of arms of Philip the Fair[7] (1493-1506) only Old and New Burgundy have switched positions.

In terms of the likely site of the find, namely the beach of Raversijde and the probable late medieval/early modern dating (15th-16th century), this object most likely needs to be situated in a fishing community as well. The piece was most likely not found by A. Chocqueel (known for surveying the beach during the years 1930-1950) since it is nowhere mentioned in his publications, which certainly would be surprising, given its remarkable character. In terms of the dating, the badge of Wilsnack provides an interesting *terminus ante quem* for this piece, namely 1522. In this year the miraculous '*Dreihostien*' of Wilsnack were publically burnt and the

veneration at Wilsnack[8] was abruptly ended. The association with duke Philip the Fair makes it likely that this object dates around 1500, give or take 10 years, which thus places it in the transition of the Middle Ages to the Early Modern period. The fact that both shields are diamond-shaped, could indicate that this object belonged to a woman[9].

However, what exactly its function is and to whom it belonged is not known. It remains remarkable that on two objects from the late medieval/early modern fishing community Walraversijde three intertwined fishes are depicted on two different types of objects. The following list of objects with a similar depiction certainly provides more insight into the distribution of this symbol.

3　Similar depictions of three fishes and their respective contexts

Extensive research of the archaeological and other literature shows that depictions of three intertwined fishes are more common than one might initially presume. By now the author knows of no less than 18 parallels and most certainly more exist, as is to be deduced from the contributions of R. Lecotté and L. Armand-Calliat[10]. Most of the examples are known as a

7 Dreesen 1999, 18.

8 Van Beuningen & Koldeweij 1993, 145.

9 Rolland & Rolland 1967/1991, Pl. A.

10 Lecotté 1952; Armand-Calliat 1948.

result of archaeological research[11] and a few have been accidentally localised during museum visits[12].

Firstly, there is the depiction of three fishes identically intertwined, known from several ceramic plates or dishes. Let's briefly review these. Three fishes placed on top of each other are depicted on a late-16th-century plate in red ware from Kampen (The Netherlands). The design is scratched into the white slip layer so that the red colour of the underlying clay is visible in the scratch lines[13].

A comparable design is applied on a 17th-century plate in red ware found in Alkmaar (The Netherlands)[14]. Three fishes lying on top of each other also appear on plates in the so-called Werra ceramics. Examples of this are known from Amsterdam[15] (The Netherlands), Enkhuizen[16] (The Netherlands), Bremen[17] (Germany) and Höxter[18] (Germany). The plate found in Amsterdam dates from the period 1600-1625 and shows three intertwined fishes with forked tail fin and a head that looks like the head of a flatfish. Three small lines demarcate the head from the rest of the body. The fragment of a small dish from Enkhuizen dates from the beginning of the 17th century. On this dish, the three fishes are not intertwined but simply placed on top of each other[19].

The six plates and/or dishes all date from the period of the late 16th and the 17th century. It is not clear whether this has to do with the popularity in this period of the three fishes design or whether this is rather the consequence of a coincidence in the available archaeological resources. In any case, it partly has to do with the popularity of this design on the so-called Werra ceramics. For example, three intertwined fishes are not known as design on plates or dishes produced in medieval and early modern Flanders. A few examples are known, however, from plates in majolica from Italy and Spain with a central depiction of three fishes with a single head (not intertwined), as on 14th-century plates from Orvieto[20] and Paterna[21].

On a yellow-glazed dish from about 1870, produced by a pottery workshop (Brack & Sønner) from Roskilde (Denmark), three intertwined fishes are depicted as well[22]. They are completely covered with scales and show a clearly forked tail fin and two small fins near the tail fin, and a dorsal as well as a ventral fin. The head is separated with two parallel lines from the rest of the body which is covered with scales. The eyes are clearly marked.

Ceramics clearly are most prevalent as bearer of this symbol with 7 examples. They all are plates or dishes as well. In terms of the dating, especially the 17th century comes to the fore as the century in which this symbol was often used on ceramics. Closely related to ceramics, *sensu stricto* or in other words dining, cooking or storage equipment, are two objects from Switzerland made from clay, in other words ceramics *sensu lato,* respectively a mould and a brick[23]. The mould (used to form gingerbread or biscuits?) of 6.3 cm diameter is almost completely decorated with the three very richly scaled and intertwined fishes in negative relief. In terms of the outline, this mould has taken over the irregular shape of the three fishes. The mould dates from the period 1650-1750 and originates from Lohn (canton Schaffhausen) situated about 8 km from the Rhine. The brick with the three rudimentary incised fishes prior to baking dates from the 18th century and comes from the City Hall in Basel.

In addition to their presence on ceramics, the three fishes have also been found on bearers in metal. A lead disc found in Schalkwijk (Haarlem, The Netherlands) albeit in manmade soil deposits of which the origin is not known, shows on one side the depiction of three similar intertwined fishes[24]. This disc could be a maritime toll payment or a pauper's token.

Three fishes placed above each other are – quite unskillfully – carved in the central part of the base of a pewter jug found in the shipwreck of the Mary Rose. This flagship of Henry VIII sank on July 19, 1545 near Portsmouth in the Solent while Henry was keeping an eye on the movement of enemy troops from the coast. The researcher supposes, based on the hammered depiction of a French token on the bottom of the lid, that the pewter jug was made in Lille (Northern France) or in the Low Countries[25]. The jug was found in the rear end of the ship, in the area of the lower deck and the main deck, containing the majority of the cannons[26]. As such it could have been part of the ship's equipment as well as of the personal property of one of the crewmembers. The large number of incised markings suggests in any case that this jug had known quite some use prior to landing on the sea bottom. The continental origin of the piece itself should not be a surprise, given the number of foreigners among the crew[27]. The three fishes on this object are strongly stylized. Only the eye and the forked tail fin of the fishes are recognizable. The three fishes fill a circle of approximately 5 cm in diameter.

Three intertwined fishes can also be seen on the seal of Langeland, a Danish elongated island situated between Fyn and Sjaelland with a blooming fishery in the 2nd half of the 16th century[28]. The seal mould is dated in 1610[29]. Of the three intertwined fishes on the seal mould only the forked tail fin and the eye can be recognized on the drawing in the aforementioned publication.

11 The author would like to be notified of other occurrences of this design on various objects.

12 By Glenn Gevaert and others with thanks.

13 Clevis & Smit 1990, 41.

14 Ruempol & Garthoff-Zwaan 1988, 21.

15 Robert et al. 1984, 192-193; Hurst *et al.* 1986, 247, pl. 48.

16 Bruijn 1992, 243.

17 Hurst 1986, 247.

18 König & Rabe 1995, 220.

19 Bruijn 1992, 243.

20 Sconci & Robinson 2006, 36.

21 Coll Conesa 2008, 124-125.

22 Birkebaek 1997, 133.

23 With thanks to Dr. Raphael Beuing for this information (Historisches Museum Basel).

24 Calkoen 1966, 81.

25 Weinstein 2005, 438.

26 Gardiner 2005, 5.

27 *Ibid.*, 12.

28 Berg et al. 1981, 201.

29 *Ibid.*, 181.

Three fishes placed on top of each other in a radial manner but not intertwined also appear on the guild panel from 1673, belonging to the guild of the Danube fishermen from Vienna (Austria). The panel is an oil painting on an oval copper plate[30].

Three intertwined fishes could until 1924 – the date of a fire on the premises – also be seen on an incised stone from the 16th century in a building at Chalon-sur-Saône (Saône-et-Loire, Burgundy, France). Next to this stone, the following text was inscribed on another stone: '*Aux trois poissons, à bon logis*'[31]. These fishes show a forked tail fin and a dorsal fin as do a number of the other depictions.

Three intertwined fishes are also found as a graffito scratched into the wood above the staircase of a medieval house in the "Rue de la Poterie" in Montereau-Fault-Yonne (Seine et Marne, Île-de-France). The residence, situated downstream from the confluence of the Yonne and Seine, is located barely 100 meters from the harbour of Montereau and of the Seine[32]. In the same house, a number of graffiti of boats was also found[33]. The three fishes from Montereau are depicted fairly large (*c.* 20 cm). One of them is covered in scales. All three show a barbel, a forked tail fin and two to three smaller fins (dorsal as well as ventral). The head is separated from the rest of the body with two small parallel lines. Investigation by a local fish expert has shown that the depicted fishes combine characteristics of various types of fish[34]. In this example the maritime context is clear as well. Dating this graffito is not easy, an incised name about 18 cm below the graffito is medieval in style in any case but this doesn't indicate anything with certainty about the dating of the design of the three fishes.

Furthermore, the three fishes have also been found on bearers of paper. Three intertwined fishes, for example, are depicted in 'The Universal Penman' from 1740-1741, engraved and published by G. Bickham[35]. This book with a commercial goal, namely offering entrepreneurs with a choice in available writing styles by means of a type of sample chart, provides an overview of the most important English calligraphic scripts from the first half of the 18th century. The symbol shows up here as the emblem of one of these calligraphers (J.B.: John Bickham?) and is depicted above the text 'Great Britain's Wealth'. The design is used even today on paper supports, as shown by the business cards of the Portuguese restaurant Polana in Kalk Bay (South Africa), a few miles south of Cape Town, which also applies the design on its billboard[36].

Three fishes also appear on a number of coats of arms[37] of cities or communities, although rarely in the manner as on the netting needle from Walraversijde. They appear on the coat of arms of Zandvoort[38] (The Netherlands) and on the coats of arms of Great Yarmouth (England), Enkhuizen (The Netherlands), Marstrand[39] (Sweden) and Lübeck[40] (Germany) to name just a few of the most important ones. Only on the coat of arms of Zandvoort are the fishes stacked on top of each other like in the netting needle of Walraversijde, yet not intertwined. In the other aforementioned cases the fishes are depicted parallel to each other. As far as is known the coat of arms of Zandvoort was first used in 1613[41], which thus brings us back to the 17th century.

Three fishes are also used in family coats of arms. For this contribution we have only listed the shields from the overview by Rietstap[42] in which the three fishes overlap each other or are at least connected to each other. Three fishes placed parallel to each other often appear, in fact, and are not included in the list below. Three fishes appear as coats of arms of Chanfleury (Holland), Van Cleef (Holland), Fischer (Winterthur), Fischern (Prussia), Hanfstengel (Prussia, Hannover, Mecklenburg), Hünder (Bavaria), Karchowski (Poland), Kerc'chac (Brittany), Lotzky de Masanizowski (Silesia), Lubeley (Neuenhaus, Bentheim), Van Ogten (The Hague), Puhler de Riegers (Austria), Salm (Province Utrecht), Scholler (Nürnberg), Steur (Holland), de Vissere (Province Utrecht) and Wittig (Lüneburg, Lübeck). Not one of these, however, is identical to the depiction on the netting needle found at Raversijde. Chanfleury and Lubeley most resemble the three fishes from Raversijde. Of the 17 cited examples, 6 are located in present-day The Netherlands (The Hague, provinces Utrecht and Holland) and 8 in the region Germany/Austria/Switzerland. France/Spain/Portugal and Italy remain completely out of the picture regarding this.

4 Interpretations and possible meanings

Various meanings are given to the three intertwined fishes. According to some the three fishes would symbolize protection and defence against evil[43]. The three fishes could also symbolize an abundance of fish or a very good catch as is mentioned in a study about pottery from Bredene[44] (Belgium).

Others interpret the three intertwined fishes as the symbol for the Holy Trinity[45]. Jack Tresidder adheres to this latter opinion and interprets this symbol in an overview of the symbols and their meaning as a depiction of the 'unity of three'[46]. This type of symbolism, however, is not limited to three fishes. In the cathedral of Paderborn (Germany), on one of the glass windows, three rabbits connected to each other are depicted as a

30 With thanks to Mrs. Andrea Hönigmann (Department Geschichte und Stadtleben 1500-1918 des Wien Museums).

31 Armand-Calliat 1948, 81.

32 Delahaye 2007, with thanks to Stephan Van Bellingen for this bibliographical reference.

33 Delahaye 2006.

34 *Idem* 2007, 168.

35 Bickham 1740-1741, 151. With thanks to Jan Bastiaens (VIOE) for this bibliographical reference.

36 With thanks to Liesbet Schietecatte for this information.

37 Von Volborth 1985, 34.

38 www.villa-tanahlot.nl. on 29/03/2008.

39 Muus 1966, 210.

40 Hutchinson 1994, 2.

41 www.villa-tanahlot.nl on 29/03/2008.

42 Rietstap 1988 and Rolland & Rolland 1967/1991, including 85.000 coats of armour.

43 Ruempol & Garthoff-Zwaan 1988, 10.

44 Logghe & Verhelle 2005, 31. With thanks to Glenn Gevaert (Domein Raversijde) for this bibliographical reference as well as for the thorough comments on this paper.

45 Braunfels 1954; König & Rabe 1995; Weinstein 2005, 438; personal communication Dr. Raphael Beuing (Historisches Museum Basel).

46 Tresidder 2000, 66. With thanks to Gerrit Haesendonckx for this information.

unity of three most likely with a similar symbolism[47]. H.-W. Stork indeed notes in the Lexicon für Theologie und Kirche that in the Middle Ages the threefold representation of animal motives (hares, fish and birds) was applied as symbol for the Holy Trinity[48]. Iacobone also mentions three lions with a single head[49] and Braunfels adds eagles to this as well[50].

G.-R. Delahaye approaches it from a totally different stance and interprets the three fishes as a sexual symbol, namely as the symbol for intercourse[51], inspired by J.-M. Simon who delivers a remarkable story about these three fishes from the Paris of the early 20th century in which street vendors used this symbol, applied in chalk on the footpath so as to let their customers know that in addition to their usual wares they also sold so-called 'obscene cards'[52]

The three possible meanings presented do vary quite a bit. It is interesting to take a look at what the material sources can offer in the context of this discussion.

5 Observations and discussion

Eleven or twelve of the abovementioned depictions of three fishes can be dated in the period of the 16th-17th centuries (table 1). These are, in addition to the 6 plates/dishes (Kampen, Alkmaar, Amsterdam, Enkhuizen, Bremen, and Höxter), also the pewter jug from the wreck of the Mary Rose, the seal mould of Langeland, the incised stone from Chalon-sur-Saône, the coat of arms from Zandvoort, the guild panel from Vienna and possibly also the ceramic mould from Lohn. When we push the analysis even further, we then notice that most of these parallels date from the period of the second half of the 16th century and the first half of the 17th century. Only the design carved into the netting needle from Walraversijde is definitely late medieval in date. Three other examples are probably also late medieval or early modern in date: the tip of a dagger or sword sheath in the Ostend Historical Museum, the metal disc from Schalkwijk and the graffito from Montereau-Fault-Yonne. The centuries after the 17th century are represented by only a few examples. Although the statistical base is very small (20 individuals, the Raversijde examples included) a trend concerning the dating seems to be present: late medieval to 17th century, with a dominance in the late 16th and first quarter of the 17th century. The netting needle from Walraversijde is thus undeniable the only object from the late medieval period, in particular from the 15th century, and is thus so far the oldest known depiction of the design with the three intertwined fishes. It needs to be mentioned here that L. Armand-Caillat does cite an example from the 14th century, but this is a depiction of three fishes with a common single head (and not intertwined) on a keystone of a church in France[53].

Another observation relates to the objects onto which the design is applied and more specifically, to the social-economic connotations that can be connected to these objects. The design is, on the one hand, most probably hand carved by seamen on a wooden netting needle, on the bottom of a pewter jug or on the wooden structural elements of a building. The design is also carved into a brick prior to baking. Furthermore, the design is depicted seven times by potters on plates/dishes, once

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TABLE 1
Depictions of three entwined fishes by period and location of findspot.

Country/Period	15th c.	16th c.	17th c.	18th c.	19th c.	20th c.	Total
Belgium	2						2
France	1	1					2
The Netherlands	1	1	4				6
England		1		1			2
Germany			2				2
Switserland			0 or 1	1 or 2			2
Austria			1				1
Denmark			1		1		2
South-Africa						1	1
Total	4	3	8 or 9	2 or 3	1	1	20

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47 Becker 1997, 298; Iacobone 1997, 159.

48 Stork 2001, 258. With thanks to Dr. Wim Francois (K.U.L.) for this bibliographical reference and further literature concerning the 'Holy Trinity'.

49 Iacobone 1997, 159.

50 Braunfels 1954, XV.

51 Delahaye 2007, 172.

52 Simon 1952.

53 With thanks to Mr. Jacques Prudhon, resident of Luxeuil-les-Bains and secretary of the association 'Les Amis de Saint Colomban' for making a photograph available of the three fishes on a keystone of this church.

used as design in a ceramic mould to shape biscuits (?), once engraved on a seal mould, twice cast in metal by metalworkers, once chiseled in stone[54], and finally once painted on a copper plate. None of the aforementioned professions was placed high on the social-economic and/or artistic ladder. Only the guild plate from Vienna is situated higher on the artistic ladder than the other executions. The design, however, has so far not been identified on art works such as paintings, tapestries, sculptures or jewelry. The design thus did not seem to belong to the culture of the top layer of the society but rather to the so-called popular culture.

Judging from the comparative materials, the presence of the depiction of the three intertwined fishes is thus not at all limited to Walraversijde or the Flemish coastal area. The design can thus be located, as far as now been detected, in an area that –translated to the current countries—stretched from north to south from Denmark over Germany, The Netherlands, England, Belgium, France, Switzerland to Austria (fig. 3). The only geographical exception is South Africa. This is also the most recent example. The question arises whether this spread is realistic and not rather artificial and in other words, mainly a consequence of the literature easily available to the author. With 6 examples, The Netherlands clearly rank the highest. The remaining countries each produced two finds with the exception of Austria and South Africa in which only one example is known.

Upon closer investigation, all of the depictions are situated or found in a context that can at the very least be described as maritime or connected to water. This needs to be taken into account concerning the interpretation. This becomes very clear when we look at the geographical distribution within the aforementioned area and this can hardly be considered happenstance. The findspots are nearly all situated alongside the coast or in the coastal area (Walraversijde, Zandvoort, Haarlem, Amsterdam, Alkmaar, Kampen, Enkhuizen and Roskilde), near rivers (Bremen, Chalon-sur-Saône, Montereau-Fault-Yonne, Basel, Lohn and Vienna), on an island (Langeland) or even aboard a ship (the wreck of the Mary Rose). For a few of these examples this maritime context can probably even be narrowed to a so-called fishing context (Walraversijde, Enkhuizen, Langeland, Zandvoort, Vienna). Based on this spatial distribution, the area in which this design is found could be described as the 'southern North Sea area' or in other words, the coastal areas alongside the southern North Sea with an offshoot in the direction of the Baltic area and a few inland branches. The places where this symbol was found further inland (Bremen, Höxter, Montereau-Fault-Yonne, Chalon-sur-Saône, Basel, Lohn and Vienna) are all clearly located near a river: Weser, Seine/Yonne, Saône, Rhine and Danube. This could indicate that the design indeed spread from the coast via the rivers into the mainland. The oldest known examples do in any case come from the coastal area (Walraversijde).

Furthermore, the observation presents itself that this symbol has a near international distribution, from the Baltic area and the North Sea to the Alps. Remarkable is that these are often very similar depictions. The depiction on the netting needle from Walraversijde, for instance, is very similar to the three fishes incised into the brick coming from the city hall of Basel despite the fact that the two examples are quite distant in time as well as in area: three centuries and nearly 700 km. This may point to the fact that at its foundation lay a common and widely spread belief system.

The metal tip of a dagger or sword sheath, likely from Raversijde, including among others, the badges of two pilgrim shrines seems to suggest that the meaning of this design/symbol needs to be searched for in the religious realm: the aforementioned 'Holy Trinity' is therefore a strong possibility. Moreover, when we interpret the symbol with the rose as 'Anna-of-Three', the number three appears three times: three fishes, three Hosts of Wilsnack, and Anna-of-Three. Based on the finds, though with a slight nuance given the meagre statistical base, we have to conclude that this symbol occurred mainly in the period of the 16th and 17th centuries, in both catholic and protestant areas.

The interpretation as a sexual symbol, on the other hand, is supported by the material sources and particularly by a 15th-century token from Nuremberg (Germany) with the depiction, in the manner of the three fishes from Walraversijde, of three entwined phalluses[55].

The English institution 'Trinity House Service' however, would give the religious interpretation (Holy Trinity) a clear maritime turn, which given the distribution of the finds does not seem completely illogical. This institution is responsible in England and Wales for, among others, light houses, lightships, and buoys. The history of it can be traced back to 1514, when Henry VIII issued a ruling for the management of pilots. This institution was under the direction of the so-called 'Elder Trinity Brethren' who were recruited among the seamen. Trinity brethren existed, in any case, already for some time prior to 1514 since two of them are buried in the church of Leigh (Essex, England) and respectively died in 1453 and 1471[56]. The available information suggests that this institution evolved from a medieval seamen's guild[57], a so-called Trinity guild (?) which wasn't completely formalized until the 16th century. The 'Corporation of the Trinity House of Deptford Strond' provided for the housing of seafarers of advanced age or their widows[58]. The three fishes however are not known as a symbol or mark of this organization, Trinity House Service, nor of the possible Trinity Guild from which Trinity House Service could have originated. Despite this fact, it remains very attractive to interpret this symbol in this meaning, certainly given the fact that a number of the finds with this design are explicitly situated in maritime environments, among which also a number of fishing communities can be found. In Vienna the symbol is clearly used in the 17th century by the guild of the Danube fishermen from Vienna.

54 **Depictions in bricks incised prior to baking, do occur more often. In most cases these are done rather playfully by the people who shaped the bricks and/or laid them to dry.**

55 **Labrot 1989, 138.**

56 **Tarrant 1998, 9.**

57 **Jarrett et al. 2004, 25.**

58 ***Ibid.*, 25-29.**
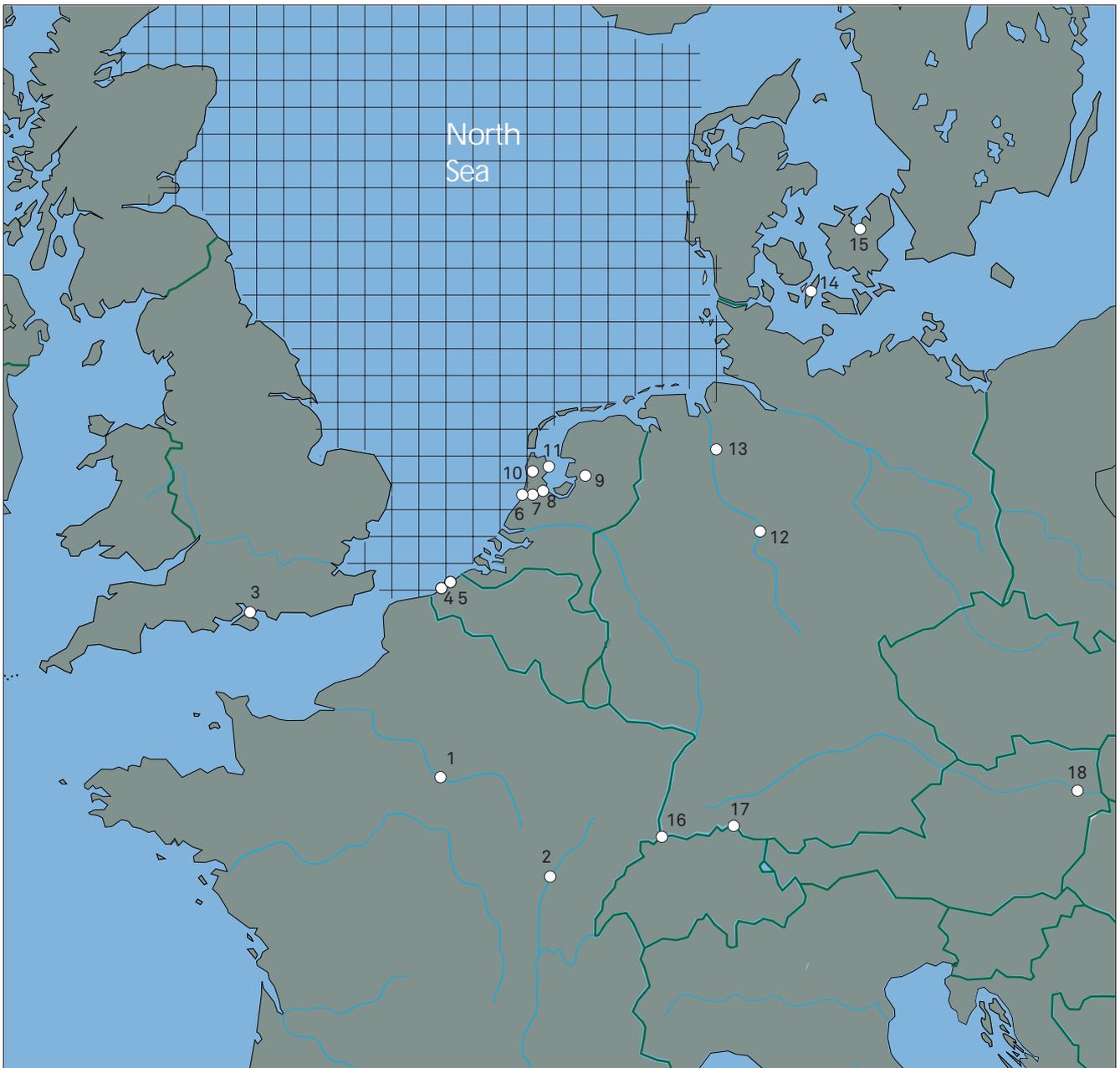
FIG. 3   Map with findspots of objects or structures with a depiction of three intertwined fishes.
Legend: 1: Montereau-Fault-Yonne; 2: Chalon-sur-Saône; 3: Mary Rose/Portsmouth; 4-5: Raversijde; 6: Zandvoort; 7: Haarlem;
8: Amsterdam; 9: Kampen; 10: Alkmaar; 11: Enkhuizen; 12: Höxter; 13: Bremen; 14: Langeland; 15: Roskilde; 16: Basel; 17: Lohn; 18: Wien.

In short, this seems to be a maritime adjustment or translation of a concept – in this case a religious one – of the Holy Trinity. In the Middle Ages it occurred regularly that concepts also had a sexual connotation[59]. The examples of the symbol presented here represent without a doubt only a small fraction of what actually exists. The author would greatly appreciate it if readers would notify him about examples not included in this overview.

This story of the netting needle with the three fishes found during the archaeological excavations at Raversijde in 1996 and the network of comparable objects spread out over a substantial part of present-day Europe that can be connected to it, show that archaeological research is more than the finding of intriguing objects and that behind all those objects indeed hides a story, lurks a meaning woven into the context. This story deals with revealing the identity of the fishing

community, but most likely also with warding off bad catches or stimulating good catches or invoking the Holy Trinity or ...

It also shows the universal character and the universal value of heritage research, in this case more specifically, archaeological and architectural research. Such research very often is unjustly considered as merely important on a local or regional level due to the predominantly descriptive character of many publications involved.

It is to the merit of the emeritus honoured in this *Festschrift* to have emphasized these aspects for decades and in this way to have delivered an important contribution to the archaeological debate in Flanders, but also outside of it.

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Tripod ewers from medieval households: some thoughts on new discoveries

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with a contribution by Mary Davis

1 Introduction

Medieval ewers or 'lavers' were by definition used to pour water for hand-washing, either at meals or at Mass (Anglo-Norman 'ewe', water; 'laver', to wash; 'lavour', water-jug). Ritual hand-washing by priests in preparation for celebration of the Eucharist could involve a variety of vessels, including gemellions, aquamaniles and ewers[1]. The secular role of ewers – at times private, at times public – is indicated by contemporary depictions, as well as listings in documents, the texts that some ewers bear, and the occasional discovery of the remains of such vessels in domestic archaeological contexts.

Tripod ewers cast in copper-alloy by the lost wax process were made in a variety of forms and metals. This paper adds to the published corpus of copper-alloy tripod ewers, in a small tribute to Frans Verhaeghe's advocacy of artefact studies and the historical-anthropological approach to seeking answers about everyday life in medieval Europe. It focuses on two particular forms (*Groups B* and *C*), although the stylistic scheme developed by Lewis is extended for the more elaborate examples, such as those with swan-neck spouts and waist carinations, based on the masterly catalogue published by Anna-Elisabeth Theuerkauff-Liederwald in 1988[2]. Ewers and jugs with flat bases are not considered here.

2 Form and composition

Early tripod ewers are characterized by their rounded body form, long tripod legs which can have out-turned feet (either plain or in the form of a stylized animal paw), either a pouring lip or a long tubular spout and plain strap handle. Spouts might end in the head of some fabulous beast, ranging in style from detailed heads with well defined features to simplified heads whose brows are defined by chevron-like mouldings (most

common for *Group B*; see below)[3]. In their elegant body forms and long spouts, ewers appear to emphasize and celebrate the act of pouring water, sometimes with an allusion to allegorical bestiary humour more directly reflected in aquamaniles, ceramic jugs and architecture. Form and performance was perfectly suited for hand-washing acts within both Christian church and home[4].

In his 1987 review of tripod ewers from Wales, John Lewis identified three main groups: those with pouring lips (*Group A*), those with pear-shaped bodies and curved tubular spouts (often of hexagonal cross-section) supported by a strut or 'bridge' to the neck (*Group B*), and those with straight tubular spouts, decorated with cordons around the body (*Group C*)[5]. He demonstrated that the commonest form, *Group B*, displayed limited variation in shape over its distribution, recognized as covering the British Isles, The Low Countries, and northern France. The 26 examples listed from Britain and Ireland pointed to predominantly British manufacture[6], and this was supported by Roger Brownsword's metallurgical analysis of the alloys. The alloy-compositions of Lewis's *Group A* were seen to conform to that of steelyard weights made in England, suggesting a London-made vessel of high quality. The alloy compositions of *Group B* from Wales were leaded bronzes of relatively high tin, and negligible zinc content[7].

Once one looks beyond Wales, the variations of body profile and proportions, and in the treatment of the feet (some taking the form of lion paws) increase, such as the examples from Germany illustrated by Dexel[8], and in particular those (63 examples) published by Theuerkauff-Liederwald[9]. These have been subdivided in Appendix 2 into *Groups A-H* (fig. 1). That there are typological similarities between some groups is clear (such as the body profiles shared by *Groups A* and *E*), but

1 Hütt 1993, 78-107.

2 See fig. 1 and Appendix 2.

3 Lewis 1987b.

4 For a recent discussion of this see Müller 1997, 251.

5 Lewis *et al.* 1987.

6 *Ibid.*, 90-91.

7 *Ibid.*, 83, 90.

8 Dexel 1981, Abb. 402-4.

9 Theuerkauff-Liederwald 1988.

detailed discussion of all of these is beyond the scope of this short paper, which is primarily concerned with *Groups B* and *C*. *Group B* is subdivided into *Ba*, those with plain tubular spouts, and *Bb*, those with tubular spouts ending in animal heads, and *Bc*, those with double spouts. Formal variations within these subdivisions can be pointed out. For example, *Group A* can be further subdivided into those with and without lids, those with bowed strap handles or angled handles, plain feet or paw feet. As in the case of later ewers, the animal head forms are capable of further subdivision, depending on degree of stylization, from notches for mouths and chevrons for brow ridges, to more realistic eyes and ears (see fig. 1, bottom for some schematic examples). Tubular spouts can be straight or curved, smooth or facetted. Some *Group B* ewers have hollow-backed legs (eg Appendix 2, nos 1, 12 and 154)[10], while rim diameters vary. Ewer variants include that from Urswick (Appendix 2, no. 39) which has been considered a 'provincial', less elegant version of the *Group Bb*[11]. Some *Group C* ewers have bridges that are attached to rims rather than necks (eg Appendix 2, nos 139, 144). In addition to the bowed strap and angled forms, handles could occasionally be ornate (eg. Appendix 2, nos 149, 163). Some late 15th / early 16th-century tripod ewers listed by Theuerkauff-Liederwald[12] have not been included in this discussion.

3   Date

Early tripod ewer finds were sometimes described as 'Roman tripods'[13] (fig. 2), and the Inchtuthill ewer (Appendix 2, no. 56) was initially described as 'a rare bronze oil or wine vessel of Roman antiquity' by association with the Roman fort[14]. The medieval date for *Group B/C* ewers was established during the later 19th century through comparisons with representations on dated manuscripts, and the discovery of ewers containing coin hoards.

Metal vessels with straight tubular spouts and bridge supports appear in 13th-century manuscript illustrations, such as the flat-based example on a dispensary shelf, in an Anglo-Norman translation of Roger of Palma's *Chirurgia* (*c.* 1230-50)[15]. Fourteenth-century depictions of *Group B/C* tripod ewers include one being carried by its handle in a servant's left hand, with a basin in his right, in a manuscript made in England during the early 14th century, which belonged to St. Bartholomew's Priory, London, in the late 15th century[16]. A mid-14th-century *Roman de la Rose* depicts a small version of a *Group B* ewer besides a basin, on a table, in a scene showing the young Dreamer seated in his bedroom[17]. The well-known marginal image from the Luttrell Psalter of *c.* 1335-40 shows a man holding a ewer by its leg and handle, in the act of pouring water in

'an unidentified game of skill'[18]. The ewer depicted in this manuscript has a curved tubular spout with bridge, and possibly a neck cordon, and is closest in form to *Group B*. Less well known is the depiction of a ewer in the scene of Christ before Herod, in the Holkham Bible, thought to have been made in London during 1337-40[19]. The ewer is clearly shown with a curving tubular spout (plain mouth) and bridge, single cordons on the waist and neck, and everted feet, corresponding to *Group Ba* or *C* (see below). The waist lines (representing a cast cordon) and a straight spout with bridge apparent on the gilded depiction of a ewer in an early-14th-century manuscript illustration of Pilate washing his hands[20] suggest *Group Ca*.

Earlier commentators have noted the appearance of a ewer below a bell as a device on a 14th-century brass seal matrix of 'Sandre' (possibly Alexander, Sanders) of Gloucester, presumably a bell-founder. The legend around the waist reads '... AVE...', presumably a partial depiction of the word LAVER that appears on ewers of the period, rather than the angelic salutation AVE MARIA PLENA GRATIA which has also been suggested[21]. The ewer is depicted with a swan neck and bridge, typical of *Group F* (see Appendix 2).

Of the twenty ewers listed by Lewis from Scotland and England, only two from *Group Bb* are closely dated: one used to contain a coin hoard of over 700 silver and 12 gold coins from Balcombe, Sussex, deposited *c.* 1380[22] and one discovered at the edge of the Cathedral Green at Fortrose (Cromarty), holding a hoard of silver coins deposited *c.* 1400-1406[23]. The hoard of metalware from Huis te Haarlem, North Holland, provides a dated context for another (1328-1351)[24].

As one might expect, excavations on land have tended to produce evidence for later dates for the final deposition of ewers or their fragments. A slender, triangular-sectioned leg with a well made foot from late 15th/early 16th-century deposits at Bedern, York, may come from a ewer[25]. A *Group Bb* tripod ewer was found during excavations in 1982 in a garden of the abbey precinct at Arbroath[26]. Found on its side on a narrow pit, it is thought to have been deposited while the abbey precinct wall was still in use. Although construction dates for some sites might appear to offer *termini post quos*, the frequent lack of contextual information on such highly mobile objects makes such assumptions unreliable.

This general scarcity of secure contextual evidence has limited refinement of the longevity of the form or its chronological development. Of the forty examples of ewers with curved tubular spouts listed by Theuerkauf-Liederwald in 1988, the majority were either unprovenanced or had imprecise provenances,

10 Bangs & Northover 1999, 26.

11 *Ibid.* 26.

12 e.g. nos. 256-62.

13 Walford & Way 1856, 74; Ayre 1897.

14 Perth Museum archive.

15 Cambridge, Trinity College, MS O.1.20, fol. 261r.; Hunt 1992, 666-667.

16 London, British Library, Royal 10 E.IV fol. 25v, a copy of the Decretals of Gregory IX.

17 Paris, Bibliothèque Nationale de Paris, MS fr. 1565, fol. 1r; Fleming 1969, fig. 2.

18 London, British Library, Add. MS 42130, fol. 157v.; Brown 2006, 43.

19 London, British Library, Add. MS 47682, fol. 30r.

20 In a Book of Hours thought to come from the Maastricht area; Theuerkauff-Liederwald 1988, 174, fig. 38.

21 Tonnochy 1952, pl. 13, no. 620; Walford & Way 1856, 73; Cherry 1977, 200.

22 Thompson 1956, no. 22; Appendix 2, no. 32.

23 Geddie 1879-80, 182ff; Thompson 1956, no. 165; Appendix 2, no. 41.

24 Renaud 1963; Appendix 2, no. 79.

25 Ottaway & Rogers 2002, no. 14193.

26 Pollock 1998, 279-81; Appendix 2, no. 44.
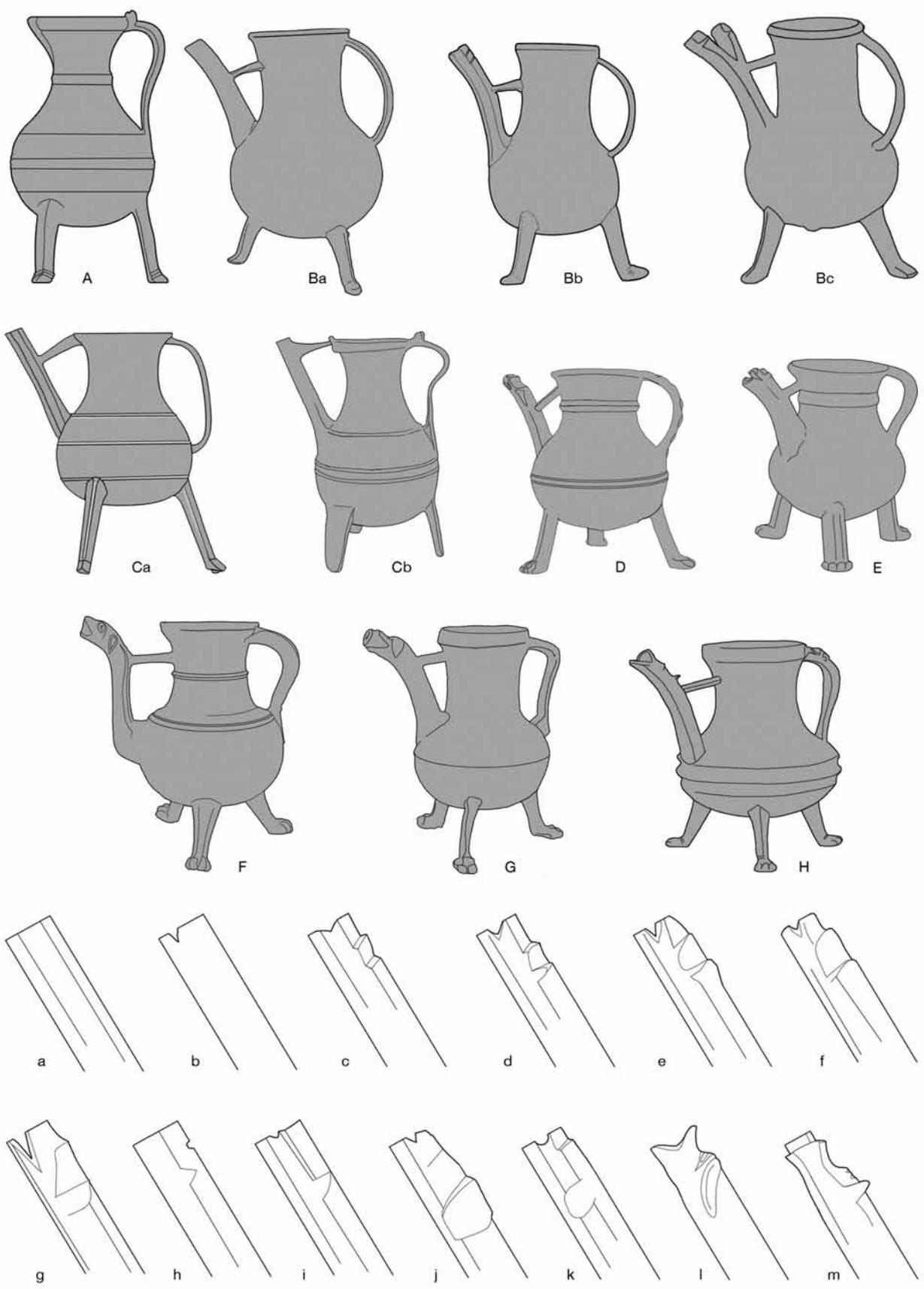
FIG. 2 Early depictions of tripod ewers: a: from *Archaeologia* 1774 (Closeburn Castle); b: from *Archaeological Journal* 1856 (Norwich).

being early finds, though one example in the British Museum (1902-5-24.1) can now be attributed to Sandon in Essex (Appendix 2, no. 37). Appendix 2 now lists 68 provenanced examples and 42 unprovenanced examples for *Group Bb*, and no doubt more await incorporation.

Of particular significance for chronology, function and spread of *Group Bb* is the tripod ewer discovered on the wreck of the Darss cog, lost off the coast of Mecklenburg-Vorpommern in the *Ostsee*[27] (fig. 5: 6). Recent excavation and analysis has established that the cog was built after 1293 in southern Baltic (the Weichsel Estuary). A barrel of sulphur provided a felling date of 1335, providing a *terminus post quem* for the sinking. Other metal vessels found on the cog, which appears to have had a cargo of roof tile and Norwegian whetstones as well as sulphur, include a number of cast copper-alloy tripod cauldrons or *Grapen*, one bearing a casting mark of Lübeck[28]. This tightly-dated assemblage confirms that the *Group Bb* ewer, once thought to have emerged towards the end of the 14th century, was popular during the first half of the century (thus supporting the evidence of manuscript sources)[29]. The appearance of a *Group Bb* ewer onboard this cargo vessel illustrates the highly portable nature of such objects: the ship appears to have been trading between Norway *via* Skagerrak and the Baltic. Post-excavation analysis still needs to determine why the object was on board – such as personal belongings, private trade, ship's equipment. At which port of call it was acquired is not known, though direct Hanseatic trade with Britain is one possibility.

Metal vessels appear to become more common in households during the 14th century, and documentary evidence such as the Worcester Court Rolls has suggested that by the second half of the 14th century such vessels appear to have become standard equipment even in peasant households[30]. *Group B* ewers were therefore popular from at least the early 14th century, and remained in use into early 15th century. In households remote from the pressures of maintaining fashion, tripod ewers may have remained in use for lengthy periods. *Group A* and *E* ewers have also been dated through comparisons of the letter forms used in their inscriptions with those of English bell-founders, such as Richard de Wymbish and William Revel[31].

Dating of the later tripod ewer types has been recognized as problematic[32], and detailed consideration is beyond the scope of this paper. An exception is the *Group A* spouted tripod ewer from Gnoien, Mecklenberg, which has marks inside the rim also found on a bell dated 1435, and presumably cast by the same master[33]. In summary, *Groups F* and *G* tripod ewers with swan-neck spouts, some with lids, have legs ending in elegant paw feet, and appear to have been in circulation during the 15th and early 16th centuries (similar animal-head terminals also appearing on lavabos of this date). The popularity of the swan neck spout on ewers of various forms is illustrated by the depiction of a double-spouted example in Roger van der Weyden's central triptych panel *The Annunciation* of *c.* 1435-1440, which shows its use in a bedroom[34], and *The Virgin of the Annunciation*, once attributed to Hans Memlinc (1465-94) but

27 Förster & Jöns 2003, 14; see fig. 4: 6 and Appendix 2, no. 89.

28 Förster & Jöns 2003, 14.

29 Lewis 1978, 28.

30 Lewis *et al.* 1987, 89.

31 Finlay 1996, 4.

32 Theuerkauf-Liederwald 1988, 176.

33 *Ibid.*, 183; Appendix 2, no. 5.

34 Paris, Louvre, inv. no. 1982.

now to the 'Master of the Prado Adoration of the Magi' (active *c.*1470-1480)[35]. Theuerkauff-Liederwald has noted the illustration of a ewer (*Group G*) in a drawing by Dürer dated *c.* 1506[36].

4   Additions to the corpus

Many ewers (whole or fragmentary) await detailed study in museum collections and within excavation assemblages. While a complete survey of additional ewers found in Europe is not possible here, it is worth drawing attention to some examples that have come to light since Lewis and Theuerkauff-Liederwald published their lists.

This paper was prompted by the discovery in 1997 of a complete example of *Group Bb* at Bettws Newydd, Monmouthshire, about 3.5 miles (5.6 km) north of Usk (fig. 3; Appendix 2, no. 26). It has a weight of 1409.7 g and a capacity when full to the rim of 1½ pints (840 ml, compared to 1¾ pints for the Lanrwst ewer; Appendix 2, no. 140). The top of the spout is level with the rim, and notched on each side at the mouth end, and has chevrons on top typical of the debased form of animal head. With a height of 21.2 cm, the Bettws Newydd ewer falls in the mid-range for Welsh finds (174-260 mm), and is closest to the examples from Strata Florida Abbey, 'Kenfig', and Corwen[37]. Recorded height ranges for *Groups B* and *C* are presented in fig. 4. The ewer was found within or close to the silted-up depression around the low mound known as *Castell Crov*, at a depth of about 35-40 cm. Tide marks of corrosion within the vessel suggest gradual silting up, supporting its loss in a moat or waterlogged ground. Bettws Newydd ('new chapel') lies within the Hundred of Raglan, and in the Middle Ages formed part of the Lordship of Abergavenny. In 1963, trial excavation at the site, which was considered to be a possible castle motte established that the mound was artificial, but found no clear evidence for a castle ditch[38]. An area of silting was noted between the mound and a concentric berm around it, and Knight concluded that the mound may have been a large Bronze Age barrow. The site was rejected as a castle by Cathcart King[39], and an explanation for the loss of this ewer in what may have been waterlogged ground around this mound remains elusive.

Of the examples from Scotland now in Dumfries Museum, all share the curved spouts of Lewis's *Group B*, but three share plain spout ends (*Group Ba*; Appendix II, nos 15-17; fig. 5: 1-3). The example from Whitelawside Farm, Nicholforest, Canonbie, Dumfriesshire, has tripod legs with paw feet[40]. One of these also has a narrow vertical rather than splayed neck, ending with a thickened cordon rim (fig. 5: 3). Two ewers belong to *Group Bb*, though the bellies appear squatter and less rounded then the Bettws Newydd example: one reputedly from 'Dumfries'

(Appendix 2, no. 40; fig. 5: 5), and one found in peat-moss at Beuchan, Keir, Dumfriesshire (Appendix 2, no. 62; fig. 5: 4).

Of the tripod ewers from Ireland, three are of *Group Ba* and thirteen of *Group Bb*, including a well-preserved ewer from Co. Meath with a slightly curved spout (Appendix 2, no. 76) and one of *Group Bc* with paw feet and a spout bifurcating into two separate heads from Roosky, Co. Monaghan (C. Bourke, *in litt*.; Appendix 2, no. 138).

5   Discussion: manufacture, distribution and use

Early tripod ewer finds were described as 'brass pots'[41], and for many years the view was that they were made in Flanders[42]. Analytical techniques available since the 1970s have now been applied to characterize the alloys used in their manufacture, in terms of the relative amounts of zinc, lead and tin in the copper alloys[43]. The paper published in 1987 by Lewis *et al.* has resulted in an occasional assumption that 14th-century ewers are of Welsh manufacture. In fact, this research established through metallurgical analysis that it is probable that most were manufactured on a wider scale in the Low Countries and Britain[44]. Brownsword's analysis of some 140 ewers and jugs has shown that many are of lead-rich leaded bronzes associated with English manufacture, while others contain higher levels of zinc[45]. However, he notes that the haphazard nature of metal supply during the 14th century might have required the remelting of damaged and discarded brass objects, resulting in greater variability of alloy composition than that found in later products[46]. Thus it has been suggested that the relatively high zinc component of the alloy for the *Group A* tripod ewer from the Gower (18.3%) may represent remelting by an English founder of scrap leaded bronze with imported continental brass[47].

Metallurgical analysis by Mary Davis has shown the alloy of the *Group Bb* ewer from Bettws Newydd to be a heavily leaded bronze (around 15-25% lead; Appendix I), though these semiquantitative results need to be used with caution. The zinc/tin content (5.1% Zn, 4.2% Sn) is generally similar to the composition of ewers from Strata Florida and Llandefalle (though they have lower lead content: 4.31-4.38%); however, the overall alloy composition appears closest to that for the ewer from Corwen (copper 67.1%, zinc 4.87%, tin 6.59%, lead 18.8%). Lewis *et al.* have argued that the Welsh examples *may* have been of English manufacture, and the high lead content for the Bettws Newydd ewer suggests that it came from a similar source[48]. *Group Bb* ewers from the Netherlands include an example with a high tin content from the Mariënburg, in the centre of Nijmegen[49], probably associated with the Mariaburg convent.

35 The Burrell Collection, acc. no. 35.533.

36 Theuerkauff-Liederwald 1988, 177 and fig. 40.

37 Lewis *et al.* 1987, 81; Appendix 2, nos 27, 28, 30.

38 Knight 1963, 125-126.

39 King 1983.

40 DUMFM: 1993.29, not illustrated; Richardson 1999, 27-29.

41 Walford & Way 1856, 74.

42 eg Turner 1982, 25.

43 eg Blair & Blair 1991, 82-5; 93-95; Brownsword 1991; Brownsword & Pitt 1996, 12.

44 Lewis *et al* 1987, 88-89.

45 Brownsword 2004, 96-97.

46 *Ibid.*, 94.

47 Brownsword & Pitt 1996, 11; Fowler 1996, 5.

48 Lewis *et al.* 1987, 88.

49 Van Enckevort & Thijssen 2000, 48.

Sites producing evidence for the casting of copper-alloy domestic vessels in medieval England include large urban centres, as well as castles; the number of known sites peak from the second half of the 13th to the end of the 15th century. This suggests a widespread distribution of production sites across England, though mould fragments are sometimes too small to allow the certain identification of the objects being cast[50].

Other commentators have argued for a 'Netherlandish or North German' source for some *Group B* ewers[51]. Certainly the Meuse Valley and north Germany were the sources of so much copper-alloy metalware imported to Britain in significant quantities, and some alloy compositions (leaded brasses with higher zinc components) have suggested manufacture in Flanders[52]. Archaeological evidence for the production of large

50 see Dungworth & Nicholas 2004 for a recent review of the evidence.

51 e.g. Sotheby's 2006, 147; Barnet & Dandridge 2006, cat. No. 53; Renaud 1963.

52 Brownsword 2004, 97.
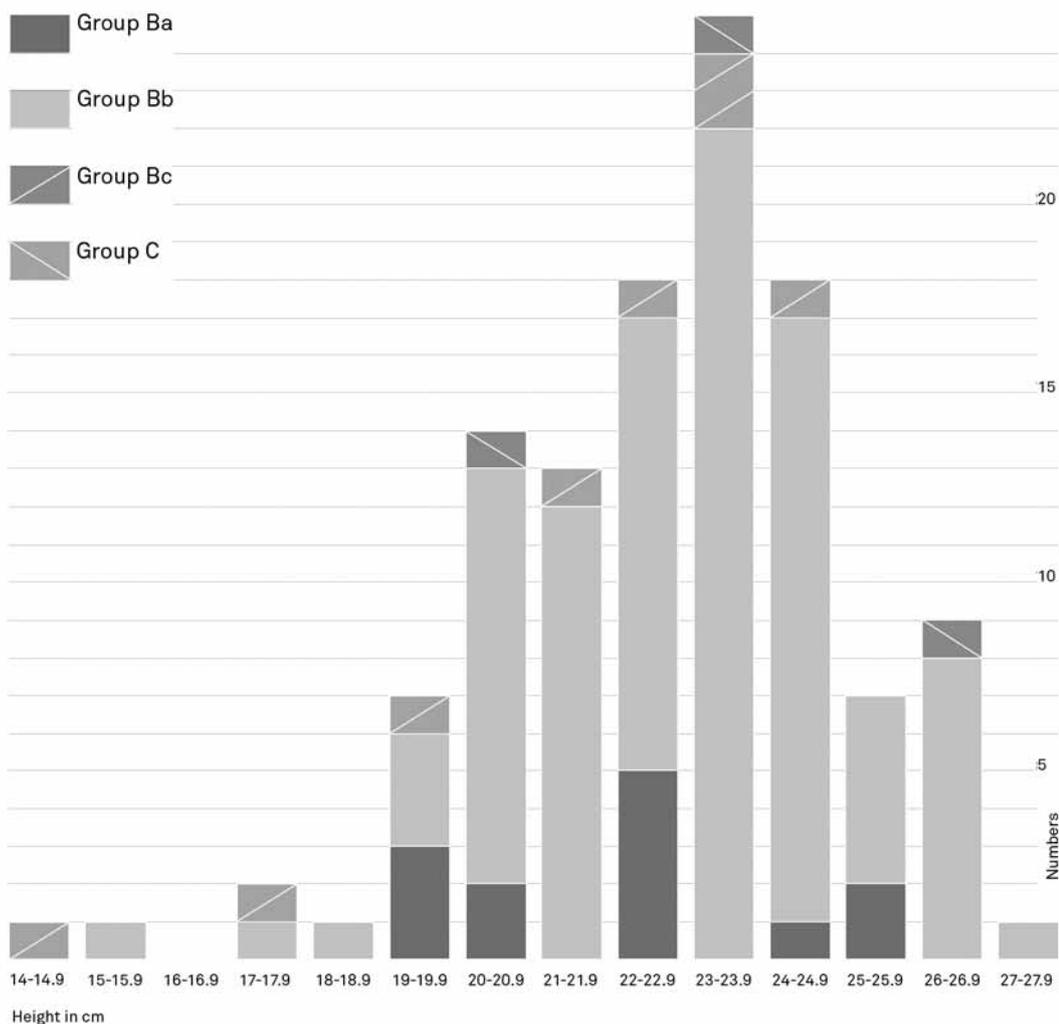
FIG. 4 Recorded heights for Group B and C ewers (© National Museum of Wales).

domestic vessels such as cauldrons has been reported from Lübeck, Germany (13th century)[53], Odense, Denmark and Uppsala, Sweden[54].

The distribution of recorded ewers (fig. 6), with an apparent concentration in southern Scotland and Ireland, needs to be considered with caution – being influenced by differential survival patterns and collecting practices, and uneven reporting. Moreover, it is unclear whether items without secure provenances, now in private collections, were originally 'locally' derived from their present country of residence. Nevertheless, the plotted distribution shows the popularity of *Group B/C* ewers in Britain, also suggested by the clarity with which they are depicted in manuscripts made in England. Certainly such ewer forms were familiar to illuminators working in London, as commonly used vessels associated with hand-washing in

style (and supporting 'English', or at least British, manufacture for many examples). Nonetheless, *Group Bb* ewers with debased chevron spouts appear to be widely distributed in Britain and on the Continent.

Workshops manufactured a wide range of objects, from domestic candlesticks to cauldrons and larger objects such as lecterns and bells, and it seems likely that the letters appearing on ewers may have been be re-applied from bell production[55]. In view of the diversification in production by some bell founders, it is also interesting to note similarities in form (though not scale) between the pear-shaped bodies of ewers and depictions of early guns produced by bronze foundries. Best known is the vase-shaped weapon illustrated in Walter de Milemete's treatise *De nobilitatibus, sapientiis, et prudentiis regum* of 1326/7[56] – sometimes called a 'tulip gun' because of its bulbous end and

53 **Gläser 1988.**

54 **Anund** *et al.* **1992, 221-242.**

55 **Cherry 1977, 200.**

56 **Oxford, Christ Church, MS 92 fol. 70v; Smith 1999, fig. 1.**

FIG. 5 *Group Ba* ewers: 1 & 3: farm near Whithorn; 2: uncertain provenance (© Dumfries Museum). *Group Bb* ewers: 4: Beuchan, Keir, Dumfriesshire; 5: 'Dumfries' © (Dumfries Museum); 6: the Darss Cog (photo: Roland Obst, Erfurt).
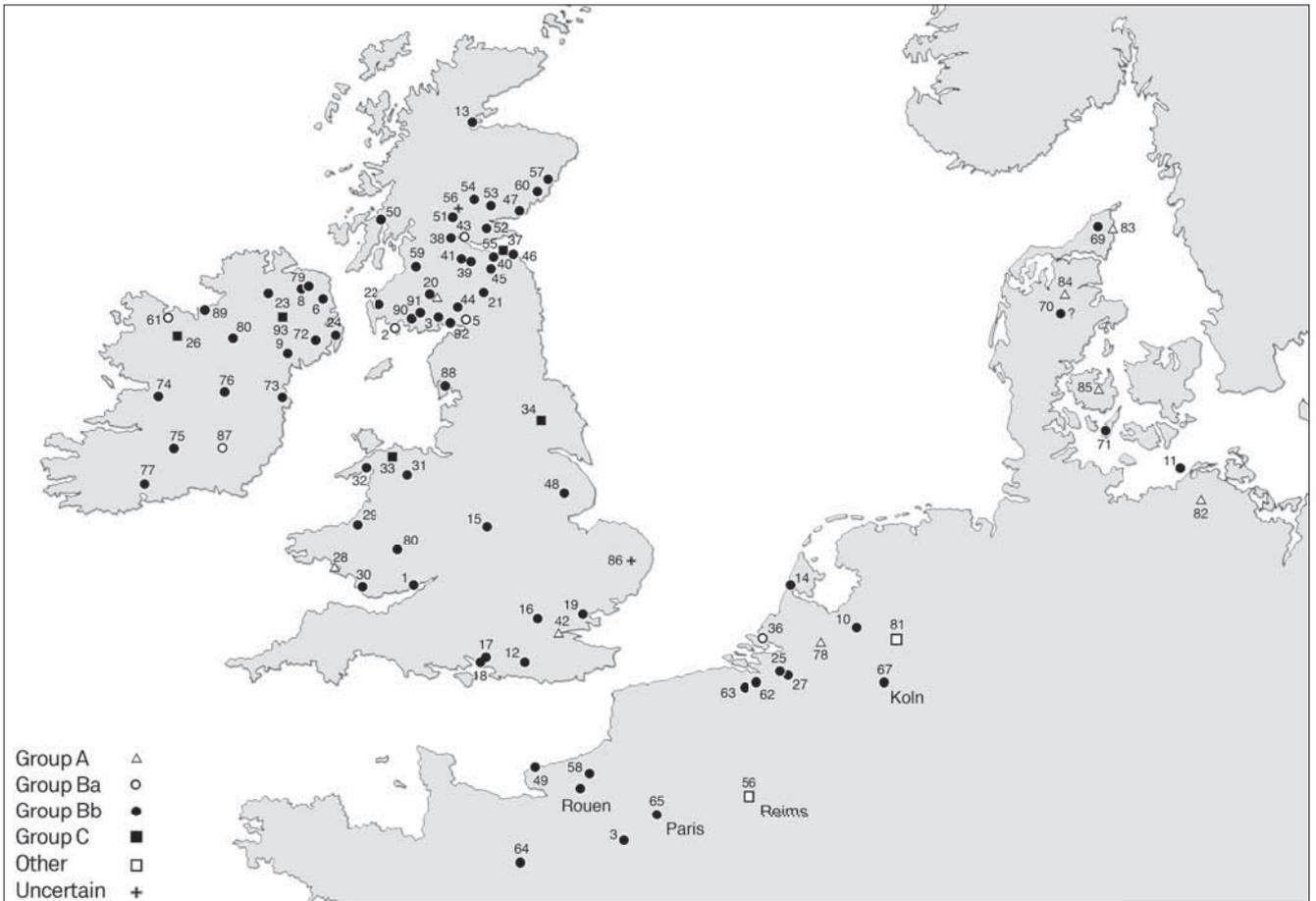
FIG. 6 Distribution of tripod ewers, by main groups (© National Museum of Wales).

flaring mouth: seemingly a scaled up and modified version of a hollow vessel form such as a ewer, cast in a foundry geared up to the production of other large objects. Had the illuminator actually seen a gun, or was he drawing from his personal knowledge of other objects from foundries? Some surviving early guns had different forms, such as the 14th-century Loshult gun from southern Sweden.

As Verhaeghe has reminded us, there are ceramic counterparts to the metal ewer, and some features such as the tubular spout and bridge were copied directly in some wares[57]. In a similar way features occurring on some green-glazed wares resemble those on metalwares. For example the narrow neck, cordons and spherical body of the Gower ewer recalls early 13th-century green-blazed bottles from the Ile de France and Lower Seine region[58]. The ceramic imitation of metalware ewers in redware descendants of highly decorated Flemish wares of the late 12th to 14th centuries[59] makes sense in view of their geographical spread. Their implied popularity supports Brownsword's conclusions based on metallurgical analyses that metal tripod ewers decorated with zoomorphic spout-ends were made on both sides of the Channel, not only in England (where most ewers of *Group B* appear made) but also in Flanders[60]. A variation of the 'classic' form (*Groups Bb* and *C*) not listed in Appendix 2 is a 'tin' ewer from Rilland, Zeeland (Netherlands)[61]. The shorter neck and longer, oval body form with horizontal cordons places this ewer in a different series of continental ewers.

Ewers reflected the established social ritual of formal hand washing which developed in upper society during the 11th to 13th centuries, and led to the development of a variety of vessels, including aquamaniles and lavabos[62]. Such vessels could serve the act of Christian liturgical ritual or that of profane washing for hygienic reasons, linked to practices in the Islamic world. They did not, of course, function in isolation, but would have been used with other vessels such as basins of thinner, beaten metal[63]. This association is depicted in 14th-century manuscripts such as those cited above, as well as later sources such as wills. That of Robert Corn Citizen of London, dated 1387, records his '*lavour of peuter*' and '*basyn of led*'[64]. That of Roger Flore (or Flower), of London and Oakham, Rutlandshire, records his '*basyn and an Ewer of sylvere*'[65]. That of Lady Peryne Clambowe of 1422 records her '*flat basyn and an ewer*', while that of Thomas Bath of Bristol dated 1420 records '*iii bascinus the best that I have, with ij laverus*'[66]. The 16th-century 'Rites of Durham' recorded that '*bason*' and '*ewers of Latten*' stood in the Frater aumbry and were used "*in their dayly service at their dyett and at their table*"[67].

Ewers and basins had private, personal uses. Humphrey de Bohun, Earl of Hereford (d. 1361), left to his sister, the Countess of Devon, the brass basin in which he used to wash his head; Richard, earl of Arundel (d. 1397) bequeathed his wife, Philippa, vessels for her ewery, including a pair of ewers and a pair of basins which she was accustomed to use for washing before lunch and supper[68]. As Müller and others have demonstrated, the growth of production of aquamaniles and other water pouring vessels during the late 12th and 13th centuries in copper alloy and glazed ceramics suggest the wider imitation and adaptation of upper class social behaviour by middle class groups, and gradual popularisation of the phenomenon in coarser wares. Water for secular hand-washing at table would have been hot or cold, depending on the time of year[69]. It might have been prepared by boiling with sage, chamomile, marjoram or rosemary[70]. It has been suggested that tripod ewers with their tall feet could have been placed on hearth embers to heat the water[71].

The so-called 'Hanseatic' bowls (*Hansaschalen*), made from copper alloy with distinctive decoration on the inside of the vessel, are well documented. Their distribution covers northwest Europe, north-east Poland, and the Baltic (e.g. Prussia, Estonia)[72]. Enamelled gemellions appear to have been high quality goods and expensive, and used within limited circles[73]. It has generally been thought that from the 14th century, simpler metal basins appear to have become available to a wider sector of society in less wealthy households. These were the products of the copper sheet metalworker, the terminology for whom (copper-smith, *lattener*, latten-smith) depended on alloy composition used. Occasionally found complete, they more frequently occur as fragments, their small size often resulting in their passing without much comment within site reports. A common feature is the use of metal patches to repair cracks (often on walls or rims) e.g. those from Writtle Manor, Essex[74]. The incomplete condition of many makes it difficult to be certain about vessel diameter, and the frequency of repairs makes it difficult to draw conclusions at times on the number of vessels represented[75]. Basins from urban contexts include a complete example with horizontal rim from Monmouth, found in the lower fill of a ditch thought to have been cut in the late 12th century and filled by the mid-13th century[76]. Others have been reported from Cannon St, London[77], Kings Lynn, Norfolk[78] and from an early-13th-century feature excavated at Full Street, Derby[79].

Examples from castles including fragments from Kidwelly[80] and Diserth[81] in Wales and a complete basin from Merwede

57 For examples produced in Stamford ware, see Kilmurry 1980, Fig. 72, no. 9; also Redknap 1993-4, fig. 1.

58 Meyer-Rodrigues 2005, 90.

59 Such as examples from Boudelo Abbey, Stekene, East-Flanders, and from Schiedam near Rotterdam: Gaimster & Verhaeghe 1992, 316.

60 Brownsword 2004, 97.

61 Found in 1989: the spout is missing, but closely related to *Group C*: van Heeringen 1989.

62 Weitzman-Fiedler 1981.

63 Lewis *et al.* 1987, 81.

64 Furnivall 1882, 2.

65 *Ibid.*, 55.

66 *Ibid.*, 46, 49.

67 MS. L., 1656; Fowler 1903, 81.

68 Nichols 1780, 50, 129; Woolgar 1999, 167.

69 '*Þy Ewry borde with basins & lauour, watur hoot & cold*', in John Russell's '*Boke of Nurture*' c. 1460; British Library, Harl. MS 4011; transcribed in Furnivall 1868, 132.

70 Brereton & Ferrier 1981.

71 Theuerkauff-Liederwald 1988, 171; Barnet & Dandridge 2006, 189.

72 For further discussion, see Müller 1997, 252.

73 Weitzmann-Fiedler 1981.

74 Rahtz 1969, fig. 50: 115.

75 Egan 1998, 159.

76 Redknap 2001.

77 BM 54, 11-30, 38 and 39.

78 Kings Lynn Museum & Art Gallery.

79 Hall & Coppack 1972, 38-9, fig. 6, 10.

80 NMW acc. no. 30.381; K III 2-5.

81 NMW acc. no. 15.249/46.

near Dordrecht, The Netherlands[82]. Analysis by Mary Davis of the Kidwelly and Diserth fragments has established a high copper content (88.6-91.3%), with similar amount of zinc (3-4.4% and tin 3.1-4.4%). The low lead is consistent with the need to avoid cracking during working, while copper or a true brass provide the most satisfactory ductile alloys for shaping by hammer.

Bowls from ecclesiastic sites include a virtually complete hemispherical bowl of copper-alloy sheet, from 46-54 Fishergate, York, associated with levelling of ground prior to early-13th-century construction of the Gilbertine Priory[83]. The excavators have suggested a possible association with the 11th-/12th-century church of St. Andrew mentioned in a charter of 1142[84].

Plain wash-basins are depicted in 15th-century paintings of Flemish interiors below lavabos (hanging cisterns) or paired with ewers, for example, Hans Multscher's 'Christ before Pilate' on the Wurzach Altar (1437) and Jan/Hubert van Eyck's Altarpiece at the Cathedral of St. Bravo, Ghent, of 1432[85]. A 15th-century painting by the Master of Flémalle illustrates a wide dish supported on a tripod support made from lathe-turned wood[86]. The use of metal basins in urban contexts during the 13th and 14th centuries, and their frequent patching, mirror the continuing importance of keeping up appearances.

The extension of material comfort and living standards and the creation of mass-produced, specialised metal vessels – the popularization of metal wares – developed alongside the extension of social customs and the emulation of the behaviour of elite classes among the less well off (in emulation of precious metals). The recorded findspots for ewers vary considerably in nature from abbeys and ecclesiastical sites (e.g. Strata Florida, Fortrose, Arbroath) and high status castles (e.g. Ashby-de-la-Zouch, Caerleon) to open moss-land – presumably on marginal land where they may have been abandoned for a variety of reasons, from concealing coin hoards or valued vessels from official collectors, to theft and the systematic collection of scrap metal for recycling. Of course, ewers found on ecclesiastical sites need not have been used liturgically, but in a secular context within guest houses. 'Merchant'-class sites include the larger towns, and some like Innermessan in Scotland, the main medieval settlement on Loch Ryan, and an important harbour[87]. While the general distribution of the main ewer groups has been plotted, there are gaps in coverage and reporting. Two things are clear – ewers could travel considerable distances, and a significant number of manufacturing centres are likely (also implied by metallurgical compositions and stylistic differences).

What about future studies? While this paper draws attention to some recent finds, our understanding of metalware in terms of compositional variation, characterization of sub-populations or dating remains limited. The most obvious deficiencies in this study are:

1) The absence of a close study of formal variation within the main groups and how these might reflect regional production.
2) Uneven cataloguing within regions; while the corpus for Wales, Scotland and Ireland is fairly detailed, other countries (including England) have been less comprehensively covered.
3) The need for further correlation of alloy compositions with date and formal variation.
4) Limited social contextualisation for ewers and associated *mobilia*.

Factors to consider in future will be regional patterns in retention, recycling and disposal, the interplay of metalware with similar vessels manufactured in other materials, and whether households in less wealthy, predominantly rural areas tended to retain the use unfashionable metalware for longer periods.

Time has prevented pursuing these aspects in more detail. In his thoughtful examination of the broader context and significance of ceramic ewers, Frans Verhaeghe has considered their relationship to more costly metal counterparts, within the dynamics of a medieval consumer society[88]. In updating the list of those metal counterparts and their published sources, I hope this offering will contribute in some small way to a better understanding of these consumer dynamics[89].

The author would welcome further information on tripod ewers or 15th-century pedestal-based ewers (and their spouts).

Acknowledgements

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82 Renaud 1963; Dexel 1981, Figs 3, 4.

83 Ottaway and Rogers 2002, 2812 no. 15150.

84 *Ibid*., 2812.

85 Theuerkauff-Liederwald 1975, Abb.1 and 3.

86 'Mary and Child in Kamin', *c.*1438; Theuerkauff-Liederwald 1975, Abb.14.

87 J. Pickin, *in litt.*

88 Verhaeghe 1989a; *Ibid.*1989b; *Ibid.* 1991; Gaimster & Verhaeghe 1992.

89 Since completing this paper, the author has located another contemporary illustration of a tripod ewer in use on a Parisian Passion diptych attributed to *c.* 1275-1300, but possibly later: Lowden & Cherry 2008, no 22.

APPENDIX 1

Metallurgical analysis of the Bettws Newydd ewer

by Mary Davis

A drill sample was taken from the cast Bettws Newydd ewer [NMW acc. no. 98.33H] using a 1mm drill after removal of corrosion products from the surface in the drilled area; this sample consisted of fine powder; a small metal scraping was also taken from an area adjacent to the drill hole. The samples analysed using a CamScan MaXim 2040 scanning electron microscope (SEM) with an Oxford Link Isis energy dispersive X-ray spectrometer (SEM-ED). The analyses were carried out on areas of metallic copper alloy avoiding slag inclusions or corrosion where present and therefore representing the content of the copper phase.

The sample from Bettws Newydd was problematic, and the results should be looked at with some caution; the analysis showed widely variable lead levels (1-35%). Within leaded copper alloys, the lead usually occurs as small, finely dispersed spherical globules scattered at the grain boundaries and within the grains themselves. The drilled Bettws Newydd sample consisted of fine metal filings, and here it was impossible to analyse a relatively large area at one time; this resulted in lead being either over represented where it had segregated, or under represented where it was absent. The metal scraping probably gave more accurate results, but these were also very variable. A percentage range of both lead and copper totals from this ewer are given in the table below, rather than an average reading (table 1). Suitable methods for quantifiably analysing this type of sampled alloy (such as ICP-MS) were not available for this study. The sample from the Caerleon ewer spout was clipped at a broken edge rather than drilled, and the results from this piece are more representative.

