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SHEATHS AND SCABBARDS FROM MEDIEVAL BERGEN

– IN A COMPARATIVE PERSPECTIVE

Ole-Magne Nøttveit

FAGBOKFORLAGET

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Sheaths and Scabbards from Medieval Bergen – In a Comparative Perspective

Ole-Magne Nøttveit

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All drawings and photos are by the author, unless otherwise noted.
Thank you to Jennifer Jones who has proofread my English (www.wordsbyjennifer.no)

Foreword

This volume of the Bryggen Papers contains an in depth analysis of a hitherto rather neglected category of artefacts among the comprehensive archaeological finds uncovered in Bergen, most of them from the extensive Bryggen excavations, 1955–68. Here, the damp soils in the medieval harbour area were ideal for preservation of organic material, not only remains of buildings, quays and passages and other major features, but also a rich selection of artefacts that reflect daily life in the medieval town. The finds group presented in this volume – sheaths and scabbards, mostly of leather – constitutes only a small percentage of the leather finds from medieval Bergen, as footwear often dominates finds of this material in medieval contexts. Still, the sheaths and scabbards display a decorative and qualitative variety that has not been ignored in the Middle Ages, and represents a potential for research today.

Throughout history, sheaths and scabbards have been as common and obligatory – or perhaps as rare and restricted – as the knives, daggers and swords which they contained. Yet they have received far less attention in archaeological research. However, the medieval sheaths and scabbards from Bergen, 341 in all, constitute one of the larger accumulations of this category in northern Europe, and the present work is the first scholarly analysis of this assemblage. The author also compares the sheaths and scabbards from Bergen with similar finds from other urban sites in Norway, England and German areas in order to gain insight into specific aspects of medieval life and society, as well as cultural contacts and social identities.

The present publication is written as a doctoral thesis in archaeology, submitted at the University of Bergen in 2009, and only minor alterations have been added for publication in this eight volume of the Main Series. The publication has been financed by grants from the Department of Archaeology, History, Cultural Studies and Religion at the University of Bergen, Skolebestyrer B.E. Bendixen's legate, the Norwegian Armed Forces Museum in Oslo and the Norwegian Knife Association.

Bergen, February 2010
Ingvild Øye
Chief Editor

Acknowledgements

This work is the result of a three year scholarship from the Faculty of Humanities at the University of Bergen. From October 2004 to March 2008, this scholarship financed my employment as a junior research fellow at the Department of Archaeology, which was incorporated into the larger Department of Archaeology, History, Culture Studies and Religion in August 2007. A part-time engagement at the Bergen Maritime Museum from June 2008 provided me the necessary spare-time for completing this work by the end of the year.

Several people have contributed to this work, first and foremost my supervisor Professor Ingvild Øye, who has supported and contributed to my project from the first scholarship application to the present result. I am most grateful for her many hours of reading and commenting on my drafts, and her efficiency and professionalism that never cease to impress me. Thank you!

Our other colleagues have provided a pleasant working environment for which I am also grateful, especially my fellow junior researchers who have also read and commented on parts of my work: Janicke Zehetner, Irene Baug, Sigrid Samset Mygland, Per Ditlef Fredriksen, Henriette Hafsaas, Asbjørn Engevik, Melanie Wrigglesworth and Ørjan Engedal.

The same goes for the people working at the Museum of Bryggen, where I have had my daily workplace. A special thank you goes to the people working in or associated with the magazines: Associate Professor Gitte Hansen and the two 'Bryggen site emeriti' Arne J. Larsen and Egill Reimers.

In June 2005, Headmaster René Larsen and Lecturer Dorte Vestergaard Poulsen at Kunstakademiets Konservatorskole in Copenhagen put aside their daily work for two days in order to teach me grain-pattern analysis, or how to identify leather species through microscope. Thank you!

A grant from the Meltzer Foundation enabled me to visit London to study the sheaths and scabbards at three different collections, each of which impressed me in their own way. I am indebted to Archive Manager Roy Stephenson, and Cath Maloney, Adam Corsini, Liz Goodman and Dan Nesbitt at LAARC (London Archaeological Archive and Research Centre), Curator John Clark at the Museum of London, and Curators James Robinson and Maureen Mellor at the British Museum.

The same grant gave me the opportunity to examine the material from Oslo. At NIKU, I am grateful to archaeologist Lise-Marie Bye Johansen and her crew for allowing me to study the sheaths and scabbards in the final run of their cataloguing the material from Senketunnellen. I would also like to thank Silje Opsahl and Curator Vegard Vike for showing me the sheaths at Oldsaksamlingen.