TABLE 1
Comparison of alloy compositions for ewers from Wales, by percentage
(* = data from Lewis *et al* 1987)

Provenance	%Fe	%Cu	%Zn	%As	%Sn	%Pb
'Kenfig'*	0.8	79.3	6.23	0.33	2.19	10.2
'Strata Florida'*	0.57	76.2	10.3	0.62	4.8	4.31
Llandefalle*	0.71	86.9	5.36	1.92	5.36	4.38
Corwen*	0.33	67.1	4.87	1.95	6.59	18.8
Criccieth*	0.79	75.4	7.41	0.39	5.58	8.1
Llanrwst*	0.51	80.8	9.49	0.58	9.49	6.65
Bettws Newydd	0.5	60-75	5.1	1.1	4.2	15-25

APPENDIX 2

Cast tripod ewers: a checklist

Sites given in the following list appear where known on fig. 6.

Abbreviations:
BM   British Museum, London
NMS   National Museum of Scotland, Edinburgh
NMW   National Museum of Wales, Cardiff
NMI   National Museum of Ireland, Dublin
V&A   Victoria and Albert Museum, London

Group A (tripod ewer with pouring lip and lid)

Some of these have been attributed to the 15th century by Theuerkauff-Liederwald 1988

Wales
1. Gower; narrow neck with cordon; hinge for lid; everted feet with transverse ridge; two bands of Lombardic lettering (in Norman French): + IE SUI: LAWR : GILEBERT ; K/ I : MEMBLERA : MAL : IDEDERT : ('I am the laver Gilbert (or 'of Gilbert'); who carries me off may he obtain evil from it'); height 26 cm (Swansea Museum acc. no. A879.1; Lewis *et al* 1987, 82; Theuerkauff-Liederwald 1988, no. 249) (fig. 6: 28).

England
2. London; no lid hinge; bowed strap handle; paw feet; three bands of Lombardic lettering: THOMAS E(L)YOT HI RECO(M) MAND ME TO EV WYLLEAM ELYOT; height 30.6 cm (Museum of London acc. no. A 4587; Theuerkauff-Liederwald 1988, no. 271) (fig. 6: 42).

Scotland
3. Closeburn Heath, Dumfries and Galloway; found in a moss near Closeburn Hall; ?14th century; plain body; shoulder cordon; hinge for lid; everted feet; angled handle; height 21 cm (NMS acc. no. H.MC 14; Ward-Perkins 1940, 199; Lewis 1987a, Appendix I, 17; Theuerkauff-Liederwald 1988, no. 269) (fig. 6: 20).

Netherlands
4. Ammersoyen Castle, Arnhem; plain; no lid; simple paw feet; ?first half 15th century; height 25.7 cm (Theuerkauff-Liederwald 1988, no. 266) (fig. 6: 78).

Germany
5. Gnoien, Mecklenburg; made *c.* 1435; three cordons on body; height 24.2 cm (Schwerin, Staatliches Museum acc. no. K H 88; Theuerkauff-Liederwald 1988, no. 264) (fig. 6: 82).

Denmark
6. Elling, Nordjutland; no lid; paw feet; bowed strap handle; ?early 15th century; two lines of Lombardic lettering: SANCT SPIRITUS QUE COR SIT NOBIS: GRACIA; height 20.4 cm (Theuerkauff-Liederwald 1988, no. 265) (fig. 6: 83).
7. Hersom, Jütland; no lid; bowed strap handle; paw feet; ?end 14th century; height 16.8 cm (Theuerkauff-Liederwald 1988, no. 267) (fig. 6: 84).

8. Odense, from the kitchen of the Blackfriars; no lid; bowed strap handle; five cordons on body; paw feet; height 22 cm (Kulturhistorisk Museum, Møntergården acc. no. 117-1975; Theuerkauff-Liederwald 1988, no. 268) (fig. 6: 85).

Unprovenanced
9. Edinburgh, National Museum of Scotland; everted lip; two cordons on body; height '7½ ins'/19.5 cm (NMS acc. no. H.MC 20).
10. Edinburgh, National Museum of Scotland; no lid; cordons on body; straight, pointed legs; angled handle; ?14th century; height 23.6 cm (NMS acc. no. MD 1; Theuerkauff-Liederwald 1988, no. 270).
11. Glasgow, Glasgow Museums; truncated legs; angled handle; Lombardic lettering: JOHES DE VALEMERE (Walmer, Kent); height 23.4 cm (Burrell Collection, acc. no. 5 – 6.162; Bangs and Northover 1999, fig. 16).
12. Private collection; pronounced 'half beak' pouring lip; no lid; height 24.5 cm; Lombardic lettering: +LAVABO INTER INNOCENTES + MANVS MEAS + MISERERE ME ('I will wash mine hands in innocency: have mercy on me'; first phrase from Psalms 26/6; Bangs and Northover 1999, 25, figs 1,2).

Group Ba (tripod ewer with curved, plain tubular spout)

England
Unprovenanced:
13. London, British Museum; height 22.2 cm (BM acc. no. 54, 7-14, 318; Lewis 1987a, Appendix I, 12; Theuerkauff-Liederwald 1988, no. 195).
14. Oxford, Ashmolean Museum; height 24 cm (Ashmolean acc. no. 1952. 181; Lewis 1987a, Appendix I, 16; Theuerkauff-Liederwald 1988, no. 192).

Scotland
15-16. Whithorn, Dumfries and Galloway; both purchased in 1974 according to the accession register, 'from a farm near Whithorn'; heights: 22.5 cm and 19.5 cm (Dumfries Museum; DUMFM:1974.76.1; DUMFM:1974.76.2) (fig. 5: 1, 3; fig. 6: 2).
17. Nicholforest, Canonbie, Dumfries; height: 25 cm (Dumfries Museum; DUMFM:1993.29; Richardson 1999, 27-9) (fig. 6: 5).
18. Castlelaw on Blairhill, Alloa; height 22 cm (NMS acc. no. H.MC 10; Theuerkauff-Liederwald 1988, no. 206III) (fig. 6: 43).
Unprovenanced
19. Provenance unknown; height: 25.5 cm (Dumfries Museum; DUMFM: 1936.35) .
20. Provenance unknown, possibly 'local' to Carlisle; described as 'English' by Brownsword (2006, 65); height: 22 cm (Carlisle Museum; CALMG: 1997.325.458; Brownsword, Pitt and Richardson 1981, fig. 1).

Ireland
21. Ardagh by Ballina, Co. Mayo, found in a bog; height 20.5 cm (NMI acc. no. 1941:636; Theuerkauff-Liederwald 1988, no. 191) (fig. 6: 61).

22. Black Abbey, Kilkenny (Dominican Friary); found in excavations, 1810; height 19 cm (but the three feet are missing) (NMI reg. no. 1881.227) (fig. 6: 87).

Unprovenanced

23. 'from Ireland?'; height 22.7 cm (BM acc. no.1854.0714.318).

Netherlands

24. Spijkenisse, from choir of the Hervormde Kerk; height 20.8 cm (Rotterdam, Museum Boymans-van Beuningen Inv. Nr. O.M.B.B.I; Theuerkauff-Liederwald 1988, no. 194; Vreeken 1994, 103) (fig. 6: 36).

France
Unprovenanced

25. Paris, Musée des Arts Décoratifs; ex estate Lejeune-Laroze, 1923; height 19.5 cm (Musée des Arts decoratifs Inv. Nr. D 23.804; Theuerkauff-Liederwald 1988, no. 193).

Group Bb (tripod ewer with curved tubular spout ending in an animal head)

Wales

26. Bettws Newydd, Monmouthshire; height 21.2 cm (NMW acc. no. 98.33H) (fig. 6: 1).

27. 'Strata Florida Abbey', Ceredigion; height 23 cm (NMW acc. no. 27.319/1; Lewis *et al* 1987, 85 no. 3; Theuerkauff-Liederwald 1988, no. 227II) (fig. 6: 29).

28. 'Kenfig', Vale of Glamorgan; height 23 cm (NMW acc. no. 82.31H; Lewis *et al* 1987, 84 no. 2) (fig. 6: 30).

29. Llandefalle, Powys; height 22.8 cm (Brecknock Museum, acc. no. R 1053); Lewis *et al* 1987, 85 no. 4). (fig. 6: 80).

30. Corwen, Gwynedd; height 17.4 cm (NMW acc. no. 42.357/3; Lewis 1987, 85 no. 5; Theuerkauff-Liederwald 1988, no. 227I) (fig. 6: 31).

31. Criccieth Castle, Gwynedd; leg only (NMW acc. no. 41.299/7; Lewis *et al* 1987, 85 no. 6) (fig. 6: 32).

England

32. Balcombe, Sussex; height about 24 cm (Cooper 1899, 209-13; Thompson 1956, no. 22; Lewis 1987, Appendix I, 2) (fig. 6: 12).

33. Ashby-de-la-Zouch Castle, Leicestershire; height 22.5 cm (found down a well in 1938; V&A Museum: M25.1939; Simms 1938, 179; Turner 1982, 25; Lewis *et al* 1987, Appendix I, 1; Theuerkauff-Liederwald 1988, no. 190) (fig. 6: 15).

34. 'from an old house' at Battersea, London; height '9.2ins' (23 cm) (Museum of London: A 2752; Ward-Perkins 1940, 201, plate 53; Lewis *et al* 1987, Appendix I, 3; Theuerkauff-Liederwald 1988, no. 229) (fig. 6: 16).

35-36. Southampton; two examples; heights 21 cm and 23.8 cm (Southampton Museum: A6.1983; and SOU 122.547; Lewis *et al* 1987, Appendix I, nos 4, 5) (fig. 6: 17).

37. Sandon, Essex; height 23.8 cm (BM acc. no. 1902,0524.1) (fig. 6: 19).

38. 'nr. Lincoln'; height '10½ ins' (26.7 cm) (*The Searcher*, August 1994, 26) (fig. 6: 48).

39. Urswick, Cumbria; found about 1772 near to the church; height 21.6 cm (Ayre 1897; Bangs and Northover 1999, fig. 7) (fig. 6: 88).

Scotland

40. 'Dumfries'; purchased locally (J Turner, *in litt.*); height: 24.0 cm (Dumfries Museum: DUMFM:1963.5) (fig. 6: 3).

41. Fortrose, Ross and Cromarty; found with over 1100 silver coins and a lead cover; height 21.6 cm (NMS acc. no. H.MC 16; Geddie 1879-80, 182-219; Thompson 1956, no. 165, pl. IId; Lewis *et al* 1987, Appendix I, 18; Theuerkauff-Liederwald 1988, no. 188) (fig. 6: 13).

42. Hawick, Roxburghshire; found in the 'Roman camp' in 1878; animal paw feet; alloy considered typical of the 'Flemish' alloy group (Brownsword, Pitt and Richardson 1981, 54); height 24 cm (Carlisle Museum; CALMG: 1997.325.459; *ibid*, 49, fig. 2; Lewis *et al.* 1987, Appendix I, 19) (fig. 6: 21).

43. Innermessan, Stranraer, Wigtownshire; height 20.8 cm (NMS: H.MC 4; Maxwell 1888-89, fig. 45; National Museum Scotland 1892, 321; Lewis *et al* 1987, Appendix I, 20; Theuerkauff-Liederwald 1988, no. 212III) (fig. 6: 22).

44. Arbroath Abbey, Angus. Found buried in a narrow pit during excavations on Arbroath High Street, 1982; two raised bands below max. girth. (Meffan Museum, Forfar; A1985.222; Pollock 1998, 279-80) (fig. 6: 47).

45. Balgone, East Lothian; height 23.8 cm (NMS acc. no. H.MC 1; Theuerkauff-Liederwald 1988, no. 210I) (fig. 6: 37).

46. Denny, Stirlingshire; height 22.5 cm (NMS acc. no. H.MC 3; Theuerkauff-Liederwald 1988, no. 210II) (fig. 6: 38).

47-48. Biggar, Lanarkshire; two examples; heights 24.4 cm and 19.9 cm (NMS acc. no. H.MC 6; Theuerkauff-Liederwald 1988, no. 212II; NMS acc. no. H.MC 19; Theuerkauff-Liederwald 1988, no. 206II) (fig. 6: 39).

49. Dalkeith, Midlothian; height 21.2 cm (NMS acc. no. H.MC 7; Theuerkauff-Liederwald 1988, no. 213) (fig. 6: 40).

50. Hill of Auchintilloch, Lesmahagow, Lanarkshire; height 22.5 cm (NMS acc. no. MC 8; Theuerkauff-Liederwald 1988, no. 212I) (fig. 6: 41).

51. Birrens, Annandale, Dumfriesshire; with falling ears, height 22.5 cm (NMS acc. no. H.MC 11; Theuerkauff-Liederwald 1988, no. 209II) (fig. 6: 44).

52. 'near Peebles', Peebleshire; height 19.8 cm (NMS acc. no. H.MC 13; Theuerkauff-Liederwald 1988, no. 206I) (fig. 6: 45).

53. Dunbar, East Lothian; height 18.7 cm (NMS acc. no. H.MC 15) (fig. 6: 46).

54. Innischonain, Loch Awe, Argyll; height 23.6 cm. (NMS acc. no. H.MC 42; Theuerkauff-Liederwald 1988, no. 208I) (fig. 6: 50).

55. nr Luncarty, Stanley, Perthshire; found in 1859; height 25 cm (Perth Museum & Art Gallery acc. no. 60) (fig. 6: 53).

56. Inchtuthill Roman fort, Delvine, nr Caputh, Perthshire; said to have been ploughed up in a field next to Delvine House; height 23.4 cm (Perth Museum & Art Gallery acc. no. 4/1945) (fig. 6: 54).

57. Stink Bog Park, Cleish, Kinross; height 21 cm. Said to have been found with a tripod cauldron (Perth Museum & Art Gallery acc. no. K.1972.283) (fig. 6: 55).

58. Aberdeen; height 21.5 cm (Aberdeen Museum ABDMS 034296; SCRAN website) (fig. 6: 57).

59. Carleith, Ayrshire; height 20.2 cm (NMS acc. no. H.MC 35; Theuerkauff-Liederwald 1988, no. 208II). (fig. 6: 59).

60. Loch of Leys, Kincardineshire 1851; height 23 cm (NMS acc. no. MA 7; Theuerkauff-Liederwald 1988, no. 209III) (fig. 6: 60)

61. Closeburn Castle, Dumfries and Galloway; found in the clearing of the medieval well (Anon 1789, 429). (fig. 6: 20).

62. Beuchan in Keir, Dumfries; found in a peat-moss by about 1858, by men cutting a drain; acquired by Dumfries Museum from Dr Grierson's Collection dispersal in 1965; height 20.5 (Black and Bisset 1894, annotated by Mr Truckell 1965); (DUMFM:1965.102; Grierson Catalogue No. 244) (fig. 5: 4; fig. 6: 8).

63. Gatehouse district, Dumfries & Galloway; collection of E. A. Hornel 1864-1933), on loan to The Stewartry Museum since 1955; height 23 cm (acc. no. STEWM:5053.2; Corrie 1932) (fig. 6: 90).

64. Lairdmannoch Moor, near Ringford, Dumfries & Galloway; found by a shooting party in 1946 (The Stewartry Museum, Kirkudbright, acc. no. STEWM:1990/15/01; D. Devereux, *in litt.*) (fig. 6: 90).

Ireland

65. near Ballymena, Co. Antrim; no legs; surviving height 15.3 cm (Ulster Museum acc. no. A4175; C. Bourke *in litt.*) (fig. 6: 6).

66. Portglenone, Co. Antrim; height 20.5 cm (Ulster Museum acc. no. A4176; C. Bourke *in litt.*) (fig. 6: 8).

67. Drumnaspar, Co. Tyrone, from a bog; height 20 cm (NMI acc. no. W55; Wilde 1857, no. 55, fig. 417; Lewis *et al* 1987, Appendix I, 21)(fig. 6: 23).

68. Grey Abbey, Ards, Co. Down, found in 1742 in a bog 12' deep; ex Trinity College Dublin collection; height 22 cm (Dublin, NMI acc. no. 1882: 204; Camden 1789, pl. 33, no. 6; Vallancey 1786, 42; Lewis *et al* 1987, Appendix I, 22) (fig. 6: 24).

69. Aughnahoy, Co. Antrim; height 23.8 cm (Ulster Museum A106.1906; C. Bourke *in litt.*) (fig. 6: 79).

70. Lecale (barony name), Co. Down; height 20 cm (NMI acc. no. W56; Wilde 1857, 544; Lewis *et al* 1987, Appendix I, 23) (fig. 6:72).

71. Swords, Co. Dublin; animal-headed spout, one leg attached after casting; height 25.5 cm (NMI acc. no. 57; Wilde 1857, 544; Lewis *et al* 1987, Appendix I, 24) (fig. 6: 73).

72. Feakle, Co. Clare; found in a bog in the 1860s; height 23.5 cm (NMI acc. no. 1937:2760) (fig. 6: 74).

73. Bog nr Thurles, Co. Tipperary; height 23.5 cm (NMI acc. no. 1941:1121) (fig. 6: 75).

74. Dysart, Co. Westmeath; found on the shores of Lough Ennell; height 19 cm (NMI acc. no. 1996:197) (fig. 6: 76).

75. Kilshannig, Co. Cork; found 4 ft down in a bog; height about 21.5 cm (Betham MSS, Royal Irish Academy MS 12.C.1, p. 185) (fig. 6: 77).

76. 'Co. Meath'; height 21.7 cm (Limerick County Museum Inv. 0000.0206) (fig. 6: 7).

77. Cloghboley, Drumcliffe, Co. Sligo; height 26 cm (NMI acc. no. 1925:4). (fig. 6: 88).

Netherlands

78. Nijmegen, Mariënburg klooster; height 23.4 cm (Gemeente Museum, Nijmegen) (fig. 6: 10).

79. Huis te Haarlem, Haarlem; height 26.8 cm (Rijksdienst voor het Oudheidkundig Bodemonderzoek acc. no. 2506-2; Renaud 1963; Theuerkauff-Liederwald 1988, no. 189) (fig. 6: 14).

Belgium

80. Antwerp, Hoogstraaten, 1844; height 23.6 cm (Oudheidkundige Musea Vleeshuis: Inv. Nr. 1876; Lewis *et al* 1987, Appendix I, 27; Theuerkauff-Liederwald 1988, no. 204) (fig. 6: 25).

81. ?Brussels; height 24 cm (Deurne, Provinciaal Sterckshof Museum Inv. Nr. S. 63-1; Lewis *et al* 1987, Appendix 1, 29; Theuerkauff-Liederwald 1988, no. 198) (fig. 6: 27).

82. Gent, Dominican Friary; height 24 cm (private coll.; Theuerkauff-Liederwald 1988, no. 220) (fig. 6: 63).

France

83. Étretat, Seine Maritime; found c. 1833 (Musée des Antiquités, Rouen, acc. no. 1835; Lewis *et al* 1987, Appendix I, 36) (fig. 6: 49).

84. Tréforêt, Seine Maritime, found *c.* 1871 on the bank of the River Béthune below the chapel of Tréforêt Castle, near Mesnil-Mauger; height 24 cm (Musée des Antiquités, Rouen, acc. no. 1347.1; Bertholet, Marin and Rey-Delqué 2002, no. 122)(fig. 6: 58).

85-87. Paris, three examples (Musée Carnavelet: C94 AM8; Lewis *et al* 1987, Appendix I, 33); priv. coll. (Lewis *et al* 1987, Appendix I, 34); another with well-modelled head, height 25 cm (found 1875, Musée de Cluny: Cl. 9325; Lewis *et al* 1987, Appendix I, 35; Theuerkauff-Liederwald 1988, no. 232) (fig. 6: 65).

88. Verniette (Canton de Conlie), Brittany; found in a 'souterrain' in the cemetery next to chapel; height 25 cm (private coll.; Chapin 1976, 10; Theuerkauff-Liederwald 1988, no. 224) (fig. 6: 64).

Germany

89. Darss Cog, lost off the coast of Mecklenburg-Vorpommern in the 1330s; two legs and handle broken (Archaeological Statemuseum, Mecklenburg-Vorpommern) (fig. 6: 11).

90. River find, Köln; height 24 cm (Kunstgewerbemuseum Inv. Nr. H 1165; Steuer 1982, 17, pl. 27; Lewis *et al* 1987, Appendix I, 39; Theuerkauff-Liederwald 1988, no. 215) (fig. 6: 67).

Denmark

91. Tolne church, Nordjütland; height 21.7 cm (1892; Copenhagen, National Museum, Inv. Nr. D 2657; Theuerkauff-Liederwald 1988, no. 233) (fig. 6: 69).

92. ?Nordjütland; height 20 cm (Copenhagen, National Museum Inv. Nr. D 2833; Theuerkauff-Liederwald 1988, no. 234) (fig. 6: 70).

93. Revbjerg, Kirchspiel Simmerbølle, Langeland; height 26.1 cm (Theuerkauff-Liederwald 1988, no. 235) (fig. 6: 71).

Unprovenanced examples:

Collections in England:

94. Whitehaven, Whitehaven Museum; presented in 1882; height 23.5 cm (Richardson 1978, pl. II; Lewis *et al* 1987, Appendix I, 6).

95-6. York, Yorkshire Museum; two examples. One with paw feet, height 20 cm; another height 22 cm (YORYM: 2002.465 and YORYM: 2006.1990; Lewis *et al* 1987, Appendix I, 8)

97-98. London, British Museum: two examples (BM acc. no. 1902, 8-24,1; Lewis *et al* 1987, Appendix I, 11; B.M. acc. no.1910,

12-20, 1, Lewis *et al* 1987, Appendix I, 13; Theuerkauff-Liederwald 1988, no. 221): height 24.5 cm.

99. London, Museum of London; height 22.5 (MoL acc. no. 8083; Lewis *et al* 1987, Appendix I, 14; Theuerkauff-Liederwald 1988, no. 226).

100-101. London, Victoria and Albert Museum; two examples (V&A acc. no. M202.1926; Lewis *et al* 1987, Appendix I, 15; V&A acc. no. M47-1956; Theuerkauff-Liederwald 1988, no. 225): height 24.4 cm.

102. Private coll. London then München (Theuerkauff-Liederwald 1988, no. 216).

Collections in Scotland:
103-111. Edinburgh, National Museum of Scotland; nine examples: (NMS acc. no. H.MC 5 (Theuerkauff-Liederwald 1988, no. 207III), height 26.1 cm; acc. no. H.MC 12 (Theuerkauff-Liederwald 1988, no. 209I), height 26.4 cm; H.MC 17 (Theuerkauff-Liederwald 1988, no. 211I), height 25.5 cm; H.MC 18, in two halves (Theuerkauff-Liederwald 1988, no. 207II); H.MC 33 (Theuerkauff-Liederwald 1988, no. 211III), height 24.8 cm; H.MC 38 (Theuerkauff-Liederwald 1988, no. 208III), height 24 cm; H.MC 79 1955-330 (Theuerkauff-Liederwald 1988, no. 211II); H.MC 4: height 24 cm.

112. Private coll., Eindhoven; height 20.5 cm (?from Scotland; Theuerkauff-Liederwald 1988, no. 218).

113. Carlisle, from Old Museum Collections – possibly a Carlisle find (Carlisle Museum; CALMG: 1998.400; Brownsword, Pitt and Richardson 1981, 49 fig. 3; Lewis *et al* 1987, Appendix I, 10).

114. Glasgow, Glasgow Museums; height 23.4 cm (The Burrell Collection, acc. no. 5-6.156; Pat Collins, *in litt.*).

Collections in Ireland:
115. Dublin, National Museum of Ireland; lacking three feet; surviving height 20.5 cm (NMI acc. no. SA 1919:37)

116-117. Belfast, Ulster Museum; height 23 cm (acc. no. A4174; Marshall 1950, 68; C. Bourke, *in litt.*); and strap handle from another (acc. no. RS 1993.177).

118. Dublin, National Museum of Ireland; one foot missing; height 24 cm (NMI acc. no. R. 447).

119. Dublin, National Museum of Ireland; ex Petrie collection; surviving height 20 cm (NMI acc. no. P.1001).

Collections in The Netherlands:
120. Rotterdam, Museum Boymans-van Beuningen; bought in Den Haag; height 26.4 cm (Frederiks Collection Inv. Nr. Kb24; Lewis *et al* 1987, Appendix I, 31; Theuerkauff-Liederwald 1988, no. 214).

121. Rotterdam, Museum Boymans-van Beuningen; height 24.5 cm (Frederiks Collection Inv. Nr. Kb28; Theuerkauff-Liederwald 1988, no. 203; Lewis *et al* 1987, Appendix I, 32).

122. Private coll., purchased in Delft; height 23.6 cm (Theuerkauff-Liederwald 1988, no. 197).

123-124. Private coll., Eindhoven, two examples, heights 22 cm and 22.4 cm; no. 123 with falling ears ex Frits Philips collection (Theuerkauff-Liederwald 1988, nos 199, 200; Sotheby's 2006, 143 no. 286).

125. Present location unknown; ex Frits Philips collection; height 21.9 cm (Theuerkauff-Liederwald 1988, no. 228; Sotheby's 2006, 147 no. 294).

Collections in Belgium:
126. Private coll. Antwerp; height 27 cm (Theuerkauff-Liederwald 1988, no. 196).

127. Brugge, Museum Gruuthuse; height 26 cm (Theuerkauff-Liederwald 1988, no. 230).

128. Antwerp, Museum Mayer van den Bergh; height 22.6 cm (museum cat. no. 255; Lewis *et al* 1987, Appendix I, 28; Theuerkauff-Liederwald 1988, no. 222).

Collections in France:
129. Rouen, Musée des Antiquités (acc. no. 1871; Lewis *et al* 1987, Appendix I, 37).

130. Rouen, Musée des Antiquités (acc. no. 2002.0.145 = no. 542; Lewis *et al* 1987, Appendix I, 38).

Collections in Germany:
131. Private coll., Bremen; height 22.8 cm (Theuerkauff-Liederwald 1988, no. 201).

132. Present location unknown; ex private collection, Germering, then Frits Philips collection; height 23.5 cm (Theuerkauff-Liederwald 1988, no. 244; Sotheby's 2006, 150 no. 301).

133. Private coll., Paderborn; height 23 cm (Theuerkauff-Liederwald 1988, no. 202).

134. Hamburg, Museum für Kunst und Gewerbe; height 21 cm (Inv. Nr. 1958.42; Theuerkauff-Liederwald 1988, no. 205).

Collections in the United States of America:
135. New York, Metropolitan Museum of Art; height 23.5 cm (acc. no. 52.46.11; Theuerkauff-Liederwald 1988, no. 223).

Group B (otherwise unattributable)

136. Quiogs House, Greenloaning, Perthshire; found during ploughing in 1963; spout and leg missing; height 23 cm (Perth Museum & Art Gallery acc. no. 1998.117; Hall 1998, 73; 2002-3, 47) (fig. 6: 51).

137. Tullibardine, Blackford, Perthshire; ewer foot, found near the site of Tullibardine Castle (Reid 1986, 41) (fig. 6: 56).

Group Bc (tripod ewer with two curved tubular spouts ending in animal heads)

138. Roosky, Co. Monaghan; found in Roosky Lough in 1876; height 18.7 cm (Ulster Museum acc. no. A25572; Gillespie 1876-78, 341-2; Wood-Martin 1886, 83 and Plate XVII, no. 7; C. Bourke, *in litt.*) (fig. 6: 80).

Unprovenanced
139. Amsterdam, Rijksmuseum; thought to be of 'English' manufacture; height 26 cm (Amsterdam, Rijksmuseum inv. Nr. NM100; Ter Kuile 1986, plate 254; Lewis *et al* 1987, Appendix I, 30).

Group Ca (tripod ewer with straight tubular spout and no lid)

Wales
140. Llanrwst, Gwynedd; height 23 cm (National Museum of Wales acc. no. 44.166; Lewis *et al* 1987, 89 no. 7; Theuerkauff-Liederwald 1988, no. 251) (fig. 6: 33).

Ireland
141. Brees, Co. Mayo; found on the grass margin of railway line (i.e. secondary deposit); with external cordons; height 19 cm (NMI acc. no. 1959:35). (fig. 6: 26).

Netherlands
142. Dredged from the River Schelde; short neck; height 14.6 cm ('s-Hertogenbosch, F. Mes; Theuerkauff-Liederwald 1988, no. 217) (fig. 6: 62).

Unprovenanced
143. Present location unknown; ex Frits Philips collection; thickened rim with well defined lower edge; height 24.5 cm (Sotheby's 2006, 151 no. 303).

Group Cb (tripod ewer with straight spout, cordons and lid)

England
144. York, found at the Golden Lion, Church Street, in 1970; only base of spout survives; height 17 cm (Yorkshire Museum; YORYM: 1978.52; Lewis *et al* 1987, Appendix I, 7; Theuerkauff-Liederwald 1988, no. 254) (fig. 6: 34).

Scotland
145. Balgone, East Lothian; horizontal flange to rim, three cordons, height 23.3 cm (NMS: acc. no. H.MC2; Theuerkauff-Liederwald 1988, no. 252) (fig. 6: 37).
146. Westhill, Annan, Dumfriesshire; short tapered 'spade-like' feet; attributed to 'North German' origin based on metal composition; attributed to 14th/15th century date; height 21.6 cm (Tullies House Museum, Carlisle; CALMG:1914.36.14; Brownsword, Pitt and Richardson 1981, 54) (fig. 6 no. 92).

Ireland
147. ?from Ireland; hinge for lid, height 22 cm (BM acc. no. (18)54.7-14.319; Theuerkauff-Liederwald 1988, no. 253).
148. Said to have been found in a bog on the east side of Mount Joy Forest, in the parish of Cappagh, Co. Tyrone (Anon 1849, 6); six heraldic devices on the shoulder (tentatively identified as 'three chevronels. (Clare, Earl of Gloucester?) A cross. (De Burgh, Earl of Ulster?) A feur de lys. Paly of eleven pieces. A fess between two chevrons. (Tendryng?), (ibid, 6); two cordons around waist; lid hinge; height 23.9 cm; this body form is clearly related to that of *Group E* (BM acc. no. 43.12-26.10; Theuerkauff-Liederwald 1988, no. 250). (fig. 6 no. 93).

Group D: tripod ewer with pronounced moulding on a short neck, animal head terminated a curved spout, moulded handle and robust legs ending in paw feet

149. Bösensell church, Kr. Coesfeld, Westfalen; height 19.2 cm (Westfälisches Landesmuseum für Kunst and Kulturgeschichte, Münster Inv. Nr. BM 288; Theuerkauff-Liederwald 1988, no. 236).

Group E. Tripod ewer with pronounced moulding on neck, curved tubular spout with animal head, robust legs ending in paw feet, plain handle

Unprovenanced
150. Düsseldorf, Kunstmuseum; height 18.7 cm (Inv. Nr. 20510; Theuerkauff-Liederwald 1988, no.240).

Group F: tripod ewer with carinated shoulder, neck cordon and swan-neck spout with bridge, terminating in an animal head. Some were fitted with lids.

151. Reims; height 24.5 cm (Amsterdam, Rijksmuseum Inv. Nr. RBK 16428; Theuerkauff-Liederwald 1988, no.237) (fig. 6: 56).

Unprovenanced
152. Paris, Versteigerung Hotel Drouot 14.2.1975; height 24 cm (Theuerkauff-Liederwald 1988, no.239).
153. Frankfurt-a-Main, Museum fur Kunsthandwerk; height 24.5 cm (Inv. Nr. Mu. St. 44; Theuerkauff-Liederwald 1988, no.238).
154. London, British Museum; ?'Scotland', from the Bannockburn House sale; lid missing; two line inscription reading: +IE: SVI: APELLE: LAWR/IE: SERF: TVT: PAR:AMVR CF ('I am called a laver, I serve all for/by/with love'); attributed to first half 14th century by Finlay (1996, 5) (London, BM reg. no. 1975, 10-1, 10; Anon 1865, 199-200; Cherry 1977, 199-201; Caldwell 1982, 94; Theuerkauff-Liederwald 1988, no. 248).
155. Glasgow, Glasgow Museums; purchased in 1948; lid missing; ?about 1400; height 28.9 cm (The Burrell Collection, acc. no. 5-6.176; Bangs and Northover 1999, fig. 6).

Group G. Tripod ewer with angular handle, waist carination and paw feet

Unprovenanced
156-7. Private coll., Eindhoven; two examples; heights 26.3 cm and 22.8 cm (Theuerkauff-Liederwald 1988, nos 241, 246).
158. Private coll., s'Hertogenbosch; height 23 cm (Theuerkauff-Liederwald 1988, no.243).
159. Köln, Kunstgewerbemuseum; height 23.8 cm (Inv. Nr. H658; Theuerkauff-Liederwald 1988, no.245).

160. Present location unknown; variant in having horizontal mouldings mid-neck (similar to *Group D*); height 23.5 cm (Theuerkauff-Liederwald 1988, no. 242; Sotheby's 1995, no. 14).

Indeterminate Group
161. Norwich; lid missing; a projection on the engraving could be the stub for a tubular spout, suggesting *Group F*; there appears to be an absence of a pouring lip, and no evidence for a bridge; bears the text + VENEZ LAVER (Walford and Way 1856, 74; for similar text see Theuerkauff-Liederwald 1988, no. 247). (fig. 6 no. 86).
162. Liverpool, National Museums Liverpool; converted by cutting off top above shoulder height; lower part bears the text LAVE: SERF TVT PAR AMVR (Nelson collection; acc. no. 53,113).

Group H. Tripod ewer with zoomorphic handle, pronounced waist mouldings and paw feet

Unprovenanced
163. Present location unknown; similar to *Group G* (Bernage 2006, 59).

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Sherds from a church. Maiolica production waste from the Augustinian friary in Antwerp

Johan Veeckman

1   Introduction

Over the last 20 years archaeological research in Antwerp has produced an important number of archaeological finds related to the production of maiolica, contributing fundamentally to the study of these typical renaissance ceramics in the North. In 2005, during archaeological investigation in the church of Saint Augustine, a number of maiolica wasters and kiln material was discovered. This paper discusses the St. Augustine church assemblage and places the finds in the general framework of Antwerp maiolica production.

2   Excavations in the church of St. Augustine

Due to their sympathy towards the Reformation, the first Augustinian convent in Antwerp was demolished in 1523 and the friars left the city only to return at the beginning of the 17th century. Building a new church, designed by the famous architect Wenceslas Cobergher, started in 1615 along

Kammenstraat (fig. 1). In the course of the 17th century different convent buildings were added, as well as school buildings, the Augustinians being famous for their important role in education. In 1796, under French government, the dissolution of the convent became inevitable. After the Belgian revolution a covered market was constructed on the grounds of the convent for which a part of the cloisters had to be demolished. In the course of the 19th and 20th century most convent buildings disappeared and today only the church and some houses in adjoining the Everdijstraat remain standing. Finally, in 1977, the church was deconsecrated and has been left without specific use since.

Recently, the church and some adjoining buildings were restored and transformed into a concert hall. In parallel with the building and restoration works excavations were carried out outside as well as inside the church. Excavations outside the church revealed amongst other features a large vaulted

FIG. 1 St. Augustine's Friary on an anonymous 17th-century engraving (© Antwerp City Archive).

cellar containing a number of burials[1] as well as a Gallo-Roman cremation burial[2]. In 2005 an underground heating system was constructed in the church, causing the need for archaeological excavations.

Prior to the building of the church a number of houses had to be demolished, probably belonging to some breweries for which Kammenstraat ('*kammer*' meaning brewer) was famous. The new church floor was constructed at approximately 2 m above street level. To raise the area a large amount of levelling material had to be supplied. The archaeological trenches necessitated by the construction of the heating system were mainly situated in these levelling layers.

The main finds relating to the history of the church consisted of burial vaults and burials, but to our surprise the levelling material also contained a significant number of maiolica sherds, production wasters and kiln material. Most of this material was collected from concentrated areas, some of it scattered in the levelling layers of the church that consisted mainly of earth and building debris. Some layers were characterised by a typical red colour, easily to recognise as burned material and very comparable to material excavated from the kiln sites at Steenhouwersvest[3] and Aalmoezeniersstraat[4].

Since only a small part of the church surface was excavated it seems likely that an important amount of the maiolica finds remains to be discovered. The use of maiolica wasters mixed into the levelling material also explains the fragmentary nature of the finds. Complete vessels are lacking and most of the sherds measure only a few square centimetres.

The origin of the material used for levelling the church area is unknown and it probably consists mainly of debris that was to hand in the immediate vicinity. In this context the presence of maiolica wasters can easily be explained since at the beginning of the 17th century different maiolica potters were living and working in the Kammenstraat area.

Dating the archaeological context is problematic. On the one hand it seems very probable that the levelling material was dumped on the spot in 1615 or shortly afterwards, at the beginning of construction work to the church, giving a very specific date for the deposition of the material, which can be used as a *terminus ante quem*. On the other hand – and in spite of this precision – this does not provide a date for the material itself. The excavated maiolica waste can originate from different workshops.

3   Maiolica production waste

Next to a quantity of kiln material, such as stilts and saggars, some 2500 maiolica sherds were collected, of which about 80% consisted of unfinished biscuit wares. Although a percentage of the finished maiolica can be identified as production waste, one should be careful with this interpretation. It is quite possible that the levelling material also contained a certain amount of regular household waste (of uncertain origin and uncertain date!). Nevertheless, the general impression of the material studied is that of a rather homogeneous assemblage, especially when looking at the biscuit wares. As a preliminary remark it should be noted that the tiles will only be discussed at a general level, since this category will be the subject of a detailed, separate paper.

The same quantitative approach that has been previously used to analyse the maiolica production from Steenhouwersvest[5] and Schoytestraat[6] was applied to the excavated material from St. Augustine church. Instead of using the minimum vessel equivalent count an individual sherd count was preferred. Applied to maiolica, experience has proved both methods give approximately the same results. Especially for the decorated maiolica an approach based on the individual sherds is to be preferred. As can be seen in the table the typological proportion between biscuit wares and finished products is very much alike (table 1). Only the ratio for *albarelli* and tiles shows a consistent deviation.

TABLE 1

Quantification of the biscuit wares and the finished products, by vessel type.

	Biscuit wares		Finished products		Total	
	#	%	#	%	#	%
Plates	1667	81,4	296	63,1	1963	78,0
Albarelli	210	10,3	97	20,6	307	12,2
Bowls	89	4,3	25	5,3	114	4,5
Jugs			10	2,1	10	0,4
Tiles	72	3,5	39	8,3	111	4,4
Uncertain	10	0,5	3	0,6	13	0,5
Total	2048	100	470	100	2518	100

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1 Bellens & Vandenbruaene 2006.

2 Bellens *et al.* 2007.

3 Dumortier & Veeckman 1994.

4 Veeckman & Bellens 2005.

5 Dumortier & Veeckman 1994.

6 Dumortier 1992; Oost 1992.

4 Biscuit wares

As has been demonstrated before, the raw material used in Antwerp to produce maiolica consists of a mixture of imported (expensive) white firing clay and a quantity of local (and cheaper) red firing clay[7]. After the first firing, at the biscuit stage, this often results in a red or at least reddish fabric. Only after the glazing and subsequent second firing does the body of the clay turn white as has been demonstrated by experimentation[8]. The biscuit wasters from Saint Augustine's church confirm this. In some cases inclusions of red-firing particles can be identified in the clay matrix. Especially in the case of tiles concentrations of red-firing clay can be identified in the clay matrix when both types of clay have been irregularly mixed.

It has to be noted that a small quantity of the biscuit wares is (partly) covered with a white powdery layer, probably to be identified as the unfired glaze and proving that things could go wrong at any stage of the production process. In some cases the decoration has already been applied to the surface of the biscuit but for an unknown reason the vessel never made it to the kiln (fig. 2).

From a total of over 2000 biscuit sherds over 80% belonged to plates, 10% to *albarelli* or ointment jars, 4% to bowls and some 3,5% to tiles. These numbers are very similar to the assemblages discovered earlier at Steenhouwersvest and Schoytestraat[9]. Because of the standardised forms of maiolica production most of the sherds can typologically be identified and only few deviating forms occur. It has to be noted that in the assemblage of biscuit wares sherds belonging to jugs are completely absent.

All plates can be identified as belonging to two basic types, both characterised by a foot ring or in the case of smaller ones by a flat concave base (fig. 3: 1). In some cases the foot ring is pierced with a hole, probably used by the potter to facilitate the application of the glaze. The most common plate shows a curved section with the edge sometimes slightly bent over (fig. 3: 2-3), the second type has a flat rim (fig. 3: 4). The latter is the case in about 20% of the recovered material, quite a large proportion compared to the previously studied assemblages of Antwerp maiolica production. Diameters vary between 14 and 35 cm for type 1 and between 15 and 33 cm for type 2 plates. The majority of type 1 plates measures from 22 to 29 cm in diameter, where type 2 plate diameters are concentrated around 23 to 25 cm and 29 to 31 cm. Some of the smaller plates should probably be identified as saltcellars.

Albarelli and smaller ointment jars make up about 10% of the finds. Although only few examples can be measured because of the fragmentation of the material, small, medium and larger specimens occur, varying in diameter between 3.5 and 12 cm for the 27 individuals of which measurements could be taken (fig. 3: 5). Small jars usually have a flat base, while the larger ones are characterised by a footring. Again, the typological similarity to other Antwerp assemblages is striking.

Most of the bowls (17 out of 20) can be identified as what we might call the typical 'Antwerp porringer', referring to the famous series of bowls in the Maagdenhuis Museum (fig. 3: 6). These bowls have a footring and horizontal trefoil handles. Some however have smaller, horizontally placed strap shaped handles that can be compared to similar finds from Schoytestraat. Only one bowl deviates fundamentally from the rest of the finds. It is large and deep and comparable to a unique vessel recovered from the site of the Bishop's palace.

Although the tiles will be subject of a separate paper some general information is necessary to understand the complete
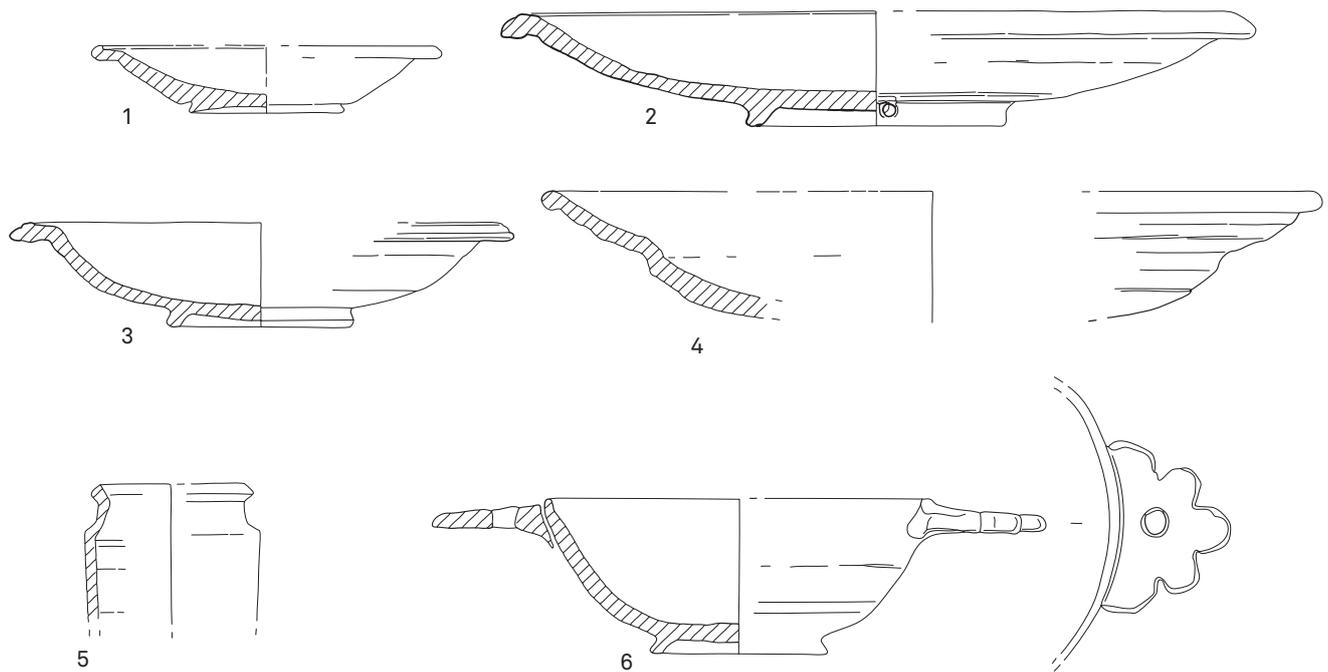

FIG. 2 **Type 2 plate with unfired checkerboard decoration (© Antwerp Archaeology Section, Jan Marstboom).**

7 Dumortier & Veeckman 1994, 174.   **8** Oost & Veeckman 2002, 62.   **9** Veeckman 1999, 117.

FIG. 3 Main form types. 1: type 1 plate with a flat base; 2: type 1 plate with a footring; 3: type 1 plate with a footring; 4: type 2 plate with a flat rim; 5: type example of a middle size *albarello*; 6: porringer with horizontal trefoil handles. Scale 1:3. Drawings: Karen Thiers.

assemblage. In 15 tile fragments the complete length was preserved, varying between 13.4 and 13.7 cm. The height of the tile fragments varies between 13 and 19 mm.

5   Finished products

One fifth of all the maiolica finds, some 500 sherds, were finished products, of which 63% consisted of plates, 20% of *albarelli*, leaving only relatively small proportions of bowls, jugs and tiles. The colours used for the decoration are the traditional ones applied to maiolica: blue, purple, brown/orange, green and yellow. Instead of a typological approach, this part of the assemblage will be discussed using the decoration as a starting point. In general the following types of decoration can be distinguished: checkerboard patterns, geometric designs, floral motifs and figurative decoration. Because of the fragmentation of the excavated material, in many cases it is not clear what type of decoration was applied. One should also be aware that different types of decoration might have been applied to a single vessel.

A number of maiolica sherds can clearly be identified as potter's waste: deformed or cracked vessels, burned glaze, failures in the decoration, glaze layer peeling off, etc... In one case the impression of a stilt is visible on a plate with checkerboard pattern (fig. 4). However, the majority of the material should not necessarily be interpreted as production waste. A number of

tile fragments are covered with mortar on the back, proving that these ones must have been used. The question remains how closely associated these items are to the produced vessels.

The most striking feature of the decorated maiolica is the preponderance of vessels bearing checkerboard patterns. From the 156 plates of which (part of) the decoration pattern could be identified, 80 consisted of checkerboards (fig. 2; fig. 5-6). The same proportion applies to the decoration on bowls. On the one hand the number might be overestimated because this type of decoration is easy to identify, even on a small sherd. On the other hand the abundance of vessels with checkerboard decoration is significant and quite different from the other Antwerp assemblages. This can be taken as an indication of the late date of the material, especially if we take into account the clear relation between checkerboard patterns and the so-called type 2 plates with a separate rim zone (fig. 6). At the edge of the plates a blue line is usually applied but in this assemblage it is often a cable pattern.

Geometric designs can be divided into the application of pure geometric forms on the one hand and stylised floral patterns on the other. In the first category we can mention parallel lines, zigzag lines, cross hatching, cable patterns, and the typical frieze consisting of groups of three parallel blue lines on a yellow background (fig. 7). Other excavation sites also produced examples of this typical Antwerp motif[10]. Especially on the

10 Dumortier & Veeckman 1994, 191, fig. 20.

(small) *albarelli*, the decoration is often limited to parallel horizontal lines in different colours and very simple geometric designs (fig. 8). The second group comprises – amongst others – stylised daisy patterns, leaves and abstract floral designs derived from the so-called 'Persian palmet'.

Floral motifs can also be devided in two main categories: one comparable with the Italian *a foglie* maiolica (fig. 9), the other more close to the *alla porcelana* style (fig. 10). One bowl should be mentioned in particular from a typological point of view as well as for the decoration (fig. 11-12). The open bowl with a protruding rim has a light blue surface. The interior is covered with *a foglie* decoration, while the outside bears an *alla porcelana* frieze. This piece is unparalleled in Antwerp. Only one comparable vessel of which the exterior is also decorated in a similar way, excavated in the Steen, can be mentioned[11]. The blurred decoration identifies this bowl as a waster, proving it to be of Antwerp origin.

Only three vessels bear (parts of) a figurative decoration, two plates and a bowl. On one of the plates a landscape is depicted, on the second one the leg of a horse (?) can be seen. The latter plate does not fit with the majority of the material. It is a high quality fabric bearing a fine decoration. This plate probably has to be dated closer to the middle of the 16th century.

A fine example of a Madonna and child is depicted on a porringer (fig. 13). Although the design is rather clumsy, the colours are very bright and the vessel is to be compared to the famous series of porringers from the Maagdenhuis[12]. An almost identical scene is depicted on a bowl excavated in Grote Kauwenberg at the site of Antwerp University.

The use of *sgraffito* as a special decoration technique should be mentioned. Scratched decoration, made by removing the colour and making the underlying surface visible again, is applied to the rim of one plate (fig. 14) as well as to the outside of a

11 Veeckman & Dumortier 1999, 185, cat. nr. 33.   **12** Dumortier 2002, 138, fig. 57.

FIG. 6 Type 2 plate with checkerboard pattern decoration (© Antwerp Archaeology Section, Jan Marstboom).

FIG. 7 Typical 'Antwerp' frieze consisting of three parallel blue lines on a yellow background (© Antwerp Archaeology Section, Jan Marstboom).

FIG. 8 Decoration consisting of parallel horizontal lines and a very simple geometric design on an *albarello* (© Antwerp Archaeology Section, Jan Marstboom).

FIG. 9 Floral decoration on a plate inspired by the Italian *a foglie* maiolica (© Antwerp Archaeology Section, Jan Marstboom).

FIG. 10 Stylised floral decoration close to the Italian *alla porcelana* style(© Antwerp Archaeology Section, Jan Marstboom).

drinking cup. Comparable decoration can be found on a tile fragment from Steenhouwersvest[13] and a plate from the Steen, inside the medieval borough[14].

Monochrome vessels with a deep cobalt blue surface have been described before, for instance the atypical large *albarelli* from the Steen[15]. In the St. Augustine assemblage a few sherds bearing the same blue colour can be identified, in both cases fragments of jugs. One fragment of a handle (also from a jug) is decorated with the typical blue/purple/brown speckled design, which has been described before in the Steenhouwersvest assemblage[16] and is closely related to the decoration on some of the so-called 'Malling' jugs[17]. One last vessel presented with a monochrome surface has to be noted. Fragments of a porringer are monochrome white, which is very unusual for Antwerp maiolica. The rather thin layer of glaze with a bluish sheen distinguishes this bowl clearly from the white faience from Italy, Portugal or the Northern Netherlands. Maybe the potter had been experimenting with a new product?

Finally two fragments of plates should be mentioned, which are definitely not wasters but maiolica imports from Italy. One plate covered with a relatively thick layer of glaze has a bright white surface and blue decoration on the front as well as on the back and might be an import from Faenza (fig. 15). The second one is a fragment of a so-called 'Berettino blue' dish from Northern Italy. A similar vessel was found in a cesspit at the Steen[18].
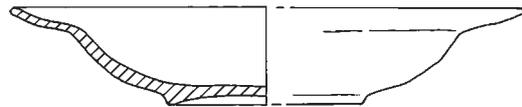
FIG. 11 Drawing of the elegant bowl with the protruding rim. Drawing: Karen Thiers.
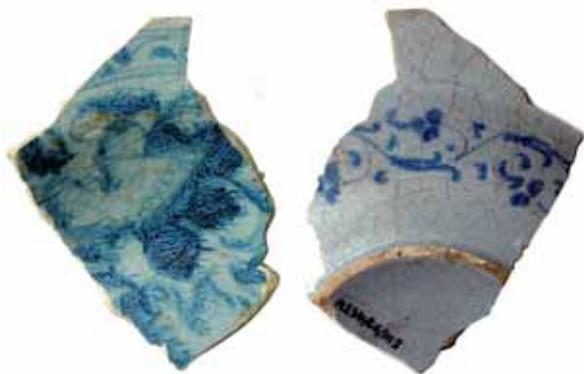
FIG. 12 The interior of the bowl is covered with *a foglie* decoration, while the outside bears an *alla porcelana* frieze (© Antwerp Archaeology Section, Jan Marstboom).

13 Dumortier & Veeckman 1994, 196, fig. 30.

14 Veeckman & Dumortier 1999, 164, cat. n° 7.

15 *Ibid.* 140, cat. nr. 34.

16 Dumortier & Veeckman 1994, 195, fig. 27.

17 Dumortier 2002, 209, cat. nr. 66.

18 Veeckman & Dumortier 1999, 181, cat. n° 26.

FIG. 13 Madonna and child depicted on a bowl, similar to the famous porringers in the Maagdenhuis Museum (© Antwerp Archaeology Section, Jan Marstboom).

FIG. 14 *Sgraffito* decoration applied to the rim of a plate (© Antwerp Archaeology Section, Jan Marstboom).

FIG. 15 Plate with blue decoration on the front as well as on the back (Faenza?) (© Antwerp Archaeology Section, Jan Marstboom).

6 Kiln material

Along with vessel and tile fragments from different stages of the production process the St. Augustine church assemblage also contains a quantity of kiln material such as stilts, small clay rolls, saggars and tiles: firing aids used to stack the vessels and tiles in the kiln. Again, these different objects are very similar to those found at other Antwerp production sites. The three pointed stilts, used to stack glazed plates and bowls upside down in the kiln, appear in different sizes (fig. 16). Impressions of the pointed stilts can often be identified on the decorated surface of the vessels.

One special item should be mentioned in particular: an unglazed object, 4.5 cm long, with just one sharp point, looks as if it is related to the stilts but its exact function cannot be determined (fig. 17). A possible parallel can be seen in Cipriano Piccolpasso's treatise on the potter's art, where a pointed support is depicted, also used to stack the kiln contents in a safe and efficient manner[19].

Red-fired roof tiles were easy to get and very useful when filling the kiln. Several fragments recovered show traces of use such as clay rolls stuck to the surface or impressions of the rim or foot of different vessels (fig. 18). The use of roof tiles in the kiln has been documented from the other Antwerp production sites as well.

7 The general framework: discussion and conclusions

Every excavation yielding production waste adds considerably to our knowledge of Antwerp maiolica and by now a general framework is becoming more and more clear. The finds from St. Augustine Church represent the fourth major assemblage discovered over the last 20 years. Previous sites from which important quantities of production waste were recovered are Steenhouwersvest[20], Schoytestraat[21] and Aalmoezenierstraat[22], the latter unfortunately not published in full.

An exact date for the assemblage from St. Augustine church cannot be given. As demonstrated earlier, the year 1615 can be taken as a *terminus ante quem*. Taking into account the large quantity of plates with a flat rim and the preponderance of checkerboard decorations, the majority of the finds, especially the biscuit material, can be dated by comparison to the first decades of the 17th century. The North Netherlands maiolica production of the late 16th and early 17th century is also characterised by the frequent use of checkerboard

FIG. 16 Different sizes of stilts used to stack glazed plates and bowls upside down in the kiln (© Antwerp Archaeology Section, Jan Marstboom).

FIG. 17 Unidentified object probably used as a firing aid in the kiln (© Antwerp Archaeology Section, Jan Marstboom).

19 Lightbown & Caiger-Smith 1980, 40.

20 Dumortier & Veeckman 1994.

21 Oost 1992.

22 Oost & Veeckman 2002, 60-61.

Fragments of roof tiles with clay rolls stuck to the surface or impressions of a vessel. (© Antwerp Archaeology Section, Jan Marstboom)

Fragment of a tile related to the production of Guido Andries' workshop in the 1530's (© Antwerp Archaeology Section, Frans Caignie).

patterns. However, many items could also easily be dated to the last quarter of the 16th century or even somewhat earlier. Some of the finds can be clearly identified as not belonging to the group of production waste. This is undoubtedly the case for the early tile, demonstrated to have come from the workshop of Guido Andries (fig. 19) and for the quality plate probably bearing the design of a horse. In other cases it is not clear whether sherds should be considered production waste or household detritus. The production of maiolica during the last decades of the 16th and the first of the 17th century emphasised quantity rather than quality. These years are rightly characterised by Claire Dumortier as the period of decline[23]. Finally, for the dating of the material one special rim fragment of a plate should be mentioned, on which part of an inscription

can be seen, probably reading '... A° 16...' (fig. 20). The interpretation of these few characters points towards a date but unfortunately the two last numbers are missing.

When comparing the material from the St. Augustine assemblage to the other production contexts remarkable resemblances are evident, especially in the technology and typology. The typological parallels are striking throughout the material from Steenhouwersvest, Schoytestraat, Aalmoezenierstraat and St. Augustine church. In each case the forms produced appear in almost the same proportions: three quarters consists of plates, some 10% of albarelli, while bowls and tiles both represent less than 5% of the production. Other forms, such as jugs, represent an almost negligible part of the potter's production

FIG. 20 **Rim fragment of a plate with part of an inscription probably reading '... A° 16...' (© Antwerp Archaeology Section, Jan Marstboom).**

(at least to quantity). From a technological point of view it is a striking conclusion that even at the beginning of the 17th century the (local) craftsmen were sticking to the original technology imported directly from Italy by the Andries family at the beginning of the 16th century.

It would have been likely (or at least interesting) to find Chinese designs in this maiolica assemblage but this was not the case. Among the Schoytestraat material two clearly misfired examples of plates bearing Chinese motives were discovered[24]. Since the St. Augustine church finds appear to be of more recent date it would have been likely to have Chinese influence in this production assemblage too.

There remains the question of the provenance of the waste material from St. Augustine church. The excavation site is situated in the middle of what one could call the 'Antwerp maiolica district'. In Kammenstraat several maiolica potters were living and working during the 16th century. The most famous workshop in Kammenstraat undoubtedly was '*Den Salm*', home of Guido Andries, founding father of the Antwerp maiolica industry[25]. But, for a certain period, his son Joris also had a house or workshop in the same street, called '*tGulden Peerdt*'[26]. Opposite St. Augustine church the house '*De Maeght van Gent*' was situated, once the workshop of Jan Bogaerts, but during the last decades of the 16th century and beginning of the 17th century run by his successor Jan Struys[27]. It is tempting to identify the waste from St. Augustine church with this potter's workshop. However, other kiln- and production sites, active during the last years of the 16th century and the beginning of the 17th century, were nearby in adjoining streets such as Schoytestraat and Aalmoezeniersstraat.

Acknowledgements

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24 Oost & Veeckman 2002, 61, fig. 11.

25 Dumortier 1988, 24-25.

26 *Ibid.* 27.

27 Dumortier 2002, 44.

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An overview of the dated stoneware (groups) from ships in the Netherlands (Zuiderzee region) and Novaya Zemlya (1200-1600)

Karel Vlierman[1]

1   Introduction

A volume to celebrate the career of Frans Verhaeghe is the perfect occasion, and for me a pleasure, to contribute a study of the material culture of households from the Middle Ages. A conscious decision has been made to concentrate on German stoneware, a striking, continually present and most important group of ceramics in archaeological contexts and publications.

For generations the former Zuiderzee has been an important waterway and the 'start and finish' of many world-wide discovery and trade voyages. In the Carolingian period this modern inland sea in the centre of the Netherlands was a lake called Almere. In the Early Middle Ages the connection between the Almere and the Vlie (the North Sea) improved considerably and a new trade route developed from Dorestad via the Kromme Rijn and Vecht rivers, and the Almere and Vlie to Frisia and the North (fig. 1). Little is known archaeologically about the earliest occupation of the Carolingian/Frisian trade settlements of Stavoren, Medemblik and the island of Wieringen[2]. In the case of Medemblik, apart from incidental settlement traces, the evidence consists mainly of late Merovingian pottery such as early Badorf sherds. These are, to date, the oldest medieval finds from West Friesland, which emphasises the deliberate foundation of this isolated stopping place on the Almere route in the late Merovingian period. All the types of Carolingian pottery found at Dorestad are also found at Medemblik[3].

The first archaeological evidence in the IJsselmeerpolders[4] for the Carolingian period was found in 1982 (fig. 1: A)[5]. Some late Badorf sherds, comparable with the Dorestad types W II B and C were collected from the bottom of a filled up channel. Some 200m to the south in the same channel a Hanseatic cog (see below 2.7), and a large quantity of 12th- and 13th-century sherds were found. These sherds were mainly from handmade local globular pots, some Paffrath-type, Pingsdorf-type, and Andenne-type wares, and a small number of proto- and near-stoneware pieces. The sherds, together with a lot of animal bones, worked wood, stone etc. are seen as evidence for a medieval settlement on the banks of a small river or stream. In the earliest written sources for the Court of Werden at Putten, which note an important donation by Folkerus in 855[6], we read the name *Archi* (in present-day Dutch: Ark) which can be connected with the archaeological site on lot Oz 36[7]. On mid-13th-century lists of income to the Court the name Ark is still present, but it is absent from 14th-century lists. The settlement was destroyed by the sea in the middle of the 14th century[8]. With the consent of Duke Reinald III, a dike was built in 1357 to protect the south-east part of the Arkemheenpolder between the sea and the later town of Nijkerk. Traces of Carolingian field systems can still be seen in the polder landscape. In 1996 the first Carolingian sherd (late Badorf) was found at the supposed location of a medieval settlement, in the section north of the polder Eastern Flevoland (fig. 1: B), from which 13th and 14th century evidence was already known[9]. The oldest medieval shipwreck in the Zuiderzee region dates back to (the end of) the 9th century. The first ship found to be carrying proto-stoneware was wrecked in the second half of the 13th century. A study was also made of all (the sherds of) the ceramics found in- and outside the *Behouden Huys* on Novaya Zemlya.

This paper includes a complete overview of the imported German stoneware found as part of the artefactual inventories

1 Old curator collections of the Netherlands Institute for Ship- and underwaterArchaeology (N.I.S.A./ R.O.B.), Oostvaardersdijk 01-04, 8244 PA Lelystad, Netherlands.

2 Woltering *et al.* 1998-99; Vlierman 2002, 122.

3 Besteman 1990, 107-110.

4 Reclaimed land of the former Zuiderzee.

5 On plot Oz 36 in the south-east part of the polder Southern Flevoland (Vlierman 1985).

6 Blommesteijn *et al.* 1997, 142.

7 Vlierman 1985, 29-30.

8 Vlierman in preparation.

9 R.O.B./A.A.O. 1995, 21.

FIG. 1 (Late) medieval shipwreck and settlement sites with German stoneware assemblages in the Zuiderzee region (according to Lenselink & Koopstra 1994, fig. 5.21d). Legend: A-B: Carolingian findspots; 1-28: location of the shipwrecks. The numbers refer to the catalogue in chapter 2.

on board 13th- to late 16th-century ships in the Netherlands[10], excavated up until 2000[11] by the Netherlands Institute for Ship and Underwater Archaeology (N.I.S.A./R.O.B.)[12]. Based on a combination of various data the shipping disasters in the Zuiderzee region can be dated within a period of 25 years or less. Sometimes an exact date of sinking can even be given[13].

The stoneware found on the ship of Barentz and Van Heemskerck has also been described. The ship was wrecked in October 1596 on the north-east coast of Novaya Zemlya during the famous third Dutch voyage of discovery to reach Asia through the North. The crew built the *Behouden Huys* (the Safe House) and made use of the galley utensils of the ship during their

10 This text is partly derived from a paper presented at the 1995 Medieval Pottery Research Group (MPRG) Congress on ceramics from the Rhineland in Cologne.

11 Since 2000 the N.I.S.A. no longer carries out excavations of shipwrecks in Flevoland (Vlierman 2006, 166).

12 Since December 2006 the Rijksdienst voor het Oudheidkundig Bodemonderzoek (ROB, and the

NISA) has been integrated in the Rijksdienst voor Archeologie, Cultuurlandschap en Monumenten (RACM), since 2009 Rijksdienst voor het Cultureel Erfgoed (RCE).

13 Vlierman 1983, 3.

overwintering (October 1596-June 1597). The sherds were collected on Novaya Zemlya between 1871 and 1995[14]. A river boat with some 'Andenne' pots is another remarkable find. These 'time capsules' are rather rare in archaeology. The generally second- or third-class quality stoneware products[15] carried on board can be dated to a short period of use. Traces of use (relative degrees of wear) indicates the age of the stoneware vessels at the moment of sinking. The 'standard' pottery is also briefly mentioned, as are the bronze and copper utensils for cooking and frying, eating and drinking on board[16].

2   Inventory of shipwrecks and stoneware finds

2.1   Vessel Pz49 ('opgeboeide boomstamkano')

- found on lot Pz49 in Southern Flevoland, 8.5 km north-east of the (early) medieval settlement of Ark, in the town of Zeewolde, excavated in 1990. Comparable with the Utrecht boats of the Van Hoornekade and Waterstraat[17].
-Pottery: none.
-Dating evidence: C-14 1210+50 BP [18].
-Comment: the oldest medieval boat in the Almere/Zuiderzee region.

2.2   Riverboat Neer ('rivieraak/aakachtige plankboot')

-Found in an old bed of the river Maas near the village of Neer, Province of Limburg, in 1997. Comparable with the Kalkar-Niedermörmter[19].
-Stock-numbers: Neer -1 up to -10.
-Pottery: the inventory contains two complete spouted pots (fig. 2) and fragments of eight other vessels in Andenne-type pottery.
-Context of pottery: found inside the wreck.
-Dating evidence: up to now dendrochronological dating has not possible. The pottery can be identified as Andenne Period I, to be dated between the late-11th and the third quarter of the 12th century[20].
-Comment: two wooden hammers (belonging to a stonemason?) and a load of *c.* 5 cm thick poles were also part of the inventory.

2.3   Hanseatic cog Oz43

-Found on lot OZ 43 in Southern Flevoland, 2.5km north-east of the medieval settlement of Ark, and north of the town of Nijkerk, excavated in 1981[21].
-Stock-numbers: ZO43-1.
-Stoneware: only some very small proto-stoneware sherds were found (fig. 3: left).
-Context of pottery: found inside the wreck.

-Dating evidence: no dendrochronological analysis is as yet available. Radiocarbon dating of the treated wood has resulted in a date of 790 ± 30 BP and 850 ± 60 BP, respectively 1220-1280 and 1160-1260 AD after calibration. The type of sintel (iron cramp) used for fastening the caulking material into the seams provides a building date in the second or third quarter of the 13th century[22].
-Comment: the inventory also contains a large fragment of a handmade globular cooking pot (fig. 3: right). The ship probably sank in the last quarter of the 13th century.

FIG. 2 **Riverboat Neer: one of the Andenne pots (photo Limburgs Museum).**

FIG. 3 **Hanseatic cog Oz43: fragment of a handmade globular pot and some very small proto-stoneware sherds.**

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14 Vlierman 2005.

15 Vlierman m.m.v. Kleij 1990, 9; Hacquebord & Vlierman 1991, 11; Vlierman 1993, 74.

16 Vlierman 1992a, 10-22; *Idem* 1992b; *Idem* 1992c, 50-59; *Idem* 1993, 69-76; Hocker & Vlierman 1996, 76-79.

17 Hoekstra 1975, 390; Vlek 1987; Vlierman 2002, 126-127, fig. 6-7.

18 File N.I.S.A./ RuG 1991.

19 Obladen-Kauder 1993; Vlierman 2002, 131-132. The boat of Kalkar-Niedermörmter has a dendrochronological date of 802 ± 5.

20 Borremans & Warginaire 1966, 53, fig. 22:8, 86-7.

21 Vlierman in preparation.

22 RuG: GrN-20003 and GrN-20057; Vlierman 1996, 73, tables I-II.

2.4 Hanseatic cog A57

-Found on lot A 57 in the North-East Polder, north of the village of Rutten, excavated in 1985[23].
-Stock-numbers: A57, A57-53, -74, -105, -177, and -180.
-Stoneware: Only a small number of sherds of proto- and near-stoneware were found (fig. 4).
-Context of the pottery: found at the bottom of the wreck.
-Dating evidence: the type of sintel provides a building date in the second or third quarter of the 13th century[24]; the dendrochronological fell-date of the wood is 1263-1275 AD[25].
-Comment: the inventory also contains some sherds of handmade globular pots. The ship probably sank in the last quarter of the 13th century.

FIG. 4 **Hanseatic cog A57: fragments of proto- and near-stoneware.**

2.5 Small cog N5

-Found on lot N 5 in Eastern Flevoland, north of the town of Dronten, excavated in 1976 [26].
-Stock-numbers: ON5 -1 up to -9.
-Stoneware: The inventory contains two storage pitchers with a capacity of *c.* 6 litres and a small jug with a capacity of 1 litre. Two vessels have a near-stoneware fabric (fig. 5: middle and right). The third has a 'soft' yellowish-grey fabric, probably a product of the West-Köln region, perhaps Langerwehe[27] or Brühl (fig. 5: left).
-Context of the pottery: found at the bottom of the wreck.
-Dating evidence: there is no dendrochronological dating available. The type of sintel (iron cramp) provides a building date in the late-13th or the first half of the 14th century[28]
-Comment: the stoneware was found together with a redware cooking pot (grape), a small globular pot, and some sherds of an other one, some sherds of redware pots, and of a blue-greyware one. Its the oldest more or less complete artefactual inventory of a cog. Its completeness makes it possible to calculate the number of stoneware jugs that could be expected to have been on board one of these late medieval vessels of *c.* 16-20 m in length, with a crew of 2-6 persons. An interesting feature of the ceramics of this inventory is the combination of the three different fabrics of (near-)stoneware with a small redware grape and a small globular pot with '*Besenstrich*' decoration, all in use together at the moment of wreckage. Based on the pottery dates, the ship sank no later than *c.* 1325 AD.

FIG. 5 **Small cog N5: jugs.**

2.6 Small cog G77

-Found on lot G 77 in Eastern Flevoland, west of the village of Swifterbant, surveyed in 2001[29]. Comparable with Dronten lot N 5 (see 2.5).
-Stock-numbers: OG77-7, -18 and -28.
-Stoneware: the inventory contains a storage pitcher with a volume of *c.* 5-6 litres, some sherds of a pitcher and a small globular drinking vessel in near-stoneware (fig. 6).
-Context of the pottery: found on the bottom of the wreck.
-Dating evidence: the dendrochronological fell-date is *c.* 1305 AD. The type of sintel provides a building date between the late-13th and the first half of the 14th century. The wreckage is not later than *c.* 1325 AD, based on the stoneware finds.
-Comment: ceramics found together with a bronze tripod cooking pot. Excavation of the wreck will probably provide more objects.