Thanks are also due to Janne Harjula, who finished his licentiate thesis *Sheaths, Scabbards and Grip Coverings* on the material from Turku, Finland about the time I received my scholarship for studying the Bergen material. I found it a bit distressing that someone had just done what I was planning to do, but on the positive side this forced me to think along new trajectories. He kindly sent me his thesis, both the submitted version (2004) and published version (2005), a work that has inspired me these recent years.

I am also grateful to Gerd Bolstad, who began to study the Bergen sheaths and scabbards when working as a research assistant at the Bryggen Project during the 1980s. She kindly gave me access to her notes, enabling me to substantiate my application for the scholarship.

The latter two count among the relatively small group of 'medieval-sheaths-and-scabbards-archaeologists' which I should now probably consider myself a part of. More than originally intended, I have made extensive use of publications treating this material in northern Europe. Regarding any misinterpretations of the material that I have only studied through publications, the responsibility is of course mine, a precaution that naturally goes for all help I have received from various persons who have contributed to this project.

Finally, my largest gratitude goes to my wife Ingunn and our three sons Sigurd, Jarand and Brede. This thesis has been part of our family life as long as the boys have been around or have been able to remember. Thank you for giving me the time this needed.

To receive a scholarship from the University of Bergen to do this study first felt like a blessing, but towards the end more like a curse. The whole time though, it has been my privilege.

The thesis was defended for the Ph.D. degree on October 16 2009 at the University of Bergen. Associate Professors Mats Roslund and Eva Svensson from the Swedish universities of Lund and Karlstad respectively, were my opponents at the defence. Leader of the committee was Professor Erik Østby from the University of Bergen. I want to thank the committee for their thorough work, and the opponents especially for an interesting and challenging discussion. Only minor alterations have been added to the present edition.

Generous support from the following three institutions made this publication possible: the Department of Archaeology, History, Culture Studies and Religion at the University of Bergen, Skolebestyrer B.E. Bendixen's legate, The Norwegian Armed Forces Museum in Oslo and the Norwegian Knife Association, for wich I am most grateful.

Bergen, November 2009
Ole-Magne Nøttveit

1 Introduction

Artefacts and the study of these constitute a central element within archaeology, including medieval archaeology. Still, academic interest in artefacts seems to have declined in recent years, despite the opportunities these provide for gaining insight into important aspects of medieval life and society. At the same time, there is argument for renewed focus on artefacts and the importance of the material culture in archaeological studies. It is a challenge to study how people use material culture as part of social interaction and how material culture is embedded with meaning, without neglecting the practical use of the artefacts. Here I will analyse a category of artefacts that has been somewhat neglected among the mass materials found in the large town excavations during the second half of the twentieth century. This category encompasses the sheaths and scabbards excavated in the urban context of the medieval town of Bergen in western Norway. This material will be compared with similar finds from other urban societies.

Throughout history, sheaths and scabbards have been as common and obligatory as the knives, daggers and swords which they contained. However, they have received far less attention in archaeological research. In Bergen, the number of sheaths and scabbards from the extensive Bryggen excavations (1955–68) and other sites within the medieval town far outnumber the finds of swords, daggers and knives. This rich assemblage of 341 artefacts, hereafter referred to as the Bergen *corpus* (of sheaths and scabbards), contains finds that vary from fragments to unusually well preserved artefacts. Few are aware that it is among the largest accumulations of sheaths and scabbards in northern Europe, as the material has only been referred to sporadically (e.g. Herteig 1960: 184; Bolstad 1991: 133, 138–139; Harjula 2005: 14–15; Mould et al. 2003: 3388; Cameron 2007: 9). The present work is the first scholarly analysis of this corpus. The aim is to analyse this material and gain new insights into specific aspects of medieval life and society, the production, use and trading of sheaths and scabbards, and their chronological and spatial distribution in medieval Bergen. The time-span for this material is from *c.* 1120 to 1700. However, the majority of finds stems from a period lasting approximately 300 years, from the last quarter of the twelfth century to the third quarter of the fifteenth century.