FIG. 6 **Small cog G77: pitcher and sherds of a small globular near-stoneware drinking vessel.**

23 **Vlierman in preparation.**

24 **Vlierman 1996, 74, tables I-II.**

25 **R.I.N.G. 1994, ka5 06, ka5 07, ka5 08 and ka5 24 (file N.I.S.A.).**

26 **Reinders *et al.* 1980, 7-16; Vlierman 1983; *Idem* 1993, 72, fig. 1; *Idem* in preparation.**

27 **Hurst 1977, 212-238.**

28 **Vlierman 1996, 77, tables I-II.**

29 **File N.I.S.A.; R.I.N.G. 2001, kog 01.1, kog 02.0, kog 02.0; Vlierman in preparation.**

2.7 Hanseatic cog Oz36

-Found near the 12th -14th century settlement of Ark on lot Oz 36 in Southern Flevoland, north of the town of Nijkerk, excavated in 1983[30].
-Stock-numbers: ZO36-1 up to –3.
-Stoneware: only some small sherds of three (real stoneware) Siegburg drinking jugs represent the stoneware finds.
-Context of the pottery: found on the bottom of the wreck.
-Dating evidence: the dendrochronological fell-date is 1335/1336 AD[31]. The type of sintel provides a building date between the third quarter of the 13th and the first half of the 14th century[32]. This type of stoneware was in use during the third and fourth quarter of the 14th century[33].
-Comment: the inventory also contains a still unidentified type of earthenware jug (fig. 7), some sherds of three redware (cooking) pots and the foot of a small bronze cooking-pot.

FIG. 7 Hanseatic cog Oz36: earthenware jug.

2.8 Small cog M107

-Found on lot M 107 in the North-East Polder, west of the village of Marknesse, excavated in 1944 [34].
-Stock-numbers: Z1944/II-2 and –3.
-Stoneware: one (real) stoneware jug from Siegburg and a small one with the well-known yellowish-grey fabric and a green-spotted glaze from the Meuse alley represent the storage and drinking vessels of the artefactual inventory (fig. 8).
-Context of the pottery: found inside the wreck.
-Dating evidence: based on the date of the ceramics, the measurements of the bricks of the cargo, and the soil disturbance the ship sank in the second half of the 14th century.
-Comment: the ship carried a copper kettle and two bronze tripods used for cooking.

FIG. 8 Small cog M107: Siegburg jug and small jug from the Meuse Valley.

2.9 Small cog W13

-Found on lot W 13 in Southern Flevoland, in the town of Almere, excavated in 1986[35]. Comparable with Marknesse lot M 107 (see 2.8)
-Stock-numbers: ZW13-1 up to –3.
-Stoneware: the inventory contains two jugs of the well-known Langerwehe type, each with a volume of 2.5 litres (fig. 9). The incomplete vessel is a base fragment of a comparable jug. They both show traces of use. Fragments of a third and smaller jug belong to another type with a yellowish-grey fabric, possibly made in the Maas/Rhine region.
-Context of the pottery: found inside the wreck.
-Dating evidence: no dendrochronological dating is available. The type of sintel provides a building date between the fourth quarter of the 14th or the first half of the 15th century. Three silver coins of Gelre and Utrecht provides a *terminus post quem* of *c.* 1420 and a *terminus post quem* of 1440. A wreck date early in the second quarter of the 15th century is most probable[36].
-Comment: some small sherds of some redware cooking pots, a tripod bowl and three frying pans were also found.

FIG. 9 Small cog W13: Langerwehe jugs.

2.10 Inland (river)boat K73/74

-Found on lot K 73/74 Eastern Flevoland, west of the town of Dronten, excavated in 1971[37].
-Stock-numbers: OK 73/74-1 and –2.
-Stoneware: the inventory contains a funnel neck jug from Siegburg and a pitcher from Langerwehe (fig. 10) with a volume of 0.75 and 1.8 litres respectively.
-Context of the pottery: found amidships on the bottom of the wreck.
-Dating evidence: to date no dendrochrological dating has been carried out. Eleven silver coins from the cities of Kampen and Groningen, the dioceses of Utrecht and Munster and from Flanders provide the best information for the date of the wreck, which occurred *c.* 1460. The type of sintel provides a building date between the fourth quarter of the 14th or the first half of the 15th century[38].
-Comment: small sherds of a redware cooking pot were also found.

30 Vlierman in preparation.

31 File n.i.s.a., r.i.n.g. 1993. kko 070 – kko 190.

32 Vlierman 1996, 77, tables I-II.

33 H.L. Janssen, personal communication 2000.

34 Modderman 1945; Vlierman in preparation.

35 Hocker & Vlierman 1996; R.I.N.G. 1996 kaw 011- kaw 061; Vlierman 1996, 80, tables I-II.

36 Vlierman 1992a; *Idem* 1992b; *Idem* 1993; Vlierman & Koldeweij 1992-1993; *Idem* 1996-1997; Hocker & Vlierman 1996.

37 Reinders *et al.* 1980, 17-29; Vlierman 1983, 4-11.

38 Vlierman 1996, 80, table I-II.

FIG. 10 **Inland (river)boat K73/74: Langerwehe pitcher and Siegburg jug.**

2.11 Cargo vessel Nz66w

-Found on lot Nz 66w in Southern Flevoland, north-north-east of the village of Spakenburg, excavated in 1983[39].
-Stock-number: NZ66w/13.
-Stoneware: the inventory contains one complete very small Siegburg jug (fig. 11).
-Context of the pottery: found inside the wreck.
-Dating evidence: the type of sintel provides a building date between the first and the third quarter of the 15th century. The wreck date is in the third or fourth quarter of the 15th century.
-Comment: -

FIG. 11 **Cargo vessel Nz66w: Siegburg jug.**

2.12 Cargo vessel (complete clinker-built foreign? ship) G35

-Found on lot G 35 in the North-East Polder, near the village of Creil, surveyed in 1999[40].
-Stock-number: NG 35-6.
-Stoneware: only a partly salt-glazed drinking jug from Frechen(?) with a volume of *c.* 1 litre was present (fig. 12). The vessel showed no traces of use.
-Context of the pottery: found inside the wreck.
-Dating evidence: dendrochronological analysis provides a *terminus post quem* building date of 1422 ± 6.
Based on the pottery the wreck can be dated to the third (or fourth) quarter of the 15th century.
-Comment: the inventory also contains a stewing pan(?) and sherds of a cooking pot in redware.

FIG. 12 **Cargo vessel G35: drinking jug (Frechen?).**

2.13 Cargo vessel B55

-Found on lot B 55 in Eastern Flevoland, in the centre of the town of Lelystad, excavated in 1975[41].
-Stock-number: OB55/2.
-Stoneware: fragments of only one Langerwehe pitcher with a volume of of *c.* 20 litres were present (fig. 13).
-Context of the pottery: found inside the stern of the wreck.
-Dating evidence: the type of sintel provides a building date between the first and the third quarter of the 15th century. To date no dendrochronological dating has been carried out. A wreck date based on the ceramics is situated in the third or fourth quarter of the 15th century.
-Comment: the inventory also contains a redware frying pan, redware jug , fragments of redware cooking pots, a copper kettle, a bronze cooking tripod, and a pewter drinking jug.

FIG. 13 **Cargo vessel B55: Langerwehe pitcher.**

39 File N.I.S.A.; Vlierman 1996, 82, tables I-II.   40 File N.I.S.A., R.I.N.G. 1999 k35 01.0.   41 Reinders *et al.* 1980, 31-41; Vlierman 1996, 83, tables I-II.

2.14 Cargo vessel Nz103

-Found on lot Nz 103 in Southern Flevoland, north of the village of Spakenburg, surveyed in 1979; protected[42].
-Stock-number: NZ 103/1.
-Stoneware: the inventory only contains a small (8cm high) so-called oil pot of a dark-grey hard fabric with a brown glaze, probably Raeren (fig. 14). Volume 60ml.
-Context of the pottery: the small pot was found in the forward of the ship.
-Dating evidence: a date for the disturbance of the soil provides a date for the sinking of the vessel in the second half of the 16th century. To date no dendrochronological dating is available. Dating The jug dates to the mid-16th century.
-Comment: -

FIG. 14 Cargo vessel Nz103: small, so-called oil pot from Raeren.

2.15 Three-masted sea-going cargo vessel or war-ship U34 (complete clinker-built foreign? ship of at least 30 m.; hulk)

-Found on lot U 34 in Eastern Flevoland, south-west of the village of Biddinghuizen, excavated in 1986 and 1987 [43].
-Stoneware: sherds of at least ten small stoneware jugs, with an average volume of *c.* 1 litre. A funnel neck jug from Siegburg, an early 'Bartmann' with stamped relief decoration and a hard fabric (fig. 15), and two yellowish-grey jugs with a 'soft' fabric and a different neck size are products of Cologne or the surrounding region. Fragments of 5 or 6 jugs with a hard and dark-grey fabric and the typical Langerwehe surface colours of brown, yellowish and grey.
-Dating evidence: the type of sintel provides a building date third quarter of the 15th or the first half of the 16th century, dendrochronological fell-date between 1522 AD and 1537 AD[44]. Wreck date on the basis of the stoneware is mid- or third quarter of the 16th century.
-Comment: the inventory also contains some sherds of redware cooking pots.

FIG. 15 Cargo vessel or warship U34: Siegburg funnel neck jug and sherds of an early 'Bartmann'.

2.16 Cargo vessel M11 (complete clinker-built foreign? ship)

-Found on lot M 11 Eastern Flevoland, near the village of Biddinghuizen, excavated in 1992[45].
-Stock-number: OM 11/127.
-Stoneware: a jug with a globular belly is the only stoneware vessel in the inventory (fig. 16: right). It has a yellowish-grey fabric and is more or less comparable with the stoneware vessels of Fisherman W10 (see 2.23).
-Context of the pottery: found inside the wreck.
-Dating evidence: dendrochronological dating provides a fell-date between 1531 and 1533 AD. Two coins, the first of the Bourgondian Netherlands, Charles V and probably minted in Holland between 1521-1529, and the second from Saxony, Friedrich III, minted between 1508-1525, provide a wreck date in the second (or third) quarter of the 16th century.
-Comment: a redware frying pan, a plate and sherds of a cooking-pot, a copper kettle and a wooden plate were also found. The wreck contained a small inventory and an interesting load; ingots of lead, barrels with fish (herring) and 16 golf clubs of different types and sizes.

FIG. 16 Cargo vessel M11: jug (right); Fisherman W10: two jugs (middle and left).

42 File N.I.S.A.

43 Reinders & Oosting 1989, 106-122; Vlierman 1996, 83, tables I-II.

44 File N.I.S.A., R.I.N.G. 1994/ 2000, kku 01.1, kku 02.1, kku 03.1.

45 File N.I.S.A.; Morel 1993, 24-37; R.I.N.G. 1997, km11011, km 11021, km11031.

2.17 Clinker-built fisherman Nz44, so-called watership

-Found on lot Nz 44 in Southern Flevoland, north of the village of Spakenburg, excavated in 1979 [46].
-Stock-number: ZN 44/20.
-Stoneware: only a small stoneware jug from Raeren was found, this with an interesting repair using red material in a crack in the bottom (fig. 17).
-Context of the pottery: found between the ballast of erratic boulders.
-Dating evidence: The type of sintel provides a building date in the first half of the 16th century. The soil disturbance, repairs and the quality of the wood used to build the ship, two silver coins of Brabant, Charles V, minted in Antwerp respectively between 1507-1520 and 1520-1555, and the stoneware jug and other ceramics provide a wreck date in the second or third quarter of the 16th century.
-Comment: The inventory also contains a copper kettle and (sherds of) several redware cooking pots and frying pans.

FIG. 17   Fisherman Nz44: small Raeren jug.

2.18 & 2.19 Two clinker-built fisherman Nz74-I and Nz74-II, so-called waterships, which were probably scrapped on the same date

-Found on lot Nz 74 (I and II), in Southern Flevoland, north of the village of Spakenburg, excavated in 1982 [47].
-Stock-numbers: NZ 74 I-58, Nz 74 II-1 and Nz 74 II-2.
-Stoneware: a complete jug with a volume of 2.5 litres was found on the Nz74-I and sherds of two comparable jugs on the Nz74-II (fig. 18).
-Context of the pottery: between the ballast of erratic boulders.
-Dating evidence: the type of sintel provides a building date of both the ships in the first half of the 16th century. There is a dendrochronological fell-date for the Nz74-I of 1525-1526 AD and of the Nz74-II of 1525-1527 AD. The ceramics indicate a wreck date in the middle or the third quarter of the 16th century.
-Comment: both wrecks carried (sherds of) several redware cooking pots, frying pans and plates.

FIG. 18   Fisherman Nz74-I: jug (left); Fisherman Nz74-II: fragments of two jugs (middle and right).

2.20 Clinker-built fisherman K84, so-called watership

-Found on lot K 84 in Eastern Flevoland, near the town of Dronten, excavated in 1971 [48].
-Stock-numbers: K 84 II-25 and -71.
-Stoneware: a glazed jug with a volume of *c.* 1 litre and the base of a small (funnel neck?) Siegburg jug were found (fig. 19).
-Context of the pottery: inside the wreck. The glazed jug was the only stoneware in use. The Siegburg sherd was found under the ballast of erratic boulders and probably part of a jug which was broken long before the ship sank.
-Dating evidence: a coin of the dioceses of Utrecht, Frederik van Baden, was minted in 1514. Dendrochronological analysis provides a fell-date between 1511 and 1517 AD. Based on the pottery, the wreck dates back from the second or third quarter of the 16th century.
-Comment: for cooking and frying the ship carried some redware tripods and a small tripod pan with a handle, and a copper kettle.

FIG. 19   Fisherman K84: complete salt-glazed jug and base of a Siegburg jug.

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46 File N.I.S.A.; Vlierman 1996, 83, tables I-II.

47 File N.I.S.A; Vlierman, 1996, 84, tables I-II; R.I.N.G. 1994, kn1010 +2, kn 1020 +2, kn 1030 +2 and kn210 +2, kn 2020 +2, kn 2030 +2, kn 2040 +2.

48 File N.I.S.A., R.I.N.G. 1999 kok 01.0, kok 02.1, kok 03.1, kok 04.1, kok 05.1, kok2+4.

2.21 Clinker-built fisherman Nz42-I, so-called watership

-Found on lot Nz 42 (I) in Southern Flevoland, north of the village of Spakenburg, excavated in 1979[49].
-Stock-numbers: ZN 42/19, /20 and /21.
-Stoneware: The inventory includes a sherd of a jug with a yellowish-grey fabric and sherds of a small 'Bartmann' with the well-known decoration of oak leaves on the surface (fig. 20: left and right). Another find outside the boat was a part of a small 'Bartmann' with a mask on the neck (fig. 20: middle).
-Context of the pottery: found in the living-quarters behind the fish well. The late 16th or early 17th century 'Bartmann' with mask on the neck was found outside the ship and isn't part of the inventory.
-Dating evidence: a dendrochronological fell-date of 1527-1531 provides a building date in the second quarter of the 16th century. Wreck date on the basis of the pottery is mid- or third quarter of the 16th century.
-Comment: several cooking pots and frying pans in redware were also found.

FIG. 20 **Fisherman Nz42-I: sherds of two 'Bartmann'-jugs and a flat-based jug.**

2.22 Inland (river-)boat L89

-Found on lot L 89 Eastern Flevoland, north of the town of Dronten, excavated in 1996[50]. Comparable with Dronten lot K73/74 (see 2.10).
-Stock-numbers: L89/30, /33, and /45.
-Stoneware: three stoneware vessels were present: a large storage pitcher of the Langerwehe type, a globular pitcher with a narrow neck and a yellowish-grey fabric from the Cologne area, comparable to the one of M 11 (see 2.16), and a small drinking jug from Raeren (fig. 21).
-Dating evidence: the sintel type provides a building date in the last quarter of the 14th or the first half of the 15th century. The ship and several construction details have also a typical 15th century look and were probably built in an 'old fashioned' way. Dendrochronological fell-date 1545 ± 6 AD. One of the five collected coins, a *driemijtstuk* of the cities of Deventer, Kampen and Zwolle, minted in 1556, provides provisionally the best indication for a wreck date in the third quarter of the 16th century.
-Comment: the inventory includes also some redware cooking pots and frying pans.

FIG. 21 **Cargo vessel L89: a jug and two pitchers.**

2.23 Carvel-built fisherman W10, so-called watership

-Found on lot W 10 in Eastern Flevoland, west of the town of Harderwijk, excavated in 1975[51].
-Stock-numbers: OW 10/26, and /27.
-Stoneware: both the small jugs with a volume of *c.* 1 litre have a yellowish-grey fabric, although this fabric is different from the one on M 11 (fig. 16: left and middle).
-Dating evidence: the ship was built *c.* 1550 AD, according to dendrochronological dating. Floor tiles inscribed 1561 provide a *terminus post quem* for the ship, which wrecked probably *c.* 1575.
-Comment: Also a redware frying pan and several cooking pots were found.

2.24 Wreck site O27

-Found on lot O 27 in the North-East Polder, south-west of the town of Emmeloord[52].
-Stock-number: NOL 27-1.
-Stoneware: a large Langerwehe type of storage pitcher (fig. 22) with a volume of *c.* 10 litres.
-Dating evidence: based on the jug the wreck can be dated in the second half of the 16th century.
-Comment: there is no further information available about the ship and its inventory.

FIG. 22 **Wreck site O27: storage pitcher.**

49 Pedersen, 1996, 103-105; R.I.N.G. 1993 knz010, knz020, knz030, knz040.

50 File N.I.S.A.; Vlierman 1996, 80, tables I-II, R.I.N.G. 1997, kln031, kln041, kln34.

51 Reinders *et al.* 1978; Van Holk 1986, 58.

52 File N.I.S.A.

2.25   Wreck R62

-Found on lot R 62 in the North-East polder, near the village of Marknesse, excavated in 1943[53].
-Stock-number: Z1943/ III-45.
-Stoneware: 7 litre storage pitcher (fig. 23).
-Dating evidence: the pottery and some other objects provide a wreck date at the end of the 16th century.
-Comment: sherds of a cooking pot, a plate and a saucepan of redware, a wooden plate and a copper kettle were also found. There is no information preserved about the wreck.

2.26   Sea-going cargo-vessel with two decks SO1

-Found on the site SO 1 in the Waddenzee near the island of Texel. Lying in an area protected as a World Heritage site because it is now known to contain many well-preserved wreck sites (fig. 1C), the vessel has been investigated between 1987 and 1997 by the N.I.S.A.[54]. In the fore and halfdeck, an armament of canons and a cargo of Baltic corn were present.
-Stock-numbers: SO 1-1357, SO 1-11003, SO 1-14717, SO 1-15012.
-Stoneware: four different stoneware jugs were present. The 'Bartmann' on the right (fig. 24) represents two complete examples. The sherds of a third example and the small decorated one (top) were found in the same area. The two very small undecorated jugs and a base sherd of a larger one were found in another part of the ship. The brown one (bottom left) represents two examples.
-Context of the pottery: the decorated jugs were found amidships between the first and second deck on starboard on the stern side of the ship. The undecorated ones were found near the oven and in the forward of the ship.
-Dating evidence: dendrochronological dating of the wood provides a building date of *c.* 1580. The find of a dated (1590) wooden linstock in 1996 provides a *terminus post quem*. Historical information provides a possible wreck date of Christmas Eve 1593.
-Comment: only a small number of (sherds of) redware cooking pots are found on the site. The pottery collected does not represent the entire inventory of the galley.

FIG. 24   **Cargo vessel SO1: 'Bartmann' and small jugs.**

3.27   Novaya Zemly

-Found in and around the *Behouden Huys* (the Safe House) on the north-east coast of Novaya Zemlya, near the wreck site of the ship of Barentz and Van Heemskerck. The sherds were collected during several (archaeological) voyages of discovery and expeditions between 1871 and 1995[55].
-Stock-numbers (fictitious): BA-001 up to BA-020.
-Stoneware: 17 different stoneware jugs, a salt or mustard pot, and two small gallipots were found (fig. 25-26). There are 4 'Bartmann'; 001 and 002 have medallions with a flower decoration, 003 and 004 with the coat of arms of Elizabeth I of England (1558-1603), a small jug with pewter lid has medallions with the coat of arms of Peter Schwartzenberg (005). Another small one (008) has a chip-carving decoration and a pewter lid. Two larger storage jugs (006 and 007) possibly had one or three medallions. The numbers 009 and 010 are of the well-known type of undecorated small jugs. 011-017 are of a particular type and in different sizes; an upside down pear shape, with a narrow neck. Almost unknown in the Netherlands is the type of salt or mustard pot 018. 019 and 020 are small gallipots. 002 is a product from Frechen, 003 and 004 maybe too, but they correspond more with products of Raeren. 005 is a product of Raeren, as are probably 006, 007, and 008. 009, 010, 018, 019 and 020 are made in one of the several production centres in the Rhineland. 001 and 011-017 have a fabric different from the stoneware from the Rhineland, they were probably produced in Westphalia[56].
-Context of the pottery: in and outside the *Behouden Huys*.
-Dating evidence: historical information. The ship sailed from Amsterdam on the 10th of May 1596, and was wrecked on the 12th of October of the same year. The crew overwintered on Novaya Zemlya, and left the island on the 14th of June 1597.
-Comment: the pots show almost no traces of use. The stoneware was probably rather new in May 1596, although some vessels were maybe a few years old at that time. The inventory also includes some redware cooking pots and two copper kettles. No intrusive finds from later expeditions are found.

28.   Cargo-vessel Lz1 for the transport of peat

-Found on lot Lz 1 in Southern Flevoland, south-west of the town of Zeewolde, excavated in 1990[57].
-Stock-numbers: ZL 1-1 and –2.

53   **File N.I.S.A.**
54   **Manders 1998, 70-81.**
55   **Braat *et al.* 1998.**
56   **Vlierman 2005.**
57   **Van Holk 1996, 28-30; file N.I.S.A.**
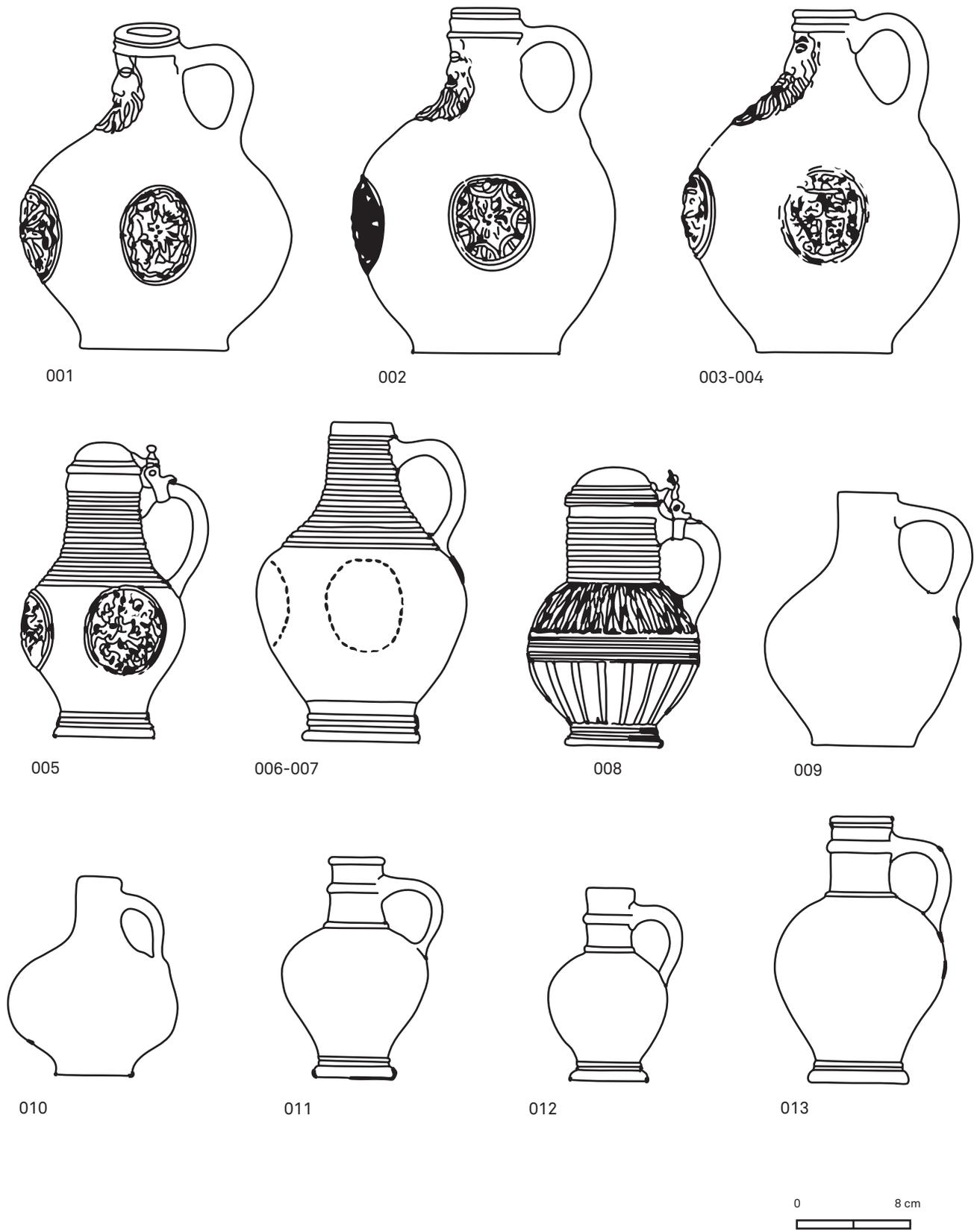
FIG. 25 Line drawings of the stoneware vessels from the *Behouden Huys*, Novaya Semlya.

014-O15

016

017

018

019-020

0   8cm
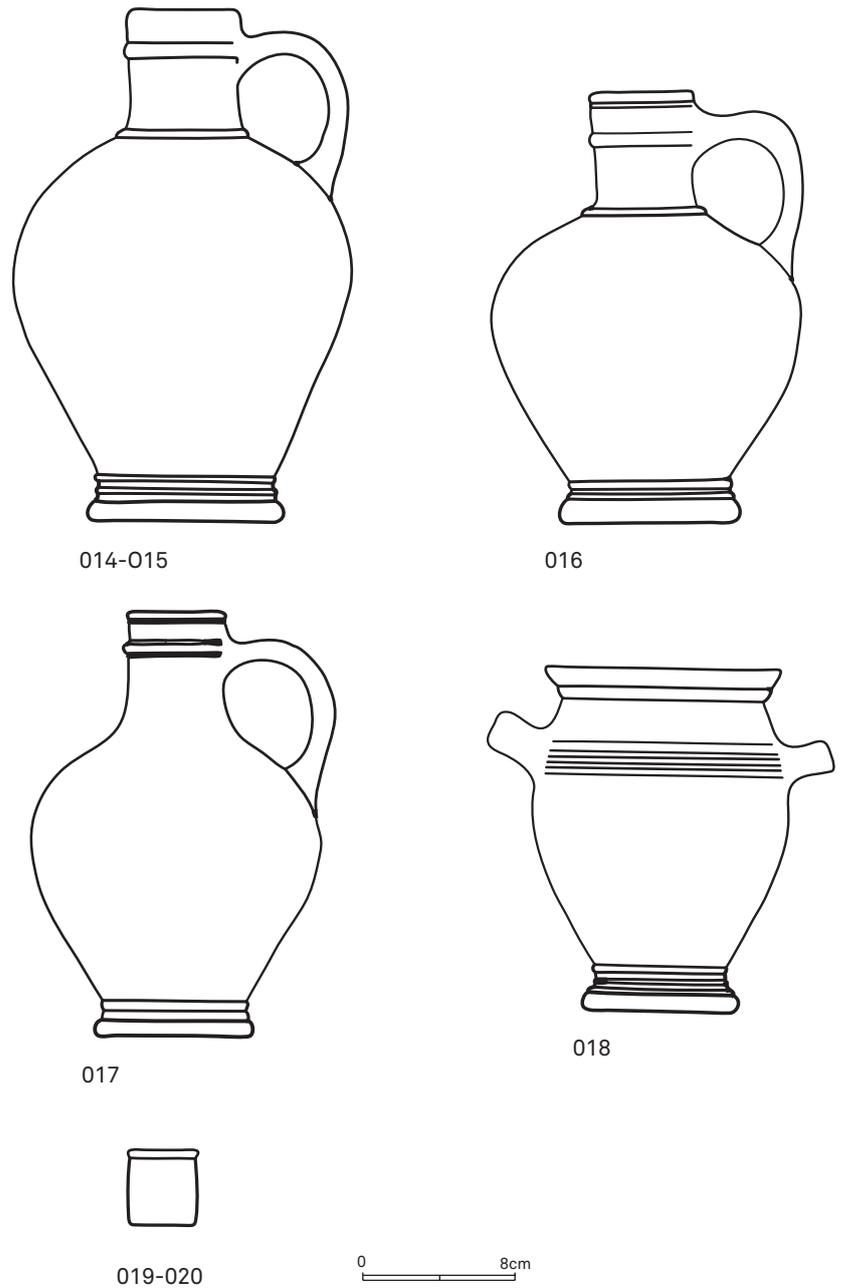
-Stoneware: small 'Bartmann' with missing medallion, probably made in Frechen (fig. 27), perhaps a second class product. A stamped relief-decorated jug with pewter lid made by Fass Mennicken from Raeren, dated 1600 (fig. 28).
-Context of the pottery: in the living-quarters in the stern of the ship.
-Dating evidence: dendrochronological dating provides a building date of 1587 ± 5. The 'Mennicken' jug is made in or shortly after 1600. A lead token with the year 1596, a coin (*duit*) of Holland minted 1593-1598, a pair of (new) shoes are directly comparable with shoes from the SO 1 wreck which probably sank in 1593 (see 2.26). The rest of the inventory also suggests a wreck date shortly after 1600. The wood of the ship didn't show many repairs and was of a good quality, an age of 18 ± 5 years when it sank seems very acceptable.
-Comment: other vessels include two cooking pots, a frying pan and a stewing pot from redware. The 'Mennicken' jug is evidence for the use of more luxury (decorated) stoneware products on board inland vessels in this period.

FIG. 27   **Cargo vessel Lz 1: small 'Bartmann'.**

FIG. 28   **Cargo vessel Lz1: decorated jug from the workshop of Fass Mennicken, Raeren.**

3   Remarks and provisional conclusions

The study of the artefactual inventories of ships within the period *c.* 1275-1600 makes clear that the nature and number of artefacts on board more or less comparable ships with a similar number of crew didn't change until *c.* 1600. One can therefore assume comparable late medieval inventories on similar vessels until this date. This was most probably also true for the household assemblages of ordinary people in towns and villages at this time.

'Bartmann' and stoneware jugs with stamped relief decorations occur from the end of the 16th century on board the inland vessels of the *Zuiderzee* and generally all the ceramics are of a second- or third-class quality[58]. The only exception to date is the 'Bartmann' with oak-leaf decoration from the mid-16th century watership (see 2.21, fig. 20). Until *c.* 1600 one can also recognise a still 'medieval look' to the assemblages, a multifunctional composition, and the use of a small number of ceramics. The archaeological evidence from shipwrecks dating to the first quarter of the 17th century shows a rapid change in the functional variety of the ceramics, as well as in their number and sometimes their quality. Ships 2.22 and 2.28 are good examples of such 'medieval look' ships and inventories,

although the inventory of the last ship is the first one to contain a more luxury stoneware jug. There is no contradiction between the dating of the stoneware and the general date ranges of the other diagnostic artefacts on board any of the vessels discussed. Their is a difference in the stoneware carried on board, between the 'small' inland- and *Zuiderzee*-vessels and the larger sea-going ships. There is of course a difference in the number of pots depending on the number of crew. On the other hand, on the larger ships, we do see some better quality products as well as ordinary artefacts. These better quality products perhaps belonged to, or were only for the use of, the captain and officers on board. For storage and transport of liquid necessary for the crew during their journey, some of the late medieval 'small' *Zuiderzee* vessels contained a large stoneware jug or two smaller ones with a total minimum volume of *c.* 5-6 litres. The *c.* 1 litre jugs could also have been used as drinking vessels. This is an acceptable conclusion considering that most of the journeys across the Zuiderzee can be completed in one day. Small boats with only one or two drinking jugs may be interpreted as vessels in use on local or regional river journeys, crossing the *Zuiderzee* now and again and only over a short space of time. In the case of larger ships, or ships on a more regular service or undertaking journeys longer than one day, or sea-going ships, one can expect one or more wooden barrels for the storage and transport of water. In several 16th-century and later ships we have indeed found evidence for such barrels.

1998 saw the completion of a new building for the N.I.S.A. There was, and still is, a plan to construct an open depot in order to exhibit all the unique, closely-dated and in total almost 30.000 objects from the ship inventories ship by ship (including the stoneware mentioned in this paper). The N.I.S.A. houses an incomparable reference collection for ceramics, bronze and copper cooking pots and kettles, tools, personal belongings, ship- and working-equipment etc. for the period 1300-1900 AD[59]. Due to the constant changing of Dutch Government policy with regard to maritime and ship archaeology over the last few years, it is not certain when the depot will be finished or even when the excavation reports of at least 150 of the most interesting late and post-medieval ships with their inventories will be published[60]. About 250 objects from the *Behouden Huys* (sie 2.27) can be seen in the Rijksmuseum in Amsterdam, most of the pottery is stored in the Regional Historical Museum in Archangelsk, and in the Arctic and Antarctic Museum in St. Petersburg (Russia).

58 Vlierman 1993, 74.   **59** Vlierman 1997A, 15-36; Vlierman 1997b, 57-68.   **60** Vlierman 2006, 165-168.

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The Merovingian cemetery of Broechem (B, province of Antwerp) in the North–Austrasian *pagus Renensis*

Rica Annaert

1 Introduction: situation and evolution of the archaeological research

Broechem, part of the municipality of Ranst, is situated east of Antwerp in the most southern part of the Meuse-Demer-Scheldt-region. The region has been the subject of many archaeological studies[1] and many early medieval cemeteries and settlements have already been excavated[2]. The cemetery site is located on a lower slope of a Pleistocene north-orientated sand ridge (13 m in length) between the *Molenbeek* and the *Merrebeek*, where the alluvial grounds of both streams and the river Nethe border the old arable lands covered with the

plaggen soils characteristic of the region (fig. 1). A contemporary settlement at Broechem is hitherto unknown.

The first archaeological excavations on this cemetery were carried out between 2001-2003 by the Flemish Heritage Institute (VIOE) after one of the owners found two intact Merovingian pottery vessels[3]. Current excavations by the Flemish Heritage Institute are being undertaken in the northern part of the cemetery where the land is under immediate threat from building activities. Since the data from this recent excavations has not yet been fully analysed and the objects are still in conservation,

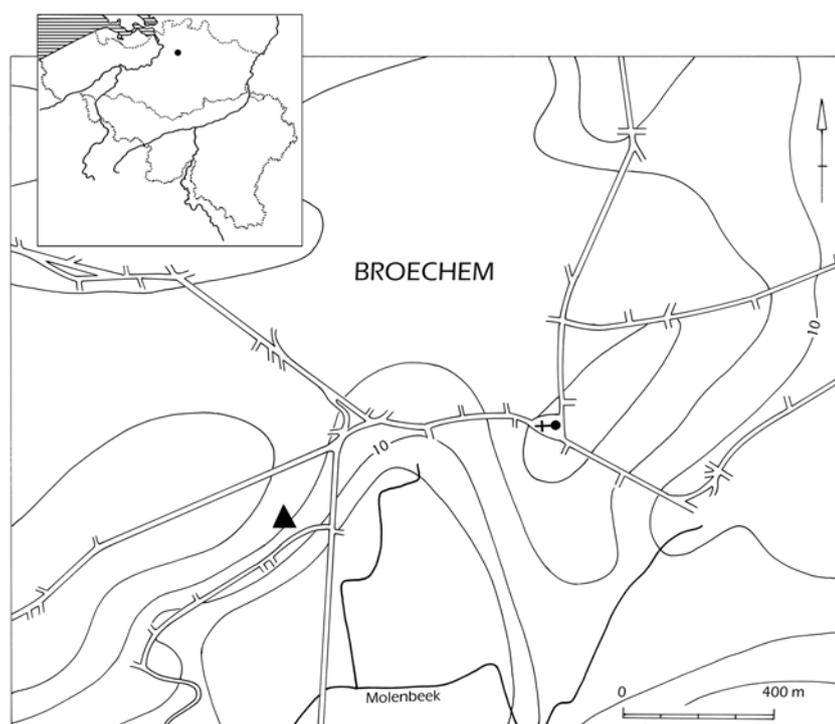FIG. 1 Location of Broechem and the graveyard.

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1 Verwers 1987; Theuws 1988; Leenders 1996; Verwers 1998-99.

2 Verwers 1987; Theuws 1988.

3 Annaert 2003; *Idem* 2004a; *Idem* 2004c;

Annaert & van Heesch 2004; Annaert 2007; *Idem* (in press).

this article is primarily based on the results from the first excavations carried out between 2001-2003, with, wherever possible, some extra information from the recent investigations.

Up until 2003 1560 m² had been excavated but the original dimensions of the cemetery remained unknown (fig. 2). In 2008 another 825 m² was excavated. During this excavation the eastern, southern and western limits of the cemetery seemed to have been reached, but the north-eastern ground plots continued to reveal graves. At the southern end, the cemetery extends to the marshy lowland of the Molenbeek, some 2.5 km distant from the alluvial plain of the river Nethe. This zone contains outcrops of Tertiary glauconitic clays. At the eastern side the clear linear limitation could be an indication for the presence of a road bordering the cemetery.

The oldest occupation on this site dates back to the Early Iron Age or Hallstatt phase C/D (800-500 B.C.). Evidence for this period of occupation was clearly visible in the southern zone where some ditches and waste pits were excavated[4]. Older post holes were also excavated among the Merovingian graves. It seems that an Early Iron Age settlement was completely destroyed during the laying out of the early medieval cemetery. This would also explain the presence of Iron Age handmade pottery sherds in the fill of the Merovingian grave pits.

At least 382 graves have been documented within the Merovingian cemetery. Among these are at least 53 cremations (14 %) and at least 329 inhumations (86 %), including 3 horse burials (situation as of 2008). With the exception of one urn grave, all the cremation graves were *Brandgrubengräber*. To date, the skeletal remains of three cremations have been analysed[5]. These three graves were female burials that also contained some cremated animal bones. These bones are the remnants of food offerings of pig and chicken. These remains seem to link the deceased to a high social class. The women died at the age of 30-40 years and all had a height between 1.50 m and 1.60 m. The cremation of the bodies appears to have been carried out shortly after death: the shrinkage and cracking of the bones suggest that the muscles were still active during the cremation process. The white colour of the cremated bone indicates that an optimal temperature of between 800-900° C was reached.

The fact that these three cremations are all female could be a coincidence. Only the complete study of all the cremation graves will prove or disprove whether the cremation ritual had any gender significance.

The cremation graves were present just beneath the subsoil and were mostly cutting into the inhumation graves. The cremation graves should therefore be interpreted as the youngest deposits in the cemetery. But because many of the cremations were buried on top of inhumation graves, other questions arise. Could there have been any relationship between the cremated

and the inhumated body? Or could it have been a burial ritual to cremate only some parts of the body whereas the rest of the body was buried in a wooden chest?

The 223 inhumation graves found during the excavations of 2001-2003 can be classified as follows:
· 177 coffin graves (79 %) with burials in a rectangular wooden coffin, some of which were placed on wooden crossbeams
· 11 chamber graves (pit with a width of over 1.60 m and a coffin with a width of over 0.80 m; 5%). Three chamber graves appear to be associated with a horse burial. They all have a rather isolated position (fig. 2: encircled graves). These graves could well be interpreted as founder graves (*Gründergräber*) belonging to the new colonists who settled in the area. Originally these graves were furnished with rich grave-goods, but these were all plundered. One of these chamber graves seems to be a multiple burial because two coffins were found buried side by side. Multiple burials are rare and in most cases these burials are *Nachbestattungen*.
· 35 graves without a coffin (16 %) including 24 without any grave-goods. Graves without a coffin are common in the Meuse-Demer-Scheldt-region especially in the cemeteries of Grobbendonk (nearby Broechem)[6] and Alphen (N.-Brabant, Nl.)[7].
· 3 horse burials: the horses were placed on their left side in a large, deep rectangular pit without a coffin.

In the Broechem cemetery skeletal remains have not been preserved due to the sandy, acidic soil of the Campine. In only a few burials were bones still visible as vague silhouettes in the soil (fig. 3). Based on the dimensions of the grave pits 44 could be attributed to infant burials (20 %). In a few graves tooth crowns were still present due to the better preservation of the tooth enamel. In some instances these teeth remains revealed information on the age and gender of the individuals. At least 39 inhumation graves did not contain any grave-goods (17 %) while 81 graves (36 %) were clearly plundered.

2   Lay out of the cemetery

As far as the lay-out and chronology of the cemetery is concerned, the following features have been identified to date. The southern part of the cemetery has a rather unorganised structure, in contrast with a more typical structured lay out in rows, in the recently excavated northern part (fig. 4). In the southern part of the cemetery there appears to be no uniformity in the orientation: for the 223 graves a number of different orientations have been recorded:
– W-E: 46 = 21 %
– WSW-ENE: 57 = 25 %
– N-S: 26 = 12 %
– NNE-SSW: 17 = 8 %
– NNW-SSE: 36 = 16 %
– unknown: 4 = 2%

4 Annaert 2004b.

5 *Idem* 2003, 53-55.

6 Janssens & Roosens 1963; Verwers 1987, 179; Theuws 1988, 62.

7 Verwers 1977; *Idem* 1987, 179; Theuws 1988, 57-59.

	1		4
	2		5
✳	3		6
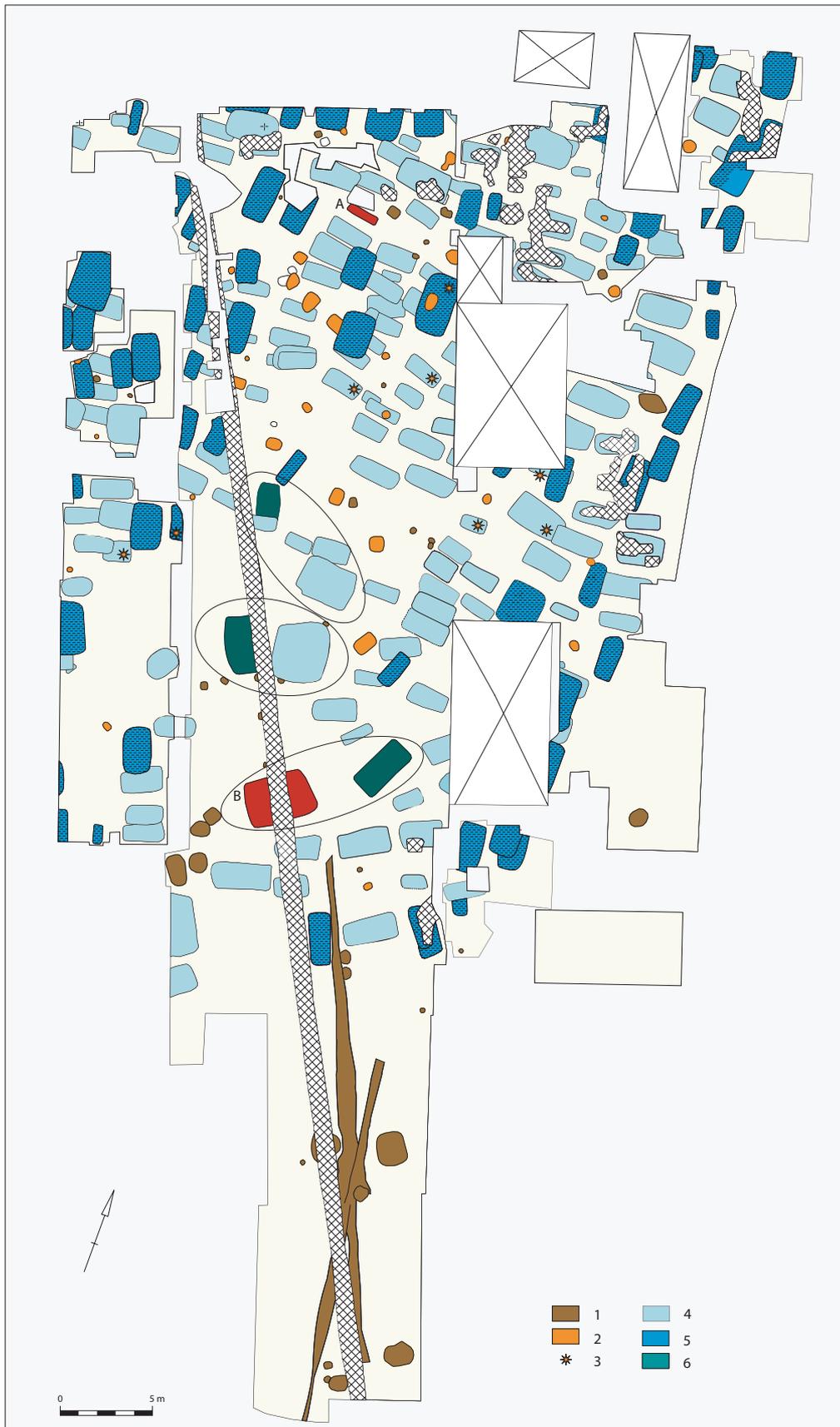
FIG. 2 **Excavation plan. 1: Iron age pits, postholes and ditches; 2: cremation graves; 3: cremation graves cutting inhumation graves; 4: W-E oriented inhumation graves; 5: N-S oriented inhumation graves; 6: horse burials; A: grave with hoard; B: double grave with Lombard** *tremissis.*

At Broechem the orientation seems to be linked to the chronology of the cemetery. The N-S orientated graves cut across the W-E orientated ones while the cremations disturb both the N-S and the W-E orientated inhumations. From a chronological view, the cremations belong to the later phase of burial on the site, while the W-E orientated inhumations can be dated to the earlier phase of the cemetery layout. This interpretation must be regarded with caution because some juxtaposition of cremation and inhumation may have significance (see earlier). Moreover the position of cremations in the upper subsoil layers is a logical phenomenon because of the shallow deposition of these burials. Both rites were certainly in use at the same time because disturbed cremation remains were found in many inhumation grave pits. The radiocarbon dating results place the three investigated cremations in the first half of the 6th century[8].

When looking how the burials are arranged with regard to existing graves, some interesting features start to emerge: inhumations as well as cremations both disturb and are disturbed or even destroyed by other graves. This questions whether a tradition existed for placing a physical memorial (in wood or stone) on the surface of the grave. In contrast, other graves are certainly arranged in relation to each other, some in juxtaposition, and others in a linear alignment. Possibly different family groups, gender or age groups are to be distinguished in this way.

The association of horse burials with rich chamber graves and the clustering of these burials, reflects the presence of an elite group in the Broechem population. These clustered graves have a central and isolated position in the cemetery.

FIG. 3 Remains of a human body visible as a soil stain in the acidic soil of Broechem.

FIG. 4 View on the recently excavated northern part of the cemetery characterised by an orderly lay out in rows.

8 Naysmith *et al.* 2007.

3 Tentative chronology based on the grave-goods

The Broechem cemetery seems to have been in use from the end of the 5th until the early 7th century with most of the grave-goods dating to the 6th century. More precise dating will be possible after the detailed comparative study of the objects has been completed[9]. Bearing in mind that many of the burials have been plundered, the poor conservation of the metal finds and the non-conservation of organic materials, the following observations can be made at this point in the research. Damascinated iron object are not present in Broechem. Graves with weaponry are found all over the cemetery. All types of weapons are present except the typical iron shield bosses which are completely absent.

Among the grave-goods some objects are rather exceptional for this region such as five glass beakers, golden or gilt brooches with garnet setting and filigree bands, a typical British penannular brooch (fig. 5), a golden ring, golden coins, more specifically a small hoard (probably the contents of a purse) containing a *solidus* of the Byzantine emperor Justinian I, struck in Constantinople between 542 and 565, two Ostrogotic *tremisses* attributed to Baduila (541-552) and seven Frankish *tremisses*, all pseudo-imperial imitations, and a possible Lombard *tremissis* found in the double grave. The hoard found in Broechem is the only Merovingian gold hoard known to have been found in modern-day Belgium; the coins were bought by the Royal Library of Belgium and are kept in the Coin Cabinet within this institution.

4 Broechem and the North-Austrasian *pagus Renensis*

Broechem is located in the peripheral region of North-Austrasia, more specifically in the *pagus Renensis* or *pagus Rien*. The latter has some quite interesting features.

The territory of the *pagus Rien* comprises a clearly defined sandy loamy area at the edge of the sandy Campine plateau. Important rivers – the Scheldt, Rupel, Nethe and Schijn – enclose this loamy area. In the region a lot of early and high medieval place names are still in use, mainly -*em* names derived from -*(inga)heim* and -*zele* place names[10]. Many of these place names are even mentioned in early medieval sources, some of them are specifically located in the *pagus Renensis*. Pre-medieval names are also known, for example Wilrijk and Kontich[11].

In earlier times some Merovingian cemeteries have been excavated in the territory of this *pagus*: Grobbendonk[12], Grobbendonk-Ouwen[13] en Borsbeek[14]. More recent rescue excavations and field survey projects have lead to the discovery of settlement traces from the late- and post-Roman colonisation period (4th-7th century), for example at Mortsel[15], Kontich[16], Hove[17], Wijnegem[18], Grobbendonk[19], Lier[20] and Zandhoven-Pulle[21]. Within the *pagus* territory two possible early medieval settlements have developed into historic towns: Antwerp and Lier (fig. 6).

Clearly the fertile soil (loam and sandy loam) as well as the presence of the rivers Scheldt, Rupel, Nethe and Schijn, have

FIG. 5 **Penannular brooch in copper alloy (type Fowler C), imported from the British Isles (pin is missing).**

9 The objects are still in conservation.

10 Theuws 1988, 173-177.

11 *Ibid.*, 171-173.

12 Janssens 1964; Janssens & Roosens 1963.

13 Mertens 1976, 14-27.

14 De Boe 1970.

15 Verstappen 2001, 93 en fig. 4.

16 De Paepe & Van Impe 1992, 152-153.

17 Verhaert & Annaert 2003, 110.

18 Cuyt & Van Strydonck 2004, 57-59.

19 Unpublished rescue excavations in the vicinity of the chapel of Ouwen - IAP, 2000-2001.

20 Annaert 1999.

21 Eggermont *et al.* 2008.

played an important role in the colonisation of this region after the Roman period. Without doubt the Germanic colonisation started from within the southern Frankish territory around Tournai and spread across the Scheldt to the fertile grounds to the north. During the next centuries further colonisation from the Rien region towards the less fertile sandy Campine plateau must have taken place[22].

During the early medieval phase a *pagus* must be understood as a constantly interchanging network of local elite groups maintaining mutual relationships as well as relationships with their original regions, or with other regions by marriage or alliance. For this reason it is impossible to map the Merovingian *pagus Rien* as a territorial ground. Only from the Carolingian period onwards can a *pagus* be said to have had a territorial as well as an administrative significance[23].

The further study of this cemetery will hopefully throw new light on the evolution, practices and chronology of the early Germanic colonisation as well as on the composition and ethnicity of local settlement groups in this region. The cemetery at Broechem appears to be the most extensive Merovingian cemetery found to date in the province of Antwerp. It is possible that the cemetery served more than one community rather than just a single settlement. The latter is assumed to be the case for the smaller cemeteries at Borsbeek[24], Grobbendonk[25] and Brecht[26], all situated in the Belgian province of Antwerp.

When compared with the known Merovingian cemeteries in the same peripheral region of North-Austrasia (the present Belgian and Dutch provinces of Antwerp and North-Brabant), at Broechem the following 'peculiar' features can be mentioned:
· A considerable number of burials lay close together within a limited area.
· The partly unstructured and irregular layout, with many of the graves cutting across each other (although the newly excavated northern part of the cemetery shows in part the structure more typical of an arranged '*Reihengräberfeld*'). A comparison can be made with the cemetery of Bergeijk (Nl., N.-Brabant)[27].
· A high percentage of infant graves, in contrast to other cemeteries where child burials are lacking. This raises the question whether children have been buried elsewhere.
· Quite a number of burials with weaponry.
· A lower percentage of chamber graves.
· The presence of three horse burials. Horse burials are not found elsewhere in this region. Their association with the chamber graves, the clearly isolated position and the indications for rich grave-goods, support an interpretation as founder graves (*Gründergräber*). The same unusual position and rich grave-goods (sometimes with a clear ethnic identification) has been recognised in the oldest graves at Grobbendonk (B., Antwerp) and Bergijk (Nl., N.-Brabant)[28].

The presence of an ethnic Alamanic shoe garniture found together with a Lombard golden *tremissis* and a golden finger ring has also been documented in one of the Broechem graves.
· The great variety in the orientation of the graves. Comparisons can be made with the nearby cemeteries of Borsbeek (B., Antwerp)[29] and Hoogeloon-Broekeneind (Nl., N.-Brabant) where the different orientations were arranged in groups[30]. Most of the N-S orientated graves of Broechem are cutting across and destroying the W-E orientated graves. Only the graves in the central part of the excavated area remained undisturbed.
· At the Broechem cemetery the variety of orientations cannot be linked to the topographical situation, the presence of a road or social, gender or age differentiation. It appears to be a chronological development.
· A minority of burials have no grave-goods or finds.
· The presence of handmade pottery which is lacking completely elsewhere in the region, with exception of the cemetery at Alphen (Nl., N.-Brabant), where two vessels have been found[31].

All these different features vary from the patterns currently recognised in other Merovingian cemeteries in North Austrasia and lead to the question as to whether an ethnic differentiation could be present in the Broechem cemetery.

5 Broechem on a supra-regional scale: the Frankish empire and the influence of northern and southern cultures

Located within the northern region of Austrasia, most burial characteristics can certainly be interpreted as Frankish:
· The presence of wheel-thrown biconical pottery types, with or without elaborate stamped decoration (imported from northern-French or southern-Belgian production centres): 45 wheel-made biconical pottery vessels in 44 graves (= 51 % of the pottery).
· The presence of Eifel ware produced in the Mayen region (11 vessels in 11 graves = 1 % of the pottery).
· Hundreds of glass and amber beads (probably imported from Northern France and Southern Belgium and the Baltic coasts respectively).
· Five glass beakers most likely from the Rhineland.
· A large variety of metal finds possibly produced in workshops in the Meuse valley.
· Golden *tremisses* coined in Frankish workshops.
· The presence of chamber graves. This grave type often accounts for a third of the total number of graves in Frankish cemeteries, most are provided with rich grave-goods and have an isolated position within the layout of the cemetery.

22 Theuws 1988, 182-187.

23 *Ibid.*, 196-210.

24 De Boe 1970.

25 Janssens 1964; Janssens & Roosens 1963.

26 Van Impe 1976.

27 Verwers 1987, fig. 3.

28 Verwers 1987, 211; Theuws 1988, 60-63.

29 De Boe 1970, fig. 3; Verwers 1987, fig. 4.

30 Glasbergen 1955; Verwers 1987, fig. 5.

31 Verwers 1987, 210.
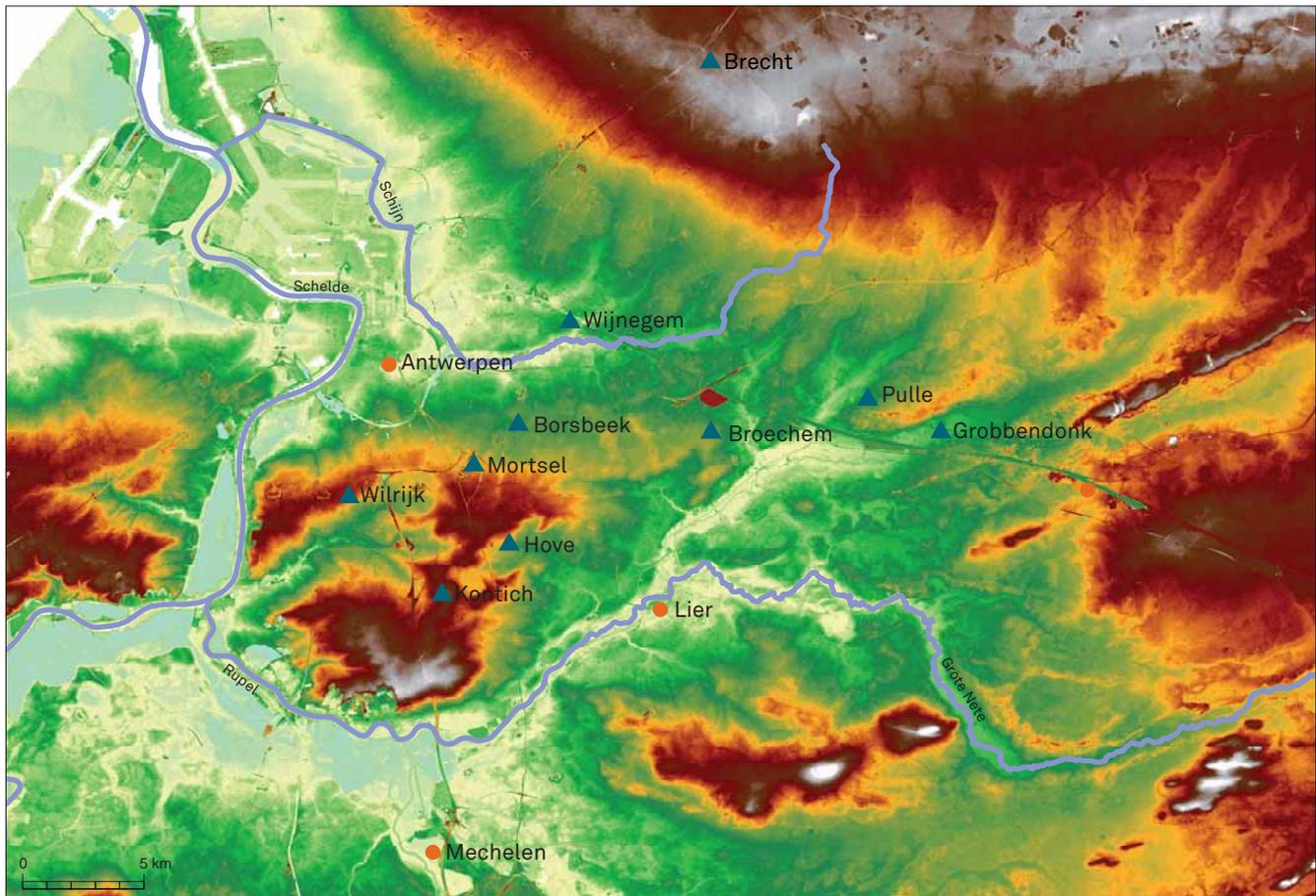
FIG. 6 **Region of** *Pagus Renensis*, **with indication of excavated early medieval sites.**

On the other hand, a lot of features representing northern cultural influences have been recorded:

· The presence of handmade pottery (11 vessels in 11 graves = 1% of the pottery). Within the Meuse-Demer-Scheldt-region handmade pottery has so far only been found in the Alphen cemetery (Nl., N.-Brabant)[32]. At Broechem, the vessels in handmade ware occur in both W-E and N-S orientated graves. At least two vessels seem to be of Saxon origin (fig. 7),

· Horse burials are rather unusual in the Frankish region but are common in the northern Netherlands and northern and central Germany (particularly the Frisian, Saxon and Thuringian territories) until the Carolingian period[33]. The horse burials in Frankish territories are mostly related to elite or warrior burials. This is also the case at Broechem.

· The high percentage of cremation graves. The cremation burial practice is common in the Meuse-Demer-Scheldt-region, but clearly not based on a local tradition and is only practiced on a minor scale. Cremation is also cited as being a minority rite in the central Netherlands and the Lower Rhine, Westphalian and Hessian regions. At Broechem the 14 % of cremation graves is high in comparison with other Meuse-Demer-Scheldt cemeteries. Only at Hoogeloon-Broekeneind (Nl., N.-Brabant) is the number of cremation graves exceptionally high (36 %)[34]. In southern Belgium and in the Scheldt valley Merovingian cremation graves are lacking with the exception of the cemetery of Sint-Gillis-Dendermonde (B, East-Flanders) where the cremation graves were related to a Saxon migration[35]. The cremation burial ritual seems to have been practiced on a major scale in the more northern regions. In Frisian and Saxon territories cremation graves were the usual burial rite (as well as urn graves such as *brandgrubengräber)* while inhumation burials were less common. In those northern regions the cremation rite remained the dominant burial practice until the 7th-8th century[36].

· The presence of north-south orientations. The N-S position of graves is also a common practice in northern German territories[37], but seems to be exceptional in the Lower Rhine region from the end of the 5th century on and in Westphalia during the 6th century (in the latter region N-S orientated graves came back in use from the 8th century on)[38]. Interesting is the high

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32 *Ibid.*, 210.

33 Müller-Wille 1970-71, fig. 3.

34 Verwers 1987, 211-212.

35 Van Doorselaer & Opsteyn 1999.

36 Verwers 1987, 212; Hässler 1999, 29; Laux 1991, 201.

37 Hässler 1999, 22-23; Laux 1991, 194-197.

38 Siegmund 1998, 232-233.

percentage of N-S orientated graves at the Merovingian cemetery of Borsbeek (B., Antwerp) in the vicinity of Broechem, where 22 of the 39 graves had this orientation[39].

All these more northern cultural influences are related to ethnic traditions and can be interpreted either as a survival of earlier indigenous (pre-Roman) traditions or as practices associated with new colonists from the northern regions. The cremation rite in particular, combined with the north-south orientation of graves, appears to be linked with the immigration of new colonists from a more northern region. Both features are emerging in the cemetery in a stratigraphically younger phase. This would make an interpretation as a survival of an indigenous tradition rather unlikely.

A lot of southern cultural influences are also clearly present in the Broechem cemetery:

· The silver shoe garniture from the double grave related to one of the horse-burials, is a very unusual find for which only a few comparative examples in Frankish and Saxon regions have been traced, namely Arlon (B., Luxembourg)[40], Hamoir (B., Liege)[41] and Stockum (D., Westphalia)[42]. The origin of these silver/pewter shoe garnitures is placed in the 6th century in the Aware territory. Later on, around the end of the 6th and the beginning of the 7th century, these type of objects were used in Lombard Italy. And yet in the first half of the 7th century similar objects appeared in the Alamanic region (southern Germany)[43]. Also the typical spiral decoration on girdle- and buckle-plates and horse-gear has been interpreted as a Lombard-Alamanic influence which is seldom observed in Frankish and Saxon contexts[44]. Exceptions are the finds from Arlon[45] (B., Luxembourg), Xanten St.-Victor[46] (D., Lower Rhine) and Bremen-Mahndorf (north-western Germany)[47].
· The official Byzantine *solidus* from the hoard, struck in Constantinople during the reign of Justinian I (527-565). This piece is quite remarkable as it was overstruck on a coin of the emperor Anastasius (491-518) (the name 'Anastasius' is still partially visible). The presence of Byzantine coins in Frankish cemeteries is not an unusual feature[48]. On the one hand these coins represent the gifts of East-Roman rulers to their western elite allies. On the other hand they testify to the existence of a commercial system between both worlds (fig. 8).
· Two Ostrogotic *tremisses* from the same hoard both produced in Italian ateliers possibly between 541 and 552, during the reign of king Baduila. Both coins are imitations of a Byzantine *solidus* bearing the name of the emperor Anastasius whose reign ended in 518. This emperor had accepted the Ostrogoth kings as the rulers of Italy, this in contrast to Justinian I, who was at war with the Ostrogoth king Baduila. These coins are frequently found north of the river Seine[49].

FIG. 7 Fragment of Saxon style pottery.

· The Lombard coin found in the same double grave that contained the Lombard-Alamanic shoe garniture. This coin belongs to a series of pseudo-imperial *tremisses* that are sometimes related to the Alamanic tribes, also known as coins of the Klepsau-type because of their presence in the cemetery of Klepsau (D., Baden-Württemberg)[50]. Similar specimens are registered in England, the Netherlands, Belgium, France, Germany and northern Italy. A very similar parallel for the Broechem coin was found in a female burial at Köln-Müngersdorf (D.). This grave also contained grave-goods with a clear Lombard cultural influence[51]. In early medieval times coins were travelling across long distances as a result of economic, military or political contacts between elite rulers. During the 6th century Frankish princesses were given in marriage to allied Lombard rulers. Also Lombard princesses were send to the Frankish empire as brides for the local elite, to maintain and strengthen political alliances between clans. One can imagine that on their way to the north, this elite was accompanied by a company of people from their native country. This seems a plausible explanation for the circulation of foreign objects and the influences from other regions on indigenous customs.

These southern cultural influences do not seem to be related to ethnic traditions but rather to contacts between the local elite and the higher nobility from regions with great political power.

39 De Boe 1970.

40 Roosens & Alenus-Lecerf 1965, 63, fig. 38:11.

41 Alenus-Lecerf 1975, 30 en pl. 39:130, 2-3.

42 Siegmund 1998, 414 en pl. 194: grave 15, 1.

43 *Ibid.*, 33-36.

44 *Ibid.*, 33, 35-36.

45 Roosens & Alenus-Lecerf 1965, 63, fig. 38: 11.

46 Siegmund 1998, 444 en pl. 222: 1/1-1/12.

47 Dannheimer 1960, 202 nr. 57b; Gebauer-Hellmann 1999.

48 Annaert & van Heesch 2004, 242-244.

49 *Ibid.*, 244-245.

50 *Ibid.*, 249-251.

51 Werner 1935, 114 nr. 47 and plate 2 nr. 47.

6   Conclusion: a still unknown region with many possibilities for further investigations

On the one hand the multicultural influences recorded in the cemetery reflect the input of the native traditions of incoming colonists from northern regions. On the other hand these influences testify to social and economic contacts between these peripheral elite landowners and the higher nobility in the political core regions of this early medieval period. This seems to be a typical feature for a peripheral area in a large and powerful political territory.

The colonisation of North-Austrasia began rather late in the 6th century and only during the 8th century was the whole territory completely integrated in the Frankish Empire. During these 150 years of colonisation many integration processes would have taken place. In these processes the contacts with the native territories as well as the local elite played an important role in the diffusion of multicultural influences.

The inhabitants of the peripheral *pagus Renensis* are to be seen as migrating farmers. Within this group, some families manifested themselves as local elites ruling a limited territory and trying to gain further power through contacts with the higher nobility of more powerful regions[52]. These elite families also maintained contact with their native countries.

The river Scheldt must have played an important role in this colonisation. Without doubt many colonists would have travelled down this river from the southern Frankish core regions around Tournai (B., Hainaut) to the fertile sand loamy soils of the south-eastern Antwerp region. More than likely other migrants came into the area from northern regions upstream heading for the same fertile grounds.

During the coming years the evidence for these migration movements within the *pagus Renensis* will be the object of further research. This project will be carried out within the scope of a number of doctoral studies at the VUB and will be supported by the Flemish Heritage Institute (VIOE). As well as studying the excavation results from the Broechem cemetery, older excavation reports of early medieval burial and settlement sites within the *pagus Rien* will also be reconsidered. In addition, the Flemish Heritage Institute will focus on further excavations in the Scheldt-Rupel-Nethe territory, aiming to reveal more scientific information on this still unknown period and region.

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FIG. 8 **Hoard with 1 Byzantine *solidus* and 9 *tremisses* struck in Ostrogothic and Frankish ateliers.**

These contacts could also have had an economic (trade) as well as a social (marriage or other alliances) character.

Finally, a specific regional feature must also be mentioned. In this peripheral area pottery vessels seem to be present in grave-goods on a minor scale: at Broechem only 65 inhumation graves contained a total amount of 88 pieces of pottery vessels. In comparison with the excavated cemeteries outside the Meuse-Demer-Scheldt-region, the Broechem results give an extremely low percentage of 29 %.

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52 Theuws 1988, 195.

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Ename and the Ottonian west border policy in the middle Scheldt region

Dirk Callebaut

1 Introduction

Professor emeritus Frans Verhaeghe is known for his sharp observations. He is often at his best when discussing the complicated relationship between history and archaeology. At the end of the 80s he showed his sense of realism when he ventured to say that there was a big gap between the two sister disciplines, mentioning that: "*historians are looking for a 'tame archaeologist' and archaeologists appeal to a 'domesticated historian.'*"[1]. He rightly wanted to see this changed. In his theoretical writings as well as in practice he devoted himself to the idea that archaeology and history are equal partners in the exploration of the past. This ideal certainly was inspired by his academic education, as the University of Ghent gave him the opportunity to link his schooling as a historian to his training as an archaeologist. Sadly enough, this unique combination of disciplines is no longer part of the university's curriculum.

Frans Verhaege's views inspired a number of researchers, and I was one of them. In addition, the late Heli Roosens, director of the former National Service for Excavations (NDO), and, later on, Guy De Boe, director of the former Institute for the Archaeological Patrimony (IAP) – now the Flemish Heritage Institute (VIOE) – stimulated me to investigate the early medieval habitation and defence in the Scheldt valley. I realized then that the interaction between archaeological and historical disciplines was one of the special challenges of the whole project.

And Ename proved to be a magnificent case. It is situated on the right bank of the Scheldt, the river that formed the borderline between Francia Occidentalis and Francia Orientalis from 925. During the 10th and the first half of the 11th century Ename developed into a power base of international importance. A fortress, a pre-urban settlement with a harbour, tollage and market rights and two portus churches made Ename an important base of support for Ottonian interests in the middle Scheldt area. This story suddenly ended when the count of Flanders, the political opponent across the river, took possession of Ename in 1047 and founded a benedictine abbey that lasted until the French Revolution. These fascinating events are documented by diverse sources that offer a rich variety of research possibilities. The theme has indeed captivated historians as well as archaeologists for decades.

A first critical survey of what the historical and archaeological sources tell us about Ename was launched in 1988. The occasion was a colloquium organised by the Municipal Bank in Spa on the 'Origin and Earliest History of the Medieval Cities in the Southern Netherlands: an Archaeological and Historical Problem'. It was one of those rare moments when archaeologists and historians met to discuss a common theme: the genesis of urban life. As far as pre-urban Ename was concerned, L. Milis of the Ghent University described the occupation history, relying on the written sources. My contribution was to confront the results of the archaeological investigations with the historical findings. The first excavations at Ename took place between 1941 and 1947, when A.L.J. Van de Walle exposed part of the *castrum* and the abbey church. After a trial excavation in 1978 the archaeological research was taken up again from 1982 onwards by the NDO/IAP/VIOE[2].

Since the colloquium in Spa the Ename file gathered more depth. Historical geography, building history, scientific technical research and the study of the material culture brought new insights. Excavations in Velzeke and Ghent also helped to situate the *villa Iham* in a broader political framework. The intergovernmental collaboration between the Flemish Region via the IAP/VIOE, the government of the province of East Flanders and the town council of Oudenaarde was of the utmost importance for the success of the investigation. This resulted in a

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[1] Verhaeghe 1990, 528-529.　　[2] Milis & Callebaut 1990, 459-497.
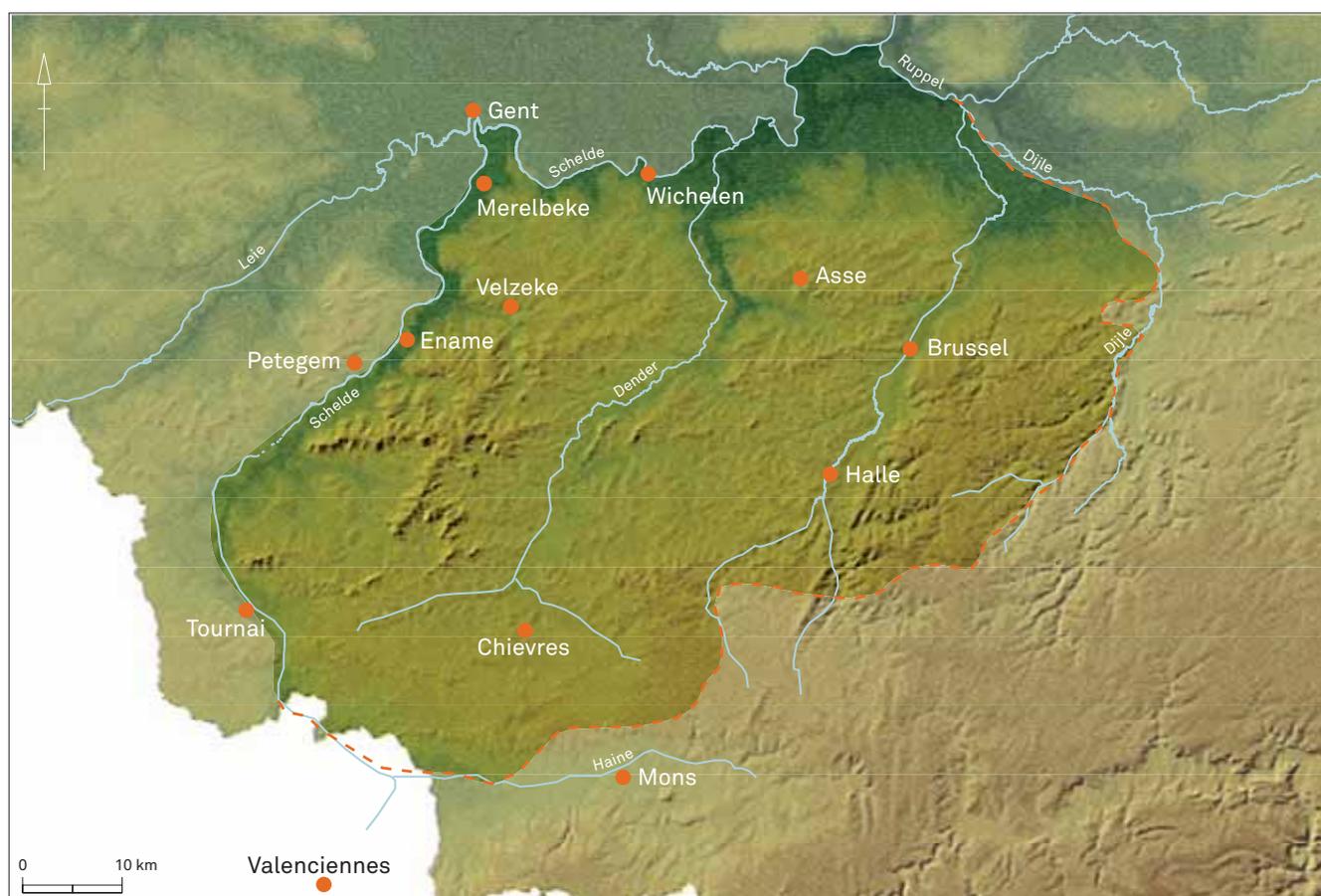
FIG. 1 Map with the core area of the *pagus Bracbatensis*. The dotted line indicates the southern and eastern border of the archdeaconny Brabant (according to Bonenfant 1935, 44 map II).

project that was characterised by an innovative approach to integrate the archaeological, monumental and environmental heritage research and to realise a structural link between research and public outreach. Ultimately the activities in Ename led to the international rules concerning the opening-up of heritage. The *ICOMOS Charter for the Interpretation and Presentation of Cultural Heritage Sites* (usually called *The ICOMOS Ename Charter*) was ratified by the General Assembly of *ICOMOS* in Quebec in November 2008.

In this article I focus on Ename within the broad framework of the Ottonian western border defence and more specifically on those who developed this Scheldt village into an Ottonian power base during the second half of the 10th and the first quarter of the 11th century. I will try to discover in which context they operated, what their approach was and what they realised. I will endeavour to link the micro-history of the stratigraphy with the macro-history of the historical texts, showing and exposing new connections and structures.

I gladly present this paper as a tribute to the successful archaeologist and historian Frans Verhaeghe really is[3].

2   The Ottonian start

Ename lies in the *pagus Bracbatensis*, a county first mentioned by name in the late 7th century (fig. 1). The area of the pagus by and large corresponded with the archdeaconry of the same name. Its borders were largely determined by rivers: the Scheldt and the Rupel to the west and the north, the Dijle to the east and the Haine to the south[4]. Around 870 (treaty of Meersen) the pagus was divided in four counties. One of these counties was called Brabant and contained locations in the deaneries of Brussels and Halle. A comitatus Biesut (Biest) is mentioned in 972. Two counts are mentioned by name: Count Johannes (record of 987) who may be assumed to have ruled in the deaneries of Brussels and Halle and a Count Egbert who is connected with Chièvres[5].

The county of Biest can be defined approximately in the north-western part of the pagus, but no historical sources have been preserved that allow us to localise the seat of government. One of the many suggestions is Velzeke, which had developed into a *vicus* in the Roman period. Velzeke had a central function within the region between Scheldt and Dender, which would later become part of the county of Biest. The Gallo-Roman settlement originated around an Augustan army camp and at a crossroads where the two main roads extended from the North Sea to the Rhine on the one hand and from Bavay to the north on the other hand. As a regional centre of artisanal production and trade activities and as a place of worship Velzeke flourished during the 1st and 2nd century. The vicus perished under the pressure of the Germanic invasions in the third quarter of the 3rd century[6].

Proof of early Frankish colonisation in Velzeke was found in the Molenhoek where Merovingian graves were excavated in 1969; 26 inhumation and cremation graves dating from the late 5th until the 7th century[7]. A. Verhulst pointed out that early medieval Velzeke was a place of consequence. He assumed that it was a crown estate founded on the following elements: its location along a Roman road, its earlier history as a *vicus* and the fact that the church of Velzeke is dedicated to St. Martin, the pre-eminent patron saint of the *fisci* churches[8]. Recent archaeological and architectural-historical investigations in and around the St. Martin's Church shed new light on the building and early medieval Velzeke (fig. 2).

The monument had already drawn the attention of the National Service for Excavations (NDO) in 1967, but the few trenches that were dug did not allow to recognize the pre-Romanesque phase of the church[9]. The excavation led to an architectural-historical investigation a few years later[10]. But the real breakthrough came when M. Rogge started archaeological and architectural-historical investigations in the St. Martin's Church from 1994 onwards[11]

As far as the existing building is concerned, it could be established that the fore-choir (inside 9.70 m by 9.70 m) with the semicircular apse (depth 8.60 m) and part of the walls of the middle-aisle date from the Ottonian period[12] (fig. 3). The northern and southern inner walls of the quadratic fore-choir are given rhythm by two imposing blind arches that used to have a central window. Doors in the northern and southern wall provided access to this part of the church. A triumphal arch separates the choir from the apse, which is covered by a semi-dome in rubble-work. The apse itself had three windows (fig. 4). Important wall paintings were exposed in the jambs of some of the choir windows. Among others foliated ornaments and saintly figures representing four evangelists or prophets that, according to M. Exner, "unmistakably bear an Ottonian hallmark"[13]. The separation between the choir and the middle-aisle is also accentuated by a triumphal arch. In the corners of the western wall of the nave door entrances were exposed. Their location suggests that they flanked an extension (choir/Westbau). The building material for this church entirely consists of recycled material from the Roman *vicus*. The investigation of remnants indicated that the outer walls of the building were originally plastered. A series of C14-datings of charcoal samples from the masonry and plasterwork prove that the church was built around the middle or the third quarter of the 10th century. The murals also date from this period. In the zone around the St. Martin's Church two V-shaped ditches

FIG. 2 **Velzeke, St. Martin's Church. View from the southeast. In front, the Ottonian choir dating from the middle or the third quarter of the 10th century. (copyright PAM Velzeke)**

6 Rogge 1971, 124-149; De Mulder 1987, 101-110; De Mulder & Rogge (eds.) 1999, 7-33,107-116; regular reports in de 'Handelingen van het Zottegems Genootschap voor Geschiedenis en Oudheidkunde' ('Archeologische Kroniek van Zuid-Oost-Vlaanderen').

7 Van Durme 1969-1971, 67-85; De Mulder & Rogge 1997, 229.

8 Verhulst 1958, 429-431.

9 De Boe 1967, 14.

10 Van Den Bossche 1973, 23-48.

11 De Mulder & Rogge 1997, 229-241; De Mulder

& Deschieter 1999, 205-212; De Mulder *et al.* 2001, 169-180; Rogge & Deschieter 2007, 69-82.

12 Many thanks to Marc Rogge who granted permission to use the hitherto unpublished drawings of the St. Martin's Church for this article.

13 Rogge & Deschieter 2007, 79.

FIG. 3 Velzeke, St. Martin's Church. Ground plan of the Ottonian church (middle or third quarter of the 10th century). Legend: blue: the preserved east choir and west façade; dotted line: interpretation of the missing architecture. (copyright PAM Velzeke)
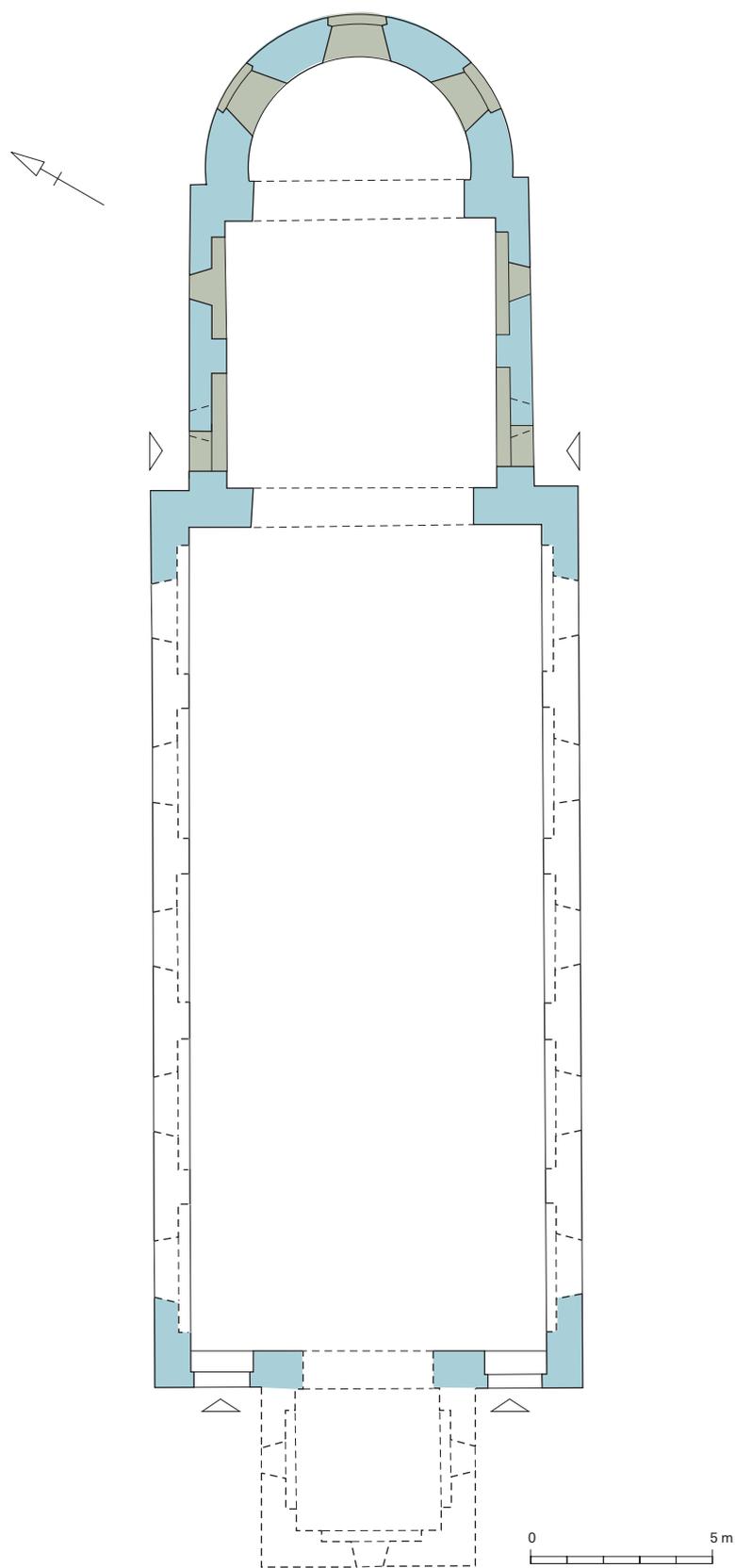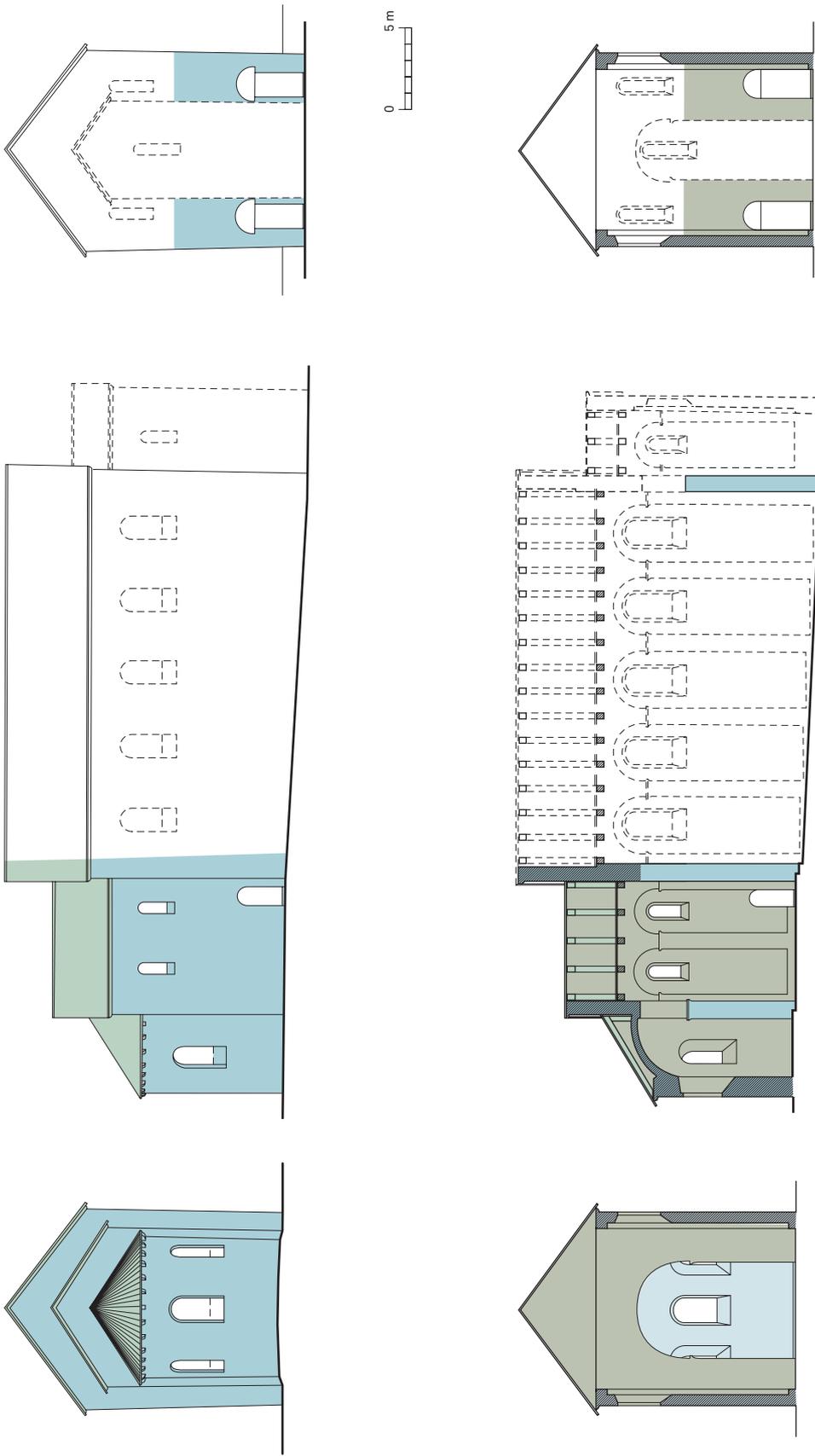
FIG. 4 **Velzeke, St. Martin's Church. Schematic representation. Outside and inside view of the east choir, longitudinal section and west front. Legend: blue: preserved architecture; dotted line: interpretation of the missing architecture. (copyright PAM Velzeke)**

were partly investigated. The oldest fills go back to the 10th century. Apparently they delineated the church area. Post holes and pits indicate habitation in the immediate surroundings of the church[14].

During the research in the church seven inhumation graves were found. One of them was cut by the foundations of the Ottonian church. C14-investigation of samples from two graves resulted in a dating between the 7th and the middle of the 9th century[15]. These burials prove that a Merovingian/Carolingian church preceded the Ottonian building.

The building structure of the 10th-century church is remarkable because of the following elements: its size (preserved longitudinal section: 43.80 m), the high blind arches that give a strong rhythm to the interior of the east choir, the probable presence of a 'choir/Westbau' as a counterpart for the east choir and murals of high quality. All these data clearly show that this is a building that transcends the level of the average domain church. Moreover, the architectural elements suggest that this building had a status that can be linked with the contemporary imperial authority. The two choirs are characteristic for imperial churches and the blind arches refer to architectural forms such as the Byzantine buildings in Ravenna, the anchorage of the Ottonian emperors in Italy[16]. Along with M. Rogge we may therefore assume that the St. Martin's Church of Velzeke was an Ottonian imperial church.

Such edifices are not build as such, they have only a meaning in a context that justifies their foundation. If this context is a *fiscus*, as A. Verhulst postulates, the erection of this church becomes acceptable, but the explanation is not truly satisfactory. In Petegem, at about 20 km from Velzeke, a *fiscus* church was excavated that was also dedicated to St. Martin. The *villa Pettinghem* was important as Charles the Bald himself came on a visit and signed a charter that confirmed all the possessions of the St. Bavo's Abbey of Ghent. We investigated this royal curtis from 1976 till 1979, as part of our activities in the former Nationale Dienst voor Opgravingen (NDO). The eye-catcher on the site was a 9th-century *aula* in limestone from Tournai, to which a camera (heated by a *Stubenofen*) was added in the 10th century. Next to the sector of the *casa regalis* there was a church dedicated to Saint Martin with a burial site. The first wooden hall church was destroyed by fire and replaced by a stone church. The foundations of this building have been preserved only very partially, so that we can merely assume that the church had a single nave and a flatly closed-off choir (inside depth 1.80 m). Even if we do not dare to pinpoint a date for both churches (the hall church did exist in the 9th century), it is obvious that neither building can be compared in any way with the grandeur of the church in Velzeke[17]. If we want to find a better explanation for the edifice in Velzeke we have to consider the period in which it was built: the middle or third quarter of the 10th century. And this leads us to a man this article will focus upon, Godfried of Verdun.

3 Godefridus, *gratia Dei comes*

Godfried of Verdun belongs to the Ardenne House and was the forefather of his own family branch: Ardenne-Verdun. A charter of 975-980 (*infra*) refers to him as *gratia Dei comes*, a count whose authority depends on God and who relies on the legitimacy of his Carolingian descent[18]. The title *gratia Dei* was originally reserved for kings. But from the 10th century onwards the entitling was also used for the highest aristocracy, who wanted to show their importance as descendants of Charlemagne[19]. Godfried of Verdun is a perfect example of this shift in social level. The mother of his father Gozlin, was Cunegundis, a third line descendant of Charles the Bald, grandson of Charlemagne. His mother, Uda of Sachsen, was the niece of Henry I, one of the key figures in the Saxon dynasty of the Ottonians (fig. 5). Therefore Godfried belonged to a family that could pride itself on Carolingian as well as Ottonian origin. Especially the latter would be very important for him. He had excellent relations with the emperors Otto I, Otto II and Otto III, which opened up possibilities for the development of his own career and the careers of his next of kin, but which also were particularly valuable for the Ottonians at crucial moments, both political and military (*infra*).

The union of the Carolingian and Ottonian lines in the Ardenne House was reflected in the actions of the family. In Francia Occidentalis as well as in Francia Orientalis the family occupied significant aristocratic positions. One of Godfried's three brothers, Adalbero, held a top position in West Francia as the archbishop of Reims (969-989). He was an important reformer and counsellor of the French kings. He was also involved in the crowning of Hugo Capet in 987, which meant the definitive end of the Carolingian kingship in West Francia[20]. Adalbero would play an important role in the life of Godfried.

His nephew, also called Adalbero, was chancellor of the French King Lotharius (974) and bishop of Laon from 977 until 1031. He was one of the first authors who committed three-functional thinking about society (orant, pugnant, laborant) to writing in his 'Carmen ad Rodbertum regem' during the twenties of the 11th century[21]. Because the seats of the Archbishopric of Reims and the Diocese of Laon were in the hands of the Ardenne House, this Lotharingian aristocratic clan had penetrated really deeply into the core area of West Francia.

Godfried of Verdun himself was active in *Lotharingia* where the family properties were located. He appears in written sources for the first time in 951, in a charter in which Bishop Berenger replaces the secular clergy of the abbey of St. Vanne in Verdun by benedictines. Godfried co-signed the document: '*Signum Godefridi Comitis*'[22]. The monastery would become of particular importance for him and his next of kin.

Godfried was count of Bidgau, Methingau and Verdun[23]. The first two counties can be roughly situated in the Moselle region. The *comitatus* Verdun stretched out along both banks of the Meuse (fig. 6). He obtained this county, which appeared to be

14 De Mulder *et al.* 2001, 177-178; Rogge & Deschieter 2007, 76.

15 De Mulder & Rogge 1997.

16 Mekking 1991, 118-123; den Hartog 1992, 21-23.

17 Callebaut 1981, 29-30.

18 Gysseling & Koch 1950, 168-169, n° 67.

19 Le Jan 1995, 140.

20 Bur 1992, 55-63.

21 Dubuy 1985, 12, 57-70.

22 Evrard 1981, 154, 175 n°2.

23 Parisse 1981, 24.

FIG. 5 **Genealogy of the Carolingian House and the counts of Flanders in West Francia and the Ottonians and the Ardenne House in East Francia (according to the genealogies of Parisse 1981, 41-42 and Van Winter 1981, 226-227).**

FIG. 6 Map of *Lotharingia* (according to Linssen 1981, 317). Legend: yellow: locations under the control of Godfried of Verdun; red: seats of dioceses and archbishoprics.

all important for the clan, presumably through the agency of his grandmother, Cunegundis. After the death of her first husband, Wigeric, Cunegundis remarried Ricuinus, count of Verdun, who was murdered in 923[24]. He had a son, Otto, who is supposed to have succeeded his father as count of Verdun[25] Otto is referred to in charters as *dux* from 942 onwards. As duke of *Lotharingia* he can be traced during political and military missions in West Francia . He died in 944[26]. The next known count of Verdun is Godfried. The fact that Otto I approved of Godfried becoming count of Verdun probably can be explained by the family ties (by marriage) with Cunegundis[27].

With Verdun Godfried managed to acquire a strategic position on the western border of the Ottonian empire. The bishop's town known as a centre of the slave trade between Northern and Southern Europe[28] was an important bridgehead in the defence of *Lotharingia*. The last attempt by the West-Frankish King Lotharius to annex *Lotharingia* in 985-987 clearly proves this: Verdun was situated in the centre of the battle (*infra*). On the other hand, the city was a gateway to the West-Frankish core regions with their cities with symbolic significance, such as archiepiscopal Reims where the kings were crowned, Laon, the *urbs regia* and one of the preferred residencies of the Carolingian kings[29] or Paris, which played a role of exceptional importance in the rise of the Capetians, the main rivals of the Carolingians in the 9th and 10th century. In brief, Verdun was the place to be in the Meuse region to realise and protect the interests of *Lotharingia*.

Godfried's power as a count depended on his authority in the town of Verdun and the surrounding territory of the *pagus Virdunensis*, which was roughly the extent of the Diocese of Verdun[30]. Another important mainstay in the area was his custody of abbeys. St. Vanne in Verdun got absolute preference. The abbey was endowed with vast real estate and developed into a veritable family monastery and a place of spiritual anchorage for the Ardenne-Verdun family[31]. His guardianship was not exclusively limited to the County of Verdun. Godfried also had his points of support outside, such as the abbey of Mouzon. Situated on the Meuse in the principal town of the *pagus Mosomensis* the monastery belonged to the territory of the Archbishopric of Reims, but politically leaned towards the Ottonian empire[32]. When Adalbero of Reims reformed the monastery around 971 he entrusted its custody to his brother Godfried, who proved to be very generous for the abbey . He is mentioned in the sources for the last time in a charter of 997 when emperor Otto III confirmed the possessions which Godfried had personally donated to the monastery[33] The abbey of Mouzon was highly regarded by the Ottonian emperors. This is proved not only by the charters favourable for the abbey that were signed by Otto II in 997 and Henry II in 1015 and 1023, but also by the diplomatic meetings that took place there

between Otto III, Hugo Capet and Robert II in 995 and between Henry II and Robert II in august 1023[34]. The same Adalbero had assigned him to the fortification of Mézières located more to the north[35]. The town was situated along the left bank of the Meuse between the tributaries of the Chiers and the Semois. Just like the abbey of Mouzon the fortress of Mézières was dependent on the Archbishopric of Reims, but was situated within the territory of *Lotharingia*. Mézières was important, among other things, because this principal town of the *pagus Castricius* was a much-used crossing of the Meuse[36]. But Godfried's range of action in the *pagus* went beyond Mézières: in june-july 971 he (along with his brother) besieged the castle of Wacq-sur-Meuse, the residence of Count Eudes who had taken up enemy positions against Adalbero[37]. Finally we also have to mention that Bouillon on the Semois had come into the hands of Godfried of Verdun. The place would eventually develop into the symbol of the ducal authority in Lower *Lotharingia*, which was mostly in the hands of the descendants of Godfried of Verdun during the 11th century[38]. His most famous offspring, Godfried of Bouillon (1089-1100), closed the series.

With the county of Verdun and his influence within the *pagi Mosomensis* and *Castricius* Godfried of Verdun laid a claim on an important part of the western border region of *Lotharingia*. But this was not the end of the border story, as far as Godfried was concerned. Around the same period in which Mouzon and Mézières were added to his power base he also appears to have been active in the more northern *pagi Hanonensis* and *Bracbatensis*, according to historical sources. The presence of Godfried in this area is related to the border problems in the Scheldt region.

4 *Lotharingia*, desirable homeland of the Carolingians

The western flank of *Lotharingia* was roughly formed by the basins of the Scheldt and the Meuse. This area became the focus of tough imperial politics during the 9th and 10th century. During the first half of the 11th century the problems were limited to the region where Flanders bordered on the Scheldt.

With the division of the Carolingian empire in 843 *Lotharingia* was positioned, as part of *Francia Media*, between two power blocks: *Francia Orientalis* and *Francia Occidentalis*. The area was considered to have been the homeland of the Carolingians and thus it became a very desirable familial home region, for East Francia as well as West Francia. The feeling that *Lotharingia* was involved in neither east nor west was especially strengthened when Francia Media was divided among the three sons of Lotharius I after his death in 855. Lotharius II received the northern part that was named after him as a kingdom, *Regnum*

24 Parisse 1981, 19-20.

25 Evrard 1981, 154-155.

26 Rüdiger 1990, 100-103.

27 Evrard 1981, 154-155.

28 Verlinden 1955, 222-223.

29 Lot 1891, 181.

30 Evrard 1984, 185.

31 Evrard 1981, 177-178.

32 Kienast 1974, 147, note 355.

33 Evrard 1981, 173, 177, Reg. 16.

34 Bur 1977, 240; Voss 1987, 214-215.

35 Lot 1891, 65.

36 Kienast 1974, 7.

37 Lot 1891, 65-66.

38 Kupper 1981, 215; Riché & Callu 1993, 308-309.

Lotharii. It was the origin of the name *Lotharingia*. But things changed rapidly. The treaty of Ribemont in 880 announced the first change of course: *Lotharingia* became part of *Francia Orientalis*. During the following decades the situation remained unsteady with various changes of camp, until eventually, *Lotharingia* ended up under the sovereignty of the East-Frankish King Henry I in 925[39]. Henry I, the first Saxon duke who was crowned king (919-936), was the great-uncle of Godfried of Verdun.

The pursuit of a more pronounced integration of *Lotharingia* into the empire by the Ottonian rulers had been hindered by two issues for more than 60 years. On the one hand there was the autochthonous nobility, with the Reginar family as absolute trendsetters, who found it difficult to conform permanently to the – decidedly foreign – Ottonian imperial authority. On the other hand West Francia wished to draw *Lotharingia* closer as the 'land of the forefathers'. Only in 987 with the accession to the throne of a non-Carolingian, Hugo Capet, the French appetite for the *Regnum Lotharingii* was tempered[40].

The Scheldt border with Cambrai, Valenciennes, Ename and Antwerp plays an important role in this laborious story. Cambrai was the seat of a diocese that stretched out mainly along the right bank of the Scheldt, but that also encompassed a considerable area along the left bank. It was part of the archdiocese of Reims, but politically it 'ultimately' belonged to *Francia Orientalis* from 925. The diocese of Cambrai held a forward position in *Francia Occidentalis* and was linked with the diocese of Arras in ecclesiastical matters, so it was vitally important for developments along the western border. It was part of the system of imperial churches, in which the bishop had worldly powers in the service of the Ottonian ruler, apart from his religious mission. Of course, the material basis he had was important for the execution of his secular authority. In the region this led to quite a number of conflicts with Count Isaac of Cambrai. An important date was 948 when Otto I presented Bishop Fulbertus with all the rights of authority over the town. But it was only in 1007 that Bishop Erluinus could exert his secular powers in the region at large[41].

The role Cambrai played on the western border of *Lotharingia* seems rather clear, but the Ottonian border policies involving the other three locations, Valenciennes, Ename and Antwerp, are of a more delicate matter. Especially German and Belgian historians have dealt with the theme. Because space does not allow to make a detailed analysis at this point of the various tendencies, we will only consider the main points.

It is generally agreed upon by historians that Ottonian rulers founded a margraviate border system along the Scheldt between Cambrai and the North Sea, of which Valenciennes, Ename

and Antwerp were the centres. The historical data on these margraviates are, however, extremely limited. Two margraves are mentioned in 981, on the occasion of a campaign Otto II led to Italy. The list of the vassals who had to supply troops has been preserved: "*Gottefredus et Arnulfus marchioness XL m(ittant)*"[42]. They are Godfried of Verdun, who was count of Mons (974-998) and founded Ename with his wife Mathildis, and Arnulf, who was count of Valenciennes (974-1012). Both had to provide 40 armoured horsemen. Valenciennes and Antwerp are indicated as margraviates in 11th-century sources, but there is no explicit mentioning of Ename. Sadly, doubts remain about the exact point in time when and the circumstances under which the system became operative. In this context the question remains what the original purpose was of an Ottonian border centre in Ename[43].

Generally speaking there are two visions on the topic. We limit ourselves to two authors who are representative of the opposing points of view, the German historian H. Franz-Reinhold[44] and the Belgian historian J. Dhondt[45]. Franz-Reinhold analysed the various aspects of the imperial border defence along the Scheldt during the 10th-11th century and came to the conclusion that Valenciennes and Ename were founded as margraviate centres by Otto I around 965, against East Francia. Her dating was based on the fact that the Dukes of *Lotharingia* mainly had a military task. In 959 Bruno, archbishop of Cologne and appointed Archidux of *Lotharingia* by his brother Otto, had divided the region into Lower and Upper *Lotharingia*. He appointed a duke for each territory, who virtually became his second in command. The duke of Lower *Lotharingia*, Godfried *(infra)* died in 964 and a successor was only appointed in 977. Franz-Reinhold explains this 13-year-vacuum by the fact that Otto I had appointed two margraves to defend the western border shortly after the duke's death. Because the military care for the border was ensured, there was, according to her, no immediate need to appoint a duke during those years[46].

From a Belgian point of view J. Dhondt put forward another vision, opposed to the foundation of the margraviates Valenciennes and Ename by Otto I around 965. He proposed *c.* 973 as a date, the year in which Godfried and Arnulf were appointed as Counts of the *pagus Hanonensis* by Otto I[47]. In his argumentation he pointed out that there would have been no need to erect fortifications along the Scheldt border in the third quarter of the 10th century simply because there were no tensions between East and West Francia during that period. On the contrary, there were even friendly contacts. The margraviate system was introduced when Lambertus and Reginar, sons of Reginar III, undertook military actions in Hainault after the death of Otto I in 973. They operated from West Francia and were supported by a fraction of the nobility there.

39 Linssen 1981, 305-307.

40 Kienast 1974, 119.

41 Trenard 1982, 29-32; Milis 1981, 281-282.

42 Uhlirz 1902, 247-248.

43 This article focuses on Ename. Valenciennes and Antwerp are dealt with in the monograph we are writing about the 9th-11th century western border of *Lotharingia*.

44 Franz-Reinhold 1940, 229-276.

45 Dhondt 1945, 123-144.

46 Franz-Reinhold 1940, 251-252.

47 Dhondt 1945, 136-143.

The situation was serious. The two counts of Hainault, Renaud and Werner, died in the battle of Péronnes and Otto II was forced to intervene military and personally in 974 (*infra*). He appointed Godfried and Arnulf as successors of the Counts Renaud and Werner. The *comitatus Godefridus* focused on Mons, while Arnulf had Valenciennes along the Scheldt as centre. In 1071 the location was referred to as *marcam Valencianae*[48]. Dhondt assumes that the margraviate system along the Scheldt was created because Otto II feared a coalition between the Lotharingian and West-Frankish nobility, instigated by the Reinier family. This would threaten not only Hainault, but all of *Lotharingia*. This point of view is often adopted so that 973/974 is generally accepted as the foundation date of Ename and not around 965[49].

Up to now only limited attention had be paid to the reason why Godfried of Verdun was involved by the Ottonian emperor in matters that were rather removed from his home ground. It is generally supposed that this family was very loyal towards the Ottonian rulers, hence the emperor's choice. Looking for a more concrete reason, we are finding ourselves in the company of his wife Mathildis Billung.

5   *Cherchez la femme...*

Mathildis was the daughter of Herman Billung, member of a prominent Saxon noble family whose power was concentrated in the region of Verden/Lüneburg[50]. As the younger son in a family with three children Herman got an unexpectedly high position in 936, which disturbed the order of precedence among the Saxon high-ranking nobility. In the autumn of that year the recently crowned King Otto I appointed him as *princeps militiae* in a campaign against the Slavic tribe of the *Redarii*. The enterprise was successful and, as a consequence, he became military commander-in-chief of the border area along the Lower Elbe[51]. Otto I founded two margraviates to maintain the imperial authority in the Slavonic region between Elbe and Oder. He entrusted Herman Billung with the margraviate along the Baltic Sea and Gero with the other one, known as Nordmark. Their task was to control the Slavic tribes, to establish a military organisation in the area and to secure it. This way Otto I consolidated the Slavic policy of his father, Henry I, in the region.

The appointment of Herman and Gero as margraves caused a lot of resentment among the Saxon nobility, since both gentlemen belonged to a 'lower' hierarchic rank. But Otto I speculated on this situation. By offering Herman and Gero an elite function he counted on their gratitude for their newly acquired status. However, this headstrong appointment strategy of the

king caused extreme dissatisfaction in Saxony. Not in the least with Wichmann, Herman's older brother, but also with the brother of Otto I, Thankmar, who had hoped to get Gero's position. Discord arose, escalating in a number of rebellions that endangered the political situation of Otto I himself[52]. In this problematic period Herman proved to be an energetic defender of the royal interests in Saxony, the cradle of the Ottonian dynasty. And the king showed his appreciation. As *marchio* in the most northern margraviate along the Baltic Sea he received the exceptional honour of being enfeoffed with a *procuratio Saxoniae* in 952, 961 and 966[53]. This meant that he was the deputy of Otto I, mandated to deal with governmental and judicial affairs in Otto's name during his absence in Saxony[54].

A promotion from margrave to deputy of Otto I in Saxony, Herman Billung' star had risen rapidly during the 50s and 60s of the 10th century, in spite of much opposition. Precisely during this successful period in his career his daughter Mathildis appeared in the spotlight, in a rather sensational way. In 961 she married Baldwin III, the son of the Flemish Count Arnulf I, who had already been appointed co-count[55]. Saxon and Flemish high-ranking nobles on the east and west border of the Ottonian empire thus came closer together via a marriage. The same connection was established with the imperial nobility in *Lotharingia*, as the two daughters of Arnulf I, Liutgard and Hildegard, married respectively Wichman of Hameland and Dirk II, count of West Friesland[56]. Matrimonial strategy forged amicable bonds, at least on a personal level, between the county of Flanders and the Ottonian empire in the second half of the 10th century.

The marriage of Mathildis and Baldwin III was sealed with a son, the later Arnulf II. And then something fatal happened. During the Christmas period of 961 the family resided in the abbey of St. Bertin in Saint-Omer. Count Baldwin got measles and died on 1 January 962. He was buried in the abbey of St. Bertin[57]. In that same year his father, Arnulf I, made arrangements with the West-Frankish king, Lotharius, concerning the future of Flanders. Mathildis remarried Godfried of Verdun, presumably very shortly after Baldwin's death. This new marriage leads us to valley of the Scheldt, more particularly to the *villa Iham*.

6   Ename: a joint project of Godfried and Mathildis

The first historical source that puts Ename on the map is the *Gesta Episcoporum Cameracensium*. The three volumes describe the history of the diocese of Cambrai-Arras from about 500 till

48 Dhondt 1945, 143, note 3.

49 Recently K.G. Van Acker reconsidered the border problem and declared himself in favour of 965 as the foundation date for the margraviates of Ename and Valenciennes by Otto I (Van Acker 2002, 292-302).

50 Althoff 1984, 39; Salewsky 2001, 53-54.

51 Atlhoff 1991,311; Salewsky 2001, 53-55.

52 Salewsky 2001, 56-60; Althoff 1991, 312-313; Althoff 1984, 77-94.

53 Althoff 1984, 376.

54 Herman Billung did not always comply with the rules. In 972 he had arranged to be received with imperial honours in Magdeburg. Bell ringing and accompanied by Archbishop Adelbert he entered the church, which was lit by chandeliers. He deliberately

seated himself on the spot reserved for the emperor. Forms and rituals were immensely important in those days, so this flagrant abuse of etiquette led to a serious and much debated incident with the emperor (Salewsky 2001, 62-63; Hageman 2006, 7-8).

55 Koch 1981, 369.

56 Van Winter 1981, 228.

57 Declercq 2006, 340.

1024 and were written by a canon from Cambrai in 1024-1025. The addendum (written between 1051 and 1054) deals with the period 1036-1051. Book II is important for Ename because it contains the description of the monasteries and chapters that belonged to the diocese of Cambrai-Arras[58].

"De villa Iham. Est etiam locus super Scaldum fluvium, quem dicunt Iham, ubi modernis temporibus honorabilis vir comes Godefridus et uxor sua Mathildis, matrona videlicet memorabilis – erat enim suum predium, suis usibus oportunum – castro quidem munito, navigium, mercatum, teloneum, ceteraque negotia statuerunt; infra castrum vero monasterium in honore sactae Mariae, deputatis canonicis, fundaverumt. Extra autem Herimannus filius duo monasteria struxit, unum sancto Laurentio, alterum vero sancto Salvatori. Nunc igitur locus, utpote noviter instructus, ex omni sufficientia floret, et tamen esset uberior, nisi crebro hostili incursione quateretur, quod maxime ab inimicis Dei patitur pro stabilitate regni et fidelitate imperatoris."[59].

The text refers to two distinct building phases. The first consists of the establishment of the settlement, which was managed by Count Godfried and his wife Mathildis, who founded a fortification with an adjacent settlement in Ename. The castrum contained a church dedicated to Our Lady and had a chapter of canons. Trade flourished in the settlement with shipping, a market, toll collection and "other activities". Herman, Godfried's son, led the second phase and built two churches outside the castrum.

Both occupation phases, which correspond with the rule of respectively Godfried and Mathildis and later Herman, were archaeologically determined during a large-scale project that started with an rescue excavation in 1982. During the canalisation of the Scheldt in 1982 an important part of the 10th-century *castrum* was excavated. It was the beginning of a multidisciplinary and integrated investigation of the archaeological, monumental and environmental heritage. For this article we only consider the buildings that were researched.

The first occupation phase can be dated in the period between the marriage of Godfried and Mathildis in 962-963 and the last record of Godfried in 997. It is possible that their son Herman had already taken over the management of the site earlier on. Indeed, Godfried was taken prisoner in Verdun in 985 by the West-Frankish King Lotharius. His imprisonment lasted for two years (*infra*). So it cannot be excluded that Herman was responsible for Ename from that time. The *castrum* is situated on the northern end of a sand-loam tongue of land surrounded by a meander of the river Scheldt (fig. 7: A). The southern open landside of the fortification was closed off by a ditch that was 18 m wide and 140 m long[60]. However, only very few traces of that first occupation phase have been preserved within this castrum area, because the zone was totally deepened by the groundwork for the brickworks during the

1940s (fig. 8). The only untouched spot was directly under the railway line Brussels-Kortrijk that was built across the site. In 1983 part of the railway bank was removed because of the canalisation of the Scheldt and, totally unexpectedly, an unspoilt part of the castrum was exposed. The only traces that go back to the occupation phase of Godfried and Mathildis consist of four layers characterised by the presence of patches of ash, lumps of charcoal and ground that was burned *in situ*. The animal remains that were recuperated in layers are part of the consumption waste of a noble site. Radiocarbon analysis on animal bones from the layers points to a dating in the second half of the 10th century, with a slight preference for the third quarter of the 10th century[61]. We have no more information about that first *castrum* occupation phase.

The trade settlement stretched on the tongue of land to the southwest of the *castrum* (fig. 7: B; fig. 9: A). The excavations concentrated on the area where later the Benedictine abbey would stand. As far the occupation phase of Godfried and Mathildis is concerned we have established that the site has been burrowed through by post holes, pits, various ditches, two hut basins, two fireplaces and three remains of ovens. But unfortunately we have no clear idea of the building complex. On the location where a stone *portus* church was erected around the year thousand there is an older phase represented by an area surrounded by ditches that are parallel to a large row of heavy post holes, for the time being unclear what they represent. The radiocarbon dating results for this oldest phase indicate a period similar to the first *castrum* phase[62].

The excavations make it possible to localize the site of Godfried and Mathildis with its fortification and trade settlement, but the information about the occupation during their rule remains limited. Apparently this is a new foundation, since no traces of earlier medieval habitation were found. So we really need the *Gesta Episcoporum Cameracensium* to be able to understand the purpose of it all.

7   *Suum predium, suis usibus oportunum*

When the *Gesta* discusses the initiators of the development in Ename they describe Mathildis as a *matrona videlicet memorabilis – erat enim suum predium, suis usibus oportunum*. This clarification indicates that *Iham* was one of Mathildis' possessions: she was allowed to put the domain to personal use. So far, this element received little attention. Ludo Milis first pointed out the importance of this allodial property of Mathildis. However, the question on how she had gained possession of the *villa Iham* has not been answered[63]. It is not very likely that *villa Iham* was an original family estate of the Billung family. Their homeland was in east Saxony and, apart from Mathildis' marriage, there are as far as we know no links of the family with *pagi* along the Scheldt at the other side of the realm. It is also not known if the Verdun family possessed local

58 Van Mingroot 1975, 282-283, 331-332.

59 Bethmann 1846, 465.

60 Callebaut 1984, 103-104.

61 Callebaut *et al.* 2002, 233, 237-238, tabel 2.

62 Callebaut 1985; *Idem* 1986; *Idem* 1987; De Groote 2008, 44-45, fig. 14.

63 Milis & Callebaut 1990, 468-469.
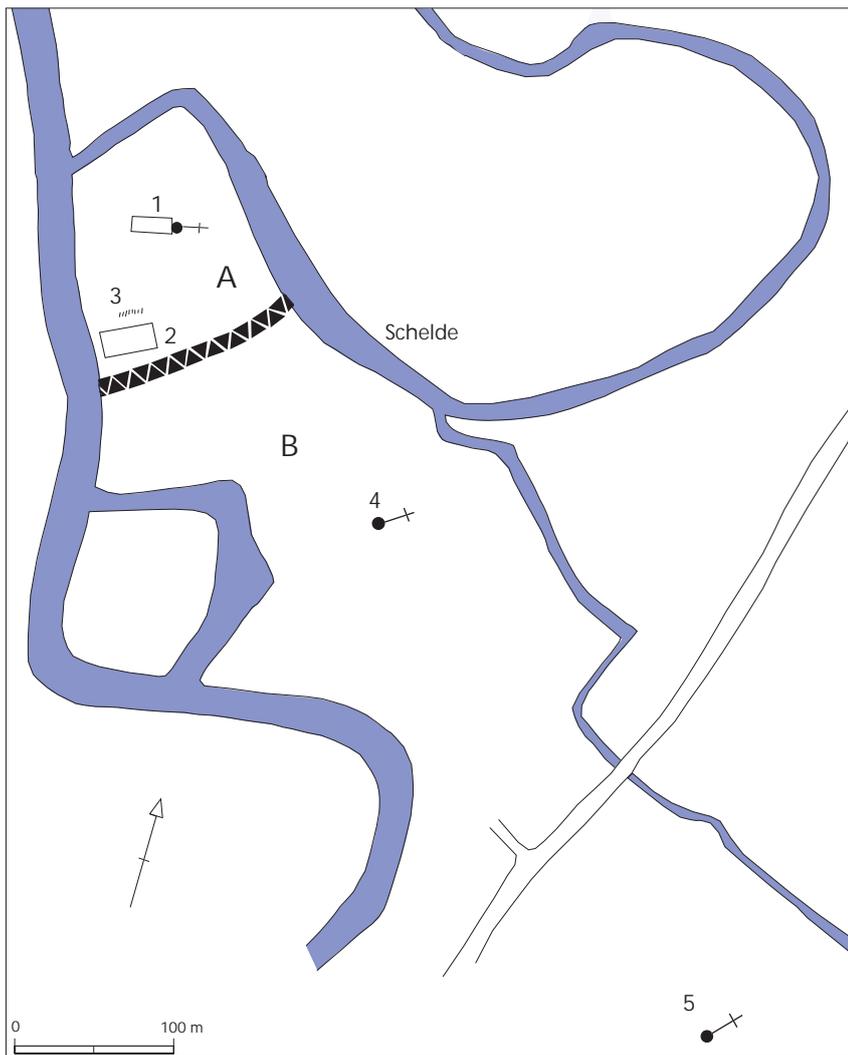
FIG. 7 Situation plan of Ottonian Ename (second half 10th-first half 11th century). A: *castrum* with residence and Our Lady's Church (1), keep and *castrum* moat (2) and depression with rubbish dump (3); B: trade settlement with St. Salvator's Church (4) and St. Lawrence's Church (5).

FIG. 8 Ename. General view of the excavations of the *castrum* and the benedictine abbey, under which the foundations of the *portus* were found.

periode A

periode B

periode C

periode D

0   20 m
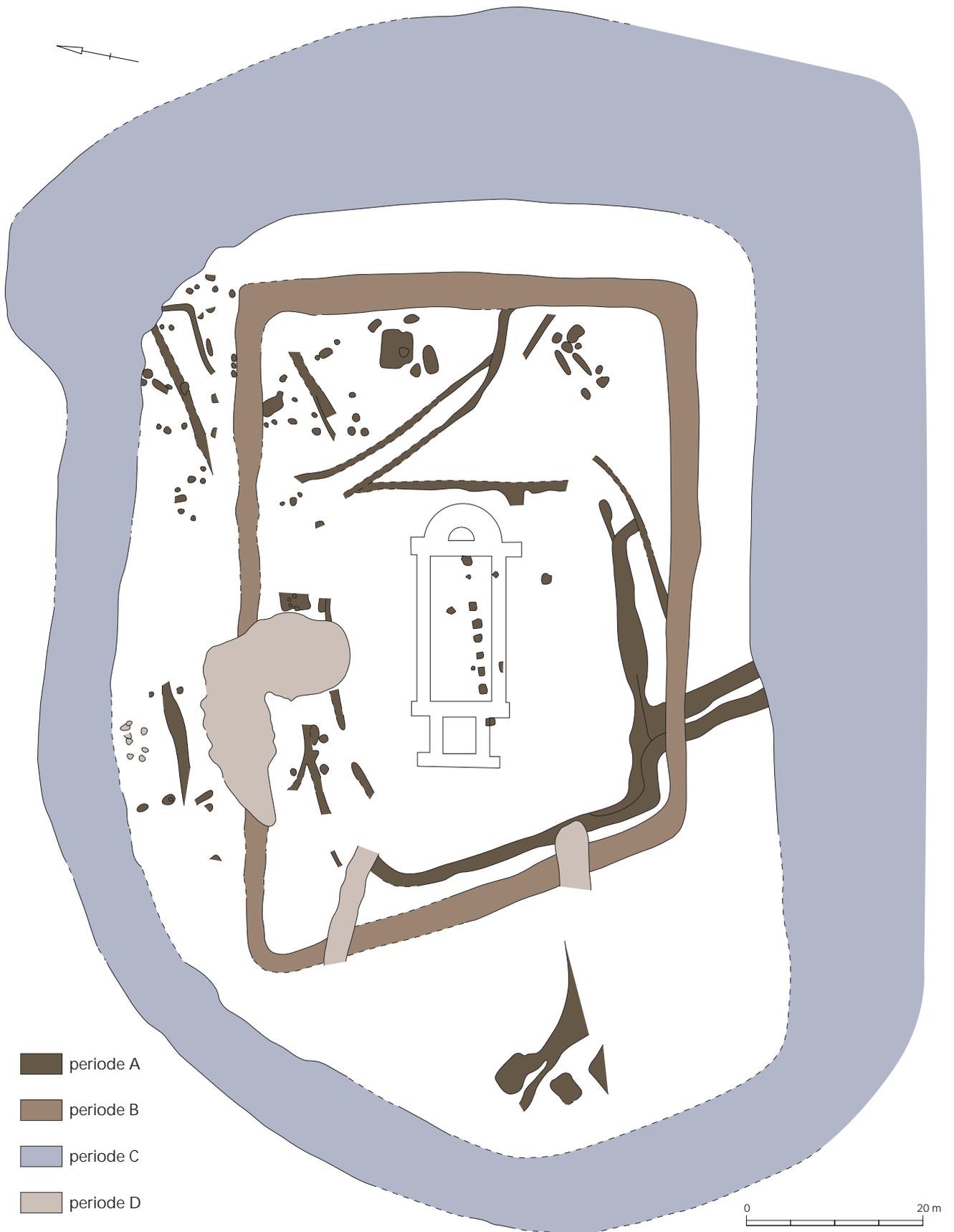
FIG. 9 **Ename. General plan of the *portus* traces in the zone of St. Salvator's Church (from De Groote 2008, fig. 14).**

properties before they took action in the *pagi Bracbatensis* and *Hanonensis*.

It is far more plausible that Mathildis received the domain as part of her dowry. There is a little chance that this happened when she married Baldwin III. As A.C.F. Koch has proved, the count of Flanders had practically no properties in the land between Scheldt and Dender. After he had grabbed the area in 1047 (*infra*) Baldwin V possessed so little land that he was forced to buy some or acquire some by exchange[64].

What remains is a dowry on the occasion of her marriage to Godfried of Verdun, who was linked with the Ottonians by blood as well as by career. The bringing together of the families of Billung and Ardenne-Verdun via marriage could not be neglected from a political point of view, as both families had important assignments concerning the borders of the realm. It is therefore possible that Otto I and his brother Bruno, who represented the Ottonian authority in *Lotharingia*, both played a role in arranging the marriage of Godfried and Mathildis.

A number of Ottonian donations prove that domains along the Scheldt were highly appreciated as a dowry. For example, in 972 Otto II gave his Byzantine wife Theophanu imperial possessions in the 'trans alpes' region as a dowry, in Walcheren[65] and in Wichelen[66]. Gerberga, the sister of Otto I, possessed the Krombrugge domain in Merelbeke. This is also considered to be part of a dowry when she married Duke Gislebert of the Reginar family in 928. She kept the property after Gislebert's death when she married Louis IV d'Outremer, the king of West Francia in 939[67].

In view of the context of the marriage and the aforementioned examples of donations it is therefore quite possible that Mathildis Billung received an imperial property along the Scheldt as a dowry from the highest Ottonian authority. This supposition is further substantiated by the fact that her property far exceeded the value of the average agrarian domain. After all, the *villa Iham* also possessed *regalia* such as the fortifications and market and tollage rights which she could use *pro suis usibus oportunum*. It is most unlikely that Godfried and Mathildis have usurped these rights. On the contrary, Godfried's career proves that he belonged to the group of counts who very loyally served the Ottonian family even in extremely dramatic situations (*infra*).

Even if it remains unclear whether the *villa Iham* really was an imperial property that Mathildis received as a dowry, the fact remains that the public rights that were attributed to the domain indicate a link between the *predium* of Mathildis and the Ottonian family. It is an important element because the support of the Saxon dynasty enabled Mathildis and Godfried to get a foothold in the *pagus Bracbatensis* and to acquire a seat with future potential: Ename. Maybe this fact allows us to go one step further. Godfried's marriage to Mathildis not only led him to Ename, but also brought him in regions he had little or nothing to do with formerly. At least as far as we know. It surely seems a tempting hypothesis.

8   The foundation of Ottonian Ename reconsidered

Of course, Ename as a foothold for Godfried in the *pagus Bracbatensis* raises the question of the true meaning of the project he developed there together with Mathildis. Literature shows that it generally has been assumed that Ottonian Ename had been created because it had to play an important military role along the Scheldt, either as a point of support in the border defence against East Francia with the County of Flanders as an important opponent, or to counter and control the interior unrest caused by, among others, the Reginar family[68]. Indeed, the *Gesta* states that Godfried and Mathildis built a *castro quidem munito* in Ename. What does this mean?

For a clear understanding we have to recall that the author of the *Gesta* wrote the text in 1024-1025 and, therefore, was contemporary. It does not really matter whether he visited Ename personally or relied on the data of others for his description. The fact remains that, when he wrote his text, Ename must have been quite impressive because of the fortress with an imposing keep and a large residential building. Understandably he called it "a very strong fortification". Consequently, it was equally acceptable that, on the basis hereof historians vieved Ename with its famous *castrum* as a pre-eminently military site that was particularly important for the border along the Scheldt. However, there is a problem. Radiocarbon research clearly indicates that the whole stone complex with donjon and residence date from around the year thousand[69]. Consequently it is not known how strong it must have looked or actually was at the time of Godfried and Mathildis, as archaeologic evidence reveals only a very limited part of the first occupation.

This leads us to yet another question. Was it politically necessary, when planning Ename, to develop the site into a military stronghold? We are inclined to doubt this. After the *Lotharingia* rebellions of Reginar III in 957 [70] and of Immo in 959 [71], Bruno managed to bring stability to the region[72]. Also the relations with West Francia were normalised. Carolingians and supporters of the Robertian clan disputed the kingship there. The pursuit of neutrality in the home affairs of West Francia was

64 Koch 1956.

65 Rotthoff 1953, 141; Verkerck 1988, 175-177.

66 Rotthoff 1953, 144-145.

67 Van Acker 2002, 207.

68 Milis & Callebaut 1990, 472-473.

69 Callebaut *et al.* 2002, 237-239.

70 After the revolt had been suppressed, the possessions of Reginar III were confiscated and he was banished to Bohemia, where he died in 973. His sons, Lambertus and Reginar, escaped to West Francia (Linssen 1981, 326-327). After the death of Otto I (973) they violently reclaimed their patrimony (*infra*).

71 When Bruno ordered to demolish the new fortresses that had been built without royal consent, a new rebellion broke out in *Lotharingia* in 959, led by Count Immo (Fournier 1978, 54, doc nr. 7).

72 Linssen 1981, 329.

characteristic of the western policy of the Ottonians. The sisters of Otto I, Gerberga and Hadwig were married respectively to the Carolingian Louis IV d'Outremer, king of West Francia (†954) and Hugo the Great, the founding father of the house of Robert (†956). After the death of their husbands the sisters looked for support with Bruno[73]. Because Lotharius, son of Gerberga and Louis IV, was still a minor, Bruno and his sister Gerberga were the effective regents in West Francia[74]. Their mutual relations were good. In 957 Lotharius helped Bruno to suppress the revolt of Reginar III. Two years later, on Easter, which Lotharius and his mother celebrated with his uncle in Cologne, the West-Frankish king guaranteed the safety of *Lotharingia* to Bruno. For his part Bruno supported Lotharius even with military interventions when trouble arose in West Francia. He also was an intermediary between him and Hugo Capet, the son of his sister Hadwig and Hugo the Great. The bonds with the Ottonians were strengthened even more in 965 when the 24-year-old Lotharius married the 17-year-old Emma, the daughter from the first marriage of empress Adelheid who had remarried Otto I in 951. After Bruno's death in October 965 a transition period followed until Otto II took office in 973, during which there are no records of any conflict between the Ottonian and the Carolingian West-Frankish house[75]. During this transition period, more precisely in 969, the archbishop of Reims, Olderik, died. Lotharius appointed Adalbero, the brother of Godfried of Verdun, to this very important function. This choice indicated that there were no frictions with the Lotharingian Ardenne clan at that time. Later on this would change dramatically (*infra*).

Finally there is Lotharius' general attitude towards Flanders. When Baldwin III died unexpectedly in 962 arrangements were made between the West-Frankish king and Arnulf I, the father of Baldwin III, about the succession by Arnulf II, who was a minor at the time. When Arnulf I died in 965 Lotharius kept his engagement: he occupied south-eastern parts of Flanders, with Artois at the core, and left the rest of the county under the management of Baldwin Balzo, who was responsible for the education of the young Arnulf II and the West-Frisian count Dirk II, son-in-law of Arnulf I and a prominent member of the Lotharingian nobility. When Arnulf II came of age in 976 he took over the count's rule in the usual way[76].

What precedes shows that the relation between East and West Francia in the third quarter of the 10th century (until the death of Otto I in 973) was stable. The family network the Ottonians had managed to build with the Carolingian clan of West Francia leads to the conclusion that there was really no military reason to close off the Scheldt with a number of margraviates during this period, when relations between both realms ranged from norm to good. So there must have been other explanations for the founding of the Ename site, apart from the mere military. Indeed, borders are more than military zones under guard, especially where rivers are concerned.

Possibilities for economic development and cultural-political aura are also factors that are inherently linked to border rivers. When looking for an explanation of Ename's foundation it is therefore also important to consider these opportunities.

9   The economy as a key resource for the development of political power

It is remarkable that the *Gesta* emphasizes the economic exploitation of the *villa Iham*. The levying of tolls on roads or the sale of goods (*teloneum*) and the market (*mercatum*) were rights that were traditionally reserved for kings during the early Middle Ages[77]. Kings also decided on the possible exemption or the transfer of these rights to a third party[78]. Toll and market districts usually overlapped. Therefore the last Carolingians and certainly the Ottonians passed these prerogatives on to the secular as well as to the clerical nobility along with the mintage rights and the *bannum* (the related jurisdiction), all in one package. Bringing together all these rights ranks as typically Ottonian[79]. With these attributions the Ottonians wanted to provide a fiscal and territorially administrative power base for an aristocracy they wanted to oblige because of the financing sources they offered.

A good example of grouped concessions is the case of Câteau-Cambrésis in the Diocese of Cambrai. The situation is important as a comparison with the foundation of Ottonian Ename itself suggests. Once again the *Gesta Episcoporum Cameracensium* is a valuable source of information[80]. The central figure is Erluinus, bishop of Cambrai. His position had been undermined because, among other things, church properties were targeted by his own vassals and by *milites* from the counties of Laon and Vermandois[81]. To counter this troubled situation Otto III allowed Erluinus in 1001 to found a trade centre in a domain of the Cambrai church of Our Lady, the *villa Peronna,* which later became the Câteau-Cambrésis . A package of rights was attributed to the new foundation: markets could be held, toll levied, coins struck, justice administered and public functions executed: "*Atque praedictum merchatum, monetam, theloneum, bannum, cum tota publica functione, in proprium concedimus sanctae Kameracensi aecclesiae, tali tenore, ut nullus dux, marchio sive comes, seu aliquis homo ullam potestatem habeat super memoratum merchatum, nisi cum licentia episcope Erlewini suorumque successorum*". This enumeration of rights is important because of, among other things, the additional statement that these prerogatives are attributed to Erluinus and his successors only. Foreign interference was not tolerated.

As the place was guarded against greedy potentates from the nobility, special protection was provided for the traders and the people who visited the market: "*Unde imperiali iubemus atque statuimus potentia, ut omnes homines iam dictum merchatum visitantes, euntes, negotiantes atque commorantes, eundo et redeundo talem obtineant pacem, qualem iuste detinent*

73 Ehlers 1992, 42-43.

74 Schneidmüller 1991, 349.

75 Kienast 1974, 80, 86.

76 Dunbabin 1985, 72-73.

77 Kaiser 1980, 470.

78 Ganshof 1959, 23-43.

79 Kaiser 1980, 481-482.

80 Bethmann 1846, 465.

81 Fournier 1978, 123, 128.

negotiatores in merchato Kameracensis civitatis.". The location, the later Câteau-Cambrésis, was protected by market peace. In other words, those who visited the market, traded or lived there, enjoyed the same security as the traders of the city of Cambrai. Apart from the regular trading activities, a peaceful course of events was also taken care of. The principle of market peace originated in the 10th century and was of the utmost importance for the development of marketplaces in early Europe[82].

Finally Bishop Erluinus was granted the right to erect a fortification: "(*Erluinus) castellum muniri imperiali praecepto obtinuit, ut hoc esset obstaculum latronibus praesidiumque libertatis circum et circa rusticanis cultoribus.*". The fortress had to stop plunderers and offer security to the farmers from the region. The fact that the fortification had to help and protect the agricultural production is understandable. Precisely because of the growing of corn crops during the 10th-11th century food became available to a part of the population that could specialise in differentiated jobs. Also, it made the evolution from trade settlement to urban settlement possible[83]. The attribution of rights by emperor Otto III enabled bishop Erluinus to found a trade settlement (which can be considered as a '*ville neuve avant la lettre*') on church property. A proper action program for the site was established, along with measures to protect the commercial initiative against any possible aggression. The bishop and his successors got the imperial guarantee that the rights were attributed to them only; a market peace secured the safety of the traders and the visitors of the market and a fortress protected whoever was involved in the agricultural production of the region. In view of the unrest in which the project came about, it seems likely to us that the whole scheme was, to a considerable extent, determined by the will of Otto III to strengthen the power base of his imperial bishop Erluinus in the Cambrai region. To reach and finance this goal the economic power of a trade settlement was instrumental.

The site of Ename shows striking parallels with the aforementioned case. Similar to Câteau-Cambrésis there is a new foundation on property, which is strongly economically orientated thanks to official rights (*teloneum* and *mercatum*) that were granted. Elements such as *moneta* and *bannum* are not explicitly mentioned in the *Gesta*, unless the *ceteraque negotia* can be interpreted as such. Ename has *navigium,* but this is not the case for Câteau-Cambrésis, which was also along a waterway. But the Scheldt probably offered more opportunities than its tributary the Selle.

And then there is the presence of the fortification. As far as Câteau-Cambrésis is concerned the charter of Otto III stipulated that the *castellum* had a sort of police function to counter banditism and guarantee the security of the rural surroundings. The *castrum* of Ename probably did the same in the vicinity it was responsible for. We then think first of all of the *villa Iham,* the oldest residential nucleus which was in Nederename, where the mother church of the domain stood. The fortress of Ename was held in high esteem, as is proven by the church with a chapter of canons within its area. The founder had to realise a great deal to be able to install this community of clergymen. He had to build a church and provide sufficient means to support the canons. Apart from meeting these material conditions the presence of relics was equally necessary. The liturgical activities of the canons concentrated on these relics as their main duty was to celebrate daily mass and to perform divine office. This way they guarded the 'spiritual and material welfare' of their founder and his family[84]. The chapters were symbols of the authority and the expansion of power of their noble founders. But the real basis of their authority lay in the other functions of a fortress as a military stronghold, an administrative centre and a point of control for the rural exploitation, the market and the levying of interests and toll. A good example of this is the action which Rozala, the stepdaughter of Godfried of Verdun, undertook. She was married to the son of Mathildis, the Flemish Count Arnulf II. After his death in 988 she remarried the French king, Robert II, son of Hugo Capet[85]. After a few years she was repudiated because she was 'too old'. Because she risked losing the castle of Montreuil she built a new one next to it to stop the boats and levy toll[86].

The support of Otto III for Câteau-Cambrésis meant economic leverage to strengthen the power base of his archbishop. This approach was probably true for Ename too. Indeed, the opportunities for development which Mathildis' *predium* received from the authorities gave Count Godfried the necessary financial ways and means to acquire a strong position in the *pagus Bracbatensis*. Taking into account this context and the normalised political relations between East and West Francia during the period that Ename came into being we have to describe its *castrum* as an administrative and financial centre of control rather than as a military bastion in the western border defence of the Ottonian empire.

Economy as a basic element in the development of a political power base: it is a principle that yielded rich rewards for Ename if we consider how the site would boom and how the Ardenne-Verdun clan of Godfried would make it to the top during the following decades.

10   Velzeke and Ename: a duo in imperial service?

As we pointed out earlier, the investigation of M. Rogge in Velzeke proved that an older St. Martin's Church was replaced by an imperial church in the middle or third quarter of the 10th century. The building of this new church was an enterprise that will have required an enormous effort. The explicit references to Ottonian architecture prove that this project was more than just a replacement of an older building. The building of an imperial church in Velzeke means that the site got the

82 Hardt-Friederichs 1980, 19.

83 Moore 2000, 30-39.

84 Meyns 2000, 397-399, 409-410, 962-963.

85 After Rozala remarried King Robert II, she had herself called Suzanna (Koch 1981, 370).

86 Latouche 1937, 288-289.

political attention of the Ottonian rulers during this period, that was important for the integration of *Lotharingia* into the empire. There had been for example the rebellion of Reginar III, which Bruno and Lotharius had jointly managed to suppress. At the Diet of 958 all the possessions of Reginar III were confiscated by Otto I and handed on to Godfried, a cousin of Godfried of Verdun on the maternal side. This Godfried, a pupil and confidant of Bruno, thus became count in Hainault and the gau of the Meuse. As duke of Lower *Lotharingia* he would subsequently provide important help for Bruno[87]. A contemporary source states that the same parliament intensely discussed how the royal authority could be strengthened in *Lotharingia*[88]. A decision was made for the *pagus Hanonensis* by appointing the aforementioned Godfried, a confidant of the Ottonian family, as the successor of Reginar III. Was it considered, at that moment or later, to make the royal authority more visible in the *pagus Bracbatensis*? Was this realised for example by organising the centre of the *fiscus* Velzeke according to an Ottonian pattern and by giving it an imperial aura by means of a symbolic architecture? Was Velzeke chosen because the site had kept its central function as a Roman *vicus* and had evolved into an administrative centre of the county of Biest? We cannot give final answers. The church building was there and it gave evidence of the Ottonian presence in the region in its own way and on a site that must have been significant for the contemporaries (fig. 10).

The *Auctarium Affligemense*, a source presumably dating from the middle of the 13th century, makes an unexpected and emotional link between this church and the son of Godfried of Verdun, Herman. Two of his children, Herman and Berthilde, died at very young age. They were buried in the church of Velzeke: "*Hic enim genuit filium nomine Herimannum et filiam nomine Berthildem; qui dum adhuc juvenes essent, defuncti sunt et in ecclesia apud Felseka sepulti.*"[89]. This is recorded in the *Auctarium* in the year 1005, yet the time of the burial is not certain[90]. The choice of the site is remarkable because Ename, where Herman would realise ambitious building projects in the footsteps of his father, also contained a church of Our Lady in its castrum, linked with a chapter of canons. In spite of the presence of a group of clergymen who could have held his children's memory dear he opted for burial in the St. Martin's Church in Velzeke. At the time Herman took this decision his bond with Velzeke apparently must have been stronger than with Ename. The church of Velzeke, along with three *mansi*, belonged to the Ardenne-Verdun family.

Herman, in consultation with his brother Godfried, gave these possessions to the monastery of St. Vanne in Verdun around 1015. "*Herimannus quoque venerabilis comes in comitatu Bracbantinse .... apud Feilsecum dedit ecclesiam eiusdem predii cum tribus mansis ad eandem pertinentibus cum omnibus adiacentiis*"[91]. An important statement in the text refers to a *predium*, an allodial property of Herman. This property reminds us of Mathildis' *predium* in Ename, which we suspect to be a wedding present. It cannot be excluded that 'Feilsecum' (Velzeke) was possibly also part of her dowry. Anyway, Velzeke must have been a family seat for Herman as he had his two children buried there. It is therefore very likely that the allodial property goes back to the days of his father and mother.

Summarizing we can list the following elements:
· Velzeke received an Ottonian impulse in the middle or the third quarter of the 10th century, witness the foundation of an imperial church.
· Godfried and Mathildis came to the *pagus Bracbatensis* during the 60s of the 10th century.
· Ename and Velzeke were two allodial possessions of Godfried and Mathildis.

It seems that these facts cannot be attributed to coincidence only, but that they are the sole pieces that are still recognisable of the larger jigsaw puzzle. The hypothesis is that the following happened. When Mathildis Billung remarried the Lotharingian Count Godfried of Verdun after the death of her first husband, the Flemish Count Baldwin III, this marriage offered an unique opportunity to launch a strong presence of Ottonian authority in the *pagus Bracbatensis*. But Godfried and Mathildis did not belong to the native nobility of the *pagus*, they were 'strangers' in the region. This would possibly explain the territorial strategy of the Ottonian top to assign two locations with a specific function each to Godfried and Mathildis. Ename, as the site along the Scheldt that offered financial possibilities, and Velzeke, because of its location in the county of Biest, which was important to the Ottonians. By linking an 'administrative seat' with a trade centre Godfried got sufficient guarantees to succeed as a count in the *comitatus* Biest[92]. Most likely his authority was not limited to only this region in the *pagus Bracbatensis*. We may assume that Chièvres was another point of support[93], maybe even Asse[94]. This course of events is all but certain, but at least this line of thinking makes plausible links between elements that are difficult to explain on their own.

87 Dhondt 1945, 129-131; Linssen 1981, 329.

88 Dhondt 1945, 129-130.

89 Gorissen 1952, 111.

90 Van Durme points out that, as far as the date of 1005 is concerned, the *Auctarium* has not enough evidential value to date the burials in that year (Van Durme 1986, 110-112).

91 Charter of Henry II in which he confirms the possessions of the Abbey of Saint-Vannes in Verdun (mentioned in Van Durme 1986, 111).

92 With many thanks to prof. Matthias Untermann, Joyce Wittur and Neil Silberman for

the discussions and the insight concerning this matter.

93 Ename and Chièvres were linked. Indeed, when Baldwin IV took Ename in 1033, there were negotiations about the partition of the two counties with Reginar IV, who had Ename in his possession at the time (*infra*). Apparently both counties formed an entity. Chièvres then came into the hands of Baldwin IV and Reginar kept Ename. A definitive agreement was reached in 1047: Ename now belonged to the count of Flanders, Baldwin V, and Chièvres to the count of Hainault, Herman,

the son of Reginar IV (Milis & Callebaut 1990, 470).

94 Between 1012 and 1015 Herman of Verdun and his brother Godfried, duke of Lower Lorraine, seem to have ceded their domain in Asse to count Lambert of Louvain. In exchange they got 30 mansi and the church in Buvrinnes (Despy 1981, 71). Is it possible that the former Roman vicus of Asse had come into hands of Godfried, just like Velzeke? This most certainly cannot be excluded (Van Droogenbroeck 2004, 179-150, 153-154).
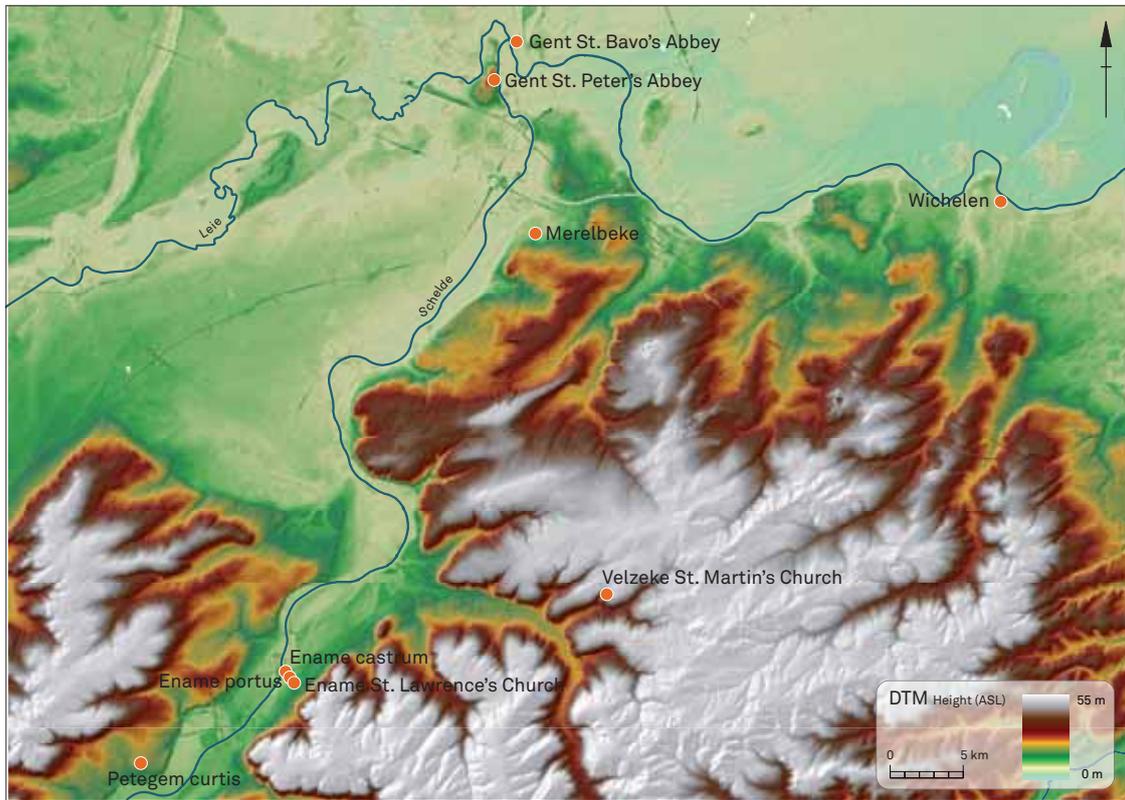
FIG. 10 Western territory of the *comitatus Biest*, situated on a digital terrain model (DTM).

FIG. 11 Ghent, St. Peter's Abbey. General plan of the *atrium* and the front extension of the abbey church (10th century). (copyright Archeologische Dienst Stad Gent)

11 The crisis years

Otto I died in 973. In that same year Reginar and Lambert , the two sons of the banished Reginar III, invaded the *pagus Hanonensis*. They had found shelter with the West-Frankish king and attempted to regain their possessions *manu militari*. The two counts who managed the *pagus* at the time, Werner and Reinold, perished in the battle of Péronne. The two brothers then took control of the Fortress of Boussu on the Haine. The situation was so grave that Otto II felt compelled to intervene personally. In january 974 his army invaded the threatened area and destroyed the castle of the Reginar family in Boussu. Both brothers escaped and were able to flee in the direction of West Francia[95]. Meanwhile Otto II had appointed Godfried of Verdun and Arnulf, son of Isaac, count of Cambrai, as the successors of Werner and Reinold in the *pagus*. Godfried and Arnulf respectively got Mons and Valenciennes as core regions. According to J. Dhont this led to the foundation of the margraviates of Ename and Valenciennes (*supra*). It is entirely possible that in those moments of unrest the county of Biest got a new task, the defence of the border, and that the county of Chièvres was added to Biest to form the margraviate of Ename to close off the Scheldt completely. Contrary to Valenciennes Ename has never been mentioned as *marcia* in texts, which, however, does not really prove anything in itself. It seems rather improbable to us that the problems with the Reginar family and the appointment of Godfried as count of Mons could have been the motive to found Ename in 974, out of nothingness. We would sooner think the opposite and argue that Godfried was called in to help and control the situation in Hainault precisely because of his position in the gau of Brabant (which had been established for years).

Two years later, in 976, the Reginar family together with their West-Frankish allies made a new attempt to regain their domains. This time they attacked Mons, which was defended by Godfried and Arnulf. During the siege Godfried was seriously wounded in his foot by a spear, but the town was not taken[96]. Then something remarkable happened. Although their military enterprise had failed, Otto II returned the county of Hainault, with the exception of Mons and Valenciennes, and the county of Louvain to respectively Reginar and Lambert. Lotharius' brother, Charles, was appointed as duke of Lower *Lotharingia*. This angered Lotharius who invaded *Lotharingia* via Sambre and Meuse in a spectacular way[97]. When he learned that Otto II was in Aachen without an army, he directed his campaign to the town and captured the Carolingian palts. Otto II managed to escape to Cologne and Lotharius withdrew. The reaction of the East-Frankish king was as sharp. In October 978 he invaded West Francia. The region of Laon, Soissons and Reims suffered under the violence. The army came to a standstill just before Paris, which was defended by Hugo Capet. The siege was unsuccessful and Otto II withdrew his troops, but not without difficulties. Near Soissons Godfried helped the imperial army to cross the Aisne, with only the rearguard not able to make the crossing. They did not stand a chance against the army of Lotharius that followed on their heels[98]. Eventually peace was made and confirmed by Otto II in Margut-sur-Chiers in May 980.

However, the *amicitia* did not last long as the hostilities resumed with great intensity after the death of Otto II in 983. In particular the succession of Otto III, who was a minor at that time, caused serious problems. Godfried sided with the party that supported Otto III along with, among others, Bernard Billung, Mathildis' brother and duke of Saxony. In these confused times Lotharius attacked Verdun in March 985 and seized the town within a few days. Thereupon Godfried counterattacked with a party that included his son Frederic and his uncle Siegfried of Luxembourg and recaptured Verdun. Lotharius retaliated and managed to get hold of the city once again at the end of March 985. Godfried was taken prisoner, along with other members of the *Lotharingia* nobility. Together with his son, Frederic, he was carried off to a castle along the Marne where he was guarded by the Counts of Blois and Troyes[99]. We are rather well informed about Godfried's demeanour in these dramatic circumstances via a number of letters by Gerbert, a collaborator of Adalbero of Reims (and the later pope Sylvester II). He managed to smuggle the letters to his family, which were afterwards preserved. Godfried urgently requested Mathildis to keep supporting Otto III and his mother Theophanu, never to strike a deal with the enemy and to firmly keep hold of all the fortifications[100].

In one letter he also urged his sons Herman (who would develop Ename) and Adalbero (who was bishop of Verdun from 984 till 988) to remain loyal to Otto III. In addition, he pleaded to defend the fortresses of Scarponne on the Meuse and of Hattonschâtel along the road from Trier to Metz at all costs against the Franks (*Francis*) of Lotharius. Very realistically he asked them no to be misled by promises of a possible release or by torture he and his son Frederic, would possibly have to endure: "*illecti aut vana spe suae liberationis, aut terrore sui cruciatus, aut filii Friderici*"[101]. These moving words illustrate his resolve. He refused concessions in order to be released, such as rendering Mons to Reginar and renouncing the county of Verdun. So he had to wait until 17 June 987 when Hugo Capet was crowned king to be set free. Not without paying compensations, however. The payment he took from the possessions of the St. Vanne abbey in Verdun, the family monastery of the Ardenne-Verdun clan[102].

12 Godfried, Mathildis and Arnulf II

As far as the historical sources tell us, a striking fact in all this military violence during the period from 973 till 987 is that no enemy actions were undertaken against the count of Flanders, nor did the latter take any hostile initiatives. The conflicts (with the border crossings) were usually situated in the Meuse

[95] Lot 1891, 78-79.

[96] *Ibid.,* 83.

[97] *Ibid.,* 93-94.

[98] *Ibid.,* 99-103.

[99] Lot 1891, 145-148; Evrard 1981, 156-157.

[100] Riché & Callu 1993, letter 50, 122-123.

[101] *Ibid.,* letter 47, 116-117.

[102] Evrard 1981, 157.

region. This is not really surprising. Indeed, in those years the count of Flanders was Arnulf II, the son and stepson of respectively Mathildis and Godfried. The relations were good, both from the viewpoint of the political context in East Francia and from the family standpoint. This can be deduced from the attitude that was held regarding the Abbeys of St. Bavo and St. Peter in Ghent (fig. 10).

The St. Bavo's Abbey had been neglected for a long time after the raids of the Vikings, but got full support from Otto II from 974 onwards. This date is not a coincidence in view of the problems in Hainault and indicates a growing Ottonian interest in the Scheldt as a border region where they had to manifest themselves. During the years 974-977 the emperor restituted an important part of the monastery's possessions in East Francia and also stimulated the architectural renovation of the St. Bavo's Abbey. Under Abbot Odwinus (981-998) a series of building campaigns was started that lasted until the end of the 12th century and that produced a grand abbey church with architectural influences from the regions of the Meuse and Rhine as well as from the north of France and Normandy[103]. The monks of St. Bavo were very grateful to Otto II and admitted him as a member of their prayer fraternity, of which they would to be very proud later on[104].

But the St. Peter's Abbey was more important for the Flemish family of counts. Baldwin II was buried there in 918 and from then on until the middle of the 11th century the Monastery became the necropolis of the Flemish counts. This means that the abbey had precedence on other ecclesiastical institutions in Flanders[105]. Count Arnulf I (918-965), son of Baldwin II, became a crucial figure for the monastery as far as reformations, restitution of goods and the restoration of the abbey buildings (the building activities started in 960) were concerned[106]. Building elements of this church were probably found during the preliminary archaeological investigation carried out by the municipal archaeological service of Ghent at the Sint-Pietersplein, in 2002, when an underground parking was built (fig. 11). Two parallel gangways of 55 m long were excavated that may be considered to have been an *atrium* to the west of the former abbey church. Also two adjoining square structures were found that may have been the tower foundations of a *Westbau*. The whole resembles examples of Ottonian architecture[107].

The new church was consecrated by Archbishop Adalbero of Reims on 30 September 975. This is a remarkable fact because the monks apparently did not appeal to Hadulfus, the bishop of Noyon-Tournai, but more likely to someone who was related to the family of Count Arnulf II via his brother, Godfried of Verdun. The same happened in 979, when the *Westbau* was dedicated by Egbert, Chancellor of Otto II and archbishop of Trier[108]. This alliance across borders was also expressed on

FIG. 12 **Ename,** *castrum.* **Foundations of the keep: a framework of crosswise stacked tree-trunks.**

another level. The brothers-in-law of Arnulf II, Wichman of Hamaland and Dirk II of West Friesland were generous donors to the St. Peter's Abbey in Ghent. Also Godfried and Mathildis made an important gift on 21st January 979 or 980: the *fiscus* of Hollain with a church and dependencies[109]. Arnulf II was first on the list of witnesses. Herman, the son of Godfried and Mathildis, also signed the donation charter: "*Herimanni comitis, filii Godefridi comitis*". So Herman was already a count in 979 and 980. Donations involved public, ceremonious events, presided by the count in the presence of numerous witnesses. They were symbolic public statements of political and social 'togetherness'. This feeling was even strengthened because at that time the St. Peter's Abbey was something like a *lieu de mémoire* of the family of counts[110]. Maybe the monastery was also a place of commemoration for the Ardenne-Verdun clan because it is not unlikely that their ancestor, Godfried of Verdun, was buried there[111].

All this shows that, as far as the sources tell us, the middle-Scheldt region escaped acts of war during the period of aggression between East and West Francia (973-987). The relations with Count Arnulf II were normal, if not amicable. This is

103 Laleman 1997, 124-125.

104 Declercq 1997, 31.

105 *Ibid.*, 29-30.

106 Declercq 2004, 67.

107 Van den Bremt & Vermeiren 2004, 31-36; Bru & Vermeiren 2007, 17.

108 Declercq 2004, 68-69.

109 Gysseling & Koch 1950, 168-169; Declercq 2006, 353, voetnoot 140.

110 Declercq 2006, 352-354.

111 *Ibid.*, 331 note 38.

Ename, *castrum*. Foundations of the residence in limestone from Tournai; the *camera* is in front, the *aula* in the middle.

understandable considering how strongly the Saxon and *Lotharingia* nobility was interrelated with the family of the Flemish counts. The support emperor Otto II granted the St. Bavo's Abbey proves that Ghent was considered a prestigious location by even the highest ranking Ottonians. To put it briefly, Ename did not begin its rise in an atmosphere of military stress, but against a background of intensified attention for the possibilities of the Scheldt both as a river and as a border region. However, this course of events would change dramatically with the next generation change: when the son of Arnulf II, Baldwin IV, took control of the county.

13   Ename booms

Archaeology only offered a very limited view of the occupation of the site at the time of Godfried and Mathildis, but that changes profoundly for the phase during which their son Herman had full control of Ename. Globally we can situate this period between the last record of Godfried in 997 and 1025, when Herman became a monk in the Monastery of St. Vanne in Verdun. As we have pointed out earlier Herman could have been in the position to take the responsibility for Ename some ten years earlier already. Let us consider some of the findings.

Two important stone constructions in limestone from Tournai were excavated in the *castrum*. The first is situated in a corner formed by the Scheldt and the *castrum* ditch that closed off the landward side of the fortification (fig. 7: 2). It is a hall that measures 27 by 10 m on the inside and is orientated east-west. The foundations were up to 3 m deep and rested on a horizontal framework of two rows of tree trunks lying crosswise (fig. 12). The aboveground masonry itself was preserved only partially. The eastern front was 4.40 m thick, the southern wall 3 m. The strategic position, among other elements, clearly

proves this to be a keep. At right angles with the west side of the *turris* a 1.40 m thick wall was cut into. It was completely broken away and only a portion could be excavated. Possibly it was a wall of defence behind the *castrum* ditch, which connected with the keep[112].

A residential building stood centrally in the area of the fortification (fig. 7: 1). During the excavations of the 1940s, before the brickworks became operative, A.L.J. Van de Walle managed to plot the foundations[113]. We completed the picture during the excavations in the 1980s. Only the bottom layers of the 1.90 m broad foundation walls were preserved (fig. 13). In the first phase the residence consisted of a hall adjoined by a room with an apse on the east side, apparently an *aula* and a *capella*. In a later phase an annex was built on the west side, which we consider to be the *camera*. Between the residence, which measured 40 m by 11 m, and the keep we found post holes of a wooden building and a ditch with a lot of sunken occupation waste[114] (fig. 7: 3). Radiocarbon analysis of the foundation latticework of the keep, of bone material from the depression and of vegetable material from the mortar of the aula shows that both stone constructions were erected roughly at the same time in the last quarter of the 10th century or during the first quarter of the 11th century[115]. The rubbish dump in the depression dates from the first half of the 11th century, the time that the keep was put to use.

The trade settlement is marked by the two stone churches dedicated respectively to St. Salvator and St. Lawrence and founded by Herman, according to the *Gesta*. The St. Salvator's Church has been completely excavated (fig. 7: 4). It is a hall church with an apse as the eastern choir. To the west there is a square annex which we also consider to be a choir[116]. The church was surrounded by a ditch of which all the older traces were

112 Callebaut 1984; *Idem* 1991, 295-297, fig. 7-8.
113 Van de Walle 1945.
114 Callebaut 1984; *Idem* 1994, 99, fig. 13.
115 Callebaut *et al.* 2002, 234-239, Tabel 1-2.
116 Callebaut 1985, 92-94.
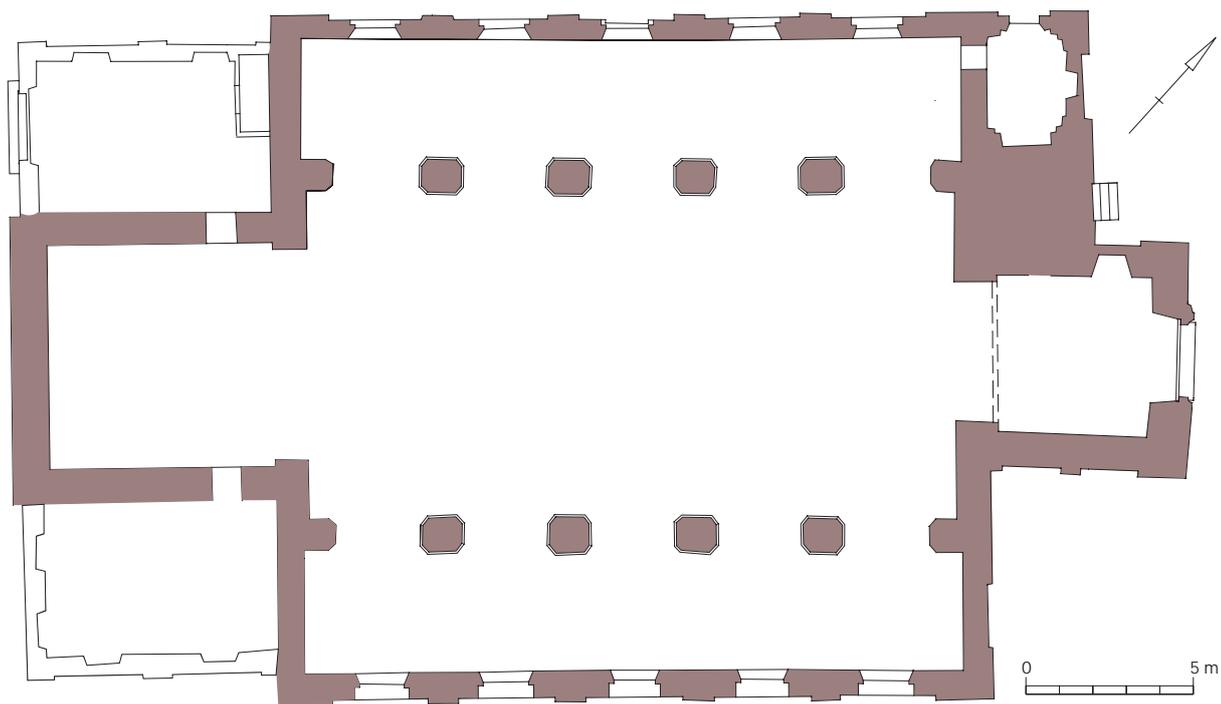
FIG. 14 **Ename, St. Lawrence's Church. Ground plan of the basilical building with an east and a west choir.**

covered by a layer of dark humus soil (a horticultural layer?)[117] (fig. 9: B).

The St. Lawrence's Church is the only Ottonian monument that has been preserved (fig. 16). During the consolidation of the tower the Institute for the Archaeological Patrimony made a few control trenches. This was the beginning of a thorough investigation in which archaeological, historical, architectural-historical and iconological research was combined with scientific analysis and material study[118]. The church was built in limestone from Tournai on the highest point of the present village centre on a plot that was used as a field during the Roman period. First the foundations were laid for a hall church with an eastern and western square choir (fig. 14). Then the building activities were interrupted, the plans were changed and a basilical church with two choirs was built using the existing foundations. Such a building does not fit into the architectural landscape of church tradition in Flanders. Indeed, it is a basilical church with an east and a west choir. Especially the east choir is remarkable with its two altar floors and rich incidence of light (fig. 15). The architectural ornaments inside are dominated by blind arches that add a strong rhythm to the walls of both choirs. Blind arches also adorn the outside of the east choir (fig. 16). The entrances were in the

aisles. The original mortar floor was preserved fragmentarily. The preserved interior elements such as the graffiti and the murals are of exceptional value, especially the fresco of the *Majestas Domini,* inspired by Byzantine examples. According to the ^{14}C-analysis the painting dates from the first quarter of the 11th century. The church was made on top of an older occupation layer, radiocarbon dated in the 10th century. Combined with the historical data we can place the building at the end of the 10th or the beginning of the 11th century. We also have to mention that the church was fully plastered on the outside. Indeed, important remnants of white-beige plasterwork were found under the present roofs of the aisles. Just like around the Saint Martin's church in Velzeke ditches were cut into around the St. Lawrence's church, which probably marked out the church area. The oldest section may date back to the building of the church around the turn of the century[119].

The iconological study of the church throws a light on the motives of Herman of Verdun who commissioned the building. He opted for a building program that had to reflect a direct bond of the patron with the imperial authority, just as in the church of Velzeke. Hence the two choirs, which can also be found in the large imperial churches, and the pronounced presence of blind arches. This motive can be described as 'from

117 De Groote 2008, 44-45, fig. 14: C.   **118** Callebaut *et al.* 2001, 23-25.   **119** De Groote 2008, 58-62, fig. 36-42.

Ravenna' because it refers, among other things, to a building style in Ravenna, the favourite place of residence of the Ottonians in Italy. From the end of the 10th century onwards blind arches appear in important Ottonian centres and may be considered to be an 'imperial hallmark'. Their dissemination fits in with the *Renovatio Romani Imperii* by the Ottonian court[120]. Also the patron St. Lawrence referred to the ideology of the Emperor[121].

The fact that the St. Lawrence's Church is an outstanding example of early medieval 'imported architecture' in Flanders determined its restoration in 2000-2002. The central axis of the church was restored in its primitive form because of the recognizable visual authenticity of the original building. The aisles retained later changes in their form and decoration. This restoration concept was recognized by the European Commission as a model project in view of the consolidation of the European architectural heritage (fig. 15).

The results of the archaeological research have shown how the site surprisingly boomed at the end of the 10th- beginning of the 11th century. Prestigious stone buildings drew attention to Ename's most remarkable locations: the *castrum* with its keep and residence and the two churches, St. Salvator and St. Lawrence. They are all marks of a notable evolution with various facets.

First of all the patron, Herman of Verdun, must have had adequate means at his disposal to commission such an impressive building complex. This implies the existence of an agricultural production with sufficient surpluses, a region with economic dynamics and a controlling structure that manages all of this in purposeful and efficient way. One does not achieve any of this in the short term. Ename beautifully illustrates this evolutionary process. The site was situated favourably in a region that was already highly cultivated with plenty of arable land and was blessed by the economic advantages which the river Scheldt offered[122]. However, between the foundation of Ename under the rule of Godfried and Mathildis and the large-scale building campaigns of Herman more than thirty years passed.

The buildings themselves not only illustrate the dominance of the nobility and the clergy in the community of Ename, but also revealed that the site as such had acquired some status (fig. 16). This particular position is specifically highlighted in the *Auctarium Affligemense*, where the location is described as the "*sedes principalis ducatus regni Lotharici*"[123]. This might be an exaggeration, but it cannot be denied that Ename had acquired a special place in the events concerning the Scheldt at the millennium. The residence built in the centre of the *castrum*, is a case in point. With its *aula* and *capella* the building was, as it were, the symbol of Ename's display of power. This is where the official receptions took place, administrative affairs were dealt with, justice was administered and canons prayed for the welfare of the Ardenne-Verdun family. This whole range

of activities transcends the level of the original *villa Iham* and justifies the assumption that Ename definitely got hold of the *comitatus* Biest, and maybe even more in the Brabant gau. And even if Herman had his two young children buried in the St. Martin's Church in Velzeke, we still surmise that Velzeke lost its importance to the advantage of Ename because political circumstances compelled new strategic decisions.

14 The 'change' of the Flemish Count Baldwin IV

When Arnulf II died on 30 March 988 his son, Baldwin IV, was 11 years old. Hugo Capet, the successor of Lotharius to the French throne, passed on the whole of Flanders to the underage grandson of Mathildis Billung, including the south-eastern part of Flanders which his predecessor had kept. Maybe the French king hoped to strengthen his own new position by building a good relationship with the county, but apparently the swift course of affairs thwarted the ambitions of certain noble groups and there was unrest in Flanders. Because the power of the count of Flanders was unevenly spread across his county Baldwin IV was most likely forced to reorganize the local administration, starting in the winter of 993-994. Although the historical sources only provide very limited information it is plausible that a great part of the county was divided into regional entities called castellanies. Three of them are known: Ghent, Tournai and Bruges. The administration in these entities was fully focused on the fortresses of the counts in Ghent, Tournai and Bruges. The *castellanus* was recruited from the upper nobility of Flanders and, as a key figure in the regional organisation, always operated in the name of the count of Flanders. This way Baldwin IV wanted to give his authority as a count a strong foundation[124]. It is remarkable that two sites that would acquire a central position of power because of the reorganisation by Baldwin IV were situated along the Scheldt: the count's fortresses of Ghent and Tournai. Ename was in between.

Did those who took the Ottonian interests to heart at the other side of the river consider this reorganisation to be a threat? And was this one of the reasons why Ename became politically and strategically more important than before? And moreover strategically so important that the means of Ename were used to develop the site into a prestigious complex as a challenging token of its strength? Some elements are in favour of this interpretation, but for a better understanding of the matter we have to take a look at the unstable political situation that would escalate into real aggression at the beginning of the second millennium.

This cannot be excluded because a formidable *discordia* was at hand along the Scheldt. When Otto III died in 1002 his second cousin Henry II (1002-1024) succeeded him in dubious circumstances. He passed over two other candidates and stole the imperial *insignia* needed for his coronation during the funeral procession. Therefore he had difficulties to have his authority accepted in general[125]. In 1006 there was unrest along the

120 Mekking 1991, 118-123, 482-484; den Hartog 1992, 21-23.

121 Milis & Callebaut 1990, 484.

122 Berings 1989, 35-81.

123 Gorissen 1952, 111.

124 Koch 1981, 375-377.

125 den Hartog 1992, 52.

FIG. 15 **Ename, St. Lawrence's Church. Interior view of the east choir during (left) and after (right) the restoration. Striking elements are the two altar floors and the triple arcade on the second level with the mural of the *Majestas Domini* on top.**
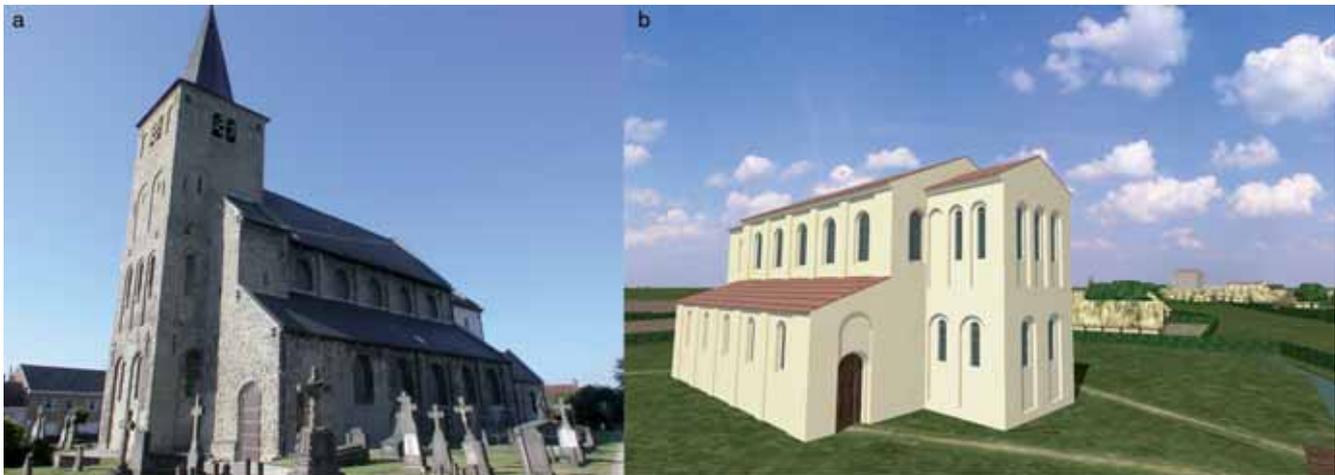
FIG. 16 **a: Ename, St. Lawrence's Church. View from the northeast of the restored church with its eastern part richly decorated with blind arches. b: Evocation of Ottonian Ename around the turn of the millennium. In his *Historiae* Radulfus Glaber (*c.* 985-1045/47) wrote that, shortly after the year thousand, it seemed as if the world had shaken off its age and cloaked itself in a white mantle of churches. With the impressive building projects that were being developed at the time and its white-plastered St. Lawrence's Church Ename corresponded remarkably well to the image that the benedictine monk had sketched of his world around the year 1000. (Virtual reconstruction: Daniël Pletinckx – Visual Dimension bvba.)**

Scheldt border. The Flemish Count Baldwin IV tried to appoint a family member to the available bishop's seat of Cambrai, because the dependent diocese of Arras, which was part of Flanders, was managed by this 'foreign' cathedral seat. But he failed. So he attacked Valenciennes and seized the town. Henry II started a campaign to recapture Valenciennes, but his attempt, supported by French and Norman troops, was not successful. A second military operation followed, straightly directed against Flanders. The emperor invaded Ghent in 1007, took the *castrum Gandavum* and plundered the county. Baldwin IV capitulated and surrendered Valenciennes[126]. However, afterwards he would be granted regions east of the Scheldt in fief by the Ottonian Emperor. Thus he acquired Walcheren and surroundings in 1012 and Valenciennes in 1015. But these acquisitions did not mean that there was peace as far as Flanders was concerned, because in 1020 Henry II again felt compelled to invade Ghent[127].

These turbulent times are referred to in the *Gesta*, when it is stated that the situation in Ename would have been more favourable without the repeated enemy attacks – *crebro hostili incursione*. However, Ename had to stand its ground *pro stabilitate regni et fidelitate imperatoris*. This phrase makes clear what the purpose of Ename was: it had to help to guarantee the stability within *Lotharingia* and, moreover, it had to be recognized as a symbol of loyalty to the emperor in an area that was under heavy pressure. The St. Lawrence's Church conveyed the message. The white building rose on the highest point of the site turning its '*Schauseite*' to the empire. Its whole concept referred to the big imperial churches and thus expressed Ename's loyalty to the imperial authority. Besides, we may not forget that the St. Lawrence's Church is only one of the four monuments that had to propagate and substantiate the Ottonian grandeur in Ename. Maybe the words *stabilitas* and *fidelitas,* recorded years later in the *Gesta*, indeed reflect the essential reason why this building programme was developed in Ename and why Velzeke faded into the background. Later on, when the border became a real political issue and Mathildis's grandson, Baldwin IV, started an aggressive strategy of his own, the *amicitia* in the region of the middle Scheldt, based on familial bonds on both sides, could not turn the tide. Because not only the economic but also the political interests of Ename became very obvious, the time was ripe to use all available means to develop the place into a showpiece of Ottonian steadfastness.

This strategic position presumably worked when Herman was responsible for Ename. Historical sources never mention that Baldwin IV actually seized the site. Even if this proves little or nothing in itself, it still seems probable that the situation was indeed under control during Herman's rule. In connection with this it is interesting to refer to the *necrologium* of the St. Michael's Monastery in Lüneburg. The abbey was situated in the core region of the Billung clan and was an *Eigenkloster* of this Saxon family. This abbey functioned as the *necropolis* for Herman Billung and his family, just like the St. Peter's Abbey in Ghent did for the Flemish Counts. One of the tasks of the family monastery was the commemoration of family members, relatives and friends of the Billung clan[128]. The *necrologium* of the monastery has been preserved. Because Mathildis was married to Baldwin III also family members of the Flemish count appear in the book: Arnulf I, the father of Baldwin III, Suzanna, who was married to Arnulf II and Mathildis' daughter-in-law, Gozelo, a son from her second marriage to Godfried, and also Baldwin IV and his wife Ogeva[129]. That Baldwin IV and his wife are listed among the relatives who had to be commemorated in the Billung family monastery is at the very least an indication that he left Mathildis' *predium*, the *villa Iham*, in peace as long as Ename was actually in the hands of her family.

This situation changed radically when Herman retired to the Monastery of St.-Vanne in Verdun in 1025. His daughter, Mathilda, was married to Reginar V, who took over the management of Ename[130]. The disputed site eventually did pass into the hands of the Reginar family, which Mathilda' grandfather, Godfried had fiercely fought.

Under Reginar's rule in 1033 the fortress came into the possession of Baldwin IV in a fraudulent way. The *castrum* was partly destroyed[131]. It was arranged that Reginar kept the northern part of the mark, the county of Biest, while Baldwin IV acquired the southern part of the mark, the county of Chièvres. The archaeological investigation of the *portus* showed that, at a given moment, a large moat with a rampart surrounded the St. Salvator's Church[132] (fig. 9: C). The width and the depth of the ditch vary: the east and west side measure respectively 18-20 m and 3 m, to the west and the north 9-10 m and 1.80 m. The embankment is at least 15 m broad. Further traces that can be linked to this occupation with certainty were not found. Radiocarbon analysis of a sample from the bottom of the moat in connection with the find of a silver denier from 1020-1050 make it likely that the work was executed shortly after the attack by Baldwin IV. Maybe a protected area was created by surrounding the St. Salvator's Church with a moat and an embankment, where people could flee at times of unrest. A few traces from a later phase have been found, but it cannot be established with certainty if they belong to the late *portus* period or the early abbey period with the building of the monastery (1063-1070) (fig. 9: D)[133].

Finally a definite agreement was reached in 1047. Baldwin V, who had succeeded his father, received the area between the rivers Scheldt and Dender, later to become the '*Land van Aalst*'. Reginar's son and successor Herman (1039/40-1051) got the southern part of the margraviate of Ename, which thus fell under the management of Hainault. Baldwin V demilitarized Ename by founding a benedictine abbey on the site in 1063.

126 Linssen 1981, 334.

127 Koch 1981, 375.

128 Althoff 1984, 42-43.

129 Althoff 1984, 58.

130 Parisse 1981, 35; Milis & Callebaut 1990, 470.

131 Ganshof 1942-1943, 120-122.

132 De Groote 2008, 46-47, fig. 14: C.

133 *Ibid*., 47, fig. 14: D.

This meant the end of all the political ambitions that had coloured the past of this village[134].

15 Conclusion

The Irish novelist Joseph O'Neill once said that nearly every so-called indisputable story can be rewritten if you look at it more closely. And this is perfectly true for the story of Ottonian Ename. Historians as well as archaeologists nearly always assumed that the site had a military origin, which fitted in with the foundation by the Ottonian emperor of the margraviates along the Scheldt. It was the basic first step in the course of events. And indeed, all the data that were collected via archaeological and historical research seemed to confirm this starting point. Until samples from the contexts of the keep and the residence in the *castrum* were investigated using the Radiocarbon technique. Suddenly doubts arose: both dominant stone buildings in the fortification dated from a later period than was first thought, the end of the 10th - beginning of the 11th century, and they were preceded by an older noble occupation from the second half of the 10th century. This unexpected element led us to approach the archaeological and historical data once more with an open mind in search of that other story of Ename. Archaeology and history went hand in hand in this new quest. The study brought us to another approach: the development of Ename could no longer be seen as beginning from an explosive military start, but rather as a steady process of growth that took some time before culminating in a true moment of glory. The grandeur, military as well as administrative and artistic, was only achieved after the means had been gathered and the structures developed to secure a firm power base. It would take a generation to get there. The Scheldt is at that point no longer considered exclusively as a political-military border element, as was the case earlier on, but also as a source of economic wealth and cultural emanation.

Members of the highest nobility at the east and west border of the *Imperium* directed the project Ename, which had received all necessary possibilities for development from the Ottonian emperor. For the Billung and Ardenne-Verdun clan the *villa Iham* was the bridgehead that brought them to the Scheldt, starting from their bases along the Lower Elbe, the Moselle, the Semois and the Meuse. Mobility was not an abstract notion for these members of the Saxon and Lotharingian nobility, but a reality that paved the way to new and greater power.

Have we now grasped the real truth? Frans will be the first to say that this is certainly not the case.

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134 **Koch 1981, 376; Milis & Callebaut 1990, 487-494.**

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The contribution of archaeological sources to the research of the formation of towns. The example of Aalst, a border town in the county of Flanders

Koen De Groote

1 Introduction

Research into the history of towns depends on different sources and disciplines, such as historical study of the primary sources, cartography, historical geography, building history and archaeology[1]. The study of the process of the formation of towns in the middle ages needs to utilise the elements linking the different disciplines. These are necessary to grasp the interaction between the nature, the organisation and the use of space in a period of large social, economic and political changes.

The input of archaeology in the study of the emergence of towns is very important, because this emergence took place in a period in which written sources are very rare and architectural or cartographical sources are absent[2]. This does not mean that archaeology can't play an important role in the historiography of the late medieval and modern town, only that the emphasis of its input is different[3].

The goal of this paper is to gather all known information on the formation process of Aalst, a small Flemish town located between Brussels and Ghent (fig. 1), within the scope of the interdisciplinary approach as argued in the volume 'Stadswording in Nederland. Op zoek naar overzicht'[4], the result of a colloquium on this subject[5]. The exercise is to check the different processes in the origin of Aalst with the available historical, cartographical and archaeological data[6], as discussed in the colloquium proceedings[7], if possible. Not only the origin, emergence and early evolution of the town will be discussed, but also the pre-urban structure. The paper will be concluded by a short exploring comparison with the formation process of other towns in the county of Flanders.

2 Historiography of the town of Aalst

Aalst's historiography truly started in the 19th century with the four-volume work of Frans de Potter and Jan Broeckaert, in which they gathered and interpreted for the first time all known historical data of this town[8]. They considered the medieval town as an immobile fact, created at a certain moment, with a large market place (Grote Markt) in the centre and completely walled from the beginning[9]. Based on written sources, local historians soon doubted this vision. At first they kept
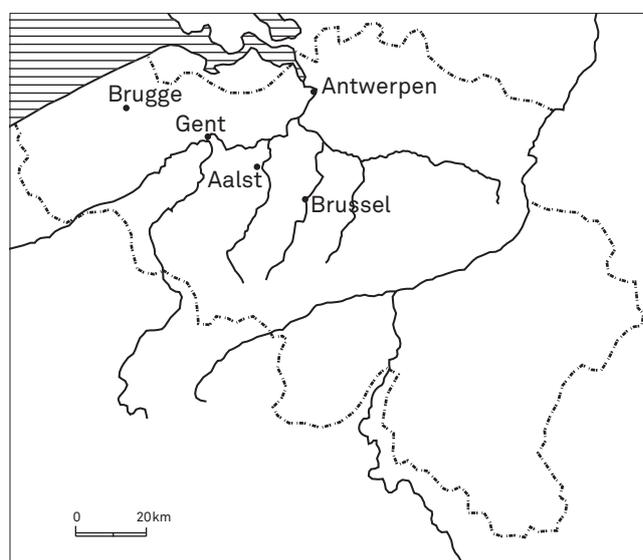
FIG. 1 Location of Aalst.

1 Verhaeghe 1990; Borger 2005; Renes 2005.

2 Verhaeghe 1991; *Idem* 1994.

3 *Idem* 1990 550-552.

4 Translation: The formation of towns in the Netherlands. In search of a survey.

5 Rutte & van Engen 2005.

6 Most of the data presented here, of which several unpublished, are the result of recent interdisciplinary research. Many people are systematically involved: Jan Moens (archaeology, VIOE), Anton Ervynck & An Lentacker (archaeozoology, VIOE), Wim Van Neer (archaeozoology, KBIN), Brigitte Cooremans & Koen Deforce (archeobotany, VIOE),

Wilfried Vernaeve (history), Johan Van Laecke (topography, VIOE), Frans De Buyser (numismatics, VIOE).

7 Especially in the papers of Boerefijn, Rennes, Rutte and Taverne.

8 De Potter & Broeckaert 1873/75.

9 *Idem* 1873, vol. I, 89, 103.

working with the concept of the Grote Markt as the centre of development[10], but later they left this idea and started to situate the rise of Aalst from different older centres[11]. The lack of education and methodology meant that inventions, stories, heroism and myths continued to play an important role. The rising historical understanding was still trapped in prejudice, causing the strangest statements. About early medieval Aalst, Van der Heyden wrote in 1945: "...Aalst wasn't but a hamlet, consisting of a group of miserable huts; the inhabitants were a bunch of thief and murderers."[12]

Only eight years after this publication, Courteaux published a study in which he put all historical data of the early development of Aalst in the right perspective. For the first time, the evolution was drawn as we now generally accept it, definitively without the Grote Markt as the historical centre[13]. This article was the basis on which thirty years later Callebaut published his study, in which he systematically gathered all known historical, cartographical and topographical material, drawing the framework for the topographic development of the town[14]. From then on only the archaeological information was missing, to fill it in, confirm or deny some hypotheses, and provide new insights.

Archaeological research in Aalst started in 1982 with an excavation by the National Service for Excavations (NDO), lead by Callebaut, with an excavation on the place of the former *Zelhof*[15]. In the second half of the 1980's and the beginning of the 1990's the Association for Archaeology in Aalst (AVA) carried out many of small interventions and observations on all kinds of building sites[16]. In 1989, the NDO did a preventive archaeological research in the H.-Geest-Chapel[17]. The Institute for the Archaeological Heritage (IAP) started in 1993 a programme for preventive research on building sites in the late medieval town centre. A lot of attention was given to the issue of the urban spatial development. Until now 19 preventive excavations and 9 rescue excavations have been carried out. The Flemish Heritage Institute (VIOE), the successor of the IAP, organised in 2004-2005 on the Hopmarkt the first large-scale archaeological project in town, with an excavated area of 3500 m².

In the beginning of 2000, a new synthesis about the formation of Aalst was published, confronting the historical studies with the archaeological data[18]. The emphasis lay on the archaeological information, placed within the historical-topographical framework. This paper is the next step in this research.

3   The pre-urban structure

3.1   Topography (fig. 2)

The centre of Aalst is situated on the left bank of the river Dender, on the changeover between loam and sandy loam soils. The medieval town developed where a north-eastern spur of a loam ridge has formed a steep edge with the alluvial area of the river. At this place the river bed is very close to the ridge. The archaeological research proved clearly that the winter channel of the river reached the edge of the loam ridge in early medieval times[19]. Between the alluvial edge and the highest point of the north-eastern side of the loam ridge – a distance of about 180 m – the difference in height is 6 m. The south side of this loam ridge was bounded by the brook valleys of the Hoezebeek and the Siesegembeek, which empty into the river Dender after their confluence north of the ridge. The original micro-topography and soil conditions of the north-eastern part are not known because of the actual built-up surface. But gathered information in the actual town, consisting of topographical, pedological and archaeological data, makes clear that the original ridge with fertile, naturally drained loamy soils had an exceptional extent for that region. The southern side is formed by the *Hoezekouter*, which almost completely consists of well-drained loamy soils. From the highest point of the *Hoezekouter*, the loam ridge softly runs down in north eastern direction. The so-called *Aalsterkouter*, mentioned in medieval written sources (oldest mention in 1248: *cultura de Alost*[20]), probably formed the north eastern part of it. The total surface area of the loam ridge occupies about 130 ha. This is very large, compared with the total surfaces of the surrounding ridges in the loam and sand loam area[21].

3.2   Pre-urban landscape

The favourable topographical and pedological situation of this area, with high, well-drained fertile loam soils and sharply cut brook valleys, must have been very attractive since prehistorical times. Several place names in the region originate in the period before the invasions of the 5th century and have pre-Germanic roots[22]. There are indications of occupation in the area in prehistoric and Gallo-Roman times. Also the name 'Aalst' has a pre-Germanic origin. This Belgian settlement name goes back to the word *alhusta-*, a Germanic deformation of *alkustom*, being a derivation of the Belgian word *alkos*, what means 'sanctuary'[23].

Archaeological research makes clear that this area was well developed in the Roman period. The systematic presence of

10 Van Nuffel 1918.
11 Van der Heyden 1945.
12 *Ibid.*, 5.
13 Courteaux 1953.
14 Callebaut 1983a.
15 *Idem* 1983b.

16 For an overview of their activities, see: Callebaut *et al.* 1994.
17 Pieters *et al.* 1994.
18 De Groote 2000a; 2000b.
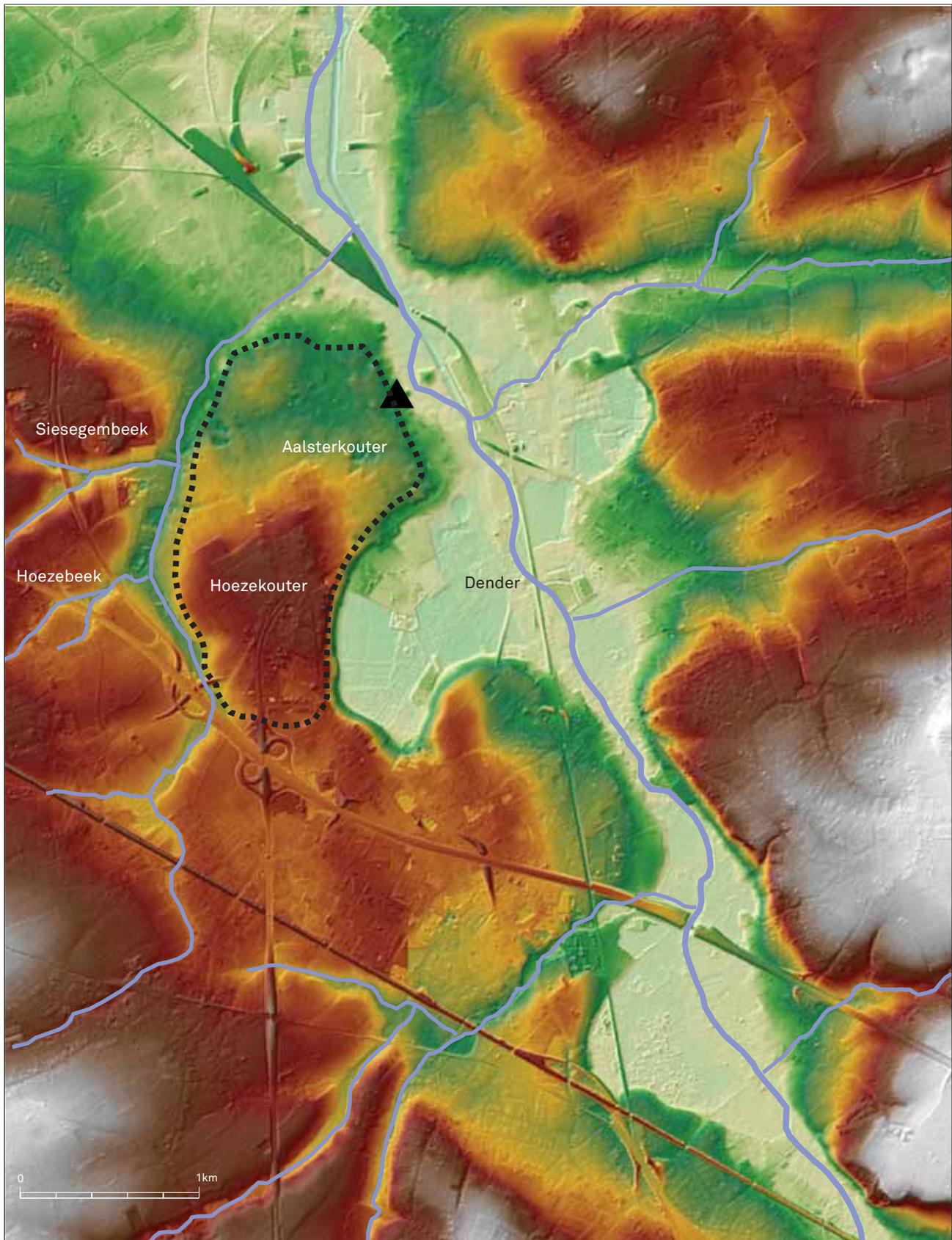19 *Idem* 2000a, 239-240.
20 Haers Van der Meulen 1961, 1.
21 Berings 1986a; De Groote 1988, 41-45.

22 Verhulst 1995, 118-119.
23 In Gotic *alhs*, in Old-English *ealh* : Gysseling 1978, 6.

FIG. 2 **Topography of the region of Aalst, based on a digital terrain model (DTM). The oldest town centre is situated with a triangle.**

agricultural settlements on the naturally drained loam ridges can be shown, probably mainly represented by the *villa rustica*[24]. But it is likely that the exploitation of these fertile soils has to be situated much earlier. The regular finds of sanded flint axe fragments during fieldwalking on this loam soils seem to be an indication of a systematic reclamation as arable land in the period of the Late Neolithic and the early Bronze Age[25].

Archaeological finds in the town centre of Aalst also gives specific information about prehistoric and Roman periods. A group of flint artefacts from the Epi-Paleolithic found on the edge of the river bank points at the presence of a periodic camp of hunters-gatherers in the period 10,000-8,000 B.C. [26]. More interesting to get a view of the topographical evolution come from finds from the Metal Ages. On several locations at the natural east bank of the Dender, at the foot of the steep eastern slope of the loam ridge, a colluvium layer with a thickness of maximum 90 cm was found, covering an old soil. This washed away loam soil always contained some sherds of pottery of pre-historic technique, which can be dated to the Metal Ages in general[27]. The strong erosion points to deforestation and recla-mation from that period on. Archaeological remains on the loam ridge seem to confirm this information. Recent excava-tions at the Hopmarkt discovered two prehistoric ditches run-ning parallel to each other over a distance of about 60 m (fig. 3). Their orientation seems to be determined by the micro-topographical situation. The presence of these ditches and the sporadic finds of older material in the medieval plough layer, such as fragments of sanded flint axes, prehistoric and Roman ceramic fragments and a Roman coin, seem to point at a con-tinuous exploitation of these loam soil as arable land from pre-historic times on[28]. Also the presence of prehistoric and Roman (and also early medieval) pottery sherds in the fillings of 11th-century parcel ditches under the first city rampart (site Sint-Jozefscollege), must be similarly interpreted[29].

At this moment, traces of habitation from these periods lack completely in the town centre. An isolated Roman burial from the 2nd or 3rd century A.D. on the east bank of the river Dender, in the area of the early medieval centre, is the only know structure[30]. Recently a fragment of a small Roman ditch was found just outside the late medieval town, north of the former Kapellepoort (Chapel Gate)[31]. In 2008 some remnants of probable loam extraction pits from the Roman period were found on the edge of the loam ridge[32]. However, specific traces of rural occupation that point at a *villa*-exploitation are lacking on this side of the loam ridge.

3.3   The centre of development

We have some information on the early medieval situation from two 9th-century texts, in which the *locus* Aalst is first mentioned[33]. Both texts are part of the property lists of the abbey of Lobbes, made around 868-869. A *polyptycum* lists the properties of the abbey by *pagus*, mentioning *Alosta* in the *pagus Bragbattensi*s. Besides that a *discriptio villarum* is pre-served, in which many details about this property are men-tioned, beginning with: '*Est in villa quae dicitur Alost mansus indominicatus...*'. This phrase makes clear that we are dealing

FIG. 3 **Remains of a prehistoric ditch found on the Hopmarkt.**

24 Pieters 1988. Remains of a Roman settlement were excavated on the edge of a large loam soil area at Erembodegem-Ter Wilgen, that lies south of the large loam ridge of Aalst (unpublished research VIOE).

25 De Groote 1988, 26; Sergeant 1994-95, 60-63.

26 Van Moerkerke 1983.

27 De Groote 2000a, 237.

28 De Groote *et al.* 2006, 48. At least nine finds of flint axe fragments are registered.

29 De Groote & Moens 1995, 138-141.

30 De Groote 2000a, 238.

31 De Groote & Moens 2007.

32 De Groote & Moens 2009.

33 Callebaut 1983a, 230-231.

with a bipartite manor, composed of a court with demesnes, which was cultivated directly for the owner of the domain, and of farmsteads (*mansi)* with tenements or tenures, which the farmers or tenants cultivated for themselves in exchange for services and deliveries of money (for military service) and goods[34]. Amongst others, the *villa Alost* was in possession of a malt-production unit and a watermill.

The location of the *Villa Alost* on the place of the former hospital, is based on the mention of the name *Zelhof* – a Germanic settlement appellation – in the 13th-century foundation charter of the Our Holy Lady Hospital[35] (fig. 4: 1). Based on the patron saint[36], the origin of the Saint-Martin Church, the future parish church lying 75 m away (fig. 4: 2), is also situated in the early Middle Ages, probably originating as the domanial church[37].

It is clear that we have to look at this *Villa Alost(a)* to find the bud of the town development. But how did this early medieval settlement look like, and what was its spatial organisation and structure? Hardly any archaeological traces from this period are preserved, even though many excavations have already taken place in this area[38], and there is a complete lack of building structures or any traces which can be directly connected to the early medieval settlement. Within the area of the later Our Holy Lady Hospital (the *Zelhof*), no traces or finds from the Carolingian period were excavated. But the excavations made clear that half of the hospital ground consisted of 12th-century elevations in the winter bed of the river Dender[39]. This

means that the former calculated surface of the domain centre reflects the 12th-century moated situation, and that the original structure is not preserved here[40]. But about 60 m south of the later Hospital area, at the opposite side of the old fish market (Vismarkt) and alongside the natural bank of the river (fig. 4: 3), some early medieval remains were excavated: some small pits and pottery fragments dating from the Carolingian period. But remarkable was the presence of some older, residual material from the Merovingian period. Not only a few pottery fragments were found, but also an Ostrogothic golden coin, an imitation of a Byzantine *solidus* of Justinian I, coined in Ravenna by king Atalaric (526-534)[41] (fig. 5). These finds indicate that the 9th-century *Villa Alost* probably had its roots in the Merovingian period. How this is to be interpreted, and what the relation is with the 8th-century origin of the Saint-Ursmarus chapel (fig. 4: 4), is not clear; however, that most of the early medieval finds from Aalst are found on the same spot, proves the importance of this area in the development of the future town. But its spatial organisation seems to be very different than what is suggested by the identification of the early 13th-century hospital area as *Zelhof*.

Archaeological research in the Saint-Martin church produced some rare, but interesting data. In the northern transept, some remains of a layer of building debris were preserved between the deepest burials. It was composed of glauconitic sandstone, Roman-type roofing tiles (*tegulae* and *imbrices*) and pieces of white and of pink mortar. Probably we are dealing here with some rubble of an older (church-) building, probably dating

FIG. 4 **General plan of Aalst, based on the 16th-century town plan of Van Deventer: 1: Zelhof; 2: St. Martin church; 3: site Burgstraat 1993; 4: St. Ursmarus chapel; 5: site Sint-Jozefscollege 1994; 6: excavation site Hopmarkt 2004-2005; 7: trade route Bruges-Cologne.**

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34 Verhulst 2002, 33.

35 For a full argumentation, see: Callebaut 1983a, 231-232.

36 Berings 1986b, 439-442.

37 Callebaut 1983a, 232-233.

38 Eight excavations took place between 1982 en 2004 (De Groote 2000a, 238-240; De Groote *et al.* 2005).

39 De Groote 2000a, 239, 246.

40 The moated structure was thought to reflect the Carolingian situation (De Meulemeester 1990, 104; *Idem* 1996, 376).

41 De Groote *et al.* 1994.

FIG. 5 **6th-century Ostrogothic golden coin, an imitation of a Byzantine *solidus* of Justinian I.**

back from the Carolingian period, regarding the composition of the debris[42]. A Roman origin seems to be unlikely, because of the total lack of Roman pottery fragments. Radiocarbon analysis on a fragment of animal bone, found amongst the rubble, produced a date in the 10th century[43], what seems to confirm a pre-urban origin.

Several places outside the oldest centre, but within the late medieval town walls, hold proof of the rural character of this area until the early 13th century. On one hand there is the presence of corn pollen (amongst rye pollen) and cornflower in 11th-century parcel ditches, found underneath the first town rampart (site St.-Jozefscollege), that proves the existence of corn fields in the direct environment (fig. 4: 5)[44]. On the other hand remnants of arable land were excavated on several places. Most of these old plough layers contain small fragments of pottery from the latest period of the land's agricultural use, dating from the 12th or early 13th century, but some older sherds are also regularly present. Besides the already mentioned flint axe fragments and Roman pottery, also some Carolingian ceramics are found. On the site Hopmarkt (fig. 4: 6) some well-datable Rhenish imports from the 9th century (Badorf, Walberberg, Mayen) could be recognized[45]. The 11th-century ditches underneath the first town rampart contain some residual Carolingian local pottery[46]. All these finds point to how these areas were already in use as arable land during the Carolingian period. Due to their location, it is possible that they were part of the central field of the domain. The evolution from a central field, separated from small, individual fields, to a large, joined field complex occurred in the following ages (10th-12th century). Also during this period emerged the name '*kouter*' (Lat: *cultura*), mostly with the place name as a prefix[47]. For this reason, it seems very likely that this field complex was part of arable land belonging to the domain farm as domain '*kouter*', and of which a part was known as '*Aalsterkouter*' in the late medieval period[48].

3.4   Pre-urban relicts in the present town plan

The plan of a town is the result of a large number of historical processes[49]. But how far can we go back in time, more specific: which elements in the present town plan originate from the rural, pre-urban landscape? One of the oldest lines on the map of Aalst is drawn by the Pontstraat and the Kerkstraat, a part of the old road that went from Ghent to Brussels, right through the town centre (fig. 4: 7). This road probably was a part of the old trade route Bruges-Cologne, which was certainly in use at the end of the 11th century[50]. A much older origin of this route, for example Roman, cannot be proved, but there are some arguments. In archaeological literature the exact position of the road track between the *vici* Velzeke and Asse, situated on the large international road connection Boulogne-Cologne, has always been a point of discussion, even as the place where this road could have crossed the river Dender[51]. But more and more, the route over Aalst is considered as the most likely one. Based on the pedological and topographical situation, the later track of the road Bruges-Cologne between Erpe and Asse over Aalst is the most logical one. It is likely that this route corresponds less or more with the Roman road, and probably goes back to it, but until proven it stays a hypothesis.

Within this light, should the relation between the position of the St. Martin church and the route of the trade road perhaps be seen differently. Before, the accepted idea was that the land route was turned towards the domanial church. But now the opposite seems to be more likely. The St. Martin church was erected on the crossing of the connecting road between the later Hospital area (the *Zelhof*) and the interregional overland route. The eastern part of this connecting road was partly excavated near the actual St.-Martensplein in its 12th-century phase, being at that moment hardened with natural stone[52]. But because this road made the connection between two early medieval places, an early medieval origin of this road is possible. A residual Carolingian fibula was found in a humic layer

42 De Groote 2000a, 239.

43 Carried out in 2001 by KIK, under direction of M. Van Strydonck. Date KIA-13570: 1095+/-25 BP: 95.4% confidence 890AD(1.00) 1000AD, 68.2% confidence 895AD(0.44)-920AD, 955AD(0.56)-985AD.

44 De Groote & Moens 1995, 137.

45 De Groote *et al.* 2006, 48.

46 De Groote & Moens 1995, 137-141, fig. 62: 27-28, 47.

47 Verhulst & Blok 1981, 156-157; Verhulst 1995, 121-126.

48 1248: *cultura de Alost*; 1400, 1431: *aelster coutere* (Haers van der Meulen 1961, 1).

49 Renes 2005, 16-17.

50 Bonenfant 1953, 410-414.

51 Callebaut 1983a, 229-230; De Groote 1988, 37 and the literature mentioned.

52 De Groote 2000a, 246; De Groote *et al.* 2001.

FIG. 6 **Carolingian bronze fibula.**

beneath the stone road (fig. 6). The western part of the original road was erased by later expansions for the gothic church, what explains the actual curved route.

Other relicts of pre-urban origin in the actual town plan are lacking. Specific data about the form of the parcels in the Early Middle Ages are not known. The oldest traces of parcels reach back to the 11th century. For this reason, they will be discussed in the chapter about the urban development.

4   The urban formation process

The development of a pre-urban settlement into a town occurs during a period of urban formation processes. Political, social, economical and geographical factors are put forward by theoretical literature as factors contributing to the origin of a town[53]. The three poled developing model emanates from three essential conditions: the *genius loci*, the interests of a lord and the presence of enterprising people. In this chapter, this model will be briefly confronted with the historical and archaeological sources, in an attempt to arrive at a coherent explanation of the origin of Aalst.

The previous chapter has made clear that the local geographic and economic circumstances (position, agricultural area, settlement, roads, trade routes) were a favourable first step in the urban formation process. The political and military circumstances of the middle of the 11th century provided a second condition for urban development: the presence of a lord and the creation of a castle. In 1050 the northern area between the rivers Scheldt and Dender was conquered by the Flemish count, named Imperial Flanders (later called the Land of Aalst)[54]. Aalst became the seat of this new administrative unit, the

castellany (*burggraafschap* or *kasselrij*), and played an important role in the defence of the new eastern border of the county. For that reason a moated castle was erected on the right bank of the Dender, opposite the *Zelhof* (fig. 7: 1). Baldwin (1046-1082), a descendant of a prominent noble family, was appointed as *castellanus* and called himself *de Alost*, with the castellany as seigniory[55]. The moated castle became property of the Flemish count in 1166, when Derrick of Aalst died, the last descendant of this family. We have no information about the evolution in the ownership of the *Zelhof*. In the 13th century, the former domain centre was in hands of the count of Flanders. It is possible that it was given in feud to the lords of Aalst during their castellany. But the noble family of Aalst also had several allodial possessions in the region, which probably went back into the hands of the Flemish count after the dead of Derrick of Aalst through his mother Laurette, the daughter of count Derrick of Alsace, and the sister of count Philip[56]. The abbey of Lobbes probably lost the ownership of the *villa Alost* in favour of the Flemish count or the lords of Aalst around 1050, when Imperial Flanders was attached to the county.

The third essential condition needed for Aalst to emerge as a town was the presence of enterprising people. The establishment of a castellany and the foundation of a castle in Aalst would have given the old, existing settlement a new, tending function[57]. Because of the largeness of its arable land, gathered in the *cultura* (in Dutch: *kouter*), the output of the old domain centre must certainly have been sufficient to deliver an important (or even the main) part of the needed amount of goods and services[58]. Its position, on the crossing of a main land route (Bruges-Cologne) with the river Dender, provided a necessary condition for acquiring trading goods. The presence of the castellany was probably the stimulus needed to get an inflow of

53 Rutte 2003, 143-146.

54 Koch 1981, 376-377.

55 Callebaut 1983a, 241-242; Van Kerrebroeck 1939-40.

56 de Hemptinne 1982, 379.

57 Verhulst 1999, 78.

58 Berings 1986a, 274.

FIG. 7 General plan of Aalst, based on the 16th-century town plan of Van Deventer: 1: castral moat; 2: Zelhof; 3: first town rampart (second half 11th century); 4: filled winter bed of the river Dender; 5: second town rampart (early 13th century); 6: new market place (Grote Markt).

enterprising merchants and craftsmen[59]. The Vismarkt (Fish market), lying next to the *Zelhof* and opposite the castle, divided by the river Dender (fig. 7: 2), can be originating from this period[60], but an older origin, from the time of the domain centre, can not be excluded[61].

This period of urban formation seems to have been very short and intensive. If it is accepted that this process effectively started after – and stimulated by – the establishment of a castle, this has to be situated after 1050. The building of a town rampart can be considered as the end of the urban formation process, and the definitive start of the development as a town. Based on archaeological evidence, this already can be situated in the second half of the 11th century, and based on historical data certainly before 1128[62]. It is a period in which most of the towns in the county of Flanders built their first defensive system[63]. Maybe this short period for the town formation process must be looked at anew, if the starting point is an earlier development as trade settlement, stimulated by the location of the domain centre on the crossing of two main trade routes. Also the general favourable demographical evolution in the 11th century will have played a positive role[64]. In that case, the impulse coming from the new status of the settlement within the county after the implantation of a castle has to be seen as the definitive trigger for its development into a town.

Aalst must be considered as a town after the building of the first town rampart in the second half of the 11th century. The political evolution played a very fortunate role in its first century of existence. After the murder on Charles the Good in 1127 and the succession war between William Clito and Thierry of Alsace, the town was lucky to be on the side of the victor, together with lord Iwain of Aalst[65]. This made that Aalst already very early got the privileges needed to stimulate its development. The preserved Charter of Aalst dates from 1174, but is the confirmation of the privileges given earlier by Derrick of Aalst, supposedly around 1160. But the text of this Charter suggests that the first privileges for the citizens of Aalst were already granted by Thierry of Alsace and Iwain of Aalst[66].

5 The urban development

5.1 Large infrastructures

A series of large infrastructure works characterizes the main medieval phases of development which determine the final urban plan. Remarkable is the fact that all this took place in a period of hardly 150 years. Based on the historical sources, the first phase can be situated between 1050 and 1128 (*supra*). Two large infrastructural works were carried out in that period: the building of the *castrum* and the erection of the first urban defence system. The second phase, dated in the second half of the 12th century, includes the reorganisation of the area around the Oude Vismarkt (Old Fish market). On the one side, the winter channel at the right bank of the river Dender was filled up systematically, with the creation of a quay about 20 m away

59 Verhulst 1999, 117.

60 The position of the oldest market near the castle, divided by a river or ditch, is a phenomenon that has already been established in several Flemish towns, e.g. at Bruges and Ghent (Verhulst 1999, 78, 100).

61 Archaeological finds directly south of it clearly show early-medieval activities.

62 De Groote & Moens 1995, 142.

63 Verhulst 1999, 115.

64 Verhulst 1999, 114-115; Taverne 2005, 179.

65 de Hemptinne 1982, 377-379.

66 Callebaut *et al.* 1994, 29.
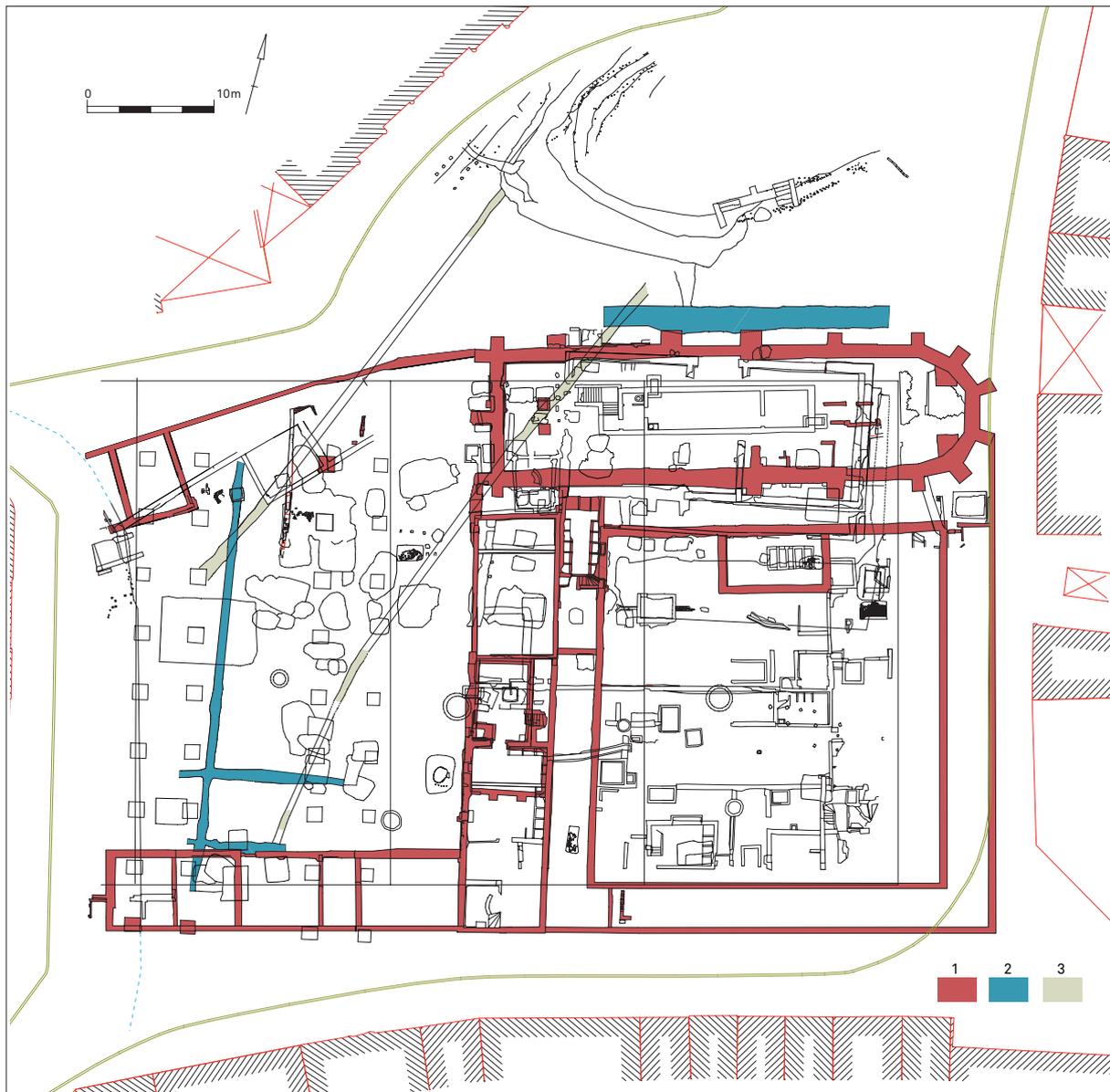
FIG. 8 The orientation of 12th-century ditches shows that the later parcel structure on the Hopmarkt had a pre-urban, agrarian origin. 1: 18th-century carmelite abbey; 2: 12th-century ditches; 3: prehistoric ditches.

from the natural bank; on the other side, the zone which was later called the '*Zelhof*' was moated[67]. The third phase is mainly characterized by the construction of the second town ramparts, situated around 1200[68].

The plan and the dimensions of the first town moat can be reconstructed for the most part, thanks to the archaeological research[69]. It was D-shaped and had a length of about 750 m,

which resulted in a surface of 6.5 ha within the ramparts[70] (fig. 7: 3). The town moat was between 15 and 18 m wide and about 3.5 and 4.5 m deep, depending on the topographical situation[71]. On the site Sint-Jozefscollege, the 13m wide base of the earthen embankment was still preserved.

The implantation of a rampart around the settlement had a large impact. These kinds of infrastructure works require good

67 In other words, the domain of the later hospi-tal, which is called *Zelhof* in the deed of donation from 1242 (De Groote 2000a, 242, 246).

68 Callebaut 1983a, 239-240.

69 De Groote & Moens 1995; De Groote & Moens 1999; De Groote 2000a, 241; Moens *et al.* 2002.

70 By shape and surface almost identical to the oldest *portus* ramparts at the Scheldt-river in Ghent (Laleman 1990, 311; Raveschot 1990; Laleman & Stoops 1996, 122-124; Verhulst 1999, 56)

71 Also the dimensions are remarkable equal with the oldest town moat of Ghent, which was minimal 14 m wide and at least 3 m deep (Raveschot 1990, 15).

planning, firm organization and enough resources. In an early-urban settlement, this kind of initiative could only emanate from the local lord, the only one who had enough financial and organizational decisiveness, and probably also owned a lot of land there[72]. Because the implantation of a rampart also had a huge impact on the parcel structure[73], and in this way also on the structure of property, a lot of juridical consequences must have come out of this. But the question of how this was done remains to be answered. As far as known, no written sources of that period refer to such events.

A large, planned structure such as these fortifications also had many consequences for the further development of the town. Before the construction of a rampart, the settlement had a structure of long, small parcels, mostly placed at a right angle to the main road and his byways. This parcel structure, which probably got already its lay-out early in the phase of urban formation[74], is still partially preserved in modern land registry. Proof for the medieval, pre-defensive phase of the parcel structure in the oldest urban centre has been found in excavations at the sites Sint-Jozefscollege, Sint-Martensplein, Oude Vismarkt (Old Fish market) and Stoofstraat[75]. As mentioned above, archaeological data can even demonstrate that within the late medieval town walls, the orientation of the parcels have a pre-urban, agrarian origin (fig. 8). This data also show that the (pre-)urban landscape – before the first rampart – consisted mainly of taut lines. Most parcels were lined by ditches. The clearest proof for this is the find of a sequence of 11th-century ditches which were cut/covered by the first town rampart[76]. The construction of the rampart introduced curved lines in the urban landscape, which are still visible in the present-day town structure. Also, almost all other curved lines which occur in the post medieval town plan have their origin in defensive structures: the second town rampart (the present-day ring road, called 'rampart ring'), the moat of the 'Zelhof' (the circular road pattern around the former Hospital) and the castral moat (which has now disappeared by the implantation of a factory)[77].

In the middle and the second half of the 12th century several large infrastructure works were situated on the left bank of the river Dender. Probably over the complete length within the area of the town rampart, a quay wall was created (fig. 7: 4). An elevation was carried out in the winter bed of the river, an average 20 m wide zone between the natural bank and the new quay wall. Wickerwork walls were used to keep the earth on its place. The original quay walls, probably originally in wood, were not preserved, but remains of a younger phase in brick

were found. It's only after this elevation that the semi-circular moat around the Zelhof-site was created. The course of this moat is actually still very visible in the street pattern around the later Our-Holy-Lady Hospital. Based on the archaeological data recovered from the Old Fish market, this moat was originally about 10 m wide and 2 m deep. In the 13th century, the moat was already completely filled, probably going together with a general elevation of the market place. Only a 2 m wide, shallow ditch was kept in the 14th century. Probably there is a connection between this activities and the donation of the former 'Zelhof' by countess Johanna of Constantinople for the erection of the hospital in 1242. Also in the same period, a semi-circular ditch was dug out on the hospital ground itself, running parallel with the so-called 'Zelhof' moat. The known data seems to indicate that this parallel ditch was the successor of the moat which was already for the most part filled in the middle of the 13th century. The blocks of the rent houses, which were built in the 17th century by the Our-Holy-Lady Hospital on the filled up ditch, reflect its location almost completely (fig. 9)[78]. By the middle of the 14th century, this ditch was mostly filled up as well.

These data offer indications about the structures of property and their juridical statute. The area of the first large ditch or moat around the 'Zelhof' is completely situated on public property. After the deed of 1242 of the domain, lying within this moat, a second ditch was created, completely situated on the hospital ground itself. This implies that the first ditch was not considered as being part of the 'Zelhof' domain. It was largely filled up, except a small remainder that was kept as drainage canal. The new ditch on the former 'Zelhof' domain served as dividing line between the public space and the private hospital ground. For a short period, until the 14th century, a new road came into use between both ditches, leading to the new bridge across the river, situated besides the hospital and opposite to the castle[79].

The third phase of large infrastructure works was formed by the creation of the second town rampart (fig. 7: 5)[80]. This period of construction can be situated at the end of the 12th or the beginning of the 13th century, based on the dating of the oldest stone town hall, build in the first quarter of the 13th century on the new market place called Grote Markt, just outside the first rampart (fig. 7: 6). Archaeologically there are no direct indications for this dating. Indirect indications are formed by finds of late 12th-century remains of occupation along the Grote Markt and the Nieuwstraat[81]. The construction of a cobble road to the 'Zelhof' in the middle of the 12th

72 Verhulst 1999, 119-120

73 As shown by the excavations on the site Sint-Jozefscollege (*infra*).

74 Boerefijn, 134-137; Verhulst 1999, 115.

75 De Groote 2000a; 243-246; De Groote *et al* 2001.

76 De Groote & Moens 1995, 136-137.

77 These establishments from Aalst are in contradiction to the observations of Rennes, who claims that the origin of curved lines is mostly pre-urban

(Rennes 2005, 37), but are corresponding with the findings of Boerefijn (Boerefijn 2005, 139-40).

78 Clearly visible on the map of the hospital in the '*Kaertboek der onroerende goederen der Burgerhospitaelen van Aelst, Schaerbeke en Mijlbeke*' of P.F. Ghysels from 1845 (De Groote *et al.* 2004b, 62).

79 Oldest know mention in 1399 as '*nieuwerbrugghe*' (Haers van der Meulen 1961, 148).

80 Until now no archaeological or historical indication was found for the hypothesis of Callebaut that before the erection of the second town rampart, an extension of the first town rampart was carried out in southern direction along the Pontstraat (Callebaut 1983a, 235-238).

81 De Groote 2000a, 247; De Groote *et al.* 2002; De Groote *et al.* 2009.
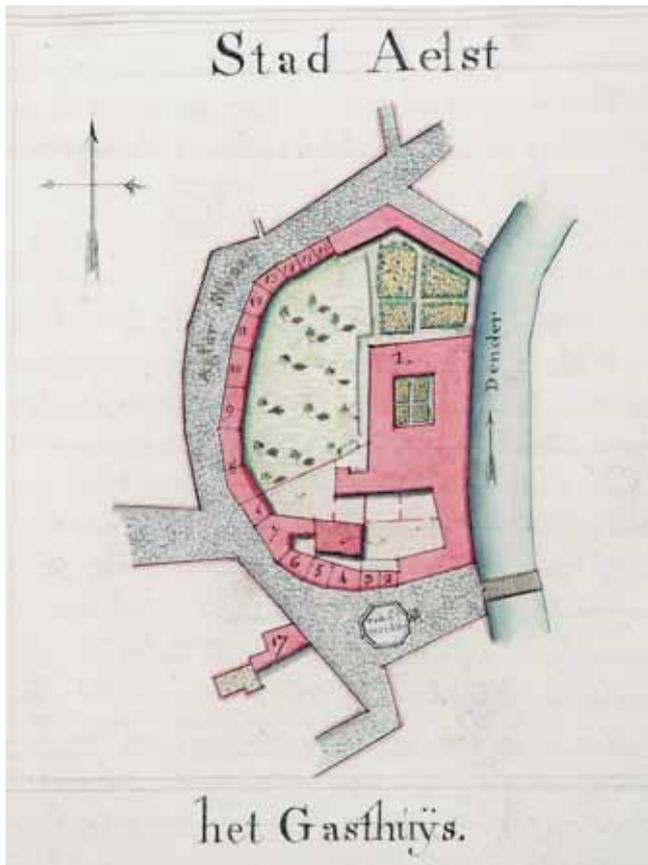
FIG. 9 **Map of the Our-Holy-Lady Hospital from 1845.**

century points to the importance of the domain as governmental centre at that moment, and can be considered as a *terminus post quem* for the urban expansion[82]. This point in time might indicate a connection with the extinction of the house of Aalst after the dead of Derrick in 1166 and the transfer of his possessions to the count of Flanders, Philip of Alsace, who was very diligent in reforming his government[83].

The construction of the second town rampart increased the urban surface nearly eightfold (from 6.5 ha to more than 50 ha). The new urban defence, that also included a part on the right bank, had a length of about 4 km. The rampart and the moat dominated the view of the town until the 17th century (fig. 10). After the capture of Aalst in 1667 by the French troops of field marshal Turenne, the urban defences were dismantled[84]. As in most Western-European medieval towns, the late medieval ramparts have put a firm stamp on the design of the town, which is still visible in the actual town map.

5.2 Parcel system, block organisation and houses

The strong population growth during the late 11th and the 12th century[85] created a large pressure on the available space in the walled town. Information about the dimensions of the plots from that period is very rare. Based on the plot entrances in the 12th-century ditch alongside the cobbled road on the site St.-Martensplein, the width of the parcels can be calculated at between 6 and 8 m. Unfortunately, further information is

FIG. 10 **Plan of Aalst, by A. Sanderus (1641).**

82 De Groote *et al.* 2001.

83 de Hemptinne 1982, 379-388.

84 Callebaut 1983a, 247, 249.

85 Verhulst 1982, 84, 93.

lacking. But it is clear that during that period the typical urban landscape was already present in Aalst, characterized by long, small plots.

From the limited information from excavations and from the comparison with modern land registry appears that the majority of the grounds within the second rampart of the late 12th and early 13th century were parcelled in the same way, probably taking into account a future steady population growth and a growing pressure on the building surface, which never occurred. Excavated late and post medieval wall remainders found alongside the Kattestraat prove that the late medieval parcels perfectly match with parcel boundaries in modern land registration (fig. 11). There are six plots south of the Holy Ghost Chapel, of which four have a width between 5 and 6 m, and two are about 3.25 m wide. Originally, those two small plots were probably entrance roads to the back yard. The buildings probably reached until 12 to 14 m away from the street side. These measures seem to be generally spread in Aalst. The measurable building plans and/or plots of the occupation on the former Veemarkt (cattle market), now part of the Hopmarkt, always indicate parcel widths of about 5 m. The large regularity in the dimensions even suggests that at the moment the arable land was divided into building plots, somewhere in the late 12th or early 13th century, a regular grid of 5 m wide was used. The length of the plots could only be calculated on the basis of the preserved building remains on the north-eastern corner of the market, where a length of 16 m was established. On the Grote Markt, the original plots seem to be less regular[86]. There the smallest plots appear to be about 4 m wide, but with a minimum length of 24 m they are remarkably long.

The layout of the small plots in the late medieval town seems to have been fixed from the beginning. For example, from the first occupation on, the location of the cesspits was situated in a specific zone in the rear of the plot. At the site Grote Markt, the five oldest cesspits, go back to the second half of the 12th and the beginning of the 13th century[87], in the Kattestraat the oldest example dates to the second half of the 13th century. On both locations cesspits – first simple holes, later wood or brick constructions – were made on the same location for centuries, in the Kattestraat even until the 19th century. The size of the houses, the placement of the hearths or the position of the inner walls also frequently follow the same pattern for centuries. The major change in this is situated in the period when the houses evolved from simple buildings with a central hearth to more complex buildings with mural hearths (in half-timber or brick houses). The large city fire of 1360, of which traces are found on almost every plot in the late medieval town, is probably the determinant moment for this change. The few exca-

vated remnants of houses from the period late 12th to middle 14th century, are mostly from mud houses with a central hearth. Tens of 14th-century pits, spread over the medieval town, only contained fired loam fragments of the walls. Remarkable is the complete absence of postholes from buildings, also in zones were remains of hearths and loam floors clearly show the presence of a house. These elements point to the use of wooden girders as base for timber buildings, a method of construction which hardly leaves traces in the soil[88].

A construction in which posts of the wall and the wickerwork are resting on a wooden girder is characteristic for half-timber buildings[89]. The lack of postholes in the ground is an indirect proof of the use of half-timber buildings in the 13th and 14th century. The excavations on the sites Hopmarkt, Kattestraat and Nieuwstraat clearly show that the burnt buildings of the 14th century were rebuilt in brick or half-timber. There is proof of half-timber from the (late) 14th century with a stone foundation and with a block foundation. The discovery of an apparent isolated brick foundation of a fireplace points to the existence of a half-timber building on wooden girders with a fireplace in brick. The use of loam floors is general in most types of houses until the 16th century.

Using ditches to mark off premises or parcels seems to be a common custom through the 11th-12th century, as shown by several examples from Aalst. But in the 13th-century town parcel ditches disappear, probably as the result of a more rational use of the available building area within the town walls. From then on boundaries of premises consisted mostly of poles with wickerwork or of small brick walls.

A last item to mention is the rare finds of wells on medieval building plots at Aalst. The explanation for this absence of wells on most of the excavations could be the fact that only small areas were searched, but the excavation of a complete housing block on the Hopmarkt made clear that something else was going on. None of the building plots which were lying at the side of the former Veemarkt (cattle market) had a well. The total excavated surface of about 3000 m² only revealed one well dating from the 14th century, made of large wine barrels, lying on a backyard at least 35m away from a street. Two large stone wells, probably from the 15th century, were situated in a comparable position[90]. Both stone wells have a diameter of more than 2 m, which is too large for a normal household use. Possibly they served for water supply in some artisan activity or other. This may also be the case for the barrel made well of the 14th century. Water for domestic use was probably mainly supplied by public wells, of which several ones were situated on the public places in town.

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86 Based on the 19th-century land register of Popp and on the plan of the medieval cellars under the 19th-century town hall (De Groote *et al.* 2004a, fig. 3, fig. 5). The spatial distribution of the 12th- and 13th-century pits seems to confirm the medieval origin of these plots (De Groote *et al.* 2009, 144 & fig. 18, 194).

87 De Groote *et al.* 2009, 133-144.
88 Voskuil 1979, 19. Examples of this construction method, with preserved girders, are known from excavations in Ghent, on the sites Waaistraat and Gravensteen (with thanks to M.C. Laleman for the information).

89 Voskuil 1979, 16-20.
90 The construction in the earliest abbey period (after 1497) can not be excluded.
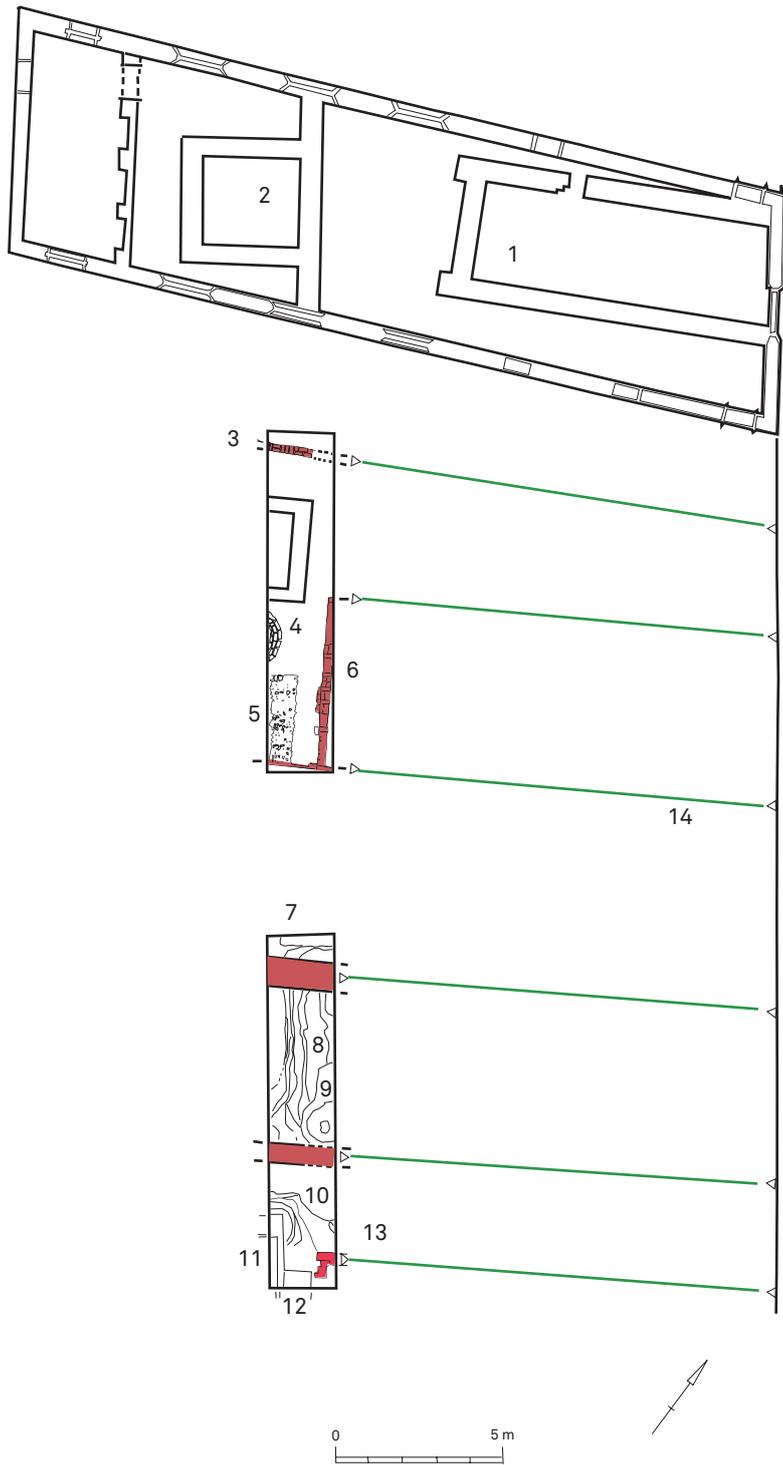
FIG. 11 Excavated late and post medieval brick walls found alongside the Kattestraat projected on the modern cadastral plan. The main building phases of the Holy-Ghost Chapel are situated in the north. 1: first chapel from 1368; 2: enlarged chapel with new orientation from 1470; 3: brick wall; 4: 16th-century well; 5: cobblestones from courtyard; 6: brick wall; 7: 14th-century pits with burnt loam; 8: large 13th-century extraction pit; 9: 13th-century iron furnace; 10: 13th-century cesspit; 11-12: 18-19th-century cesspits; 13: brick wall; 14: modern parcel bounderies.

0   5 m

6   Comparison with other towns

Literature about the rise and development of towns in Flanders hardly mentions the small towns[91]. For this reason it is impossible to compare the urban formation process of Aalst with that of other small Flemish towns in an adequate way. Because of its special position in the county – as border town in Imperial Flanders – it is important to compare it with the urban formation process of the other towns in the valley of the river Dender, being Dendermonde, Ninove and Geraardsbergen. In this way general, collective and specific, individual elements in their formation history can be separated. This gives the possibility to research the importance of the different determining factors that play a role, such as the presence of the river Dender, as a trade route and as a state border, the presence of an old domain centre with a large *kouter* (*cultura*), the erection of a castle, the political and military circumstances, etc...

The rise of Aalst is situated in the third phase of urban development in Flanders. The two older phases are dating from the 8th until the 10th century, when settlements developed into towns first near centres of power, such as large abbeys, large royal or noble domains and episcopal residences, and later around feudal castles and trade centres[92]. In the 11th century several trade settlements developed very quickly and knew an explosive growth in a very short time, like Ypres and Lille. The urban development of Aalst is situated in the same period or shortly after and is partly comparable with it, although Aalst has a different dynamic. Both Lille and Ypres came into existence at the foot of a castle and a large agricultural domain[93], like Aalst, although in the last case it didn't go about countal possessions. The very early situation of Ypres is even very comparable with that one of Aalst, with the presence of a '*Zaalhof*' (*Zelhof*), a St. Martins church, a castral motte and a fish market.

Finally some thoughts about the striking resemblance between the first town moat of Aalst and the oldest rampart around the *portus* of Ghent. Both the form and the dimensions of the moat as well as their circumference and surface area are almost identical[94]. The Antwerp *vicus* also had a very similar defence. But both examples, dating from the late 9th or 10th century, are about 100 to 150 years older than the city walls of Aalst. A possible explanation can be that in the second half of the 11th century not many walled towns existed[95]. At the moment Aalst wanted to build his first town moat, Ghent was probably the only near example suitable as a model. Another link with Ghent is the fact that the House of Aalst had their origin in that region, as they were known as lords of Ghent before 1047[96].

7   Conclusion

This research on the urban formation process of Aalst is the first in his kind, because until now the study of the origin and development of small towns in Flanders has always been neglected. The gathering of archaeological, historical, geographical and cartographical information makes it possible to give an outline of the origin and earliest development of Aalst, and to show the role that small towns had in the process of urbanisation in the county of Flanders in a very early stage.

Several mechanisms stimulated the urban formation process. The basic conditions were present, such as the existence of a large domain of some local importance with the availability of arable land of a more than average size, and a favourable geographical position on the crossing of an important water and land route. The political situation of the middle of the 11th century formed a main turning point for the urban formation of Aalst, with the unexpected importance as a border settlement and an administration centre of Imperial Flanders, with the power and the importance of the local lord and the implantation of his castle, combined with the favourable economic and demographic circumstances of that time. The fast evolution in the following decennia was finally settled by the political incidents after the murder of count Charles the Good in 1127 and the important role in this for the lord of Aalst. The granting of urban rights in the middle of the 12th century crowned the urban development of Aalst. The building of a second town wall around 1200 laid down the urban plan for many centuries. The whole process of urban formation and urban development seems to have lasted in Aalst less than 200 years.

The results of this study answer some questions arising from the issue about the formation of the urban plan, as formulated by Boerefijn[97]. Amongst other things he points at the persistent prejudice that the medieval towns are organically grown, without any planning, by which the irregular and curved lines are considered to be the typical expression of it. The data from Aalst seems to prove just the opposite: about all curved lines in the city plan are the results of planned large infrastructure works, whereas most of the straight lines know their origin in the pre-urban landscape[98]. But also the structure of this pre-urban landscape is a result of planning and organisation. The inertia of structures, often from pre-urban origin, is a constantly returning element that is very determining for the formation of the urban outline. This appears both from the old parcel and road structures as from the importance of the implantation of the city walls.

An overview such as this finally results in a *status questionis* about the urban formation process and especially confronts both the researcher and the reader with the many lacks of knowledge. Important general issues are the origin and evolution of the property structures, the creation and the distribution of the private and public space and the issue of the expropriations at large infrastructure works. Specifically for the formation process of Aalst most questions arise around the

91 van Uytven 1982; Ontstaan 1990; Verhulst 1999.

92 Verhulst 1999, 33-67.

93 *Ibid.*, 103-110.

94 See notes 70 and 71.

95 The towns in Brabant only started to build defences in the 12th century (Verhulst 1999, 115).

96 The oldest recorded person of this noble family is Rudolfus, *advocatus* of the Abbey of Saint-Peter, called in documents between 1038 and 1052 '*de*

Gandavo' or '*Gandensis*' (Van Kerrebroeck 1939-40).

97 Boerefijn 2005.

98 Also established in the Netherlands (Renes 2005, 36).

location, the spatial structure and the development of the original domain (*villa Alost/Zelhof*).

I hope this study can stimulate further historical research to place the origin and development of small towns in Flanders in a general research framework and a wider perspective and give these towns the attention they deserve.

Acknowledgements

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A good riddance of bad rubbish?[1] Scatological musings on rubbish disposal and the handling of 'filth' in medieval and early post-medieval towns

Dave H. Evans

1 Introduction

One definition of archaeology would be that it is the study of mankind through those vestiges and physical remains of its past which chance to survive. As a result, we tend to spend a considerable part of our professional lives studying material which has been discarded, for whatever reason; perhaps because it was no longer needed, or had been broken or used up, or that it represents the unwanted by-products of a process or activity: in a word, rubbish. Added to that, we have the age-old problem of what to do with human excrement and liquid waste, particularly on settlement sites.

Archaeological literature is full of references to 'rubbish pits', 'cesspits', and various terms for latrines (e.g. garderobes, toilets, lavatories, closets, etc.); however, whilst the presence of such structures is almost always noted and described, all too often, rather less thought is given to the all important questions of what exactly do we mean by some of these terms (particularly, rubbish pits and cesspits), and how did these structures function; in short, what did people do with their rubbish, what does the material contained in these pits actually signify, and how representative of what would have been in use on these sites are the material assemblages recovered from these contexts?

Finds researchers have long recognised the opportunities offered by the study of sealed groups of material incorporated in the fills of cesspits and rubbish pits[2], or in the dumps of rubbish found behind waterfront revetments[3]; however, rather more attention has been devoted to the study of such finds *per se*, than to the interpretation of their significance within such contexts[4].

The wealth of evidence pertaining to rubbish disposal practices and sanitation in English medieval towns was first identified by some of the 19th- and early 20th-century historians publishing extracts from our better-preserved borough records (e.g. H.T. Riley and Reginald Sharpe in London; W. Hudson and J.C. Tingey in Norwich; or T.P. Cooper in York); but, it was the detailed synthesis of the evidence from medieval London, carried out by Ernest Sabine in three successive ground-breaking papers[5], which laid the foundations for the modern study of this subject. Perhaps because these papers appeared in the historical journal *Speculum*, rather than an archaeological periodical, they had little impact on conventional archaeological interpretation until their rediscovery by a new generation of urban and environmental archaeologists, who were to enthusiastically champion them in the late 1970s and early 1980s. In three papers which appeared in the same year, Keene was to expand upon the historical evidence for rubbish disposal (by drawing attention to complementary evidence from other medieval towns)[6], Greig highlighted the very important contribution which environmental archaeology could bring to such studies[7], and Rhodes looked at examples of how archaeological evidence from some of the London waterfronts could contribute to our understanding of such practices[8]. Since then, the occasional overview of the archaeology of individual medieval towns has touched on rubbish disposal practices[9], but, otherwise, this is a theme which has been underdeveloped in syntheses of recent archaeological work in Britain's historic towns – as opposed to individual site-specific studies; whereas our continental colleagues have been more active in this area. The *Rijksdienst voor het Oudheidkundig Bodemonderzoek* (ROB) has invested a considerable amount of resources into the study of

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[1] Riddance [The word is first recorded in 1535, according to the Shorter *Oxford English Dictionary*]. Primary meaning: removal, clearance; an instance of this; clearing out; scouring. The first recorded use of the phrase 'a good riddance of bad rubbish' dates from 1863. A modern variant – 'good riddance to bad rubbish' – can also be used

in a more pejorative and dismissive manner, which is not what is intended here. Hence, I have opted for the earlier form.

[2] e.g. Bartels 1999; or the majority of the pottery groups examined in Holdsworth 1978

[3] e.g. Vince 1985, 40 and 48; Brooks & Hodges 1983, 233; Egan 1985/86; *Idem* 1991, 1-3

[4] Rhodes 1982 being one of the better exceptions as a finds report.

[5] Sabine 1933; *Idem* 1934; *Idem* 1937.

[6] Keene 1982.

[7] Greig 1982.

[8] Rhodes 1982.

[9] e.g. Evans & Atkin 2002, 241-242.

material from cesspits in a number of historic towns in the Netherlands[10], and rubbish dispersal patterns have also featured prominently in a number of other recent urban publications from historic towns such as Deventer. More recently, the rubbish disposal practices in many of the major Hanseatic towns in Northern Europe formed one of the major themes in a detailed study of the infrastructure arrangements for these towns between 1200 and 1700[11]. Nevertheless, despite these important contributions, comparatively few excavators and finds specialists seem to devote much thought to what medieval societies did with their rubbish: it is almost as if each generation of archaeologists must rediscover the wider ramifications of this topic anew.

2   Some of the options for rubbish disposal

2.1   Middens and dung-hills

Many towns had common dung-hills or 'muckhills', which served as communal rubbish tips; but medieval records are also full of references to the *ad hoc* creation of middens, encroaching onto market squares and the highways – an all-too common complaint was that householders had mucked out their stables or animal stalls, and simply dumped material into the road outside of their properties. Such heaps could often grow to quite considerable size, and were said to block lanes and to be up to 3 or 4 m high. An inquest in York in 1303 found that a piece of land near Hungate called *Dunnyngdikes* "was formerly highroad, and now is waste, and stopped up with beasts' dung, yet whoever wishes can pass by there, but not without trouble"[12]. Conditions in York were clearly no better in 1332 when the Royal court officials sent a mandate to the Mayor and Bailiffs of York, in advance of a royal visit, stating that:

"The king detesting the abominable smells abounding in the said city, more than in any other city of the realm, from dung and manure and other filth and dirt, wherewith the streets and lanes are filled and obstructed, and wishing to provide for the protection of the health of the inhabitants, and of those coming to the present Parliament, orders them to cause all the streets and lanes in the city to be cleansed from such filth..."[13].

Conditions were probably not that much better in many other towns and cities, as in 1349, the year after the advent of the Black Death, Edward III had to write to the City of London authorities, complaining about "...human faeces and other obnoxious filth lying about in the streets and lanes, where it was cast from the houses both by day and by night, so that the air of the city was polluted with foul odours to the great peril of citizens during that time of prevailing sickness"[14]; he ordered all such filth to be immediately removed. In 1393 Richard II issued a general order for the towns of the kingdom to be

cleared of dung and entrails; he also issued detailed regulations for London butchers to manage their waste more effectively[15].

In addition to the middens which spilled out onto the streets, and thus chanced to be recorded in surviving medieval documents, many tenements are likely to have had temporary rubbish heaps within their yard areas, and it is on these that much of the household domestic waste would first have been deposited; as many households would also have had domestic animals (including cows, sheep, pigs and horses) and fowl, these muck heaps would also have incorporated dung and litter from the mucking out of animal stalls and the used bedding and floor coverings. The problem then became what to do with this ordure, once it has begun to rot down (or 'sweeten'). The two options were either to spread it as a lateral midden deposit, or to have it taken off-site, and deposited elsewhere.

Spreading rubbish and manure as lateral deposits within settlements is a well-attested practice which goes back to prehistoric times, and has long been documented on early medieval rural and urban sites, both in Britain and in Continental Europe; the manure can significantly improve the productivity of croft and garden areas, whilst the rubbish can be used to reclaim poorly drained areas[16] or level up hollows[17]. In some towns (e.g. Aberdeen or Perth) lateral midden spreads were commonly present in the 12th- and 13th-century tenements, but then were replaced by other forms of rubbish disposal; in others (e.g. Cork), the practice persisted much later, even into the post-medieval period. Much seems to have depended on the pressure on the available ground space, and the nature of the topography and drainage of the settlement. In those cases where the lateral midden spreads took place close to the households which had generated the original rubbish, even though the material has been removed from its primary context, it is still sufficiently close enough to its point of origin for the study of material incorporated within the spreads to shed light on the economy and activity of those households.

2.2   Off-site deposition and rubbish collection

The second option was to collect the rubbish and take it off-site for deposition elsewhere. We have already noted that nuisances were repeatedly caused by the unauthorised dumping of rubbish and manure in the streets, and that other rubbish was taken to communal rubbish tips or dung-hills[18]. A large proportion of rubbish is likely to have been deposited off-site in most towns from a relatively early stage in their development; however, as larger towns developed in size, and housing became more densely packed, something clearly had to be done to regulate the problems being caused by *ad hoc* dumping of rubbish. Hence, by the early 14th century (if not before) many larger towns had passed regulations restricting the dumping of rubbish, and, in many cases, had introduced organised systems of

10 Bartels 1999.

11 see the numerous individual contributions in Gläser 2004.

12 Cooper 1913, 273.

13 *Ibid.*, 274.

14 Sabine 1934, 320-321.

15 Keene 1982, 28.

16 e.g. at Eastgate, Beverley: Evans & Tomlinson 1992.

17 e.g. a dip between two ridges at Anglo-Saxon Flixborough: Loveluck 2007.

18 see also the references given in Rhodes 1982, 86-88.

street cleaning and regular rubbish collection[19]. Dung and stable manure was often carted outside of the towns, and spread on the surrounding fields, or sold to local farmers; in cases where towns were sited on major rivers, it could also be taken away by boat to be disposed off downstream[20].

2.3   Opportunistic dumping

Rubbish could also be conveniently disposed of by using it to infill any deep holes in the ground (such as old quarry pits, redundant cellars and docks, disused wells, abandoned cesspits, or old tanning pits), or to infill the space behind new waterfront revetments. Waterfronts, in particular, needed large quantities of material delivered and deposited in a very short time, and so borough records are often full of references to cartloads of rubbish being carried from different parts of the town to be deposited behind the new revetments: major projects, such as the infilling of the 'dock' at Baynards Castle, London, required over 900 cubic metres of refuse to be brought onto the site, and it has been suggested that the quantities involved were so great in that particular case that the developers may have had to pay for this material[21]. Whilst much of this material may have been contemporary rubbish, some may also have been the upcast from digging cellars, undercrofts, and deep cesspits, and there may also have been an element of archaic rubbish being introduced by the removal of redundant rubbish tips from new building sites. Hence, at Trig Lane, London, up to 10% of the pottery and other finds was thought to be residual[22]; whilst at Bishopgate, Norwich (site 156N), the later 14th- and 15th-century yard surfaces were so dominated by archaic pottery, that only two sherds out of several thousand are likely to have been contemporary with the deposition of these deposits[23].

There is copious documentary evidence to show that rubbish was often dumped on vacant plots, or within abandoned buildings (both secular, and religious). Hence, for example, in 1338 Edward III granted to the Archbishop of York "a void place called Patrik Pole in the city of York... whereon a church of St. Benedict was in ancient time built, but now lying waste and covered with refuse"[24]. To cite another example, in the 15th century the Hospital of St. Giles in Norwich had its carters transport both muck and building materials between one of its farms outside the city and a set of investment properties in its very heart[25]; hence, whilst refuse was being taken away from the investment properties for off-site deposition, other finds were possibly being introduced onto the same properties with loads of marl, clay and gravel.

Lastly, whilst there were frequent attempts to regulate the disposal of butchers' waste and other noxious craft products (e.g. from tanning, horn-working, dyeing, etc.[26]), it is clear from the regularity of complaints and prosecutions which are mentioned in various borough records that a certain amount of unscrupulous dumping of such waste took place on vacant plots of land, or in town ditches and watercourses. Similarly, most towns experienced problems with people dumping rubbish into the open 'sewers' and gutters, which were meant to cope with rainwater and flood-waters, rather than with domestic or craft waste.

2.4   Unlined 'rubbish pits'

Fieldwork carried out in London by the Guildhall Museum between 1945 and 1973 suggested that there was a significant increase in the numbers of unlined earth-cut pits, which contained either privy waste or general domestic waste during the period between the 10th and the 13th centuries; this trend seems to have reached a peak during the 13th century, after which unlined pits were increasingly replaced by brick- or stone-lined pits[27]. Similar fieldwork in many other British towns has recorded a plethora of unlined pits, often associated with deposits which include at least some food waste and broken pottery, in the period up to the 14th century; from then onwards, the incidence of unlined pits, associated specifically with large quantities of rubbish, becomes less common, and the number of brick- or stone-lined cesspits increases.

Many excavators tend to describe all such unlined pits as 'rubbish pits', but this term has been used indiscriminately to cover a variety of cut features, which happen to contain waste; but, not all of these may necessarily have started life as pits intended for the disposal of rubbish. Documentary sources make it clear that there were indeed such purpose-dug unlined pits. In late 12th-century London the proliferation of pit digging on domestic properties in the more densely packed areas led to a need for regulation to try to tackle the problems caused both by the seepage of liquid waste from pits, and the undermining of neighbours' houses. The City's regulations required stone-lined pits to be sited no closer than 2½ ft. (0.76 m) from a neighbouring property, whereas *unlined pits* could be no closer than 3½ ft (1.07 m)[28]. In this case, the pits mentioned are quite clearly cesspits, serving a latrine or privy, and, as such, are likely to have been no larger than the privy itself, and would have had a shape and profile which would have assisted their cleaning out on a regular basis; samples of their excavated fills may also contain parasite remains. Essentially, such pits would have functioned as temporary storage 'bins'; as with a modern cesspit, they would need to be emptied periodically, when the by then solid waste would be taken off site for long-term disposal elsewhere. An unlined pit would have had a relatively limited life, before it went 'sour', following which it would be infilled with any available rubbish, or even the upcast from a replacement pit dug nearby. The excavated profiles of such structures should show evidence of one or more re-cuts.

19 Sabine 1937; Cooper 1913, 273-276; and numerous examples cited in Gläser 2004.

20 E.g. both London and Hull disposed off both domestic rubbish and noxious industrial waste in this way.

21 Rhodes 1982, 88.

22 *Ibid.*, 92.

23 Atkin & Evans 2002, 35.

24 Cooper 1913, 274.

25 Tingey 1904.

26 Sabine 1933; Cooper 1913, 275.

27 Rhodes 1982, 87.

28 Sabine 1934, 319; Keene 1982, 26.

In other cases where unlined pits are mentioned in documents, it is clear that they were being dug specifically to dispose of noxious products such as offal or butchery waste, or as long-term disposal places for human waste which had been removed from cesspits. As such, these are likely to have been excavated on vacant ground, and not within occupied domestic tenements.

Excavation reports also include a large number of irregular pits, of all shapes and sizes, which contain a certain amount of domestic waste, but which often show no evidence for recuts; some may be quite shallow, and with profiles which would make any subsequent cleaning out quite difficult. Whilst they may indeed have been described as 'rubbish pits', an alternative interpretation may be more appropriate. Many of the larger and deeper pits are likely to have been originally excavated as quarries of one sort or another, and later to have been infilled with rubbish, because they offered a convenient disposal site. Some may have been dug for building materials (such as chalk, sand or gravel); others to serve craft industries (e.g. the quarries for bog iron, contained in sands and gravels, at many of the Norwich sites[29]). On sites with predominantly clay subsoils; there would have been a major demand for marl: clay and clayey loam would have been required in large quantities for forming construction platforms, for replacement earth floors, for the clay infill of the walls of timber buildings, and for luting structures such as hearths, or lining fire-hoods. A more plausible interpretation of many of this category of unlined, 'rubbish pits' is that they are redundant extraction hollows and marl pits, which have had a secondary use as a convenient receptacle for rubbish.

On an analogous note, tanning and tawing pits, whilst in use on sites producing leather or finished skins, would have been periodically scoured, so as to remove anything which might introduce dirt onto the hides, pelts or skins. Once abandoned, they would have afforded convenient sites for the opportunistic dumping of all sorts of waste, including craft debris from other industries (see above). Hence, whilst material, such as cobbling waste, may be present in their backfills[30], it has no relationship to the primary use of these structures.

3 Latrines, and the arrangements for dealing with human waste

3.1 Public latrines

Many of the larger towns had communal latrines, which were either sited over or next to some source of running water, so as to quickly clear away any liquid and solid waste. Some were directly sited on staithes and waterfronts (e.g. at Queenhithe, London, or the public staiths at Hull), or on bridges (e.g. on London Bridge and Temple Bridge, in London); others were sited next to major rivers or streams (e.g. the Walbrook in London), or next to a major moat or ditch (e.g. the London Wall latrine which emptied into the city moat). There are documentary references to at least 13 public latrines in London[31], and there may well have been many more; as these structures usually appear in the public records (under such terms as 'jakes', 'necessary houses', or 'houses of easement'[32]) only in relation to money being spent on their construction or repair, or in connection with crimes which took place within their vicinity (e.g. murders, violent assaults, robberies, muggings, etc.[33]). Similar structures are known from many other towns[34].

Few if any of these structures have been excavated in Britain and subsequently published. Nevertheless, they must have been much commoner in larger towns and cities than is often realised, as many medieval households did not have access to their own privy, particularly in the poorer areas where a single large common latrine might have had to serve a whole block of properties (as in many slum areas in Victorian Britain). An inquest of 1579 recorded that a mere three privies in the parish of All Hallows, London, served 57 households, containing 85 individuals[35]. The documentary references suggest that such communal latrines must have had multiple seating; hence, we should be expecting similar evidence for multi-seating as that found on some of the Bryggen sites in Norway[36]. In this respect, they may have been similar to the arrangements in many monastic latrines or reredorters[37].

3.2 Lined cesspits

There were two conflicting considerations to be taken into account when deciding where within a tenement to site a domestic privy. The first of these was the desire to keep noxious odours, and all insanitary waste away from the living quarters; the second was the desire for convenience, and not having to stumble outside in the middle of the night. During the course of the Middle Ages, both schools of thought could prevail within a town, at any one time; opinion and fashion could swing back and forth, from siting privies at the rear of tenements, well away from the residential areas, to incorporating privies either within buildings or attached to their exteriors[38].

Examples of small lean-to privies attached to the side or rear of buildings are known from at least the later 12th century[39], and privies within attached outshots, and later within buildings, became commoner in 13th-century and later buildings belonging to the wealthier sections of society. As the latter built larger houses with accommodation on the upper floors, so the fashion developed of having privies served by latrine chutes which emptied into a watercourse or a pit set at ground-floor level.

29 Evans 1985.

30 e.g. Armstrong 1973, 51-60; Keene 1982, 29.

31 Sabine 1934, 306-309.

32 see Salzman 1952, 280-5 for many of the other euphemisms.

33 Sabine 1934, 306; Keene 1982, 26.

34 *Cf.* the maps published in Campbell 1975, and other parts of the 'Atlas of Historic Towns' series.

35 Sabine 1934, 306.

36 Herteig 1994, figs 20 and 21.

37 See Salzman 1952, 280-1 for a description of the reredorter at Durham Priory in the early 16th century.

38 For a longer exploration of these themes, see Evans 2004, 63-65.

39 e.g. Armstrong *et al.* 1991, fig. 156.
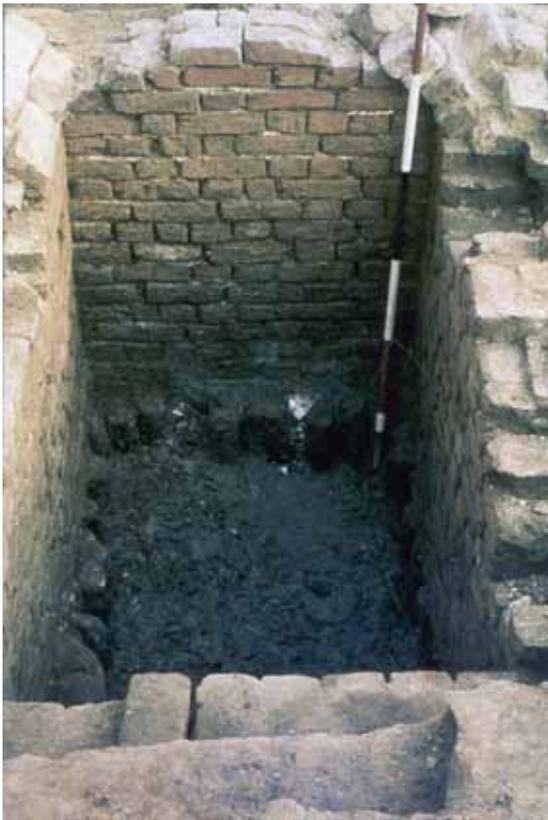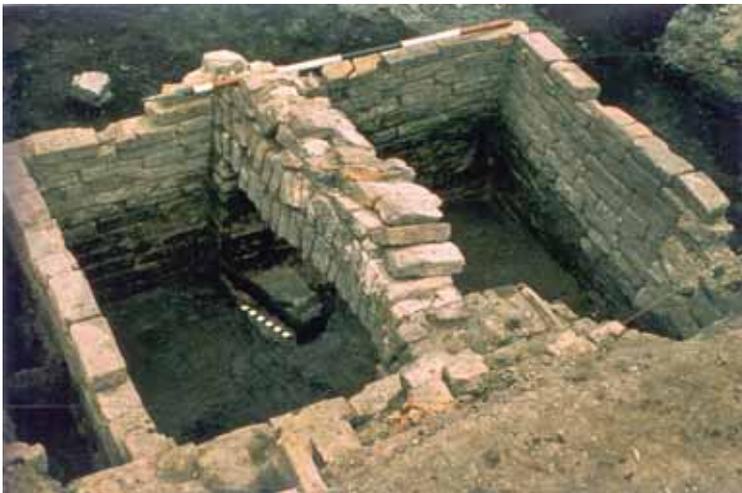
FIG. 1 Examples of lined cesspits from various sites in Hull-High Street. 1: early-14th-century brick-lined and vaulted cesspit for a two-storied building: note the wooden piles foundations; 2: mid- to late-14th-century brick-lined cesspit fed from inside a building by a brick chute, probably from an upper floor; 3: twin-chambered brick-lined detached cesspit, with internal arch: a detached pit set in the yards, straddling a tenement boundary. This pit was last cleaned out in the mid to late 15th century; 4: a complex of early-14th-century cesspits, incorporated into a succession of buildings: one is internal, a second within an attached outbuilding or lean-to, and the third is external.

The connection between the spread of disease and poor hygiene was at best poorly understood by medieval society. On the one hand, there was a very real fear of plague and other serious diseases (of both humans and animals) affecting a community, and this could periodically lead to short-lived efforts being made to clean up whole areas of a town, and to remove any offending rubbish and manure heaps; on the other hand, people still thought nothing of sinking a new well within a short distance of a latrine pit – seemingly without any thought of seepage from the latter contaminating the water supply. Rather, what seemed to be more important to medieval communities was keeping offensive waste in places where it could neither be seen nor smelt; the latter was a major consideration because so many people associated bad odours, or 'unclean air' with putrefaction and sources of infection[40]. Hence, William Horman, writing in 1519, advised that "*a wyse buylder wyll set a sege house out of the wey from sight and smellynge*"[41]. The same precepts can be seen in a 1377 York ordinance which required any offal or beasts' entrails, which were going to be thrown into the River Ouse, to be covered with a cloth, whilst being carried through the streets from the slaughter-house[42]. It is also presumably the reason why surviving documents from medieval London suggest that cesspits were to be emptied at night (i.e. so that most burgesses did not have to watch excrement being carted through the streets): formal regulations requiring *gong-fermers* – the people who cleaned out the pits, and took away the 'dung' – to carry ordure through the streets only after ten o'clock in winter, and eleven o'clock in summer, were not enacted until 1671, but many earlier documentary references to the emptying of cesspits belonging to municipal authorities and the Crown all refer to the work being done by night, and for extra payments for lights and candles[43].

Lined cesspits could be found in all shapes and sizes, often reflecting the nature of the establishment which they served. Hence, some public houses, inns or rows of shops could have very large pits which could take several man-days to empty. A contract for building a complex of 18 shops in London in 1370 required the mason to make "10 stone pits for *prevez*, of which pits 8 shall be double, and each in depth 10ft and in length 10ft, and in breadth 11ft"[44]. A 1342 contract for a vintner in Paternoster Row, London, required an excavation 17ft deep, served by a vaulted garderobe at one end, with chalk walls, and with the gardrobe fed by a stone pipe up to the first-floor level of the building[45]. Another document describing two shops in the parish of St Nicholas Coldharbor, London, mentions a two-storied stone-walled garderobe[46]; whilst a document of 1390-91 for a tenement at Fenchurch records that it took two men digging for 2½ days each to dig out 60 loads of 'earth' from the latrine pit[47]. Nor were such large cesspits confined to London, as the 13th-century chronicler, Matthew Paris, in his *History of England*, relates the story of a Jew who fell into such a pit at Tewkesbury. This tale is doubtless apocryphal, but

describes a Jew who was so devout that when he fell into a latrine pit on a Saturday, he felt obliged to respect the laws preventing work on the Sabbath, and "would not allow himself to be extricated until the following day, which was Sunday; and in consequence he died, being suffocated by the foul stench"[48]. For this story to have any credence amongst his readers, they must have been familiar with similarly large pits which required ladders to get in and out of.

Confirmation of the depth of some pits is also provided by some court cases. In 1326 Richard the Baker entered a privy and sat down, only for the rotten planks of the floor to give way; he fell into the deep cesspit below, and drowned[49]. The London *Assize Rolls* record that some other cesspits were so large that the bodies of murder victims were sometimes thrown into them, on the assumption that the pit might take some years to fill, and, thus, by the time that the body was discovered, the perpetrators would have made good their escape[50].

The linings of pits could take many forms, one of the simplest being to line a circular shaft with reused wine casks. This form of construction was used for the construction of both wells and cesspits – in fact, some wells may have had a secondary lease of life as cesspits, once they were no longer fit to hold drinking water. The sizes of casks used clearly varied, but the larger sizes (corresponding to more recent barrels, hogsheads, pipes and tuns) were preferred, because of the larger size of shaft which could be constructed. The *pipe* was the vessel which gave its name to the medieval *Pipe Rolls*, and corresponded to 2 hogsheads (105 gallons, or about 477 litres). An inquest into an accident in Bread Street Ward, London, records that two men had dug and lined a latrine pit shaft with five casks, placed one on top of another; the casks had recently been used for storing new wine, and the staves were still redolent with its stench. When a board had fallen from the end of a cask to the bottom of the shaft, one of the men climbed down a ladder to retrieve it, only to be overcome with the wine fumes; he dropped unconscious to the bottom. The second man climbed down to rescue him, but suffered the same fate; both were asphyxiated[51]. Hence, the depth of the pit is likely to have been some 20 ft (c. 6.1 m) or so, and, if these casks were *pipes*, then the volume of the pit might have been in the order of 525 gallons, or around 2,387 litres. In contrast, whilst large numbers of cask-lined cesspits have been recorded on archaeological excavations, most of the surviving vessels appear to have been rather smaller, approximating more to the size of a modern barrel (36 gallons, or around 164 litres).

Whereas the construction pits for cask-lined shafts tend by their nature to be circular or oval in plan, brick- and stone-lined pits are usually square or rectangular. Their size at ground-level often mirrors the structure which once contained them. Hence, small privy pits may be no more than 1.5 x 2 m in

40 Keene 1982, 28.

41 A sege house is another term for a privy. Salzman 1952, 283.

42 Cooper 1913, 276.

43 Sabine 1934, 316-17.

44 Salzman 1952, 284.

45 Sabine 1934, 314.

46 *Ibid*., 314.

47 *Ibid*., 315.

48 Cited in McCall 1979, 276.

49 Sabine 1934, 317.

50 *Ibid*., 317, note 5.

51 Sabine 1934, 317.

TABLE I

Two different ways of characterising the range of privies and the types of cesspits which were associated with them. The first column relates mainly to structures which survive above-ground, whilst the second column deals predominantly with the remains of below-ground structures. As the two columns present very different classes of evidence, no attempt has been made to equate these.

Documented types of privy (as defined in Sabine 1934, 305 and Salzman 1952, 280-5)	Examples of different types of cesspit encountered in excavations
Set within the thickness of castle walls (e.g. London Tower)	Unlined pits
Set within towers	Lined pits
Set within turrets	Housing a cask or barrel
Set within chimneys	Detached from houses
Set within chambers corbelled out over the water of the moats	Inside houses
Set within chambers on arches over the water	Attached to the exterior of houses, and entered from ground-floor level
With pipe drains to the moats	Attached to the exterior of houses, but fed by a chute from the upper floors
With cesspits to receive their filth	Incorporated into a yard boundary
Public or communal latrines	Lined cesspits with arches
With ventilation shafts	Lined cesspits connected with drains; these may either be fed by a drain or gully at surface level, or have some form of flushing system running through their base
	Lined pits with multiple chambers
	Very large deep pits which may have served a number of households

plan; whilst larger double pits indicate the former existence of a double privy, or a twin-seated structure above, and so on. Some excavated examples still contain the arches of vaults which once supported an above-ground chute from one of the upper stories of a building; whilst, yet others are fed at ground-floor level by drains flowing into them, or may have adits or leats at their base, through which running water may have helped to carry some of the filth away. A selection of pits is shown (fig. 1), whilst some of the rich variety of examples known from documentary accounts and from excavated sites are tabulated in table 1.

Whilst in use, such pits would be emptied periodically, but some of the larger pits might take more than a year to fill. The waste was carted away in *pipes* (see above) or *tuns* (a cask which held 252 gallons). Hence, in 1411-12 payments to Henry Ivory, a London privy cleaner, included 41s 8d for 23 pipes (or 2,415 gallons), and 23s 4d for 5 tuns (or 1,260 gallons). In all, he was paid for moving the equivalent in volume of 10,710 gallons (or 48,688 litres) of human waste in a year[52]. His prices ranged from 3s 4d a tun for the larger privies, to 4s 8d for the smaller ones – perhaps because of the more awkward task of digging out some of the smaller privy pits. In 1466 another London privy cleaner, John Lovegold, asked the city authorities to give him the monopoly of clearing all the privies within the city for a period of 10 years, claiming that it had previously been done

imperfectly, and at an exorbitant charge; he was awarded the contract at the rate of 2s 2d a tun[53]. Two centuries earlier, the *Exchequer Accounts* for 1281-2 record that 13 men were paid for 5 nights, at the rate of 6d each per night, to empty the privy at Newgate Prison[54]; the pay was approximately three times as much as an ordinary unskilled worker could earn at that date[55], and reflects both the difficulty of doing this at night and the unpleasantness of the task.

Some of the larger cesspits on the London Bridge Estate tenements had cesspits which held the equivalent of between 100 and 120 barrels each (i.e. between 3,600 and 4,320 gallons; 16,336 - 19,639 litres[56]). An account of repairs to some houses in London in 1450 includes the digging out and carting away of 6 tons of *dounge* [dung] from a privy in the tenement of John Boyd; whilst the churchwardens of St. Mary-at-Hill paid 5s 4d for clearing 2 tons out of one privy, and 5 tons out of another, at the rate of 2s per ton[57].

What is not usually appreciated is that it was much easier to clear out many of the larger lined pits by taking down, or making a breach in one of their side walls, than to try digging it out from the top; this would particularly be the case with pits which were fed by overhead chutes. Hence, the 1281-2 costs for the cleaning of the *cloaca* at Newgate Prison include the cost of the masons repairing the breach made in the stone wall to

52 Sabine 1934, 315-316.
53 *Ibid.*, 316.
54 *Ibid.*, 316.
55 Salzman 1952, 284.
56 Sabine 1934, 317.
57 Salzman 1952, 284-285.

remove the privy filth, and in strengthening the tower over the *cloaca*[58]. The account of a cleaning of a privy at Queensborough in 1379 similarly includes payments to a mason to block up the outer openings of the latrine with masonry, once the contents of the cesspit had been emptied[59]. In the archaeological record, such rebuilding of a side wall to a pit should be obvious both from the elevations of the brick- or stone-work, and also from the shape and fills of the containing construction pit; yet, none has so far been reported.

Environmental samples taken from excavated cesspits often produce evidence for parasites and various types of dung-loving beetles and flies, within the primary fills, and from the edges of the pit linings; they also occasionally incorporate moss remains (presumably used for wiping[60]). Not all cesspits could easily be cleaned out (as illustrated above in the higher rates charged by Ivory for clearing smaller pits), and so it is not unusual to find evidence for re-cuts preserved in their lower fills, where the *gong fermers* have failed to completely expose the base and original sides of the pit. Here, environmental analysis will often reveal the remains of contemporary food remains (in the form of seeds, fruit skins, fruit stones, small fragments of undigested animal and fish bone, etc.), and pollen. Fragments of hay and straw may also have blown in, whilst the pits were being dug out. In those larger pits, which were served by drains flowing from the kitchens, there may also have been some other food remains, introduced with the liquid waste. Nevertheless, it should be emphasised that the bulk of the fills which related to a pit's use as a latrine would have consisted just of human excrement.

Once a pit became 'sour', or for whatever reason fell out of use, it afforded a convenient receptacle for any household waste[61]. Hence, in the upper fills we may encounter substantial deposits of broken pottery, glass vessels, clay pipes, animal bones, discarded shell-fish remains, building rubble, thatch, straw, and broken metal artefacts; these sealed groups of material are often contained in successive dumps of tipping, with discrete tip-lines. They may even be covered with the upcast from a new cesspit which has been dug close by; the old pit has then usually been sealed with a clay capping.

The great value of studying such secondary fills, with their sealed groups of finds, is that they represent a very short-lived and intensive episode of rubbish disposal, and, because such rubbish has not then been subject to 're-working', the material is relatively fresh, and far more complete than is usually the case with finds from other parts of a site. Unfortunately, the failure by some excavators to differentiate between the primary and secondary fills within some cesspits has led to many of these fills being considered together, often under the assumption that all of this material relates to the active use of a pit as a latrine. Hence, we are sometimes presented with accounts which assume that quantities of domestic waste were routinely transported from a kitchen to a latrine, whilst it was still actively in use for its original purpose. In a society which had taboos over the sight and smell of noxious waste, this is highly implausible. It should also be remembered that not only did English society use a variety of euphemisms to describe the latrine, or *cloaca*, but that there could also be an element of embarrassment concerning bodily functions. Hence, a 14th-century abbot of St Albans built a separate privy to serve Redburn Priory, because he formerly had to share the reredorter with the rest of the brethren, and the other monks were said to be ashamed to go to the latrine in his presence[62]. It would seem likely that the only material which would routinely be taken into a privy, whilst it was still functional, would have been the contents of any chamber-pots in use within the household.

4   Changes in late medieval and early post-medieval towns

Whilst the impact of major outbreaks of disease (such as the Black Death, and subsequent bouts of plague, ague and cholera amongst humans, and murrain amongst animals) undoubtedly helped to speed up the introduction of regulatory systems for dealing with rubbish and making improvements to public health, these were not the sole reasons for instigating such reforms. Many larger towns had already begun to introduce street cleaning, and systems of regular rubbish collection some decades before the advent of the Black Death[63]. However, it should also be appreciated that borough regulation during the Middle Ages was often ineffectual, and relied more on the effectiveness of exhortation, than on enforcement. Hence, despite ordinances being passed to prevent certain 'nuisances' taking place, the ineffectiveness of such regulation is often indicated by much the same orders having to be re-enacted at a later date; whilst the frequent records of prosecutions for infringement of such regulations suggest that the practices still persisted unabated. This is certainly the case with attempts to stop the dumping of rubbish on vacant plots and of stable manure etc. in the streets; it also clearly applied to the indiscriminate tipping of butchers' waste, fishmongers' waste, and craft waste in areas other than those specifically designated for this purpose. Hence, because earlier regulation may not always have been effective, fresh outbreaks of disease could serve to highlight the continued existence of a problem, and thus motivate renewed efforts to clean up a town or to introduce further reforms.

The introduction of organised collections of rubbish as 'night soil' from tenements clearly had a major impact on what chanced to survive within the archaeological record in deposits of the later Middle Ages and the early post-medieval era. Whereas deposits from at least the 12th to the mid 14th centuries in English towns tend to be well-represented by surviving artefacts, the later 14th and 15th centuries are often characterised by much smaller assemblages, and these are often dominated by sealed groups of material recovered from the fills of cellars, wells and cesspits.

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58 Sabine 1934, 316.

59 Salzman 1952, 284

60 Greig 1982.

61 Keene 1982, 29.

62 Salzman 1952, 281.

63 See examples in Gläser 2004.

As we have noted above, it is likely that a substantial proportion of the rubbish generated by households had always been deposited off-site; but, the introduction of organised rubbish collections meant that this trend then accelerated, and that the overwhelming bulk of a household's waste was then taken off-site.

Another contributory factor, which is often overlooked, was the introduction of planked floors. Most buildings within the earlier Middle Ages would have had floors of beaten earth, rammed clay, or skins of plaster; a bedding of rushes would then be strewn over this, and, periodically, the old rushes would be swept or forked out of the building, to be replaced with a fresh layer. The advantage for the archaeologist is that these layers of rushes whilst in use became trampled into a compressed organic layer, which could often incorporate anything which had been dropped onto them, along with smaller pieces of broken vessels; these deposits often survive as dark organic occupation layers overlying floors, and are a rich source of both artefacts and environmental material. The Dutch humanist and theologian, Desiderius Erasmus (*c.* 1466-1536), was most scathing of this practice. Writing of his time in England between 1495 and about 1520, he observed that the rush floors in English houses were so ineffectively removed "that the bottom layer is left undisturbed, sometimes for twenty years, harbouring expectorations, vomiting, the leakages of dogs and men, ale-droppings, scraps of fish, and other abominations not fit to be mentioned"[64].

The advantage (for the occupiers) of replacing these rush floors with planked floors was that ground-floor rooms could now be properly swept out. Similarly, if ceramic or glass vessels were broken within such a room, it was easier to pick up all of the pieces, whilst dropped food remains would be swept up – leaving much leaner pickings for the archaeologist. Some of the wealthier houses would have had planked floors from the mid 14th century onwards – a trend made easier by the importation of large quantities of fast-grown oak from the Baltic which was ideally suited for the manufacture and fitting of 'wainscot' boards. However, not all houses of a certain social scale would have adopted the new planked floors at the same time, and many poorer houses would have persisted with earthen floors until a much later date; and so it is harder to chart the rate of progress of this change across a town.

Lastly, not all foreign visitors were as critical of 16th-century English society as Erasmus. Hence, the Dutch physician, Levinus Lemnius, attributed the good health of the English to a wholesome diet, traditionally rich in fine roasts; he then went on to note the "*neate cleanliness, the exquisite finenesse, the pleasaunte and delightfull furniture in every poynt for household, wonderfully rejoysed mee; their chambers and parlours strawed over with sweete herbes refreshed mee; their nosegays finely entermingled with sundry sortes of fragraunte floures in their bedchambers and privy roomes, with comfortable smell cheered mee up and entirelye delighted all my sence*"[65]. Although this passage relates to a period barely 50 years later than that described by Erasmus, it may also be the case that these two writers were describing buildings and households of very different status. Lemnius would appear to be describing households of the middle and upper sections of society, whist Erasmus may have been commenting on a much wider social range of households which he had encountered.

5   Conclusions

From this cursory survey a number of points are already apparent:

· Excavators need to make more effort to differentiate between primary and secondary fills of cesspits, and to communicate their interpretations of these features to both the finds specialists and the environmental archaeologists who are working on the analysis of the contents of these pits: we can interpret material properly only when we genuinely understand the context of its deposition.

· Not all unlined pits which happen to contain rubbish were necessarily dug as rubbish pits *per se*. Once again, there is an onus on excavators to properly interpret their features and deposits.

· Some lined pits, which were either attached to, or incorporated within buildings, may have been fed by chutes from upper floors; although the above-ground components of these structures may no longer survive, there may be clues as to their former existence surviving below ground (e.g. in the form of vaulted arches, drain feeds etc.). Unless, as excavators, we pause to give some thought as to how these structures worked, such evidence will be overlooked, and its significance will not be grasped.

· So far, there have been no published examples of the side walls of lined cesspits having been taken down to facilitate their emptying, and then being rebuilt. It is possible that excavators may simply not have considered this as an option, but there is certainly documentary evidence to attest this practice.

· The great bulk of rubbish would always have been removed for deposition off-site, and this process would have been exacerbated by the introduction of organised collections of 'night soil' and the introduction of planked floors. Hence, as finds specialists, we need to grasp that we would always be dealing with a very partial sample of what may have been in use on a particular site; and, once we get into the later medieval period or later, we are at best dealing with a mere palimpsest of contemporary material culture.

· We still know next to nothing about the archaeology of public or communal latrines in Britain; as with the contemporary *stews* (bath houses and brothels), our knowledge of such establishments is limited to casual documentary references for their existence. Whilst this has previously not registered as a priority on any published national or regional research agenda, it is an obvious gap in our knowledge of how medieval and Renaissance society functioned.

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64 Hoskins 1976, 2.

65 Cited in Platt 1976, 72.

Acknowledgements

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Micro history, archaeology and the study of housing culture. Some thoughts on archaeological and historical data from a cesspit in 17th-century Breda

Wim Hupperetz

1 Introduction

Urban archaeology in the Netherlands provides us with a constant flow of excavation reports in which archaeological finds and settlement traces are published. The interpretation of archaeological finds such as ceramics is still difficult because a good theoretical framework is lacking. Cesspit finds are ideally suited to give information on the social-economic position of the household that used the cesspit. Recently, there have been some critical remarks on the interpretation of cesspit finds. In the 17th century a cesspit was a common phenomenon in most Dutch cities. But how did it function? How many times was it emptied and what was the meaning of waste in the economic system and in relation to the beginning of the consumer society in the 17th century?

Until now, the analysis of cesspit finds focuses on what has been found and not on what is missing. In this regard, a household inventory and a cesspit can be complementary, but there are many household goods that lack in both sources, for instance wooden dishes that were burnt or inherited pieces that were not listed in an inventory. Research in the Dutch city of Breda, especially on the inn 'De Drye Mooren' will be discussed in relation to the interpretation of archaeological finds from a 17th-century cesspit, their context and the theoretical framework[1].

2 Waste processing

People produce waste and that waste often is a problem. It will be removed or thrown into the water, but the most popular way to get rid of waste was to put it under the ground, because in a city there is a natural lack of space. In the early modern period, the waste problem is a typical city problem.

Building density varies across and between cities, so the waste problems will vary too. In a town, every household produces waste. This has to be stored and that can be done in a hole, a barrel or a brick cesspit or cellar, depending on the wealth of the users and the available space. In Breda, from the mid-17th century on, cess gets an economic value because of its use as fertilizer. Although a private household still has to pay for emptying a cesspit, the city council earned money contracting out the collection of waste in the public domain. In Breda this service was called the 'moosmeierij' and it provided the city council with considerable earnings.

3 Dating findings from cesspits

Brick cesspits (originally used as wells) occur in Breda since the 14th century and gradually replaced wooden barrels. Brick cesspits could be more easily cleaned and were more durable. The cesspits or holes with content, which archaeologists discover, can be divided in a number of groups. There is waste material in an original hole or in a secondary hole and there are cesspits that were cleaned frequently and that after being discarded were not cleaned anymore. This may indicate that a new cesspit was taken into use.

When we look at the broad spectrum of publications on urban archaeological research of the last 30 years, we can detect an emphasis on describing material finds and only marginal attention for theoretical interpretation of archaeological traces and findings[2]. The theoretical interpretation by archaeologists is still very much in development and in relation to cesspit findings it is still rather restricted[3]. Almost every excavation in a town centre provides us with ceramics from cesspits. The

[1] This research was done for a PhD thesis: 'The memory of a street. Eight-hundred years of living in the Visserstraat in Breda', see Hupperetz 2004.

[2] Verhaeghe 1990, 516, makes clear that archaeologists have less room for an objective presentation of their archaeological evidence because of the use of typologies and classifications that lead to unverifiable interpretations.

[3] For an overview on the theoretical aspects of urban archaeology: Verhaeghe 1990, 503-527. The absence of references to historical sources on waste removal from cesspits i.e. Bartels 1999, 25-41. Recent Dutch research on the phenomenon of cesspits (by drs. M. Hoogsteyns) and the status aspect of cesspit finds (by drs. R. van Oosten) are to be published in the near future.

archaeological dating of these cesspits is often with a margin of 25 to 50 years. We have to distinguish between complex dating – the specific period in which all the objects from this complex were thrown away in this pit – and lifespan dating – the period in which these objects were in general use[4].

Especially lifespan dating often leads to a inaccurate dating of cesspits. It is therefore rather alarming that recent historic research has shown that cesspits in 17th-century Breda were emptied every 4.5 years on average, which means that a lifespan dating of between 25 and 50 years in many cases will exceed the real dating by a factor of ten[5]. The interpretation of these important archaeological finds is therefore not very accurate.

4   The '*moosmeierij*' in Breda

In Breda, the cleaning of cesspits is already known from the city accounts of 1493 when '*Jacoppen den Stadsknecht*' received money for his job. During the 16th century the cleaning of cesspits was part of the duties of the '*moosmeier*', that also included cleaning the streets, and the clearing of sewage pipes and gutters. In 1537 *Jacoppen den Moesmeyer* had to visit all places where gutters or canals were concealed. If they were congested, they had to be cleared within three days or a high penalty was due. The streets were cleaned three times a week, also to prevent infectious deceases. This we can conclude from the regulations of the city council in 1548 regarding the cleaning of the streets: "to prevent plague ande sweating, it is necessary to purify the streets three times a week: on monday, tuesday and saturday and also on Holy Days."[6].

In the first half of the 17th century the predecessor of the municipal sanitation department (in Breda called the '*moosmeier*') was paid for removing the city trash and he also supplied the various towers and gates with peat. More and more, waste from the streets was used as fertilizer. Because of the substantial land reclamation, there was a great need for

fertilizer. The trade in *faeces* thus became an attractive business. In Breda, the important change in the waste trade can be traced through the city accounts. Until 1649 the city paid the '*moosmeier*' to remove the city waste, but from then on, the '*moosmeier*' had to pay the city. Since 1649, the city could farm out the '*moosmeier*' office and pretty soon earned more than 1000 guilders a year from it (fig. 1). Only from the second half of the 19th century the '*moosmeierij*' changed because of the construction of drainage systems and the pick-up system of vessels, but the benefits were still high[7].

5   Innovations in housing culture and consumption

A lot of change occurred behind the façades in the 17th and 18th century. The circulation of consumer articles was increasing during the 18th century. This influenced home furnishing and affected the household. The material housing culture was strongly influenced by these changes in consumer patterns. The central hypothesis is that the introduction and application of new fashionable – but less durable – goods increased the circulation of these consumer goods more and more. It would be interesting to explore in which period the so-called 'age of stability' – when the traditional housing culture showed hardly any innovations – has ended. Research in the Krimpenerwaard and in Groningen puts this change in the middle of the 17th century[8]. In Antwerp the 'birth of consumer society' is placed in the first half of the 18th century[9]. The innovation of housing culture fits with the common trend of a diminishing attachment to durable goods and a preference for fashionable goods. Ceramics and glass – used as tableware – could not be repaired when broken. Lasting Spanish chairs were replaced by upholstered chairs and rush-bottomed chairs, pewter plates were replaced by trendy ceramics and stamped and gilded leather was substituted by wallpaper. This development is clear in the 18th century but it is too early to see a connection with the Breda cesspit finds.

FIG. 1 Farming out the '*moosmeierij*' of Breda during the period 1600-1830 (source: City Archive of Breda, Municipal accounts and Acten Magistrael).
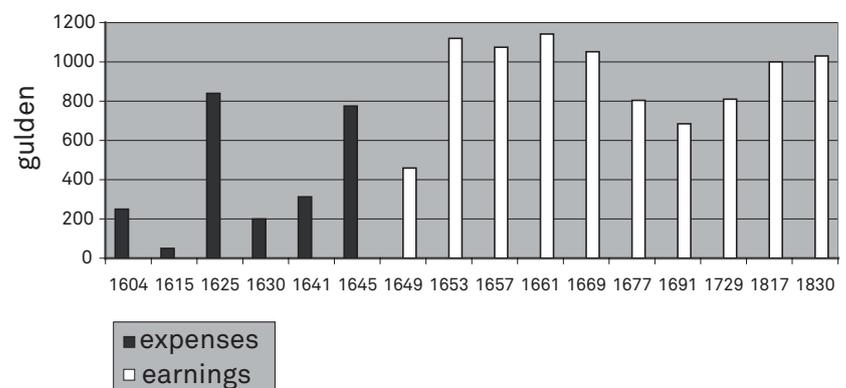
4 Bartels 1999, 38-39; 65% of the cesspit finds in this study had a complex dating with a margin of more than 50 years.

5 As an example the cesspit of the inn '*De Drye Mooren*' can be used. Based on the archaeological evidence a dating between 1650-1675 was possible. The historical data however make a complex dating

possible in a maximum period of 20 months in 1661-1663 (Hupperetz 1994).

6 SAB, H.6 Acten Magistrael 1534-1577 f.129 en f. 127v.

7 See the year-accounts of the City of Breda 1920, Bijlage 7, 8: sale of manure matter 35,157 guilders,

sale of garbage 18,414 guilders and horses manure 1090 guilders.

8 Kamermans 1999, 312. For Groningen see Nijboer 2007.

9 Blondé 2002, 299-301.

6 The night worker in the inn '*De Drye Mooren*'

Cleaning the cesspit was done at night because of the terrible stench. On January 4th, 1678 blacksmith Martinus van Reenen came to '*De Drye Mooren*' and worked on the privy. Probably the same day the pit was to be cleaned by night workers employed by Jacob Huijgen. The pit was opened and closed by mason Adriaen Fiers. After the cleaning, the carpenter Daniel van Arendonk with two servants repaired and fixed the privy during half a day[10]. In 1675 the opening and closing of the cesspit was done by the night worker and the mason[11].

The night workers were often employed by the '*moosmeier*' who was bound to certain terms of employment. In 1651 it was specified that the '*moosmeier*' for every cesspit and every night could charge four guilders at the most . And for every worker he should provide one pint of beer[12]. In 1669 the terms of employment were more precisely described in the 'ordinance on the night worker'. The cleaning of a pit or cellar had to be done by a team of six men and would cost eight guilders for one night and fourteen guilders for two nights. Furthermore candles and a pint of brandy had to be provided for every man. The '*moosmeier*' was responsible for decent tools and a cart for the transportation of the garbage. He should avoid polluting the streets[13]. The cleaning of the cesspit of '*De Drye Mooren*' was done on average every 3.6 years[14].

7 Cleaning the cesspits in Breda

We can compare the data on '*De Dry Mooren*' with some other inns, public buildings and private households in Breda. Almost always one cesspit is mentioned but at the public buildings sometimes more than one cesspit or cellar is indicated. The

average costs from '*De Drye Mooren*' are the same as in the Latin School, the '*Geweldigen Huis*' and the inn '*Het Groot Hert*'. The differences in the average number of cleanings was dependent on the size of the cellar or the cesspit. Furthermore the amount of produced waste was also crucial but data on this aspect are lacking. The comparison data on the private households are from the accounts of the Institution for Orphans. From seventeen households we have historical data on the cleaning of cesspits. The pits form these households were cleaned regularly every 4.2 years and this is comparable with the data we have on the inns which were cleaned every 4.4 years.

The waste-production of toilet, household goods and kitchen should be larger in the inns but they had probably larger pits and cellars, and the cleaning costs of the inns are therefore higher, as can be seen in the average costs (table 1).

8 Waste from the inn '*De Drye Mooren*' 1661-1663

The glass and ceramics from the cesspit of '*De Drye Mooren*' were part of the tableware that was used in the inn (fig. 2-4). Regularly, a plate or a glass must have broken. The broken pottery, glass and other waste material were thrown in the cesspit which was also filled with human faeces from the toilet. This privy, also mentioned as '*secreet*', '*privaet*' or '*heymlicheyt*', was located in the courtyard next to the inn. It had to be cleaned once in a while and this was done by the night workers. During the extension of the inn in 1663 the existing cesspit was closed and a new toilet and cesspit had to be built. From the accounts it is clear that this cesspit (together with three other pits) was cleaned between october 10th, 1661 and october 10th, 1662 by

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TABLE 1

Comparison of the cleaning of cesspits/cellars from inns (1, 4, 5, 6), public buildings (2, 3) and seventeen different households (7) in Breda (1606-1702); the costs are in guilders. Source: City Archive of Breda, Municipal accounts, Church-accounts and accounts of the Institution for Orphans Breda.

Nr	House	Period	Number of reference years	Number of cleanings	Average in years	Average costs	Remarks
1	*Vreuchdendael*	1643-1698	55	7	7.8	20.60	Sometimes 3 pits
2	*De Latijnse school*	1653-1682	30	5	6	11.60	Once 3 cellars
3	*Het Geweldigen Huis*	1693-1702	9	2	4.5	12.32	Once 4 nights
4	*(Achter) Muziekkamer*	1692-1700	8	3	2.7	14	Once 2 nights
5	*Het Groot Hert*	1697-1702	5	5	1	11	Several pits
6	*De Drye Mooren*	1657-1696	36	10	3.6	10.31	Pit, later cellar
7	21 other houses ¹	1606-1679	328	73	4.4	2.69	Each time one pit
Total		**1606-1702**	**471**	**105**	**4,4**		

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10 SAB, Church-accounts of the Grote Kerk, III-8-126 (1686/1687).

11 SAB, Church-accounts of the Grote Kerk, III-8-120 (1674/1675).

12 SAB, I-H.14 f.241v.

13 SAB, H.15 f.50 e.v.

14 Ten times during 36 reference years (1657-1696) shows that each 3.6 years the cesspit or cellar was cleaned.

FIG. 2 Two handled cooking pots and pipkins from the cesspit at '*De Drye Mooren*', Breda (1661-1663).

FIG. 3 Beer and wine glasses from the cesspit at '*De Drye Mooren*', Breda (1661-1663).

Theunis Janssen, the night worker, and his people. He received 8.50 guilders. In 1987 this cesspit was discovered and the content of this pit therefore must have been 'produced' between october 10th, 1661 at the earliest, and the summer of 1663, a period of about 18 months[15].

The cesspit contained (on the basis of minimum number of specimen) 43 beer and 41 wine glasses (fig. 3), 49 clay pipes, a comb, bones and 137 ceramic vessels: 30 plates, 19 platters, 12 lobed dishes (fig. 4), 13 stoneware (beer) jugs (one with the remains of a pewter lid), 11 pipkins (fig. 2), 4 strainers, 13 bowls, 1 frying-pan, 3 lids, 1 flowerpot, 4 chamber pots and several unknown objects. Pewter is lacking in the pit because it could be repaired or melted. The finds from this cesspit can be compared with the inventory of the kitchen house which was recorded on april 23rd, 1678 and represented then the value of 7.80 guilders.

Based on the archaeological data we can estimate that on average once a week a glass, a tobacco pipe and a ceramic vessel

was broken in the inn and thrown away. These objects were vulnerable, since these were Venetian glasses and clay tobacco pipes. The plates were heavily used and therefore were broken regularly. It is remarkable that only a few ceramic beer-jugs were found, but this is very likely explained by the use of pewter jugs that were never thrown into the cesspit.

9   Conclusions: micro history, archaeology and the study of housing culture

The historical and archaeological context of cesspit finds is very complex and should be taken into account during interpretation. One could use the approach of *Microstoria* or micro history. This is a research method that aims to limit the research object as much as possible[16]. By restricting the research object to a certain closed find – mostly linked to one household – we have a very limited spatial entity. Limiting the scale works as an analytical principle. Through this kind of detailed studies we can observe more interconnections. In many cases historians use *microstoria* as an anthropologist or as an ethnologist in

15 SAB, Church-accounts of the Grote Kerk, III-8-59 f. 81 and 81v.; Hupperetz 1994.

16 Levi 1991, 95; see also Jacobs 2000.

the sense that one is looking for a contextual meaning. Through microscopic analyses sometimes meaning can be given to apparently arbitrary details, thus arriving at far-reaching conclusions. In the case of research on cesspits *microstoria* will provide more information on the lifestyle than the study of large numbers of cesspits that lack a sharp dating or clear historical context[17].

Combining archaeological and historical data, and considering them from a perspective of micro history can lead to interesting conclusions. The fact that cesspits in Breda were cleaned every four years should be taken into account as we study the finds from cesspits and try to date them. Furthermore, the change in the economic value of waste in 17th-century Breda should be considered crucial. This could have influenced the way in which people regarded and handled waste. The relation with the beginning of a consumer society and the innovation of housing culture is interesting and should be studied more from the archaeological perspective. The common trend of a diminishing attachment to durable goods and a preference for fashionable goods could also be visible from the archaeological data.

Acknowledgements

17 See for a large scale inventarisation of cesspit finds: Bartels 1999.

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Danish sponsors, English lead, Vikings, and a new roof for the church of Sainte-Geneviève in Paris

Else Roesdahl

1   Introduction

In 1188 Étienne, abbot of the monastery of Sainte-Geneviève in Paris, sent letters to the king of Denmark and six of the most powerful Danish magnates[1]. The content of the letters was basically the same: the abbot was renovating his monastic church and appealed to the Danes for funding of a lead roof. It was explicitly stated that he needed a high quality roof of English and not 'Roman' lead, which would soon leak. These letters offer an unique insight into clever and perspicacious twelfth-century fund-raising, into classic 'old boys' networks', into the importance of lead and lead roofs¸ and into Franco-Danish relationships at that period. The letters are known from copies in Paris and elsewhere, and a little additional information appears in the collection of letters from Abbot William of Æbelholt – one of the men addressed by Abbot Étienne[2].

Sainte-Geneviève, on the left bank of the Seine, was one of the most important churches of Paris and was dedicated to the town's patron saint. It was first built in *c.* 510 over the tomb of Saint Geneviève, as the basilica of the *Saints-Apôtres*, by Clovis, king of the Franks, and his wife Clotilde, to serve as a royal mausoleum. Church and monastery were of course renovated and rebuilt many times. The complex was demolished in 1802-1807 to make way for the Panthéon and a school. Little is left of the monastery (fig. 1), and archaeological information is sparse[3].

2   The letters of abbot Étienne

Abbot Étienne had – in keeping with twelfth-century epistolary style – a flowery and somewhat loquacious pen. He justified his appeal to the Danes by referral to their pagan ancestors (the Vikings), who had burned and destroyed so much in Gaul in the ninth century. He explained that this particularly famous

FIG. 1 Little remains of Sainte-Geneviève in Paris. Information derives chiefly from written sources and pictorial evidence, although it was 'excavated' in connection with the demolition. What little is left is built into the Lycée Henri IV, near the Panthéon. A medieval bell-tower, the 'Tour de Clovis', can be seen from the Rue de Clovis. Photo: Else Roesdahl 1996.

1 This is a revised version of my Danish-language article (Roesdahl 2006).

2 *Diplomatarium Danicum* 1 Rk., vol. 3, 1170-1199, nos. 153-59, and part 2: Epistolæ Abbatis Willelmi, *passim*.

3 Vieillard-Troïkouroff *et al.* 1960, with refs.

church, where the holy virgin Saint Geneviève was buried and which had been built with royal support, had suffered badly and still suffered from the consequences. The sad condition of the walls is vividly described. Étienne wrote further that he had acquired timber for the support of a lead roof and that the church walls were now being externally renovated with well-dressed stones. However, as has been pointed out elsewhere[4], it was probably a gross exaggeration that the walls were in such bad condition, because the church had had many rich benefactors through the years and been in continual use. The abbot's real project was, rather, a Gothic modernisation of his church with rib vaulting (*voûtes d'ogives*) – at this time fashionable in churches in the Ile de France. The external support of the walls, which is explicitly mentioned, may represent buttresses or, possibly, an external skin of dressed stone.

The text of the seven letters varied in detail in accordance with what was deemed suitable for each recipient and useful for the project. Abbot Étienne knew some of the men very well, in particular Archbishop Absalon, Peder Sunesen and Abbot William, and naturally all the Danes knew each other extremely well[5].

Absalon had studied in Paris, perhaps in Sainte-Geneviève itself, when he was young. He returned to Denmark *c.* 1155 and maintained regular contact with Étienne. At Absalon's request Étienne sent William (who was well-known to Absalon) to Denmark in order to reform the Augustine monastery at Eskilsø in Sjælland, which moved in *c.* 1175 to Æbelholt and became a flourishing institution. Étienne had also been very helpful to young Peder Sunesen, Absalon's relative and protégé. He had formally entered the monastery of Sainte-Geneviève but as he did not thrive in Paris, it was arranged for him to return to Denmark with an untainted reputation and formalities in order to qualify him for later clerical preferment in his home country. Absalon was not only asked for economic support in providing lead for the roof, but also for practical help in the acquisition of English lead, as he had experience of buying lead for churches[6].

Peder Sunesen was a son of one of Denmark's most powerful men and richest land-owners, Sune Ebbesen, who had died two years earlier. Peder was also the brother of the King's chancellor Andreas, who succeeded Absalon as archbishop in 1201; Peder himself succeeded Absalon as bishop of Roskilde in 1192. He had returned from Paris a few years before 1188 and must have known the actual condition of the church of Sainte-Geneviève. Abbot Étienne's letter to him has a personal tone, and Peder is informed about the building project, but is not asked for economic support.

In 1188 William was well established as Abbot of Æbelholt[7]. He had been a canon at Sainte-Geneviève but had had certain problems there before he went north to Denmark. He was in regular contact with Étienne and sent him, for example, a splendid horse as a present. In the letter in question, William is told of the building project and the letters appealing for sponsorship. He is asked to help in whatever way he feels is best, but is not specifically asked for money.

Knut Prizlavsen, however, is seriously targeted in support of Étienne's cause. Knut was the son of Knut Lavard's daughter Catherine and the Slav prince Prizlav and therefore a nephew of king Valdemar the Great (died 1186) and related to king Knut VI. In the letter it is spelled out that his brother, Valdemar Prizlavsen, had entered Sainte-Geneviève and was buried there. The destruction caused by their pagan ancestors is also mentioned.

The letter to King Knut relates to this. With proper deference to the king's greatness, it is stressed that Valdemar Prizlavsen's rightful inheritance was never paid, neither to him, nor to the monastery. Abbot Étienne therefore asked the king to influence Valdemar's brother Knut to support the lead-roof appeal as some substitute for the missing inheritance. The abbot did not ask the king himself for economic support – although he reminded him of his pagan ancestors' depredations.

Bishop Valdemar of Schleswig was directly asked for economic support, with due reference to his exquisite personal qualities and to his pagan ancestors' part in the destruction of Sainte-Geneviève. Valdemar was a son of Knut Magnussen (former king of part of Denmark, killed in 1157) and a great-grandson of king Niels of Denmark (killed in 1134). Like several other men with a legitimate claim to the throne, Valdemar was helped to an ecclesiastical career and had studied in Paris, while continuing to have ambitions of secular power.

The last letter was to Bishop Omer of Ribe, who Étienne did not know personally. He was not asked for money, but was asked to assist Étienne's messenger, the canon Gaufridus[8]. This letter starts with a statement of friendship, which is interesting in relation to all letters sent: "There are four ways to create either new friendships or to nourish old ones: conversation, mutual assistance, frequent exchange of letters, and reports on the possession of true virtues".

Abbot Étienne, then, had sent concrete requests for economic support to Absalon, Knut Prizlavsen and bishop Valdemar, as well as a request to the king to put pressure on Knut, and to Abbot William to work for the cause. Further, Peder Sunesen was informed about the project, and bishop Omer was asked to give advice and protection to Étienne's messenger, who (probably before arriving in Ribe) also visited Absalon, Knut Prizlavsen, bishop Valdemar and the King.

4 *Ibid.*, 174-177.

5 Individual biographies in *Dansk Biografisk Leksikon*; on general Danish history in this period, see e.g. Skyum-Nielsen 1971.

6 On Absalon see also: Birkebæk *et al.* 1996; Friis-Jensen & Skovgaard-Petersen 2000.

7 He was canonized in 1224.

3   Conclusion

Abbot Étienne must have believed that his letters to the rich Danes would be well received. Perhaps the king and Peder Sunesen also contributed to the roof. The application to bishop Valdemar, whose relationship with the ruling dynasty was somewhat strained, may have been intended to add some element of competition in relation to the other donors. The whole fundraising project may well have been discretely planned between abbot Étienne and archbishop Absalon, and Absalon, who was well versed in Danish history, may well have agreed (or suggested) that the Vikings' destruction in ancient times could be used as a good argument in appeals for Danish funding of a new lead roof.

It is not known whether the fund-raising was successful. But it probably was, for good relations between Abbot Étienne on one side, and Absalon, Peder Sunesen, Abbot William and king Knut on the other, continued in later years. When the king's sister, Ingeborg, in 1193 was repudiated by King Philippe Auguste of France on the morning after the wedding night,

Étienne worked hard on the side of the Danes – with Abbot William and Peder Sunesen's brother, Andreas, and others – to have her re-instated. Meanwhile Étienne had become bishop of Tournai, in the southern part of present-day Belgium[9]. He was a key figure in the flourishing Franco-Danish relationship of the second half of the twelfth and the early thirteenth centuries, a relationship which also had an important impact on Danish art and architecture – one of the finest examples of which being Roskilde Cathedral, the first seat of Absalon, who was succeeded by Peder Sunesen[10].

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8 Ribe was a good starting point for travel to England, where the lead was to be purchased.

9 He is widely known as Étienne de Tournai.
10 Heliot 1964; Nyborg 2003, with refs.

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Medieval moated sites in coastal Flanders: the impact of social groups on the formation of the landscape in relation to the early estates of the Count of Flanders

Dries Tys

1 Introduction

Throughout his scientific writings Frans Verhaeghe has dealt with the question of the importance of social practices in the explanation of landscape and settlements as well as of the possibilities of historical archaeology to offer contextual approaches to study human behaviour and 'agency'[1].

He emphasizes how the availability of written sources and evidence for the medieval and later period "provides contextual information against which the archaeological sources and their interpretations can be tested", by which medieval and later archaeology has the potential to contribute to issues in archaeological theory[2]. He states: "If humans define their material culture, they are in turn also defined by this same material culture, as are their behaviour and ultimately even their institutions."[3]. Landscapes and settlements have the potential to constitute in an active way how space should be organised and should be read as a sign of how spatial features and senses of place constitute society and ones position in society. As such, material features could contain social and even ideological messages about how the object "has been derived from social position and can act as a sign from which a social position is derived"[4].

2 Moated sites

An early example of this interdisciplinary approach in the work of Frans Verhaeghe is his study of the moated sites in coastal Flanders[5]. These moats form an interesting example of medieval spatial material culture, which can be read as signs by which social relations are, consciously or not, mediated in the landscape.

'Moated sites' are morphologically sites where a part of the terrain is surrounded by a moat, whatever the actual status and position of the site. It is generally accepted that the use of a moat is a phenomenon that refers to the larger moats around castle sites (motte-and-bailey castles). Throughout northwest Europe moats seem to be an accepted feature with the ongoing social connotation for sites of status, the houses and castles of the (lower) nobility and/or manorial sites. The moats were apparently military features as well as symbolic features, signalling distinctions and the ability to organize the landscape around the castle site[6]. Only in (coastal) Flanders, the phenomenon is connected to farms of social groups under the lower nobility: farmers without an official higher status in the medieval society. It is not uncommon in the late medieval coastal plain to find farms with no more than 5 to 10 hectares of land, belonging to the so-called 'self-subsistence' category of peasants[7].

Frans Verhaeghe showed how for instance the 'manoirs' that were confiscated by the French crown after the coastal peasant rebellion of 1328, were often nothing else but farms with a moat, which were abundantly present in coastal Flanders[8]. On the east bank of the river Yzer for instance, no less than fifteen 'manoirs' were confiscated, of which eight possessed less than 5 hectares and five between 5 and 15 hectares (fig. 1)[9].

The use of moats on farms of social groups under the lower nobility is a typical phenomenon for the region of coastal Flanders. Notwithstanding the fact that the use of moats is widespread in the entire regions of Flanders and Brabant, it is clear that coastal Flanders has the largest density and dispersion of sites and farms with a moat compared to the rest of

1 Verhaeghe 1978; *Idem* 1981; *Idem* 1998, 270.

2 Verhaeghe 1998, 267.

3 *Ibid.*, 271.

4 *Ibid.*.

5 Verhaeghe 1977; *Idem* 1978; *Idem* 1981; *Idem* 1984; *Idem* 1986, *Idem* 2002.

6 *Idem* 1981; *Idem* 1986.

7 Tys 1997; see also Soens 2001.

8 Verhaeghe 1986, 59.

9 Estate Archives Brussels, Fonds rekenkamer, rol 2923: confiscated goods after the batlle of Cassel, 1329; Tys 2003.

Flanders[10]. In the area south of Veurne, the density of moated sites was around one per 38 hectares, with concentration zones where the density went up to one per 20/25 hectares[11]. The same goes for the area on the east bank of the river Yzer, where alone according to the landbooks of the early 17th century 252 moated sites, lost sites as well as still existing ones, had been present on a surface of 5044 hectares (fig. 1)[12]. In inland Flanders and Brabant, this number would decrease to one moated site per 80 hectares or more[13]. One can assume that in inland Flanders and Brabant, the phenomenon was probably more closely connected to indeed manorial sites and castle sites or sites with a distinctive status[14].

In coastal Flanders, the phenomenon of moated sites as portrayed above, seems to have originated around 1200[15]. The appearance of the 'fashion' to use moats around 'ordinary' farmsteads in coastal Flanders can be dated between the late 12th and the middle of the 14th century. The phenomenon does not disappear after 1350, but clear enough, new moated sites become much scarcer afterwards and many 13th- and 14th-century moated farmsteads are given up between the middle of the 14th century and the middle of the 15th century, leaving only the trace of the moat and other earthworks in the rural landscape[16]. The explanation is to be found in a combination of the general economic crisis of the 14th century, connected to the intensive commercialisation of the rural economy around Bruges in the later medieval period. Probably many peasants had to sell their property because of a combination of unfavourable economic conditions, the rise of debts and loans and the use of a ruthless credit system applied by the Bruges patricians[17]. Between the 15th and the 17th century, moats around farms and other sites in coastal Flanders tend to become a more exclusive phenomenon, mainly used in the context of larger estates and/or by members of higher social strata[18].

As such, the widespread use of moats around sites in coastal Flanders between the period around 1200 and the period around 1350, most probably as a distinctive status symbol, testifies how the use of moats in coastal Flanders had clearly a much larger social dispersion, compared to the rest of Flanders

10   Verhaeghe 1981; *Idem* 1986, 72-76.

11   *Ibid.*.

12   Tys 2003.

13   Verhaeghe 1986, 72-76.

14   *Idem* 2002.

15   *Idem* 1986, 77.

16   *Ibid.;* see a.o. also Verhaeghe 1984 and Tys 1997.

17   The so-called '*rentekoop*' system; see Thoen & Soens 2003.

18   Verhaeghe 1986; *Idem* 2003; Tys 1997; *Idem* 2003.

and (N-W-) Europe. The moats around the moated farmsteads in coastal Flanders were indeed apparently more than exclusively functional features, for instance for drainage, defence or use as fish resource.

Verhaeghe suggested a very probable link between the general social and symbolic meaning and use of these moats and the use of moats in the high status motte-and-bailey sites[19]. He formulated the hypothesis that the use of moats around the farms designed a kind of social emulation, in which the moat around the farm had to be seen as an imitation of these fashionable features used in the higher circles[20]. Indeed, coastal Flanders was already in the 12th century an exceptionally early urban market oriented area where farmers had no or very few seigniorial ties or duties[21]. One could indeed suggest that the apparent independence of the coastal farmers from lords or nobility, seems to have been the context in which these farmers chose to signal their free status and social independence.

The questions that remain are how, when and from where the idea of using a moat as a sign to define them was transferred from the higher circles to the free (and other) farmers. It suggests all together that the farmers and peasants did not fear to use moats and were not opposed in doing so in the early 13th century. The example(s) to follow must have been not far away and in one way or another it must have stimulated the idea of imitation, either by the ambitions of the peasants, or by the accessibility of it as a sign to use, or by a combination of both. The use of moats indeed might have been derived from social position, namely the position of being free farmers and could then have acted as a sign from which a social position is derived[22]. The question is, which was the reference sign for those coastal farmers, and in which context could the farmers and peasants use and imitate the idea of moats around their farms? One particular problem is that classical motte-bailey strongholds were not a widespread phenomenon in the coastal plain.

3   Coastal knights of the count of Flanders

When we look at the social elites in the coastal plain in the medieval period and especially the period around the 12th century and before that, we notice the apparent absence of real ('high') nobility from within the coastal area[23]. Local and micro-regional lordship can be found in estates at the sandy edge of the coastal plain, while in comital strongholds as Sint-Winoksbergen, Bourbourg, Veurne (Furnes), Oudenburg and

of course Bruges we find *castellani* or *burggraven* ('castle governors'), who are connected to the higher nobility of Flanders[24]. These governors were appointed officials who had their roots elsewhere and who had no clear territorial possessions in the coastal plain itself. There are some indications that some of them hold motte-bailey castles within the circular strongholds of Veurne and Bergues, but these castles are archaeologically not very well known.

Next to this small group of higher officials, some contemporary written sources, like the account of the murder of Charles the Good by Galbert of Bruges (1127-1128), mention the presence of a group or even confederacy of coastal knights in early-12th-century Flanders[25]. Knights were not considered nobility until the end of the 12th century, although they did play a higher social role in society[26]. In his article of 1980 about the position of these knights in the events of 1127/1128, W. von Groote gave some interesting characteristics of these knights, which he considered as the notables of the coastal plain[27]. The first is that these knights, called the *maritimi flandrenses* acted and lived in the actual alluvial polder area of coastal Flanders. Furthermore, these knights were involved in the defence of comital fortresses in the coastal area and in the regional practice of justice (as *scabini terrae*). They also seem to have been involved in the management of comital estates. The most important amongst them (the *meliores*) belonged to the *principes* of coastal Flanders[28]. The *milites* from Oostkerke, who were situated next to the Zwin (the tidal inlet that connected Bruges with the sea) seem to have been engaged in the control of the trade to Bruges and had a role in the surveillance of the public order (as *exercitus*)[29].

The actual connection between these knights and estates or manors in the coastal area remained unclear though, as well as the actual position and place of these knights in the coastal landscape. According to the 'traditional' historical-geographical interpretations of the formation of the coastal landscape, this landscape was first of all the result of the embanking, reclamations and actions of large ecclesiastical institutions in the salt marshes of the high medieval coastal plain[30]. According to this theory, the ecclesiastical property rights of these salt marshes were granted by the counts, which were the theoretical landowners of the unembanked salt marshes. The counts however, would not have been interested in developing estates of their own[31]. Inside the coastal plain itself, the counts would only have kept a limited number of smaller feudal manors and some rents in kind.

19 Verhaeghe 1981; *Idem* 1986; *Idem* 2002.

20 *Idem* 1998, 304; *Idem* 2002.

21 Brenner 2001.

22 Verhaeghe 1998, 282-283.

23 Koch 1951; Warlop 1968.

24 These strongholds were mainly circular fortresses who were probably erected against the last large Viking invasion in the southern Netherlands between 885 and 891. As stated in the mid-11th-century *Vita Winnoci*, written in an abbey in one of these forts, it is most likely that the young as well

as unscrupulous Prince Baldwin II (878-918) was responsible for the construction of the circular ring forts in the coastal plain of Flanders, and this between 884/885 and 891 (Meijns 2007).

25 Monumenta Germaniae Historica (MGH), Scriptores (SS), 12: *Vita Karoli comitis Flandriae*, § 97: "*Eodem die, scilicet feria quarta, cives nostri et maritimi flandrenses coniuraverunt ut simul deinceps starent pro tuendo honere loci et patriae.*"

26 Duby 1977, 178-185.

27 Von Groote 1980.

28 MGH, SS, *Vita Karoli comitis Flandriae*, § 51: "*ex Isandica Alardus scabinus cum sua potentia, ex Ostburg Haiolum cum illius locis potestatibus, ex Reddenburg Hugo Berlensis cum illius loci fortioribus, ex Lapscura, Ostkerca, Utkerca, Liswega, Slipen, Gistella, Oldenburg, Lichtervelda, Iadbeca omnes fortiores et meliores …*"; Von Groote 1980.

29 *Ibid.*.

30 See for instance Verhulst 1995.

31 Thoen 2001.

4   Coastal estates of the count of Flanders

This view was contested by the 'discovery' of extensive comital estates in coastal Flanders by reconstructing the actual 10th- to 12th-century social property relations in the central part of the coastal plain, on the east bank of the river Yzer, the so called 'Kamerlings Ambacht' (fig. 2; fig. 3)[32]. According to this research, it was count Baldwin II (879-918) who succeeded in the creation of an enormous territorial property in the coastal plain, next to the free lands of an older population of early medieval sheep farmers, who lived more land inward on dwelling mounds[33]. He apparently did so by exercising the ability to gain control over important resources, through the usurpation of older estates belonging to the crown or ecclesiastical institutions, but also through the exercise of the regal right of waste grounds in the coastal plain, which were to be found in the lower salt marshes in the estuaries of the open tidal channels and rivers, like the Zwin, the Yzer, the Gersta, and others.

The interdisciplinary analysis of the medieval landscape of case study areas in the coastal plain resulted in the reconstruction of several of these comital estates in the estuaries, like the estates on the east bank of the river Yzer (all together 1600 hectares and with a capacity of 10,000 sheep), the huge comital estates around Veurne, specialised in animal husbandry and sheep herding but also containing several fisheries, and the estates of the 'lardarium' and 'spicarium' of Bergues on both sides of the Gersta estuary.

Detailed analysis of the medieval landscape developments (with attention to spatial structures, field systems, property relations and site catchment analysis) of the area on the east bank of the river Yzer resulted indeed in the reconstruction of 1600 hectares of 'old' territorial comital domains in this specific area. In the 15th- and 16th-century land books, these lands were described either as 'Camerland' or as 'Proostland', being in fact the lands of the *Brevia Camera* and *Magna Brevia* of Bruges (fig. 3).

The *Brevia Camera* and *Magna Brevia* were two of the more important estate accounts of the comital treasury[34]. Both accounts went back to an older, united estate account in the castellany of Bruges, which would have originated around the end of the 11th century[35]. This account collected all the revenues in money of the comital *brevia*-estates in the castellany of Bruges, which were mainly estates leased out in *census* since the end of the 11th century. Before the end of the 11th century, these domains were part of the estate management called the *spicaria* of Bruges, which refers to the comital storehouse in the comital fortress in Bruges (the 'Burg'). This storehouse acted as rent-collecting centre of the comital estates in the region of Bruges. Spatial and historical analysis of the estates in relation to the descriptions of the revenues and incomes in later sources from the comital treasury (the *Grote Brief* of 1187, the oldest known general account of the revenues of the comital territorial estates) show that these incomes could be brought back to specialised sheep domains. The comital estates seem indeed to have started with the delivery of bulk products and/or rents in kind to the storehouses. In the case of the mentioned estates in the area between the later towns of Ostend and Nieuwpoort, it seems that they mainly delivered lambs (meat) and wool. According to Verhulst and Lyon, the castral *spicaria*-system came into existence around the year 1000, together with the division of Flanders in castellanies[36].

FIG. 2 **The parishes on the eastbank of the Yzer and their relation. There existed two mother parishes: Testerep (Mariakerke) and Leffinge.**
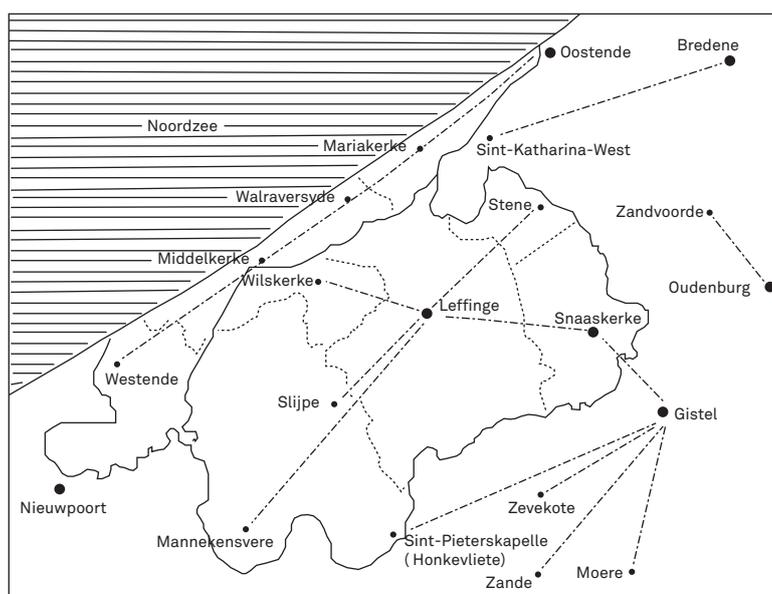
32 Tys 2003; *Idem* 2005.

33 Loveluck & Tys 2006; Tys 2004.

34 See Verhulst & Gysseling 1962; Lyon &

Verhulst 1967.

35 Around 1170, the treasury was reorganised in the context of the development of a new estate

account administration, the so called '*reddeninge*', see Declercq 1997; Soens & Tys 2001.

36 Lyon & Verhulst 1967.

The comital estates also formed distinctive units in the landscape, as is shown by several oval enclosures, which are to be found in the centres of these domains. These oval enclosures were probably nucleated embankings, according tot written 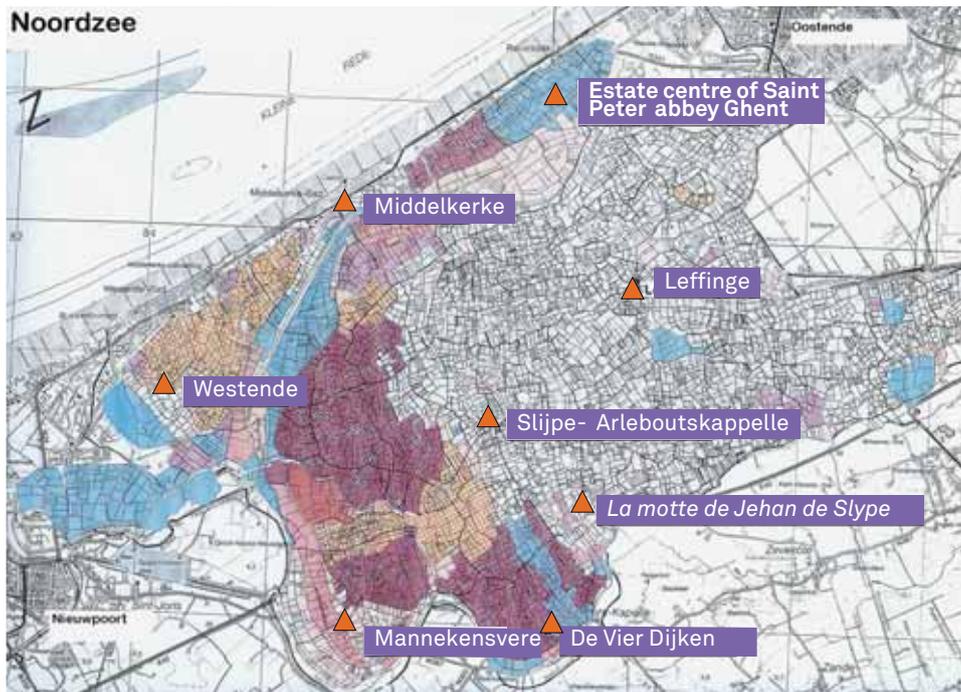data probably erected before the middle of the 11th century to create protected infields. This means that the counts made a deliberate choice for the control of the environment as well as the rural landscape surrounding their fortresses through technological innovations. It thus seems that the counts have made use of the inherent ecological possibilities of the coastal plain to organise and control the production and the exchange of wool, grain, meat and sea fish. Trough these comital estates and through their intervention in the management of ecology and hydrology of the coastal area, the counts created themselves a dominant 'market position' in the supply and trade of bulk commodities, which was organised during the 10th and 11th centuries via the castral storehouses and marketplaces in amongst others the ringfort castles of Veurne, Bergues and the main comital stronghold at the time, namely Bruges. The development of these markets with comital produce, probably caused a strong impulse on urban developments in and around these centres.

Whatever the economical importance of the 10th- to 11th-century comital territorial possessions in the coastal plain, it was probably not the count's purpose to develop an economic position on its own, but instead to use the generated means to purchase a princely ideology with a powerful territorial position, by investing them in the organisation of a centralised public authority, in military campaigns and territorial conquests in the neighbouring counties, in socio-political networking

through gifts out of the territorial properties and in the materialisation of his performance in collegiate churches in these centres and fortresses like Veurne, Sint-Winoksbergen, and others[37].

Count Baldwin founded as well in Bergues as in Veurne prestigious collegiate churches; in Bergues in 899 and in Veurne at the end of his life, between 916 and 918. Very important from the point of princely performance and ideological power, he managed to donate to the church in Bergues the relics of the *Sancti Winnoci*, an 8th-century missionary who was buried in Saint-Omer, and to Veurne the skull of Saint Walburga, a late 8th-century Anglo-Saxon saint living in Bavaria. At least in Veurne, Baldwin must have had a residential hall or *aula*, since we know that he and his son issued many charters from this centre of power.

As in the burghs of Baldwin II's father in law, Alfred the Great, these centres developed during the period between the end of the 9th and the start of the 11th century also as socio-political centres of collective and territorial institutions, like feudal courts, through which the count could develop a firm grip on his territory and his subjects.

5   The knights and the estates of the counts of Flanders

Instead of the old view that comital power was restricted to his fortresses, we know now that these centres of power stood in relation to large estates, transforming large parts of 10th- to 12th-century coastal Flanders into a comital landscape. When

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37 Tys 2003; *Idem* 2005; Meijns 2000; *Idem* 2007.

we look more closely to the estates themselves, it becomes clear that the comital power apparatus and the rural estates were closely connected.

Also in Flanders, there seems to be a clear link between the landscape and the organisation of the estates of the count and his military apparatus. Inside the estates of the *Brevia Camere* and the *Magna Brevia*, there were several feudal manors, which had (according to the oldest 14th-century loan registry documents) certain common features:
1) They were part of the comital feudal court of Bruges;
2) The vassals who kept them in loan had to perform military services for the counts army (*e.g.* 40 days duty with two horses);
3) the most important amongst them could be brought in relation to 12th-century *milites* or knights, like the knights of Testerep (the former mother parish of Saint Mary of Testerep, also called *villa*), of Westende (the western part of Testerep, with both extensive embanked sheep estates as dairy estates in the dunes) and especially the knights of Slype, the so called *milites de Slipen*, which belonged to the confederacy of *fortiores et meliores* of the coastal plain that played a role in the events of 1127 and 1128, mentioned by Galbert of Bruges (fig. 2; fig. 3)[38].

Slype was the name of the former salt-marsh area on the east bank of the river Yzer, indicating a large muddy area west of the early medieval village of Leffinge. It was this tidal area where the largest comital estates of the central region in coastal Flanders were formed, resulting in two entirely new 12th-century parishes, namely Mannekensvere and Arleboudskapelle.

The oldest known knight of the estates of Slype was Walter, who was also *scabinus*, probably of the comital jurisdiction in the coastal region around Bruges (the later *Brugse Vrije*). The knights of Slype also kept the toll on the Ieperleed, the canal through which wool, cloth, peat, grains and other goods were traded between Ieper and Bruges. This toll was situated on the place where the canal entered the comital domains. The family of the knights of Slype still had three feudal manors in this area in the early 14th century. It also appears that other, somewhat smaller feudal manors in the surroundings of the main manor of the family, which had to perform (lesser) military services, were military servants added to the knights of Slype. The knights of Slype and other knights also kept important parochial tithes in the surroundings in fief from the counts of Flanders.

The knights of Slype, as well as the knights of Westende and Testerep, thus had a profile comparable to that of the knights of Lissewege, Meetkerke and Uitkerke near the Zwin tidal channel, as described by Galbert of Bruges in 1127/1128 (*supra*). At least for the comital knights in Kamerlings Ambacht, it is clear that their position is closely connected to the presence of large comital domains in the coastal plain. This relation seems to have had several aspects. The first is that the feudal manors and goods were most likely (modest) parts of the comital estates that were transformed into feudal manors. It is not

unlikely that we are dealing with a kind of garrison system, comparable to the *casamenta* in Catalonia, by which the count gave some moderate holdings out of his private grounds in fief to his military servants, whose military force was one of the strongholds of the expansionist foreign policy of the counts of Flanders[39]. The domains functioned in other words not only as production centres for wool and meat, but also as a territorial reserve for his cavalry.

Similar situations can also be found in The Netherlands, where we encounter at the end of the 9th century the *militari agrarii*, as members of the garrison of the circular fortress of Zutphen, the centre of the *pagus* IJssel, which suggests that the garrison was partially formed by warriors form the rural area outside the fortress[40].

It is also very likely that the knights and military servants in coastal Flanders were closely connected to the exploitation and management of the comital estates. Galbert describes the *maiores* of the confederacy of 1127/1128 also as *villici*, or domain administrators, something that only makes sense in the estate context in which these knights have to be seen. Galbert tells us also how in the events of 1128, during his short reign, count Willem Clito went to Oudenburg to receive the revenues of his coastal domain from the *berquarii*, the lease-holders of sheep-breeding farms, and from the *custodes curtium*, the guards of the estate centres. It is well possible, although not proven, that these *custodes* were the official servants or *ministeriales* of those domains that were by 1128 still under direct exploitation. As in Lissewege, Uitkerke and Oostkerke, the knights of Slype, as members of the group of most important coastal knights also exercised the function of sheriff or ammans of local districts called 'ambachten'. The ammans of each 'ambacht' seem to have been involved in the control of the collection of the revenues out of the comital estates. The function of amman itself was often compensated with payments in natura like husbandry-products mentioned in the accounts of the old comital domains[41].

The social group of the coastal knights, the so-called *maritimi Flandrenses*, seems to have had a fairly uniform nevertheless complex social agency, in which military duties, administration, jurisdiction and many other functions were combined with regionally bound status and prestige, derived form their position inside the comital estates: the knights of coastal Flanders. Whether these knights were first of all estate officials (*ministeriales*), or whether they got their position as a feudal reward for their military service, the 12th-century coastal knights cannot be separated from the extensive comital territories in the coastal plain which were so important for the development of the treasury and the policy of the counts of Flanders. It is also clear that the count chose to rely on his (unfree) estate-knights to organise jurisdiction, defence, public order, the control of the trade and regional administration during the 10th, 11th and 12th century in the hart of his county, the area around Bruges and Veurne[42].

38 See notes 25 and 28.

39 Poly & Bournazel 1991, 64.

40 Bartels 2006.

41 Soens & Tys 2001.

42 It seems indeed that, like Fossier wrote: "The men on the horseback had domestic origins." (Fossier 1999, 40).

6   The knights and their sites

Frans Verhaeghe paid special attention to (moated) sites with a distinct upper court and lower court, as a reference to the motte-and-bailey structures[43]. In short, his conclusion was that late medieval site with the bipartite structure of a residential upper court (*opperhof*) and a non-residential lower bailey (*neerhof*), was a typical feature amongst the moated sites in coastal Flanders. In the area south of Veurne, 13% of the late medieval moated sites had a similar structure (the so-called type A2 of Verhaeghe)[44].

Archaeological excavations indicated that some of them, like the Leenhof ter Wissche in Lampernisse and the court of Zoutenaaie, were transformed into the motte-and-bailey structure only in the 13th century, after both sites had been raised earlier[45]. Other motte-bailey-like sites, like the Cathem motte in Dudzele near Bruges, were dated in the 11th and 12th centuries and considered as a kind of missing link between the motte-and-bailey castle sites and the 13th-century moated sites with upper and lower court elsewhere in coastal Flanders[46]. The Cathem motte in Dudzele was thought to be a site of some status, maybe even a *maison forte*, although the actual origin and socio-institutional context for the presence of this smaller elevated site, almost a smaller or 'light' version of a motte-and-bailey castle, remained unclear. Verhaeghe suggested that sites like the one in Dudzele played an important intermediary role in the actual transfer of the use of a circular moat suggesting and symbolising an upper court and an adjacent moat surrounding a lower court, from the motte-and-bailey castles of the nobilty to late medieval farms of diverse social-economic origins (feudal as well as non-feudal, ecclesiastical and non-ecclesiastical). The actual meaning, social significance and status of similar sites and the reason why and how they played this role remained unclear though. We know that the knight of Dudzele was part of the confederacy of notables and knights in 1127/1128, although it is difficult to link him to the Cathem motte site (*supra*).

When we look at the dispersion of moated sites with a motte-and-bailey structure, Verhaeghe's A2 type, in regard to the social property relations in the research area on the east bank of the river Yzer, we notice that the phenomenon is clearly concentrated inside the area of the former coastal estates. Twenty out of twenty-two sites that have according to written, cartographical or archaeological sources a motte-and-bailey structure are either situated inside the former comital estates, or estates that were derived from these, or can be brought in relationship with the estate knights. Five of them were situated in the old parish of Mannekensvere, and eleven in the actual parish of Slype, which were both entirely comital property. Two were situated in Leffinge, which was former non-comital free-owners land with early-medieval anteced-
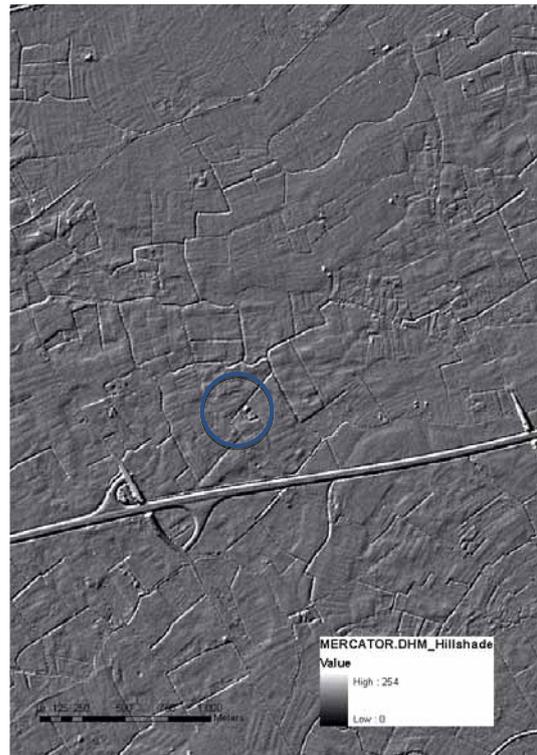
FIG. 4   The site '*La motte de Jehan de Slype*', situated on the digital elevation model (copyright Vlaams Gewest).

ents[47]. However, when we look more closely to these sites, one of them was property of the Religious Order of the knights of Saint John, and the other, called *La Motte de Jehan de Slype* (figs. 4 and 5), was owned by the knights of Slype, at the edge of the comital estates (*infra*). The others were one in Westende, inside the comital lands, one in Middelkerke, on estates that were transferred from the Counts house to the Abbey of Saint Peters in Ghent, one in Mariakerke, as an upper court and lower bailey site (with gate) on a fief from the Court of Bruges and one was situated in the free farmers' lands of Wilskerke. The last one is the only one with no links to comital property rights. Most of the sites are just attestations in the written sources, often from the comital archives[48]. Because of the devastating effects of the First World War, earthwork remains are seldom preserved, especially in the parishes of Slype and Mannekensvere, which were situated in the German frontlines east of the Yzer. The court called De Vier Dijken in Slype, which acted probably as the estate centre of the estate with the same name and was described in the comital landbooks as an "*upperhofstede ende nederhofstede, met eender valbrugghe...*" an upper court and lower bailey with

43 Verhaeghe 1977; *Idem* 1981; *Idem* 1986; *Idem* 2003.

44 *Idem* 1981; *Idem* 1986.

45 *Idem* 1981, 105; *Idem* 1986, 62.

46 De Meulemeester 1980; Verhaeghe 1986, 76-77.

47 Tys 2004; Loveluck & Tys 2006.

48 For instance the site in St-Mariakerke: Royal Archives Brussels, Fonds Rekenkamer, number 1075, register of fiefs of the Court of Bruges, 1501:

"*'t Goedt ter Kuekene, binder prochie van Sinte Mariekercke, west suydtwest vander kercke ende es de hofstede metten opperhove ende nederhove ... ende metten poortsticke alt een aent andere ...*".

draw-bridge[49]. From this site remains only the circular moat of the upper court (fig. 6). In Leffinge, one site is much better preserved. It is the site that bears in 1370 the name *La Motte de Jehan de Slipe* (figs. 4 and 5)[50]. It is one of the three sites of the family of the knights of Slype, connected to feudal grounds and related to horseman services (40 days) for the count of Flanders. It has a clear circular raised platform, the upper court, with a diameter of 24 meter. It resembles the general lay-out of the Cathem motte in Dudzele, but it can not be dated archaeologically, otherwise than it was in use during the late medieval period. Nevertheless it is interesting that this distinctive moated site with a clear motte-and-bailey structure was indeed one of the courts and houses of the family of Slype, whose members belonged to the confederacy of the most renowned knights in early-12th-century Flanders.

Next to the many of these seigneurial sites of knights connected to the estates of the count of Flanders, small churches were erected, probably during the 11th, 12th and early 13th century. A well-documented archaeological example is the church of Zoutenaaie, erected on the bailey of the court of the knights with the same name. Also the church of Westende was situated next to one of the two courts of the knights of Westende. In Slype, the church is not situated on one of the bailey-courts of one of the manors of this family. Yet, the original name of this village around the church next to the manors of the family of Slype was Arleboudscapelle (oldest attestation 1141), the chapel of Arleboud, which could indicate a member from the family of the knights of Slype[51]. This seems even more likely because the church was connected to one of the manors via a direct connection.

In some other villages, the link between the names of the villages and their origin in relation to the manor and manor church seems evident. For instance *Volcravenskinderkerke*, *Reinilini Capella*, *Eustacii Capella* etc., which were in origin nothing more than the chapels next to the manor of Volcraf, Reinilinus, Eustacius, etc. Thus, also these place names were equally part of the status of the manors and landscapes of the comital knights in the coastal area. As such, these knights were responsible for the morphogenesis of a particular type of feudal coastal village, with distinct other spatial features than the older, more communal villages around the mother parishes (Leffinge, Bredene and others). The presence of these churches, signalling the importance of the knights as regional elites, suggests that the manors functioned in a motte-and-bailey way, since these churches were all private churches (*eigenkerken*), like the example of Zoutenaaie shows very well[52]. Maybe, they were in origin only burial chapels. Nevertheless, these chapels, which most of the times evolved into village churches, were clearly connected to the most important estate knights, like the family of Slype, communicating their role in the organisation of religion on the local level.

As such and unfortunately without clear archaeological dating or excavations, we can deduce that there seems a clear relation between the use of the motte-and-bailey morphology in coastal moated sites and the presence of the knights in the estates of the count of Flanders. The use of motte-and-bailey sites in the coastal plains seems clearly connected to the functioning of the comital estates. The situation of these sites inside the comital estates and their relation to the fiefs and courts of the comital knights inside the estates suggest that exactly the knights and estate-officials and -managers seem to have been the agents that imitated the motte-and-bailey structures in their moated sites throughout at least the 12th century and later, (re)producing and communicating 'status' through the imitation of the spatial practices and concepts of the nobility. Also the Cathem motte in Dudzele, the manor (called 'castle') of the knights of Uitkerke and the site in Zoutenaaie suggest this. The motte-like erected platforms seem to have had modest hights, between 3 and 5 meters, and surfaces large enough to carry a rather modest house or tower structure. These sites seem to have had no defensive purpose. Next to the residential motte-like structure, there were lower bailey-courts with stables and others.

FIG. 5   Actual view of the site '*La motte de Jehan de Slipe*' (photograph Pieterjan Deckers).

49 Departmental Archives of 'Le Departement du Nord', B3979 8r°.

50 Royal Archives Bruges, *Cumulus ecclesiasticus*, 825.

51 de Hemptinne & Verhulst 1988, nr. 58.

52 De Meulemeester 1983.

The practice to construct sites with a similar morphology seems to have had mainly residential and ornamental meanings, as a visual reference to the status and position of the nobility. This was also suggested by Frans Verhaeghe[53]. The next step was that other social groups copied the social meaning and symbolic function of the structure and moats.

This might have happened in a hypothetical sequence in which first other courts and farms inside or next to the comital estates and/or estates with comital antecedents copied the motte-and-bailey moated structure. An interesting example is the central court of the estate of Saint Peters Abbey of Ghent in Middelkerke. This estate was already transferred from comital hands into the possession of the abbey at the end of the 10th century. By the time the motte-and-bailey sites originated in the coastal landscape, this estate was since long in the hands of this large abbey, which transformed its estate centre into a moated site with upper court and lower bailey probably somewhere between the 12th and 13th century. This seems to indicate that the use of this system and the imitation of these structures kept its connotation of status and importance and its relation to estate management by regional elites. In a second stage, the symbolic and social significance of moats in general was transformed from these and other sites to signal their relatively autonomous social position in the 13th- and 14th-century coastal landscape.

In this respect it is remarkable that the late medieval moated sites are relatively more common within the comital estates than compared to the allodial lands of the free holders farms. In Mannekensvere 53.4 % of the farms had a moat, in Slype even 56.8 %, while in free-holder Leffinge the percentage is 44.6 % and in Wilskerke, a small parish situated between Slype and Leffinge even 35.5 %. If this pattern can be confirmed elsewhere, this suggests that the use of moats was first of all connected to the known status of agency of local elites in the context of comital estates, connected to the idea of social independence from feudal structures, which is in fact not a paradox in the context of the coastal landscape and social property relations[54].

7   Conclusions

The phenomenon of the moated site of coastal Flanders was one of the first important themes in Frans Verhaeghe's research. He rather early touched the archaeological problem of the cognitive aspects of material culture and of the use of symbols as "active means of constructing continuously changing realities"[55].

He was right in stressing the link between the general social and symbolic meaning and use of these moats and the use of moats in the high status motte-and-bailey castles. What remained unclear was how the actual transfer of the idea of using a moat happened between the noble castle sites and the

FIG. 6 **The former central court of the high medieval estate** ***De Vier Dijken.***

farmsteads in coastal Flanders. The interdisciplinary approach of the phenomenon, with attention for the context of the social property relations of the medieval moated sites, brought some new elements to the discussion. First of all, the actual context of the origin of the social dispersion of moated sites in coastal Flanders is connected with the presence of large comital estates in the area. There is a distinctive concentration of sites with a motte-and-bailey-structure, in itself probably an imitation of the motte-and-bailey castle sites, inside the comital estates. Several of these sites were clearly connected with members of a coastal regional elite network. These estate officials and knights combined several functions, from military to regional administrative and juridical functions, as comital representatives in the coastal region where the territorial basis of the power of the Flemish counts was situated. The members of this group played a distinctive role in the landscape of the estates, controlling the financial revenues and signalling their relative status through churches, village names and motte-and-bailey sites of relatively modest size and proportions compared to the 'real stuff'. Nevertheless, the group of estate elites seems to have been able to use these structures as a sign to define themselves. The suggestion by the written sources that the most important members of this network had an influence in the events around 1128, when the choice for a new count was at stake after the old one had been murdered, suggests indeed that the coastal knights had a certain social position to display.

Coming from this group then would have followed the transfer of the idea of using a moat as a kind of social emulation, to lower classes, from the 13th century on. An interesting idea is the one that the 'ordinary' moated sites from the late medieval period knew a distinctive higher concentration inside the old comital estates compared to the non-comital estates. Would this strengthen the idea that the transfer and the emulation

53 In 1986, Verhaeghe took the view that the 13th- and 14th- century moated farmsteads were most of all sites of the higher strata of the (free) farmers,

but also could be farms given in fief (as part of a rural feudal estate) (Verhaeghe 1986: 79-81).

54 Tys 2004.

55 Verhaeghe 1998, 271.

happened first within the estates and only later outside? Would this therefore suggest that it were first of all (commercial) farmers inside the old estates of the count who tried to refer to the identity and emulation connected to the ones from the estate knights? The moated sites were indeed less frequent in the sub-region with the free farmers, suggesting an interesting shift in the interpretation of the significance of these moats compared to Frans Verhaeghe.

As a form of material culture, these moats indeed have inevitably social as well as functional dimensions and objects may even be used to implement social strategies, to refer to social networks and power networks in the context of the count's apparatus and landscape[56]. We can even ask if the use of the moat designs a certain sense of place in a context of social emulation, which indeed seems to operate both vertically and horizontally through the lifetrajectory of the moat-concept in coastal Flanders[57]. The use of these spatial concepts was at diverse stages in diverse periods aimed towards the production and reproduction of social groups and their social formations, both in relation to emulation compared to their superiors, as to distance themselves from the others ('below'), as to refer to an idea of equality within these groups[58]. As such moats became standards in a variety of transformative processes of social reproduction in the course of the 12th, 13th and 14th centuries[59]. These processes seem to include the transformation (and ambition) of *ministeriales* and *milites* into nobility, as described by Duby for 13th-century France, and van Winter for the northern Netherlands, where she describes the rise of these groups to higher social positions and duties as a process starting in the 12th century[60]. The process of transformation seems to fit perfectly well for the coastal *milites* and estate officials in contemporary coastal Flanders, where the transformations went hand in hand with certain assumptions, amongst others, the assumption of the displaying social significance through using first motte-and-bailey like structures and then moats in itself. Without going into the full mapping of the complexity of these transformation processes, the moated sites themselves show indeed that the social emulation and distinction is not easily explained, nor is it a simple process. The lack of chronological data do not help us here, but the few data we have show how the structures and moats we discussed were still active at the start of the 13th century, at the same time as the further transfer of the moats in 'lower' social groups began. We have indeed to be aware of the danger of equifinality in the light of the complexity of emulation in general and more particular concerning the discussed social emulation processes in coastal Flanders during the 12th and 13th centuries[61]. Nevertheless the notion that ideas and perceptions are often not transferred into material objects consciously, we have to be aware that the social uses and meanings of material culture in this context will have gone together with at least some assumptions of emulation and distinction. For instance, somewhere in the early 13th century also social groups under the lower nobility had the assumption that they could and should use the idea of using a moat to distinguish them selves, or was it to follow fashionable behaviour in their own spatial context? The complexity of sense of place behind the moats in 12th- to 14th-century coastal Flanders is still not sufficiently understood. This and the search, for which actual assumptions were at stake, are problems that need more attention, as does the chronology of these phenomena.

Historical archaeology plays an interesting role in this search for agency behind the landscape, because often we have the opportunity to know at least something of the social context and even the agents behind landscape and settlement. As such, a contextual approach and search for sense of place, spatial structure and culture, social agency behind the landscape can hopefully continue to bring new light in these and similar matters, as Frans Verhaeghe has repeatedly argued.

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56 *Idem* 1998.

57 Hinton 1999.

58 Lefebvre 1974.

59 Hinton 1999.

60 Duby 1977, 178-185; van Winter 1962.

61 Verhaeghe 1998, see also Dumolyn & Van Tricht 2000.

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La dotation funéraire des tombes dites de 'chefs' dans le Nord-Ouest de la Gaule du Ve au VIIe siècle

Laurent Verslype[1]

1 Introduction

Notre collègue et maître en bien des domaines Frans Verhaeghe, mettant naguère la notion des grands échanges en perspective, posa la question du caractère élitaire du marché de consommation au haut Moyen Âge, conduisant: «d'ailleurs à se demander s'il s'agissait dans tous les cas de commerce: une bonne partie de la distribution des produits de luxe pouvait s'inscrire dans le cadre des pratiques du troc, du cadeau diplomatique, ou si l'on préfère, du don et du contre-don, fortement répandues dans les populations germaniques et, plus spécialement, chez leurs élites»[2]. Aujourd'hui, les progrès conjoints des recherches archéologiques dans la sphère du vivant – les établissements ruraux et le fait urbain dont notre collègue est un éminent spécialiste – et de celles dévolues aux pratiques funéraires, autorisent une lecture socio-économique de plus en plus nuancées. «*Material culture not only represents social relations but also gives them form and content*», écrivait également Frans Theuws il y a plus de quinze ans[3]. Comment en a-t-on distingué la forme et le sens en considérant plus particulièrement la place des individus promus – à nos yeux – par les sépultures[4]?

2 L'expression matérielle d'une singularité individuelle ou communautaire

Un 'vocabulaire' formel standardisé caractérise les tenants du pouvoir au coeur et à la périphérie des royaumes du nord-ouest européen, tel que les sépultures en matérialisent l'ancrage aux Ve et VIe siècle. Cette standardisation s'est nourrie d'influences mutuelles entre Gallo-Romains et groupes allogènes de l'Empire, entre royaumes contigus ensuite. Au sein des communautés, des contextes mobiliers singularisent des sépultures individuelles d'hommes, de femmes, de couples très souvent aussi et, partant, de groupes familiaux tout entier. Or, la richesse relative des assemblages mobiliers ainsi que les

dispositifs d'inhumation tels la disposition topographique et l'aménagement de la sépulture, distinguent les individus en vertu de l'équation admissible entre singularité de la dotation et de l'environnement funéraires et position ou considération de l'inhumé dans sa communauté. L'examen monographique puis régional se fonde sur les écarts observés avec des standards strictement matériels comme les dimensions, le volume, la position et la complexité des structures d'inhumation, auxquels s'additionnent des marqueurs liés à la mode et à la facture des panoplies militaires, des parures vestimentaire et corporelle, ainsi que du dépôt de services de vaisselle et d'équipements domestiques.

3 Statut, origine, fortune et position sociale: l'indispensable prudence critique

Ces facteurs dépendent de la position sociale individuelle de l'inhumé, impossible à préciser telle sa fonction ou son statut, et de sa considération par sa communauté, à commencer par sa renommée et l'importance de sa famille soit des données plus subjectives encore pour l'archéologue. Quoiqu'il en soit, ce sont les choix des survivants qui confèrent *in fine* son importance à la sépulture, justifiée par la coutume. Indépendamment de l'identification d'un statut précis, *a priori* impossible sur les seules bases archéologiques, la singularité d'une sépulture au sein d'une ou d'un groupe de nécropoles et sa richesse relative autorisent l'établissement d'une classification hiérarchique théorique et indicative, dans les limites soulignées par Alain Dierkens en 1981: «Sur la base du mobilier funéraire – dont les armes ne sont qu'un élément – ne sont possibles que des déductions concernant le niveau de fortune, et non le statut juridique du défunt ; certaines tombes pouvant toutefois être rattachées avec certitude à l'aristocratie ou du moins aux classes fortunées de la population»[5]. La qualité de la production

– finesse d'exécution, coût ou rareté des matériaux employés – ou la provenance de l'objet et de ces mêmes matériaux, sont autant d'éléments dont il faut évidemment tenir compte pour évaluer la richesse relative dans une communauté donnée[6]. Böhme partage ce point de vue quand il considère les sépultures romano-germaniques antiques tardives, souvent attribuées à une riche élite si l'on en juge par la présence d'objets en métaux précieux et de vaisselle métallique[7].

4   La désignation variable d'un phénomène récurrent

Au-delà de leur traitement quantitatif ou de leur considération qualitative intrinsèque, Jean-Charles Picard avait, dès 1984, intégré l'ensemble de ces facteurs dans ce qu'il dénommait un large 'faisceau de motivations', désignant l'intention expresse de la démarcation et les moyens qui la servent[8]. Ces motivations opèrent donc le lien entre les marqueurs sociaux évoqués et le sens qu'ils véhiculent au regard des contemporains: les modalités de l'inhumation et le message délivré lors de l'ostentation plus ou moins éphémère de la dépouille et des biens qui l'accompagnent durant les rites d'ensevelissement, puis par le souvenir paysager entretenu par la sépulture. Or, ces motivations évoluent avec les sociétés qui les promeuvent. Le concept des tombes plus précisément dites de chefs n'en reflète donc qu'une part dans la considération des sépultures privilégiées de la période mérovingienne. Il participe de la définition des *Prunkgräber* adoptée pour la première fois en 1974 par Georg Kossak, tel que Heiko Steuer le résume dans le Reallexikons der Germanischen Altertumskunde: «...*eine Gruppe von gräbern ranghoher Toter*». «*Dazu gehören Königsgräber, Fürstengräber, Adelsgräber und Gräber einer Aristokratie; neutraler sind Bezeichnungen wie Bestattungen einer Obserschicht oder der gesellschaftlichen Elite*»[9]. On parle donc ici de tombes de chefs, là de *Prunkgräber* ou de *Herrengräber*, sans préjuger de leur position sociale précise. Si le vocabulaire peine à désigner clairement les membres de l'élite supérieure, les dotations mobilières en reflètent la relation au métier des armes qui émerge de la documentation archéologique. De nombreux chercheurs ont dès lors focalisé le regard sur les armes et leurs associations au sein des contextes funéraires pour en déterminer la signification. A quelle époque et dans quelle mesure celui-ci révèle-t-il les techniques de combat auquel ces armes sont théoriquement vouées, la richesse d'un contexte – soit essentiellement le dépôt des biens propres par les survivants –, ou le statut social voire le rang hiérarchique du défunt, symbolisé par une pièce révélatrice ou une association particulière[10]?

5   Le dépôt d'armes romano-germanique tardif

Les tombes de chefs qui émergent dans le second tiers du Ve siècle procèdent d'une triple influence: d'une part celle des coutumes gallo-romaines régulant les inhumations antiques tardives au détriment de la pratique de l'incinération, et dont certaines riches dotations armées trahissent une influence germanique débattue par certains. Sous Théodose, qui privilégie à nouveau l'armée de mouvement (379-395), des contingents à composantes germaniques des groupes Rhin-Weser, de l'Elbe ou de la Mer du Nord, se répartissent effectivement du littoral normand et picard aux contreforts du bassin mosan[11]. Les fortifications de hauteur, désaffectées depuis la période valentinienne, sont réattribuées à de petits contingents germaniques qui les occuperont jusqu'au milieu du Ve siècle. Du troisième quart du IVe siècle au premier tiers du Ve siècle, la coexistence de ces groupes germaniques avec les populations gallo-romaines pose progressivement les bases d'une assimilation culturelle mutuelle. Le faciès mixte de leurs sépultures parfois orientées Nord-Sud et plus régulièrement organisées, sont caractérisées par le maintien du dépôt d'une vaisselle fournie et d'oboles, tandis que les composantes de l'inhumation habillée gagnent en importance, notamment les équipements de ceinture et une parure précieuse. Ces derniers reflètent aussi l'extravagance nouvelle de la mode par l'adaptation des styles provinciaux.

Dès lors, les contextes armés de l'élite procèdent simultanément des cultures régionales originales qui se développent ensuite dans les royaumes barbares du nord-ouest européen, adaptant et amplifiant certaines de ces pratiques antiques tardives. En troisième lieu, il procède de l'imitation des modèles princiers paneuropéens documentés dans le dernier tiers du Ve siècle, qui matérialisent les réseaux suprarégionaux d'influence et d'échange des élites supérieures[12]. Les deux premiers facteurs favorisent l'importance croissante des panoplies militaires dans les sépultures des élites gallo-franques puis la standardisation proto-mérovingienne, de la seconde moitié du IVe siècle à la moitié du Ve siècle. Le troisième catalyse les phénomènes d'imitation au sein de l'élite de la deuxième moitié du Ve siècle et du début du VIe siècle.

Mais la présence des Francs n'est pas exclusive aux garnisons, et le statut de l'inhumé et du groupe auquel il appartient est essentiel quand il s'agit d'interpréter une tombe précoce dotée d'armes[13]. Les spécialistes de la fin du Bas-Empire reconnaissent plusieurs catégories d'armes et de dépôts d'armes en contexte funéraire. Les allogènes engagés individuellement et les groupes incorporés ne se distinguent pas des indigènes et des Romains dont l'équipement standardisé est propriété de l'autorité militaire[14]. Les apports germaniques et orientaux en matière d'armement sont donc ponctuels voire anecdotiques dans ce cadre[15]. Indépendamment de la valeur tactique, c'est-à-dire de la fonction des associations découvertes, les armes ne livrent dès lors d'informations d'ordre ethnique qu'une fois recoupées, par exemple, par des observations anthropologiques ou par l'association avec les sépultures féminines associées, dont les parures trahissent plus sûrement le caractère

6 Depeyrot 1994; Martin 1997.

7 Böhme 1978.

8 Picard 1986, 11.

9 Kossak 1974 ; Steuer 2003, 533 ; Müller-Wille 2006, 127.

10 Werner 1968; Steuer 1968 ; *Idem* 1970.

11 Parmi lesquels quelques exemples représentatifs: Pouligny, Saint-Martin-de-Fontenay, Frénouville, Vron, Arras, Oudenburg, Rhenen, Spontin, Furfooz, Vireux-Molhain.

12 Catalogue 2000.

13 Van Ossel 1995; Martin 1993.

14 Mertens 1962; Kazanski 1995.

15 Kazanski & Périn 1997; Lebedynski 2001.

véritablement germanique[16]. L'incorporation et la dotation de troupes germaniques n'a donc pas le même écho archéologique que la présence d'un groupe préalablement constitué, maintenu comme tel, et doté de ses propres armes, à l'instar des peuples bénéficiaires d'un *foedus* comme les groupes francs contemporains de Clodion à l'égard d'Aetius. Ils assurent alors pour une bonne part l'intégrité territoriale de la Belgique seconde, noyau du premier *Regnum*. Accentuant la lente fusion des cultures germanique et gallo-romaine initiée de longue date par l'immigration précoce, les vétérans germaniques, les *gentiles dediticii* éventuellement enrôlés, les lètes et les contingents incorporés, ils participent au développent des caractères proto-mérovingiens qui se développent durant le premier et le deuxième tiers du Ve siècle. Outre leurs propres communautés, ils encadrent désormais les populations des régions qu'ils protègent et administrent pleinement. Dans la Meuse belge comme française par exemple, les caractères des cimetières et leurs chronologies reflètent l'ancrage des nouveaux tenants du pouvoir et des sièges de son exercice au sommet de la hiérarchie sociale en Belgique seconde[17]. C'est de cette position qu'émerge la conscience d'une élite aristocratique guerrière, peut-être d'une noblesse franque à proprement parler[18]. Cette conscience sera caractéristique de la royauté mérovingienne, achevant de conjuguer les héritages culturel, administratif, judiciaire et militaire romain[19]. Jusqu'au VIIe siècle, leurs usages se dissémineront aux confins des royaumes et outre-Manche, au gré des contacts et des jeux d'influence cristallisant parallèlement certains usages régionaux en manifestation d'opposition au pouvoir franc[20].

6   Les premiers 'chefs' mérovingiens: le Ve siècle

Dans le deuxième tiers du Ve siècle, on observe l'association de la hache profilée avec l'angon et le bouclier ainsi que les baudriers, les fourreaux et les épées à bouterolle à masque humain, du type dit de Krefeld-Gellep, les plaques-boucles réniformes, le maintien du dépôt multiple de vaisselle en terre de tradition antique et de l'obole, le renouveau de la production verrière et le dépôt sélectif de vaisselle métallique, la disparition des offrandes alimentaires et l'accentuation des services à boire, ainsi que l'importance toujours croissante de la parure féminine et celle des accessoires vestimentaires, encore essentiellement de tradition gallo-romaine. Fabriqués dans les ateliers régionaux de Gaule septentrionale, les équipements militaires constituent les signes de reconnaissance de la nouvelle aristocratie guerrière. Leur distribution découle à la fois des mouvements des contingents mixtes de l'armée romaine au Nord de l'Empire, et sans doute aussi de la pratique du don par l'élite germanique. Elle reflète, nonobstant le vide des cartes archéologiques, l'avancée de Clodion jusqu'à la Somme entre environ 443 et 450, avant que Majorien ne le contraigne à s'établir plus au nord, dans le haut et le moyen Escaut. L'hérédité des charges curiales et la quête des immunités qui, au IVe siècle, avaient

notablement réduit le nombre des élites, avaient contribué à asseoir la puissance des familles sénatoriales, confrontées au pouvoir militaire franc croissant durant tout le Ve siècle. Jusqu'alors, des distinctions subsistaient au sein des populations dans l'exercice des fonctions curiales des municipalités et de l'autorité militaire, dans le régime des propriétés foncières et de l'administration fiscale par exemple. Rien ne contredit par ailleurs le partage éventuel des terres entre les Romains et les Francs ni n'atteste l'interdiction des mariages mixtes à l'instar des Burgondes, des Alains et des Goths[21]. Durant ce même siècle naîtra la cohabitation des hautes personnalités des royaumes mérovingiens, les évêques et les fonctionnaires royaux, en même temps que la confusion grandira entre l'administration civile et militaire. Parallèlement, le rôle des évêques dans les responsabilités civiles ira croissant. Dans le dernier tiers du Ve siècle, après la mort d'Aetius et la scission de l'office de *magister militum Galliarum* (461), la prise en mains des pouvoirs régionaux par les Francs s'est accompagnée de leur entrée dans les domaines publics. Ainsi, sous Clodion et Childéric coexistent les caractères des populations de souche gallo-romaine et les communautés armées d'origine franque placées sous l'autorité de dirigeants élus, communément qualifiés de 'chefs'[22]. L'hégémonie croissante de l'aristocratie franque sous Childéric puis Clovis s'accompagnera d'une codification de la législation qui, constituant le noyau du *Pactus Legis Salicae*, assimilera l'ensemble des populations libres placées sous leur autorité, qu'elles soient gallo-romaines ou franques. Ces *Franci*, portant les armes, les non libres, ainsi que les semi-libres comme naguère les *laeti* et les *dediticii*, plusieurs catégories d'officiers royaux notamment impliqués dans l'exercice de la justice, et des membres de l'entourage royal, illustrent une souveraineté désormais solidement établie et administrée. Si l'existence d'une classe guerrière hiérarchisée n'est pas douteuse – les récits contemporains témoignent de l'âpreté des relations entre ses membres à tous les échelons –, son statut demeure incertain. D'autre part, rien ne permet sur le plan archéologique de reconnaître les fonctionnaires, officiers ou proches de la famille royale, pourtant documentés dans diverses sources écrites à partir de cette période, jusqu'aux lois nationales édictées postérieurement[23].

7   Le reflet d'une classe guerrière

Comme l'a souligné Patrick Périn, l'inventaire archéologique du mobilier de la tombe d'enfant de la cathédrale de Cologne, découverte en 1959, valide – certes au plus haut rang – cette classe supérieure de guerriers, plus couramment dérivée des petites communautés segmentaires franques implantées au nord de la Seine au Ve siècle. Inhumé vers 540 dans l'*atrium* de la cathédrale, à côté d'une femme très richement dotée et dont l'identification avec la princesse lombarde Wisigarde est généralement admise, ce garçon appartenait de toute évidence à l'entourage du roi Théodebert (534-548). Alors qu'il portait un

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16 Böhme 1974; Périn 1983; Mertens 1987; Pilet 1994; Seillier 2006.

17 Citons parmi d'autres exemples belges: Samson, Haillot, Rochefort, Eprave, Han-sur-Lesse, Vieuxville.

18 Werner 1998, 125-142.

19 Morsel 2004, 15-49.

20 Böhme 1996; Carver 2001.

21 Durliat 2002.

22 Périn 1995.

23 Steuer 1989, 112; Périn 1998b, 177.

casque, un bouclier et un scramasaxe miniatures ou plus exactement réalisés à la taille du défunt, d'autres armes à taille d'adulte l'accompagnaient: «celles qu'il aurait été amené à porter du fait de son haut rang s'il avait vécu, en l'occurrence une épée longue, une hache de jet, une lance et un angon»[24]. L'abondance et la richesse du dépôt funéraire qui complétait cette panoplie hautement symbolique du rang de l'inhumé est notamment illustrée par le mobilier au sens littéral, un rarissime ensemble composé d'une chaise et d'un lit[25]. Cette découverte confirme donc l'existence, depuis le Ve siècle et à travers tout le VIe siècle, d'une classe supérieure reconnaissable à l'ampleur de leurs panoplies d'armes au sein des dépôts funéraires, mais dont les niveaux de richesse pouvaient considérablement varier. Elle confirme encore globalement l'hérédité du statut matérialisé par les dotations de sépultures d'enfants – ne fut-ce que brièvement de manière démonstrative lors des funérailles –, qui reflètent symboliquement la position sociale et les mérites de leurs parents tenus par filiation[26].

8 Les tombes de chefs mérovingiennes: une nouvelle aristocratie

Illustrant les liens entre les élites supérieures de la fin du Ve et du début du VIe siècle, les plus riches dotations intègrent des équipements caractéristiques de l'horizon Flonheim-Gültingen, dont la *spatha* d'apparat à poignée en tôle d'or de Childéric à Tournai et les associations bouclier-angon[27]. Parmi les autres productions méditerranéennes de tradition byzantine, le décor cloisonné et à inscrustation de grenats caractérise les contextes contemporains de Childéric et de Clovis[28] dont ils jalonnent le territoire jusqu'à la Somme[29]. Parallèlement, dès le troisième quart du Ve siècle, les contacts se multiplient entre les Germains occidentaux, orientaux et des groupes asiatiques. La présence des femmes d'auxiliaires alains et wisigoths, les relations entre les élites germaniques, et l'alliance de Childéric avec le roi ostrogoth Odoacre, contribuent conjointement à diffuser la mode danubienne dans nos régions[30]. Le développement des fibules ansées en est le plus représentatif. Portées par des gallo-franques, moins souvent par des allochtones, les parures féminines anglo-saxonnes et thuringiennes sont assez fréquentes entre le Pas-de-Calais et l'estuaire de l'Escaut, à l'inverse des mobiliers wisigothiques plus sporadiquement documentés de l'Escaut au Chiers et à l'Aisne[31].

9 Les critères et leurs combinaisons

Les combinaisons systématiques d'armes contrastent avec la grande diversité et la qualité très variable des dépôts dans lesquels elles figurent entre Seine et Rhin : certaines tombes de 'chefs' renferment des boucles de ceinture et de la vaisselle modeste, en tous points analogues aux multiples ensembles rassemblant couramment de une à trois armes offensives parmi lesquelles les épées longues, les lances et les haches, outre les petits scramasaxes. Celles-là s'en distinguent cependant par la présence d'accessoires vestimentaires de facture soignée, notamment en orfèvrerie cloisonnée, par l'association de vaisselles en verre, en bronze et en bois dont les sceaux décorés de masques estampés, occasionnellement associées à des instruments culinaires ou de service du vin. Elles possèdent cette fois des armes spécifiques, symboles manifestes d'un pouvoir: un angon, au moins une arme défensive – souvent un bouclier à *umbo* caréné en fer avec bouton terminal –, plus rarement une épée à poignée et à fourreau d'apparat, et exceptionnellement un casque et une cuirasse[32]. Le signe d'une élite cavalière est également illustré par la présence de pièces de harnachement de chevaux voire de la dépouille ou d'une tête de cheval, puis d'éperons[33]. Les appropriations par l'élite franque et l'héritage des domaines ruraux se matérialisent alors dans le reflet double des cimetières occupés de manière continue du IVe siècle à la période mérovingienne, et dans les aires funéraires dont le foyer est matérialisé par une tombe de chef ou par un couple de tombes fondatrices, premières sépultures des dirigeants de leur génération dans les communautés du dernier tiers du Ve siècle et de la première moitié du VIe siècle. Les générations s'y succèdent ensuite, souvent dans des emplacements réservés et diversement délimités, propices à l'accueil de fosses sépulcrales très volumineuses et à la construction d'infra- et de superstructures protectrices en bois comme des chambres funéraires, des édicules ou d'autres marqueurs monumentaux de surface. Les marqueurs de l'ascendance familiale des groupes aristocratiques identifient donc soit les couples ou groupes de fondateurs[34], soit les générations successives de dirigeants[35]. La position topographique de ces sépultures franques et des cimetières auxquels elles appartiennent procède simultanément d'une appropriation des paysages, symbolique de celle des territoires[36]. A partir du VIIe siècle, cette appropriation se marque plus fréquemment par l'implantation de quelques sépultures dans les parcelles allouées aux maisonnées des établissements ruraux[37].

10 L'interprétation des dépôts mobiliers

Tous ces critères peuvent prendre place dans un système de classification en catégories hiérarchiques, dont la validité est indépendante d'une interprétation strictement fonctionnelle[38]. La théorie qui a le plus mal vieilli dans le traitement de ces

24 Périn 2008, 40-41.

25 Doppenfeld & Pirling 1966; Hauser 1996.

26 Voir également: Granaert 2004.

27 Böhme 1994; Périn 1997.

28 Kazanski & Périn 1988; Arrhenius 1997; Quast 1997.

29 James 1979; Vallet 1986; Vallet 1997; Dierkens & Périn 2003.

30 Kazanski 1989; Pilet 1994; Périn 1998a.

31 Notamment: Böhme 1988; Martin 1992;

Bierbrauer 1997; Soulat 2008 ; ainsi que quelques exemples d'ensembles mobiliers caractéristiques à cet égard, avec bibliographie: Piton 1985; Hantute 1989; Brulet 1990; *Idem* 1991; Legoux 2006; Rogge 2007; Jorrand & Henton 2007, 285-286.

32 von Schnurbein 1974; Menghin 1983; Böhner 1987; *Idem* 1994; Périn 2006; Müller-Wille 2006.

33 Müller-Wille 1971; Oexle 1984; *Idem* 1992; Prummel 1993.

34 Parmi d'autres exemples caractéristiques de

nos régions: Beerlegem, Bloville, Engelmanshoven, Lavoye.

35 Parmi d'autres exemples caractéristiques de nos régions: Fréthun, Grez-Doiceau, Hamoir, Omal, Rosmeer, Torgny, Vieuxville.

36 Faider-Feytmans 1970; Lémant & Billoin 2007; Mignot 2006.

37 Parmi d'autres exemples caractéristiques, au sud des Pays-Bas: Dommelen, Escharen, Geldrop.

38 Christlein 1973; Böhme 1993, 397-398, n. 4.

critères est sans doute celle de Heiko Steuer qui, en 1968, avait attribué les combinaisons des types d'armes à des catégories sociales théoriques – nobles, libres, semi-libres et serviles –, extraites de textes postérieurs aux faits décrits, tels les lois des Bavarois et des Alamans[39]. Outre la critique de ces catégories, il est désormais évident que l'examen des seules occurrences d'armes ou de tout autre objet qui ne tienne pas compte de leur évolution dans le temps, y compris leur transmission et leur transformation, ni des usages qui leur sont liés, est peu probant. Joachim Werner, la même année, approchait le problème avec une critique plus affirmée: il nuançait l'interprétation de catégories sociales théoriques en fonction de la période[40]. Ainsi, si la francisque et l'angon sont des marqueurs importants au début de la période mérovingienne, le casque, l'épée puis plus tard l'éperon, auront une importance spécifique selon que l'on se situe au VIe ou au VIIe siècle. H. Steuer nuancera également dans ce sens[41]. Par ailleurs, un symbole matériel identifié dans une tombe de l'aristocratie franque du début du VIe siècle n'a pas le même sens qu'un marqueur semblable dans le courant du VIIe siècle, témoignant par exemple progressivement moins de sa nature guerrière que de la position sociale de son porteur[42]. Associé à une position économique ou à une fonction favorable, le pouvoir foncier ou politique qui l'accompagne, local ou régional, confère à son tour une responsabilité d'encadrement militaire. Ainsi, si on perçoit et si on s'explique aisément la permanence du rôle de l'épée longue dans une sépulture du début du Ve siècle au VIIIe siècle, on n'en décèle pas moins la variabilité importante du sens de cette présence.

L'approche qualitative fut initiée par R. Christlein[43]. Son étude, qui porte sur des contextes alamaniques du VIe et du VIIe siècles, a permis de distribuer les tombes dans des groupes qualitatifs relatifs. La démarche consiste à quantifier l'occurence d'un grand nombre de critères liés à la composition et à la richesse intrinsèque du mobilier. Il s'agissait d'apprécier la portée de la présence des objets caractéristiques évoqués plus haut à côté de pièces de mobilier plus courantes. Selon les occurences et sur une base statistique suffisante, la place des armes offensives et défensives a été confirmée. L'importance de la combinaison des mobiliers militaires était donc certes affinée, mais elle fut aussi complétée par l'appréciation de la présence des dépôts de bassins en bronze, de récipients en verre, de pièces d'harnachement ou tout autre équipement équestre, et de parures en métaux précieux. Les catégories créées vont des tombes pauvres (A) aux tombes très riches d'une élite supérieure (C). Joachim Werner ayant démontré le caractère exceptionnel de contextes du type de la tombe de l'enfant de Cologne[44], R. Christlein créa l'ultime catégorie des sépultures dites princières ou royales (D)[45]. De manière générale, il est facile d'identifier les individus plus pauvres de même qu'il est commode d'isoler ces tombes richissimes. Par contre, le groupe de qualité B de Christlein concerne des individus dont les

tombes assez répandues recèlent des objets de qualité moyenne, dont une épée, et le groupe C concerne les tombes dites de chefs. La distinction entre ces deux dernières catégories n'est pas toujours aisée. Elles concernent pourtant l'écrasante majorité des sources disponibles[46].

Ce système a cependant facilité l'attribution des inventaires mobiliers à des catégories qualitatives strictement archéologiques, fournissant une base de lecture sociale théorique des communautés. La lecture par H. Steuer des catégories sociales déduites des sources funéraires se décline en termes de rangs entre les familles, selon leur position par rapport aux centres économiques et de décision, et dans les familles[47]. Ainsi, la proximité d'un pôle d'organisation sociale tel le siège d'un fisc ou une cité, et les adjuvants environnementaux, favorisent l'émergence de communautés rurales de rang croissant. Si les dotations funéraires des *familiae* gagnent en qualité et en diversité avec la proximité des pôles décisionnels et institutionnels, au premier rang desquels les sites royaux, les écarts de richesse observés entre les groupes familiaux de ces communautés sont aussi proportionnellement plus grands. Une plus grande complexité et une plus grande diversité sociales caractérisent donc les communautés plus favorisées. Steuer traduit ces écarts en rangs familiaux, dont les mobiliers funéraires stéréotypés déjà classés par R. Christlein autorisent une lecture matérielle qualitative. Le rang A correspond aux sépultures les plus pauvres. Le rang B possède des mobiliers composites comportant notamment une vaisselle en terre cuite et en verre, de l'orfèvrerie en bronze et en argent, et des panoplies d'armes composées de trois à quatre armes dont une épée longue. Si chaque *familia* de ces premiers rangs est conduite par un chef libre – ce dont rendent compte les topographies funéraires de la majorité des cimetières mérovingiens –, le groupe C est celui des sépultures plus communément dites de chefs, caractérisé par de la vaisselle métallique, de l'orfèvrerie en or, des pièces d'harnachement, un éperon et un angon selon les périodes. Avec cette modélisation, on sent d'emblée la nuance à apporter au concept de sépulture dite de chef, qui ne se rapporte subjectivement dans le vocabulaire généralement admis qu'à une catégorie particulière d'aristocrate. Les hiérarchies théoriques s'appliquent donc en deux temps : à l'échelle monographique, entre elles à l'échelle territoriale. Le groupe D répond au rang princier ou royal différencié par sa qualité et sa diversité exceptionnelle[48]. Dans un tel modèle, le passage d'une *familia* à l'autre s'accompagne d'un glissement de rang social, ce qui renforce la valeur démonstrative des dotations funéraires. Véritable discours symbolique, dotation et apprêt du costume ne reflètent que très partiellement la possession en biens propres et certainement aucun statut juridique. A cet égard, le déroulement des funérailles y compris les repas funéraires qui les accompagnent, participent de la caractérisation sociale des individus et de leurs familles. En outre, l'organisation topographique de l'aire

39 Steuer 1968.

40 Werner 1968.

41 Steuer 1987.

42 Stein 1967; Martin 1989; Martin 1993; Vallet 1997; Theuws & Alkemade 2000.

43 Christlein 1973.

44 Werner 1964.

45 Christlein 1978.

46 De Longueville 2007.

47 Steuer 1989.

48 Steuer 1982.

funéraire et le choix du lieu d'inhumation, de plus en plus fréquemment associé à l'habitat dans le courant du VIIᵉ siècle, sont des critères qui participent aussi à la définition des sépultures dites privilégiées. La portée des caractères de ces tombes démarquées à travers toute la période mérovingienne, y compris les sépultures chrétiennes parfois abondamment dotées, a été étudiée en détail par H.-W. Böhme[49].

11 L'évolution des dotations et de leur signification sociale au VIᵉ siècle

Dans la deuxième moitié du VIᵉ siècle, l'uniformité gagne les contextes mobiliers. Arguant de leur dispersion, en corrélation avec la distribution de ses domaines, les tombes les plus richement dotées sont attribuées à une aristocratie foncière dont la fortune et le rôle économique est devenu déterminant au sein des *regna*. Leurs dirigeants participent du maintien des spécialités militaires indispensables à l'encadrement d'une réserve armée non professionnelle[50], par sa double capacité financière d'acquisition d'armes personnelles et de levée de troupes[51]. La description de ces armes dans les sources contemporaines par Grégoire de Tours ne trouve qu'un reflet matériel incomplet dans les sources archéologiques, qui reflètent à la fois la possession de ces armes en biens propres et les sélections délibérées dont elles sont l'objet[52]. Le dépôt sélectif d'armes par les survivants reflète alors de moins en moins exclusivement le statut guerrier: progressivement, la constitution des ceinturons et les associations d'armes en panoplies incomplètes se fait au détriment de toute réalité tactique, mais au profit de la portée symbolique de leur port[53]. Sa signifiance sociale n'est également validée que dans cette mesure. Plusieurs types d'épées d'apparat à anneau et à pommeau ou barrette de fourreau porteur d'inscription runique sont caractéristiques de cette tendance. Il est d'ailleurs révélateur que trois quarts d'entre-elles sont plus précisément datées du second tiers du VIᵉ siècle contre une minorité de quelques exemplaires antérieurs datés du Ve siècle au premier tiers du VIᵉ siècle, et postérieurs, datés du dernier tiers du VIᵉ siècle et du premier tiers du VIIe siècle. On admet aujourd'hui que les pièces constituantes de ces armes et de leurs fourreaux font l'objet de dons spécifiques, d'adaptation, et sont en partie transmises symboliquement de génération en génération selon le choix des descendants, tout en reflétant la tradition diffuse de leur production sous le coup des échanges d'idées ou d'artisans[54]. Ceci dissuade également d'envisager l'épée comme un objet uniquement fonctionnel et immuable. Leurs porteurs, disséminés à travers les royaumes, font démonstration de valeurs partagées dans de larges réseaux d'affinité idéologique ou politique. Individuellement, on y verra des

signes de loyauté par la reconnaissance de liens entre pairs (alliance) ou entre dirigeants et obligés (fidélité)[55].

12 L'évolution des dotations et de leur signification sociale au VIIᵉ siècle

Plusieurs étapes stylistiques modifient radicalement le port de l'habit et les techniques d'orfèvrerie, révélateurs de cette élite du dernier quart du VIᵉ siècle au premier quart du VIIᵉ siècle. L'évolution de la mode révèle une esthétique nouvelle, codifiée, fruit d'une évolution sociale porteuse de nouvelles valeurs. Un des témoins de cette évolution est le passage définitif du style géométrique cloisonné, moulé, puis damasquiné, au style animalier également damasquiné qui orne tout particulièrement les décors d'équipements de ceinture et d'armes[56]. Dans le courant des VIIᵉ siècle et VIIIᵉ siècle, le dépôt de plus en plus sélectif puis la disparition de l'inhumation habillée en Neustrie puis en Austrasie, limite progressivement l'apport des sources archéologiques. Parallèlement, certains types d'armes signalés par les textes ne sont plus déposés dans les tombes – tel l'angon –, ou ne le sont désormais plus que très épisodiquement – hache, lance, bouclier à *umbo* en calotte –, on constate cependant que quelques tombes se distinguent encore de la majorité qui ne comprend généralement qu'un scramasaxe lourd. Elles comportent alors une épée longue, dont le pommeau, la garniture de fourreau et le baudrier sont en fer damasquiné, un scramasaxe, et parfois une lance[57]. Cet armement offensif est fréquemment complété par le port d'un éperon, reflet d'une aristocratie cavalière qui supplante les ensembles d'harnachement et les sépultures de chevaux dont le rite de sacrifice de haute valeur était encore consenti par les générations précédentes[58]. Malgré la différence avec la période antérieure où l'épée dépourvue de décor de poignée pouvait être une arme commune et non nécessairement un attribut du cavalier, l'épée longue demeure une marque indissociable du pouvoir et sans doute du statut social. Elle le restera en tous cas par la suite. C'est par exemple cette arme seule que les rois mérovingiens emportent dans la tombe, comme celle de Childéric II († 674) découverte en 1656 à Saint-Germain des Prés[59]. Les sépultures de porteurs d'épée longue et d'éperon sont fréquemment associées à de très riches tombes féminines, dans des concessions funéraires de plus en plus radicalement démarquées en vertu d'un phénomène identifié depuis longtemps[60]. Cette situation illustre la conscience de classe et la compétition politique qui anime les grandes familles aristocratiques[61]. Certains signes de démarcation funéraire dans les cimetières et dans les habitats illustrent assez bien les choix qui se posent effectivement dans les communautés. La topographie, la forme monumentale, le privilège de l'inhumation en terre consacrée les distinguent

49 Böhme 1993

50 Bachrach 1972; Anderson 1995.

51 Ce sont ces Francs «libres non libres» de Geary 1989, 137-138.

52 Weidemann 1982, t. 2, 252-268; Steuer 1989, 114-115.

53 Härke 1992; *Idem* 1993; Theuws & Alkemade 2000.

54 Cela a particulièrement été mis en évidence dans les contextes de Saint-Dizier: Fischer *et al.* 2008a.

55 Genrich 1971; Steuer 1987; Bachrach 1993; Fischer *et al.* 2008b.

56 Nielsen 1997.

57 Périn 2006.

58 Schlemmer 2004.

59 Périn 2008.

60 James 1989.

61 Halsall 1992; Le Jan 1995; Werner 1998, 125-142.

désormais couramment. La rareté croissante de telles tombes tardives dans les cimetières mérovingiens de la moitié nord de la Gaule donne effectivement à penser, même si les exemples archéologiques sont encore peu fréquents, que nombre d'entre elles avait déjà trouvé place dans les oratoires ruraux privés et communautaires dont on sait que beaucoup furent édifiés à l'initiative de l'aristocratie franque. Alors que la christianisation renouvelle les modes de monumentalisation des sépultures privilégiées, la consécration des tombes des aïeuls isolés du cimetière de plein champ ou des fondateurs de la communauté par la construction de sanctuaires chrétiens par leurs successeurs, constitue une des formes les plus abouties de ce glissement idéologique. Les marques stéréotypées de prestige servent les élites christianisées comme celles qui ne le sont pas, avec des buts opposés d'affiliation ou au contraire de démarcation dans les royaumes périphériques en proie à l'expansion franque. A la périphérie orientale et septentrionale du *Regnum Francorum*, chez les Saxons, les Alamans et les Bavarois notamment, de tels marqueurs se combinent ainsi jusque dans le second tiers du VIIIe siècle[62]. Les tombes armées y comportent toujours des épées à pommeau triangulaire en bronze ou en fer éventuellement damasquiné, de longs scramasaxes, des lances effilées à ailerons ou à crochets latéraux, et de plus rares haches à tranchant symétrique développé et bouclier à *umbos* coniques. Leurs combinaisons répétitives contraste avec la raréfaction des armements individuels qui étaient encore caractéristiques au VIe siècle. Ils témoignent simultanément de nouvelles pratiques tactiques, davantage collectives et structurées, et des nouvelles structures sociales qui guident ces pratiques militaires mêmes. La récurrence du vocabulaire matériel mobilisé, l'évolution des syntaxes symboliques, et la variabilité du sens directement invoqué, manifestent diversement le rang social à différentes périodes. Cette manifestation qu'il faut interpréter enfin, fugace ou pérenne selon l'interaction des critères liés à la dotation ensevelie et à la topographie, s'ancre dans la réalité matérielle évolutive des fonctions exercées, des pouvoirs conférés, des usages partagés et des privilèges qui distinguent les individus. Le cap de cette interprétation ne peut cependant être franchi qu'en de rares occasions, au risque de succomber à la subjectivité.

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62 Stein 1967; Siegmund 1998; *Idem* 1999.

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Social theory and post-medieval archaeology: a historical perspective

Paul Courtney

1 Introduction

The British-based, Society for Post-medieval Archaeology was founded in 1966. However, the subject was scarcely taught in European universities before the 1990s; though Prof Dr. Frans Verhaeghe, formerly of the VUB (Flemish Free University of Brussels), has long been a source of encouragement across the Continent. Now, an increasing number of archaeology departments, especially in the United Kingdom, have added post-medieval/historical archaeology to their curriculum in recent years. Those outside the UK include U.C. Dublin, Cork, Lund, Seville, Venice, Paris, Pisa and Bamberg, while various maritime archaeology programs also cover the period. Matthew Johnson and Marilyn Palmer were appointed to personal chairs, respectively in historical archaeology at Durham in 1998 and in industrial archaeology at Leicester in 2000. Other important milestones include the founding of the Italian journal *Archeologia Postmedievale* in 1997 and the creation of the Irish Post-medieval Archaeology Group in 1999[1].

This paper hopes to illustrate the breadth of theoretical debate in both post-medieval archaeology and the cognate disciplines of history, geography and the social sciences. It is beyond the scope of this paper to tackle the increasing impact of American historical archaeology, notably in Britain, Ireland and Sweden; though American scholars cannot be entirely ignored as their work is so entwined with European scholarship. This account is also inevitably biased towards Britain where the subject is most developed, especially from a theoretical standpoint. However, it aims to mitigate this emphasis by taking a broader view of European intellectual trends. Firstly, several influential academic traditions (such as folk studies and culture history) will be identified and traced historically, though much cross-fertilisation is evident. In particular, I hope to show that there has been a long and rich tradition of social theory interacting with European landscape and material-culture studies. Secondly, I will review some areas of current theoretical debate within post-medieval archaeology, hopefully demonstrating the wide range of interdisciplinary interaction.

2 Some key intellectual traditions

2.1 Folk studies

The late 19th century saw the creation of close ties between the Romantics and the emerging nationalist movements of Europe. As industrialiaation transformed traditional ways of rural life, members of the Romantic movement looked back to a golden medieval age as epitomized by William Morris's interest in craft production. Romanticism had a major impact on the emerging movements for the preservation of the architectural heritage, initially perceived as pre-eminently Gothic. The most obvious physical expression of the growing interest in folk culture was the open-air museum movement and its academic counterpart, folk studies or ethnology. The first such museum to open was Artur Hazelius's 1891 creation at Skansen, near Stockholm. Hazelius also founded the *Nordiska Museet (Nordic Museum)*, an ethnographic collection whose name reflected the pan-Scandinavian politics of the time[2]. In 1913 the Institute of Ethnology opened at Lund University. These three institutions served as models for the many subsequent folk-life museums and ethnological research institutions founded across Europe[3].

Folk studies only slowly emerged in France, and continues to be especially poorly developed in England, reflecting the centralizing needs of these empire-building states. The public-school educated English middle classes often shared with Celtic and Scandinavian folklorists a distrust of industrialization, but

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[1] Represa 1996; Milanese 1997; Ericsson 1995, 1999; O'Sullivan 1999; Donnelly & Horning 2002.

[2] Hellspong & Klein 1994; Østergård 2002.

[3] Peate 1948; Stocklund 1983; Rentzhog 2007.

instead chose to locate their cultural roots in the classical world. Folk studies faired better in the Celtic fringes with luminaries such as Iorwerth Peate in Wales and Emyr Estyn Evans in Ulster[4]. The leading early figure in French folklore studies was Arnold van Gennep[5] noted for his theoretical work on rights of passage and his monumental, but unfinished, *Manuel du folklore français contemporain;* though he never held a university post in his native country[6].

The study of folk culture has played an important part in establishing national consciousness especially in the countries on the Celtic and Scandinavian fringe of Europe, and in those states newly created by the collapse of the Austro-Hungarian Empire in WWI[7]. The nationalist aspect of folk studies and ethnology came to an extreme conclusion in Nazi Germany, whose ideology drew on such academic concepts as the *Volk* and Fredrick Ratzel's *Lebensraum* (living space). The latter concept was discredited with the end of the war but, despite the damning critique of Heinz Maus[8], it was not until the 1960s that West German scholars, in general, began to critically question the notion of the *Volk*[9]. Academic *Volkskunde* has therefore now largely rebranded itself as 'European ethnology'[10]. Its current orientation is largely towards sociological studies of the present or recent past though a few scholars have specialised in the material and folk culture of the early-modern period. Major studies of relevance to archaeology have included volumes on Hanseatic food and table culture and inventory-based studies of household goods[11].

Post-war folk studies in Sweden, for example, the atlas of Swedish folk culture[12] were heavily influenced by the German-derived distributional school of geography, especially the diffusionist ideas of Torsten Hägerstrand[13] of Lund University. By contrast, Norwegian research was more dominated by the functionalist approach to objects, concentrating on the study of form, construction and practical use[14]. English language studies showing influences from both schools are Geraint Jenkins' study of the English farm wagon[15] and Peter Smith's monograph on Welsh vernacular architecture[16]. The 1960s and 1970s saw academic folk studies, especially in Germany and Scandinavia, adopt a more explicitly theoretical approach. In the field of material culture studies, for example, there has been a growing emphasis on the symbolic and cognitive aspects of objects. Current scholarship also tends to stress that society and culture are composed of various interacting constituencies rather than being a monolithic construction[17].

On the Continent, folklore studies (ethnography) has been an important source of context for archaeological studies, for instance, in studying Mediterranean transhumance settlement, the organisation of French ceramic industries and in studying Estonian cemeteries[18]. Important American influences on material-culture theory include the work of Henry Glassie and James Deetz[19]; aspects of whose work utilised the structuralism of French anthropologist, Claude Lévi Strauss[20]. New trends in European material-culture studies include the life history of objects and phenomenological approaches which emphasise the way humans (including researchers) experience physical and imagined worlds[21]. Theorists of materiality emphasise the way society interacts with (and is shaped by) the material world of things[22]. A major centre of both contemporary and historical research in the UK is the material culture group within the anthropology department of University College, London, whose staff edits the Journal of Material Culture. Its intellectual roots lie in the Cambridge schools of archaeology and social anthropology, and are heavily influenced by post-processualism, phenomenology and materiality[23].

2.2   Culture history and the sociology of consumption

Under the influences of Romanticism and nationalism, 18th- and 19th-century German scholars developed the notion that each ethnic group had its own unique *Weltanschauung* ('worldview'). The idea that the geography and evolution of cultures could be determined by mapping cultural attributes, including material artefacts, became central to Germanic archaeology and ethnography[24]. The Swiss historian, Jacob Burckhardt's 1860: *Die Kultur der Renaissance in Italien (The Civilisation of the Renaissance in Italy)* quickly established itself as a seminal work in the development of European art and culture history. Burckhardt's method was to study 'cultural horizons' or cross-sections of history at selected times. In order to explain the 'spirit of the age' (*Geitesgeschicte*) of the Renaissance, Burckhardt stressed the wealth, civic freedom and growth of individualism in the northern Italy's city states. He saw the 15th century Italian Renaissance as marking a revolutionary end to the medieval period and the birth of modernity. A more intuitive and contextual approach to culture history is represented by Johan Huizinga's influential book*, Herfsttij der Middeleeuwen* (*The Autumn of the Middle Ages*)[25]. The Dutch historian vividly described the mentality, art and elaborate ritual of the Burgundian court and its surrounds in the 15th century, a

4 Stevens 1986; Ó Giollain 2000.

5 van Gennep 1909; *Idem* 1938-58.

6 Belmont 1974.

7 Ó Giollain 2000; Dow & Bockhorn 2004.

8 Maus 1946.

9 Smith 1991, 219-33; Dow & Lixfield 1986, 12-14.

10 Köstlin *et al.* 2002; Fenske & Bendix 2007.

11 Wiegelmann & Mohrmann 1996; Mohrmann 1990; *Idem* 2001.

12 Erixon 1961; Campbell & Nyman 1976.

13 Hägerstrand 1967.

14 Klein 1986; Rogan 1996.

15 Jenkins 1961.

16 Smith 1975.

17 Stoklund 1983; Bringéus *et al* 1988; Löfgren 1997.

18 Vaysettes 1987; Valk 2001; Christie *et al.* 2004; Massimo 2004.

19 Glassie 1969; *Idem* 1975; Deetz 1977.

20 Lévi Strauss 1958.

21 Appadurai 1986; Rogan 1992; *Idem* 1996; Kõresaar 1998; Mentges *et al.* 2000.

22 Miller 2005.

23 Tilley *et al.* 2006; Buchli 2007.

24 Hartshorne 1939, 48-83; Gingrich 2005; Trigger 2006, 232-341.

25 Huizinga 1919.

chivalric society he rather subjectively (even perversely to modern eyes) saw as decadent and in decline[26].

The relationship between culture and society was a recurring theme in German sociology under the influences of its dual father figures, Max Weber and Karl Marx. Weber's thesis linking the supposed 'work ethic' and self-discipline of Protestantism and the rise of capitalism was to prove the basis of a long-lasting and fiercely contested historical debate[27]. Georg Simmel emphasized the role of fashion, and especially the 'trickle-down' theory of social emulation in creating a modern consumer society[28]. He argued that subordinate groups copy the fashions of elites who are then forced to adopt new styles in order to differentiate themselves. Thorstein Veblen, a Norwegian-American economist, invented the term 'conspicuous consumption' to describe how American *nouveau riche* utilised their wealth in order to create and maintain social status[29]. This theory influenced the German economic historian Walter Sombart, who argued in *Luxury and Capitalism* that the root of the capitalist ethic was to be found in the extravagant, competitive consumption of late-medieval and early-modern European courts[30]. It is clear, though, that multiple economic, social and cultural factors shaped people's acquisition, use and disposal of goods in the early-modern period, and patterns of consumption are too complex to be reduced to any single theory.

The German sociologist Norbert Elias spent much of his academic career abroad[31]. His early research on etiquette books led him to suggest that the social instability of the later Middle Ages and the increasing centralised nature of the state, led to the promotion of civility or 'civilized' behaviour as a means of distinguishing new and insecure elites[32]. Elias also emphasised shame as an important mechanism in regulating social behaviour, prefiguring recent historical work on emotion[33]. His socio-psychological approach has influenced a number of modern sociologists and historians including Chandra Mukerji, Stephen Mennel, Roger Chartier and Robert Muchembled[34]. Elias's concept of an evolutionary civilizing process has been criticised by anthropologist, Hans Peter Duerr who argued that all human societies are equally complex, just different[35]. The ensuing debate has produced a large literature on the key issues of the nature of progress, modernity, emotions and how we view the past from the present[36].

Recent work on civility has been less generalising than Elias, placing its origins in the urban and courtly cultures of Renaissance and its adoption by other European elites[37]. Anne Bryson and Marku Peltonnen have stressed its use by as a means of social competition within heterogeneous and unstable courtly elites[38]. Peter Burke, Robert Muchembled and Norbert Schindler have examined the reformation of manners in early-modern Europe, that is the elite's suppression of popular culture and the imposition of civility or polite behaviour upon the lower orders on the grounds of decency[39]. Both Michel Foucault and the German historian Gerhard Oestreich have linked elitist ideologies of discipline with the rise of the early-modern absolutist state[40]. Oestreich also emphasised the intellectual popularity of 'neo-Stoic' philosophy and, like Weber, the rise of professional armies as a sources of discipline[41].

Burke's work has been used as the theoretical base for the interpretation of material culture change in the rural farms and small towns of Halland, Sweden by archaeologist, Christina Rosén[42]. She cites resistance to outside reform as a key factor in the distinctiveness of rural material culture. In 1978-9, the archaeology service of the Val d'Oise department excavated an earthenware bowl, animal bones and broken eggshells, which had been buried during the 1684-5 reconstruction of the *lavabo* (washbasin) in the cloister of Maubuisson Abbey. They used Van Gennep's work on folklore to suggest it was a folk religious practice involving the burying of the remains of an Easter feast, and also noted the significance of cloistral fountains in church rites including Easter baptism[43]. Victoria Newell has noted the use of remains from similar feasts in Poland as magical charms against evil[44], while a further theoretical context for the burial is suggested by anthropologist Mary Douglas's ideas on purity and pollution[45].

The elevation of elite culture into the distinct category of 'high art' (dating back to the 16th-century Italian scholar, Giorgio Vasari) continues to be problematic for archaeologists and social historians. The binary concept of popular culture has clearly been of considerable analytical value in theorising the fragmented sources of sub-elite culture, though clearly a simplification. However, by the 1980s, historians were stressing more complex, nuanced and fluid cultural patterning affected by such factors as locality and region, religion, age and gender as well as "class"[46]. Renaissance studies also began to widen out as scholars started to examine the rise of national cultures and the complex reciprocal links between different parts of Europe. They have also used a wide range of theoretical concepts including communications and consumption theory[47]. An

26 Bulhof 1975; Arnade 1996; Peters & Simons 1999.

27 Green 1973; Lehmann & Roth 1993.

28 Simmel 1904.

29 Veblen 1899.

30 Sombart 1913.

31 Elias 1939; *Idem* 1969.

32 Niestroj 1989; Van Krieken 1998; Dunning & Mennel 2003.

33 Tarlow 2000b; Lecuppre-Desjardin & Van Bruane 2005.

34 Mukerji 1993; Mennel 1985; Chartier 1995; *Idem* 2002; Muchembled 1988.

35 Duerr 1988-2002.

36 Mennel & Goudsblom 1997; Van Krieken 1989; *Idem* 2005.

37 Muchembled 2002.

38 Bryson 1998; Peltonnen 2004.

39 Burke 1978; Muchembled 1977; *Idem* 1988; Schindler 1992.

40 Foucault 1975; Oestreich 1969.

41 Van Krieken 1990.

42 Rosén 2004.

43 Toupet *et al.* 1980, 95-103.

44 Newell 1967, 22-3.

45 Douglas 1966.

46 Chartier 1985; Schribner 1987; Watt 1991.

47 Burke 1987; Goldthwaite 1993; Jardine 1996a.

important recent trend, influenced by American school of 'new historicist' literary scholars, has been towards studying art as 'texts' within specific social and political contexts; especially the use of art in legitimising the power of oligarchic elites[48]. New historicism is heavily influenced by both Foucault and Geertz. Its post-modernist emphasis on discourse analysis has also influenced the recent work of archaeologist Matthew Johnson, notably his study of the architecture of Kenilworth Castle[49].

In the decorative arts the impact of rising middle class as mass consumers of luxury and other goods has become a major focus. Both scholars associated with the Victoria and Albert Museum in London (and its innovative taught MA course), as well as economic historians, have been examining trade networks, innovation, marketing and consumer markets[50]. Inspired by the work of Peter Thornton[51] interior design of the homes of European elite and bourgeoisis has also been a major thread in recent research[52].

2.3 Economic and local history (Britain and beyond)

The period 1880-1920 saw economic history appear as a distinct sub-discipline of history as scholars across Europe tried to break free of the institutional dominance of constitutional history. In Britain an early concern with the social condition of the working class was reflected in the historical work and activism of Richard Tawney[53] and such non-university as the Webbs and Hammonds[54]. A major concern of post-1945 economic historians has been the study of economic growth, especially the origins and socio-economic impact of the Industrial Revolution[55]. The subject was to find especially fertile ground in the 1960s as the university system expanded rapidly in the UK and many specialist economic history departments were founded; though, since the 1980s many such departments have been absorbed within general history schools. In the 1950s and 1960s, close connections grew up between a number of medieval economic historians in Britain, notably Rodney Hilton and Maurice Beresford, and the archaeologists who pioneered medieval and post-medieval archaeology[56]. The first synthesis of British post-medieval archaeology was written by David Crossley[57], an economic historian by training, whose special interest has been early-modern technology and industry.

In the 1980s revised figures calculated for economic growth in 18th-century Britain suggested a slower level of growth than previously supposed and thus a more evolutionary model of economic and industrial transformation[58]. In response, Maxine Berg and Pat Hudson argued that the national statistics used underestimated growth[59]. They reappraised the period 1700-1830 as a series of multiple transformations which affected specific regions and industries at differing time, but which cumulatively revolutionised the economic and social fabric of British society as a whole[60]. On the Continent research on industrialisation has been particularly strong in Belgium and France which were the next countries to experience industrialisation[61]. Modern economic history studies not only the production and distribution of goods but emphasises retailing and household consumption[62]. Recent work has also tried to place industrialization both within the context of specific regions and simultaneously the wider framework of European economic modernization[63]. The Netherlands, for example, transformed from a 'feudal' to a modern economy without ever experiencing an Industrial Revolution[64].

A controversial area of historical research has been on the interaction between western European marriage patterns, household structure and proto-industrialisation[65]. The increasing role of women and children in the work-place has been seen as crucial to industrial growth by Jan de Vries and Maxine Berg[66]. However, research on specific industries has indicated that women could also be marginalised in the work place by technical innovation[67]. Archaeological analysis of household organisation, production and consumption could add a new perspective to these complex debates. André van Holk, for example, has noted that finds assemblages on Dutch polder ship-wrecks indicate a change from hired to family labour in the 17th century[68].

Archaeologists have begun to follow historians, literary scholars and economists in utilising colonial, post-colonial and development-theory to understanding the relationship between the industrial world and the colonial Third World[69]. Colonial and post-colonial theory has been increasingly applied to the European periphery especially by American scholars working on native and planter settlements in Ireland[70]. However, Audrey Horning has warned that the oversimplistic application of a binary paradigm has masked complexity and ambiguity in the relationship between coloniser and colonized[71]. The increasing number of Irish post-medieval archaeologists is also beginning to widen the debate[72]. Uneven economic development is also often associated with colonial and post-colonial situations but is also found more widely, even within developed regions[73].

48 Greenblatt 1991; Jardine 1996b; Gallagher & Greenblatt 2000.

49 Johnson 2002.

50 Mitchell 1997; Berg & Clifford 1999; Young 1999; Snodin & Styles 2001; Berg 2005.

51 Thornton 1978; Idem 1984.

52 Brown 2004; Ajmar-Wollheim & Dennis 2006.

53 Tawney 1926.

54 Feske 1996; Weaver 1997.

55 Harte 1971; Cannadine 1984.

56 Courtney 2006.

57 Crossley 1990.

58 Crafts 1985; Wrigley 1989.

59 Berg & Hudson 1992.

60 See also Berg 1994.

61 Crozet 1996; Van der Wee 1996.

62 Berg 2005; Blondé et al. 2005; Blondé et al. 2006.

63 Pollard 1981; Duplessis 1997.

64 De Vries & Van der Woude 1995.

65 Mendels 1972; Medick 1976; Houston & Snell 1984.

66 de Vries 1993; Idem 1994; Maxine Berg 1993.

67 Van Nederveen Meerkerk 2007.

68 van Holk 1996; Idem 1997.

69 Funari et al. 1999a; Given 2004; Gosden 2004; Lucas 2004; Hicks 2007.

70 Delle 1999; Klingelhofer 1999; Idem 2003; Orser 2004.

71 Horning 2007.

72 Myles 2006; Donnelly et al. 2008.

73 Smith 1984; Harvey 1996; Courtney 2009b.

The founding of the Department of English Local History at Leicester in 1948 led to the spread of this sub-discipline devoted to local and regional analysis of economic, social and cultural history[74]. One of the department's leading figures was W.G. Hoskins whose 1955 book, *The Making of the English Landscape* had a profound affect on the growth of landscape history as a distinct discipline[75]. Major outside influences included the historical geography of H. C. Darby and Marc Bloch's *Les Caràcteres Originaux de L'Histoire Rurale Français*, which expounded the relationship between different French landscape zones and distinct social structures[76]. Notable contributions to landscape studies by scholars associated with Leicester included the work of Joan Thirsk, Harold Fox and Alan Everitt[77]. Their work, for example, contrasts champion regions of open-fields and large villages against woodland-pasture regions with their weaker social controls and tendency to non-conformist religion and proto-industrialization. Another vein of 'Leicester school' research is represented by Charles Phythian-Adams application of structural-functional anthropological theory to urban ritual[78].

Environmental determinism has generally been replaced by a more subtle appreciation of the complex and dynamic inter-relationship which exists between the physical environment and human exploitation[79]. Cultural geographers, archaeologists, literary scholars and others have increasingly seen the landscape as reflecting changing ideology, and many recent studies have stressed the way landscapes are perceived by those inhabiting them[80]. Recent landscape studies have tended to stress the active shaping of the landscape by diverse social groups, at times though through mutual alliance and compromise as well as by competition and conflict. Local and regional variation in socio-political and economic organisation also continue to be seen as key factors in understanding the impact of modernisation[81].

2.4   Annales, Marxism and Post-modernism

The *Annales* school of French history was named after the journal founded in the 1920s by Marc Bloch and Lucien Febvre. This loose alliance of economic, social and cultural historians was influenced by contemporary ideas in French sociology and regional geography[82]. Classic works of regional analysis included Fernand Braudel's study of the 16th-century Mediterranean, Pierre Goubert's analysis of the Beauvais region *c.*1600-1730 and Emmanuel Le Roy Ladurie's study of the peasantry of the Languedoc from the 14th century onwards[83]. In the former work, Braudel divided historical time into three scales: *la longue durée* (regional structures of landscape and climate), *conjoncture* (economic and demographic cycles) and *évenément* (historical events): a method which has been much discussed but rarely imitated. Braudel's *Capitalism and Civilization* trilogy was notable for combining the history of every-day life with national and global economic structures[84]. Since the 1970s, French social history has become more fragmented and there has been a rejection of some aspects of the *Annales* interpretation including Braudel's tendency towards environmental determinism and Le Roy Ladurie's emphasis on neo-Malthusian controls on population. There has also been a shift in interest from economic to cultural history, including the study of mentalities and emotions, collective memory and the micro-politics of the family and institutions[85].

The rise of fascism from the 1930s saw many western European historians attracted to communism. Marxist historians in studying modes of production have traditionally relied on the economic substructure as the prime explanation of the political and ideological superstructure. A classic example was Emilio Sereni's study of Italian agriculture from antiquity onwards[86]. The post-war British Marxist tradition in history (Christopher Hill, Eric Hobsbawm, Rodney Hilton and E. P. Thompson) was marked by its rejection of economic determinism, a critique influenced by the writings of the Italian Communist, Antonio Gramsci[87]. The much cited and complex 'Brenner debate' was fought in the pages of the radical journal *Past and Present* from 1975 onwards. Robert Brenner saw the accumulation of land by the gentry in the late medieval English countryside as key to the transition from the feudal to capitalist modes of production in Europe[88]. The debate has been recently revisited in relation to the advanced agrarian development of the Low Countries[89]. Recent research has tended to argue for far greater involvement by medieval peasantry in a market economy than Brenner suggested, and also seen them as important actors in promoting agrarian change rather than the passive victims of the original thesis[90].

Traditional Marxism holds that the ruling class hangs on to power through its control of the means of production. Antonio Gramsci argued that *hegemony*, the ruling classes' control of political and ideological structures, was also an important means of control, but he also stressed the natural existence of working-class resistance. Some modern Marxists, influenced by the structural-Marxism of French philosophers, Louis Althusser and Etienne Balibar, have emphasised the hidden structures of capitalism, for example, the use of *ideological incorporation* by the elite to hoodwink the masses into accepting capitalist ideology[91]. E. P. Thompson attacked the *dominant ideology* thesis[92] for its Stalinist rejection of the proletarian self-conciousness

74 Phythian-Adams 1987.

75 Matless 1993; Johnson 2006; Wylie 2006.

76 Darby 1936; *Idem* 1940; Bloch 1931.

77 Thirsk 1957; *Idem* 1967; Fox 1989; Everitt 1985.

78 Phythian-Adams 1972; *Idem* 1983.

79 Newman 1999.

80 Barrel 1980; Cosgrove & Daniels 1988; Bender 1993; Schama 1996; Cosgrove 1998.

81 Nevell & Walker 1998; Williamson 2000; Mientjes *et al.* 2002; Deligne 2003; Tys 2006.

82 Friedman 1996; Burke 1990.

83 Braudel 1949; Goubert 1960; Le Roy Ladurie 1966.

84 Braudel 1967.

85 Vovelle 1985; Chartier 1988; Corbin 1994; Chavaud 1999.

86 Sereni 1967.

87 Hoare & Smith 1970; Kaye 1984.

88 Aston & Philpin 1985.

89 Hoppenbrouwers & Van Zandern 2001.

90 Thoen 2001; Dyer 2005; Tys 2006.

91 Benton 1984.

92 Thompson 1978a.

which was so central to his own masterpiece, *The Making of the English Working Class*[93]. Abercrombie argued that it is economic reality not ideology which keeps the working class politically 'passive'[94]. The *dominant ideology* thesis has been influential in the 'Annapolis school' of American historical archaeology. A much debated example is Mark Leone's paper on the formal garden created by the wealthy lawyer and politician, William Paca in 18th-century Annapolis, Maryland[95]. British and American critics of Leone's analysis have tended to reject the notion that such gardens were designed to speak to the poor[96].

In the 1980s, a number of German social and labour historians developed the study of *Alltagsgeschichte* (history of everyday life) to present a 'bottom up' view of history as an alternative to the prevailing interest in large-scale structures. This school emphasises the way that ordinary people experience and negotiate the complexities and contradictions of every-day life[97]. The concept of *habitus* was developed by the Marxist anthropologist, Pierre Bourdieu. It describes the practices by which individuals use culture (language, gestures, clothes, furnishings) to structure and make familiar their environment through everyday acts of repetition[98]. The most controversial aspect of Bourdieu's concept is his argument that individual action or free will is constrained through the pre-programmed choices presented by the *habitus*. This concept has been utilised, for example, by Jörn Staecker in a study of Reformation graveslabs in Denmark[99]. In contrast to Bourdieu, Michel De Certeau emphasised the active choices continually made by individuals in mundane everyday actions such as buying groceries[100]. Another important aspect of Bourdieu's work is on *distinction*, the idea that social groups define themselves through taste, a web of aesthethic choices reflecting aversion to other social groups[101]. Bourdieu also wrote on the limitations of the Marxist concept of capital. In his revisionist scheme one can envisage a merchant weighing up his potential profit (*economic capital*) against the goodwill (*symbolic capital*) he might gain by selling at a lower price. This can be compared with Jean Baudrillard's more elaborate, four-fold schema of commodities having functional, economic, symbolic and sign exchange (relative within a system of objects) values[102].

By the 1960s the 'new' history had arrived, heavily influenced by anthropology, the earlier *Annales* historians and, increasingly, French post-structuralist intellectuals such as Michel Foucault, Roland Barthes and Jacques Derrida. Another influence was the Frankfurt school of critical theorists (especially Jürgen Habermas) with its radical emphasis on contemporary political engagement. One outcome was a renewed interest in cultural history after a long period of neglect in Europe[103]. Both Keith Thomas's analysis of the decline of magical beliefs and Alan MacFarlane's study based on the 17th-century diary of Essex clergyman, Ralph Josselin, were early classics of anthropologically-orientated history[104].

Cultural historians on both sides of the Atlantic have been influenced by the work of American anthropologist Clifford Geertz, especially his 'thick description' of a Balinese cockfight, which he argued had multiple layers of meaning for the participants[105]. Anthropological critics of Geertz have attacked his claims to observer objectivity and his concept of culture as being overly monolithic and failing to allow for multiple competing discourses and ideologies[106]. Regardless, his work has influenced many historians to analyse the symbolism involved in events such as riots and carnivals. Examples by American historians include Robert Darnton's study of the symbolic massacre of cats during an 18th-century Parisian riot, Natalie Davis' analysis of violence in 16th-century France, and David Sabean's portrayal of conflict in the southern German village of Neckarhausen[107].

The post-modernist fragmentation of the discipline has seen the emergence of gendered, post-colonial and world histories. Another new form, micro-history focuses on single events or individuals in order to shed light on wider historical problems. Notable studies include Le Roy Ladurie on the 14th-century Cathar village of Montaillou[108] and Carlo Ginzburg on the cosmos of a heretical 16th-century Italian miller[109]. The micro-history approach has been accused of being over reliant on inquisitorial records and not being critical enough of the biased (male) authority figures behind their production[110]. Rather different is Alain Corbin's attempt to recreate the world of Louis-Francois Pinagot, a barely-documented clog-maker in 19th-century France (chosen at random) by studying his wider context[111].

Post-processual or contextual archaeology is influenced by post-modernist, neo-Marxist, feminist and other radical agendas and emphasises the analysis of ideological and symbolic structures within specific historical contexts[112]. It tends to stress the relativist and politicised nature of knowledge and the necessity of analysing the context of 'texts' (language or material culture). Jürgen Habermas's argued that the 18th century saw the origin of the 'public sphere', the social space in which free and democratic expression can operate, since corrupted by the manipulative power of mass advertising[113]. Post-structuralist

93 *Idem* 1963.

94 Abercrombie *et al.* 1980.

95 Leone 1984.

96 Hodder 1986, 61-70; Beaudry *et al.* 1991, 156-159; Williamson 1999.

97 Braun 1979; Lüdtke 1989; Eley 1989; Mohrmann 1990.

98 Bourdieu 1980.

99 Staecker 2003.

100 De Certeau 1980.

101 Bourdieu 1979.

102 Baudrillard 1978.

103 Jenkins 1991; Thompson 1978b; Gentilicore 2005.

104 Thomas 1967; MacFarlane 1970.

105 Geertz 1973.

106 Crapanzano 1986; Scholte 1986; Kuper 1999, 75-121.

107 Darnton 1984; Davis 1975; Sabean 1988.

108 Le Roy Ladurie 1976, critiqued by Boyle 1981.

109 Ginzburg 1976.

110 Clifford 1975; Rosaldo 1986; Biddick 1994.

111 Corbin 1998.

112 Shanks & Tilley 1987; Preucel 1991; Hodder & Hudson 2003.

113 Habermas 1962.

approaches such as *deconstruction* (Derrida) and *discourse analysis* (Foucault) are utilized to unravel the power relationships incorporated into language, material culture and knowledge systems. An influential example was Michel Foucault's use of Jeremy Bentham's 'panopticon', a design for an idealised prison intended to facilitate surveillance, as a metaphor for the modern disciplinary state[114].

Another important influence on post-processualism has been the sociological debate on *agency* and *structure*, i.e. the dynamics of the relationship between individual agency or decision making and the creation and operation of broader social structures[115]. Anthony Giddens's influential concept of *structuration* offers a dynamic view of how agency and social structure continually interact[116]. In his scheme social structures depend on *signification* (shared understanding), *domination* and *legitimisation*. The interests of post-processual archaeologists have included symbolic archaeology, the social organization of space, mentalities and the espousal of alternate archaeologies such as feminism and post-colonialism[117].

3 Some current areas of research and debate

3.1 Social identity

Individuals posses multiple, layered identities based on their interaction with a variety of wider groups based on ethnicity, communality, gender, age, social standing, geography, religion etc. These multiple identities are entwined and constantly renegotiated through time. They may be contradictory and variously expressed, or suppressed, within different social contexts. The relationship between material culture and social identity has been a recent growth area in archaeology. Ethnicity has been relatively low on the agenda of post-medieval archaeologists in Europe when compared to the USA. However, partly prompted by the increasingly multi-cultural nature of contemporary Europe, useful studies are beginning to emerge. Nevertheless, distinguishing ethnic groups, especially the less privileged, by their material culture alone is often extremely difficult[118].

Dutch and Walloon strangers accounted for over a third of the Norwich population in 1600 but being excluded from the property market are difficult to trace in documents. Dutch ceramics were imported in large quantities into eastern English ports and used by all sectors of society. Only a few excavated Norwich households have so far been identified as belonging to immigrant tenants. Identification has been based on unusually

high quantities of imported ceramics and the presence of non-local ceramic forms, as well as Dutch clay-pipes and other artefacts[119]. Nigel Jeffries' work on Spitalfields has suggested that London's Hueguenot community were using similar ceramics to the indigenous population[120]. Eighteenth century London's sizeable black population, a by-product of Britain's involvement in the slave trade has also remained archaeologically invisible to date[121].

Perhaps the best archaeological evidence for a distinct ethnic group comes from the excavations of 17th- and 18th-century tenements in the Waterlooplein, within the Sephardic Jewish quarter of Amsterdam. These have revealed pork-free bone assemblages, kosher lead-seals (some still attached to chicken legs), Sabbath oil lamps, brass wedding-medals and two Dutch-made delftware plates with Hebrew inscriptions[122]. In London the small Jewish community was interspersed with other Londoners making archaeological identification difficult, though some Jewish properties can be identified through documents[123]. A London-made delftware plate of the 1720s, with Hebrew inscription, has been excavated from a brick-lined, cess-pit believed to belong to a middle-class Jewish household in Mitre Street, London[124]. Kosher lead-seals have been found, as in Amsterdam, but none from contexts which can be described as specifically Jewish[125]. Despite ample evidence for immigrant potters and glass makers arriving in England in the 16th and 17th centuries to escape religious persecution, different aesthetic tastes seem to have limited the adoption of some common Continental designs[126]. An example is the *roemer* glass which was ubiquitous in the Rhineland and Low Countries but seems to have been rejected by English consumers[127].

The series of essays published as *The Invention of Tradition*[128] examined how rapid change during industrialisation or colonialism encouraged the invention or recreation of folk traditions, such as Highland tartans and Druidism, to serve contemporary political purposes[129]. It encouraged archaeologists to examine the use of material-culture to reinforce regional and national identities in the industrial period. Harold Mytum has used tombstones to study Welsh identity in bilingual 19th-century Pembrokeshire[130], while Alisdair Brooks has used printed designs on Staffordshire ceramics to study both 'Celtic' and 'British' identities[131]. Adrian Green has used both housing and prints in interdisciplinary studies of both housing and prints to address regional identity in N. E. England[132].

Death and its associated material culture has been a fertile ground amongst those interested in shedding light on power

114 Foucault 1975.

115 Dobres & Robb 2000.

116 Giddens 1979; *Idem* 1984.

117 Johnson 1996; Tarlow 1999; Tarlow & West 1999; Lawrence 2003; Hicks & Beaudry 2006.

118 Barth 1969; Wallerström 1997; Jones 1997.

119 Atkin *et al.* 1985, 96, 196-201 and 260; Margeson 1993, 8-9 & 236-237.

120 Jeffries 2001.

121 Fryer 1984; Gerzina 1999.

122 Baart 1983; Thijssen 1985; Ijzereef 1987.

123 Nenk 2003.

124 Pearce 1998.

125 Egan 1994, 124.

126 Courtney 2004a, 188.

127 Willmott 2002, 29-30.

128 Hobsbawn & Ranger 1983.

129 Trevor Roper 1983; Morgan 1983.

130 Mytum 1999; *Idem* 2002.

131 Brooks 1997; *Idem* 1999.

132 Green 2003; *Idem* 2004.

and gender relationships, regional social-structures and patterns of consumption, as well as the history of mentalities, aesthetics and emotion[133]. Inspiration has come both from Deetz and Dethlefsen's pioneering American work on New England tomb markers and from social-history, for example, Clare Gittings work on early-modern English funerary rites[134]. A wide variety of approaches to the ideology and material culture of the European reformation have also been explored in a recent conference monograph, *The Archaeology of Reformation*[135]. The archaeology of the body as the physical location of the senses, thought and identity, as well as being a cultural artefact and symbol, is also an emerging interdisciplinary field[136].

3.2   Power, status and space

In the early-modern period, new ceramic types appeared in the north aimed at specifically at the luxury market, though with time they often become more socially widespread. In Dutch towns, for example, Chinese porcelain is regarded as a good indicator of high status from *c.*1600-1680, but after this date it was imported in massive quantities and its use became increasingly widespread among urban wage-earners[137]. By contrast, the archaeological recognition of differences within the vast body of 'middling' status is at present a highly uncertain process. Partly this reflects the problem that it is often very difficult to relate archaeological deposits with specific, let alone documented, households. However, Swedish attempts to quantify proportions of decorated to undecorated pottery as an indicator of status have given poor results suggesting multiple factors influenced consumer choice of such goods[138].

Ceramics are often under-represented in probate inventories and it is often difficult to match the terminology of the documents with archaeological types. Nevertheless, research on probate inventories by social historians is shedding new light on the regional, class and chronological patterns of material culture and the consumption of goods from both economic and cultural perspectives[139]. Inventory studies of particular interest to archaeologists, include work on glass and ceramics in Antwerp[140], a study of ceramic useage in the Dutch small towns of Doesburg and Lichtenvoorde[141] and a study of a Dutch miller's household[142].

European historians have been increasingly studying the comparative history of the family and household and their role in social control and consumption[143]. John Allan's work on arte-fact consumption by households in the port towns of S.W. England shows the potential contribution of archaeology in revealing both local and regional difference in food culture[144]. Jim Symonds, Jane Webster and Chris Dalglish have studied the impact of capitalism in transforming the social organisation, material culture and everyday lives of farmers in the highlands and islands of Scotland[145]. Symonds has also compared the evolving culture and identity of expatriate Highlanders in Nova Scotia[146].

Matthew Johnson has updated the classic Marxist model of seeing the key transition to modern capitalism as lying in the agrarian changes of the 15th and 16th centuries[147]. Paul Courtney and Frans Verhaeghe have argued for a more evolutionary perspectives rooted in the commercialization of the high Middle Ages, whilst accepting the revolutionary nature of change in the 18th and 19th centuries[148]. Tom Williamson has analyzed the new fashion in 18th-century England for less hierarchical architecture and the replacement of geometric formal gardens by new informal, pseudo-natural landscapes[149]. He situated this change within Peter Langford's conception of the emergence of a 'polite' society marked by the increased social interaction of aristocracy and gentry[150]. Pamela Graves has used the spectacle of civic processions to look at the oligarchical manipulation of social space in 17th-century Newcastle[151].

A current growth area, with some nascent archaeological input, is the changing provision and organization of public buildings from town halls to hospitals created by urban or regional governments[152]. Archaeologists have yet to seriously tackle the relationship of material culture and the emerging nation state. The American sociologist Chandra Mukerji has led the way with her study of the links between the design of Louis XIV's garden at Versailles and the territorial demarcation of France by Marshal Vauban's fortresses[153]. The concept of social space examines the way individuals and social groups constantly recreate, react to and perceive their spatial environment through everyday actions[154]. A number of British archaeologists are currently studying social space in urban and rural landscapes, houses and gardens[155]. Matthew Johnson has published on the spatial organisation of rural housing in East Anglia, especially their implications for understanding social and cultural change[156]. Kate Giles has analysed the changing construction of social space within the guild halls of York to critically examine social and ideological aspects of the medieval/post-medieval transition.[157] Comparable work on social space, especially

133 Parker Pearson 1982; Buckham 1999; Tarlow 1999; *Idem* 2000a; *Idem* 2000b; Finch 2000; Mytum 2003.

134 Deetz & Dethlefsen 1967; Gittings 1984.

135 Gilchrist & Gaimster 2003.

136 Hamilakis *et al.* 2002.

137 Baart *et al.* 1986, 92-111; Bartels 1999, 419.

138 Hållans & Andersson 1992; Rosén 1995.

139 Van der Woude & Schuurman 1980; Weatherill 1988; Brewer & Porter 1993; Miller 1995.

140 Blondé 2000.

141 Dibbits & Noordzij 2000.

142 Ter Molen 1986.

143 Schuurman & Spierenburg 1996b; Sarti 1999.

144 Allan 1984; *Idem* 2003.

145 Symonds 1999; *Idem* 2000; Webster 1999; Dalglish 2003.

146 Symonds 2003.

147 Johnson 1993; *Idem* 1996.

148 Courtney 1997a; Verhaeghe 1997.

149 Williamson 1995; *Idem* 1999.

150 Langford 1989.

151 Graves 2003.

152 Tittler 1991; Markus 1993; Lucas 1999; Giles 2000.

153 Mukerji 1997.

154 Lefebvre 1974; Hillier & Hanson 1984; Soja 1989; Craig & Thrift 2000.

155 Locock 1994; Leech 1999; West 1999; Courtney 1996 ; *Idem* 2001.

156 Johnson 1993; *Idem* 1997.

157 Giles 2000.

the changing relationships between public and private spheres, is also being carried out on the Continent by scholars from numerous disciplines[158].

3.3   Consumption and Industrialization

Initially archaeologists were largely concerned to date and provenance their wares and examine problems of technology. In the last two decades much excellent work has appeared linking archaeology and documentary research and increasingly studying production, distribution, consumption and discard as part of a single chain or life history[159]. Examples of taphonomic analysis (breakage and depositional analysis) of medieval and/or post-medieval finds include Françoise Pipponier's study of the finds from the deserted medieval village of Dracy in France and Stuart Wrathmell's analysis of the finds from the ditch of Penhow Castle in Wales; while Stephen Moorhouse has brought together material from a wide range of British sites[160]. Much of the literature on post-medieval material culture and consumption has been generated by the needs of urban archaeology to interpret the enormous quantities of excavated finds recovered from urban excavations. Recurring topics include supply networks and the problems of interpreting social status of both households and districts[161]. Other areas of discussion have included the interplay of such factors as cuisine, trade, technology and fashion in influencing changing forms and styles[162].

Food history is an area cutting across several academic disciplines but often having a material culture element[163]. Stephen Mennell's conclusions that the post-medieval divergence of English and French cuisine reflect a complex social and political history rather than differences between Catholic hedonism and Protestant puritanism is a warning against superficial interpretations of cultural differences[164]. Notable for their interdisciplinary approaches are Kistemaker and Van Vilsteren's edited volume on beer in Holland, Cora Laan's study of drinking in 18th-century Dutch inns and research by Sarah Pennell, Peter Brears, Fred Kaspar on the material culture of kitchens[165].

Industrial archaeology has been a major sub-discipline not only in Britain but also in other European regions which experienced industrialisation, notably in France, Germany, Belgium, Ireland, Italy and Spain[166]. Originally, it was mostly an amateur-led discipline, with an emphasis on technical analysis and field recording. The last few decades have seen a growth in industrial and eco-museums across Europe and in the preservation and recording of landscapes threatened by regeneration. This has given the subject a much stronger professional base especially in the heritage industry, field archaeology and increasingly in universities. Industrial archaeologists are also examining the material culture, landscapes and social culture of industrialisation[167]. Whether industrial archaeology should remain a thematic discipline, expand into the archaeology of the industrial period or be subsumed into a holistic 'historical' archaeology studying the period from *c.*1500 to the present is a major current debate in Britain[168].

Pioneering works looking at the creation of industrial landscapes, rather than merely industrial units, include a 1975 Belgian exhibition catalogue, *Le paysage de l'industrie*[169], Devilliers and Huet's architectural analysis of the new industrial town of Le Creusot in Burgundy[170] and various studies of industrial housing in England and Wales[171]. Notable recent works stressing the social analysis of whole industrialized landscapes include British studies of Ironbridge Gorge[172] and Swansea[173]. David Gwyn has argued for a linkage between slate worker's villages and blocks of small freehold tenements in north-west Wales, as large landowners discouraged village creation[174]. Barrie Trinder has applied a classificatory approach to understand why only particular market towns industrialized[175]. Keith Matthews' and Eleanor Conlin Casella's excavations, respectively in urban Chester and rural Alderley Edge, have critically examined the use of material culture by the Victorian working class[176]. Gavin Lucas has analysed the social meaning of transfer-prints using an excavated group of mid-19th-century ceramics from a Buckinghamshire farmhouse, especially the short-lived popularity of scenes from the novels of Sir Walter Scott[177].

Permeability maps (access diagrams) have been utilized by Gary Campion to study the layouts of textile workshops and housing in Nottinghamshire, especially to shed light on power relationships in the industry[178]. Max Weber's concept of *social closure* has been adapted by Mike Nevell and John Walker to analyse the relationship between landownership, class and industrialisation in surveys of archaeological remains in Tameside, Lancashire[179]. This thesis suggests that new classes emerge through competition for economic resources then close

158 Baetens & Blondé 1991; Leménorel 1997; Thomasson 1997; Kistemaker 2000.

159 Appadurai 1986.

160 Pipponier 1975; Wrathmell 1987; Moorhouse 1984.

161 Allan 1984; Baart 1990; Thijssen 1993; Bartels 1999; Brown 1999; Ravoire 2002.

162 Blake 1980; Alexandre-Bidon 1985; Goldthwaite 1989; Fayre-Boucharlat 1990; Verhaeghe 1991; *Idem* 1999; Gaimster & Nenk 1997; Courtney 1997b; *Idem* 2004; Gaimster 1998, 115-155; Cumberpatch 2003.

163 Moulin 1989; Anne Wilson 1991; Schärer & Fenton 1998; Scholliers 2001; Carroll *et al.* 2005.

164 Mennell 1985.

165 Kistemaker & Van Vilsteren 1994; Laan 2003; Pennell 1998; *Idem* 1999; Brears 2000; Kaspar 1996.

166 Trinder 1993; Bergeron & Dorel-Ferre 1996; Represa 1996; Scholliers 2003; *Idem* 2006; Donnelly & Horning 2002.

167 Palmer & Neaverson 1998; *Idem* 2005; Newman *et al.* 2001; Barker & Cranstone 2004; Casella & Symonds 2005.

168 Palmer 1990; *Idem* 2005; Walker *et al.* 2003; Cranstone 2004; Casella & Symonds 2005.

169 Wieser-Benedetti 1975.

170 Devilliers & Huet 1981.

171 Chapman 1971; Lowe 1977; Leech 1981.

172 Alfrey & Clark 1993.

173 Hughes 2000.

174 Gwyn 2002.

175 Trinder 2002.

176 Matthews 1999; *Idem* 2003; Casella 2005.

177 Lucas 2003.

178 Campion 1994.

179 Nevell & Walker 1998; *Idem* 1999.

off access to new members. Erik Nijhof and Peter Scholliers have elaborated on the German–derived concept of 'industrial culture' to study both the physical and social impact of industrialisation in the Low Countries[180]. Commercial archaeology projects are also being integrated into wider social landscape projects in the Ironbridge area and Sheffield[181]. Neil Ewins, David Barker and Yolanda Courtney have respectively studied aspects of the Staffordshire ceramic and Birmingham hardware industries integrating documents and objects[182]. Their interdisciplinary work has highlighted the complex relationships that existed between manufacturers, salesmen and customers.

4   Conclusion

The expansion of the European Union and the 1992 Valetta agreement on the protection of European archaeology is already beginning to see an expansion in European post-medieval archaeology in the heritage and commercial archaeology sectors. Yet, the problems of publishing, synthesising and disseminating data from rescue excavations and recording remain severe especially in the poorer countries. A further worry is the scarcity of academic departments teaching post-medieval archaeology and encouraging research and synthesis. International conferences, informal contacts and the internet will thus continue to be vital in spreading ideas. However, not only linguistic barriers but important methodological and philosophical differences divide European archaeology[183]. Anglo-Americans also have to be sensitive to the fact that their linguistic dominance of academic publishing and the internet may lead them being seen as cultural imperialists rather than as missionary pioneers. Yet it is important that ideas flow freely and that diversity in approach reflects informed and free choice rather than nationalistic proscription.

Acknowledgments

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180 Nijhof & Scholliers 1996; Nijhof 2004.

181 Belford 2004; Symonds 2006.

182 Ewins 1997; Barker 2004; Courtney 2000; *Idem* 2004b.

183 Courtney 2009a.

184 *Ibid.*

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