Sheaths and scabbards are not just physical holsters. Seen as extended artefacts (Robb 2004: 134) they presuppose swords, knives and belts, and a number of practises encompassing wear, use and storage. Sheaths and scabbards also have several social habitats; sheaths as holsters for all-round implements and eating equipment, and scabbards for swords of primarily violent character for war and battle. Thus, both sheaths and scabbards have been included in social life and ritual practices. As specialised instruments designed to inflict death and injury, weapons evoke response from humans (cf. Robb 2004; Gosden 2005), probably more far-reaching and in more ways than intended by the persons who made the artefacts. In a town with far-reaching medieval trading contacts and a population with large fractions of foreigners (Helle 1982: 164–167, 304–329, 472–486), it is also interesting to consider whether sheaths and scabbards could also have been markers of regional identities. Sheaths and scabbards should therefore potentially be able to shed light on different issues regarding social interaction, in addition to empirical measurable aspects of the artefacts. In order to assess these problems, a comparative analysis of the sheaths and scabbards of medieval Oslo and London has been carried out. Published material from most of northern Europe is also included to obtain a wider comparative basis.

The aim to probe deeper into the material culture of medieval society in order to broaden the knowledge and understanding of it based on a selected group of artefacts implies several theoretical considerations. Can material culture, in this case sheaths and scabbards, be used as a source for topics such as social identity, the relationship between groups in society, power, status, gender, etc. or even the complex issue concerning relations between humans and artefacts? Such questions have recently inspired fresh fo-

cus on the nature and properties of materiality itself. A concrete material could be a good basis for further elaboration of such perspectives. However, my methodological point of departure is traditional within archaeology: classification will be used for grouping, mapping and comparing the material, both spatially and chronologically on a local and regional level.

On the empirical level, basic research is necessary to assess questions with regard to chronology, distribution, technical features, etc. The results might shed light on the use of these objects in medieval Bergen, supplementing our knowledge of medieval man and society both locally and regionally over larger areas through comparisons with other sites and towns.

As a result, my research strategy will be multi-facetted and will include objectives of theoretical, methodological and empirical nature. My overall aim is to broaden knowledge of medieval society and individuals through an artefact-based study of material culture.

1.1 Aims and objectives

The objectives include theoretical, methodological and empirical aspects. These three levels of investigation are interrelated. One main challenge will be to elevate the artefact study above the narrow empirical and descriptive level in order to approach the material from a wider perspective. The goal is to obtain new knowledge of the material itself, and hopefully also its contextual meaning in order to shed light on the society surrounding it. First, some central perspectives in my study should be outlined. Daggers, swords and to some extent knives have been imbedded in symbolic connotations related to honour and prestige and other subtle symbolic expressions referring to social identity, power and violence, gender, age and cultural belonging (Hoffmeyer 1954: 11; Idsøe 2004: 103; Nøttveit 2006b). Medieval weaponry is among the rarer finds in the urban archaeological record. However, this kind of material communication may also have been intrinsic to their containers, or sheaths and scabbards, an aspect which has so far not been examined. The Norwegian term *knivstell*, or knife-gear (a set of knife and sheath), denotes that knife and sheath are part of the same unit. The knife and sheath must therefore be understood in relation to each other, a perspective that should also be taken into account when studying this type of material. Thus, in this study I want to consider the sheaths and scabbards as possible statements in a material discourse between individuals, groups and society, as well as functional and practical implements and containers. Shape, decoration and the material they were made of, what artefacts they enveloped, and how and by whom they were carried are all aspects of a practice and material communication. My aim is therefore to gain knowledge not only about the physical objects themselves, but indirectly also about their users, the society and inherent meanings related to them. By focusing on this social dimension, the study will hopefully shed new light on immaterial aspects of society and perhaps also the mentality of the Middle Ages.

As a study of a corpus of archaeological artefacts which is limited spatially, chronologically and in numbers, my thesis will begin as a typical and traditional example of what archaeologists label as 'material culture'. Hans Hildebrand, the Swedish archaeologist who probably introduced the term as early as in 1882, argued that knowledge of material culture was needed to better understand history. He interestingly used arms and armour as an example since these artefacts constitute a material culture that determines movement and ways of fighting, thus influencing tactics of war and consequently politics of regional groups and nations in decisive manners (Hildebrand 1882: 21, 26–27; Andrén 1997: 134–135). Archaeology of the late nineteenth century onwards has been labelled as an obsession with artefacts and materiality. As a slightly exaggerated generalisation or simplification of twentieth century archaeology, it is claimed that material culture became a means for studying other aspects considered more important than the material itself. First, materiality was seen as reflecting cultures and societies within the culture-historical paradigm. Later, within processualism in the 1970s, materiality exemplified and explained man's adaption to environment, moving on to a post-processual focus on social and cultural meaning of materiality, as means (not

physically) to construct, maintain and change society and cosmology. "Material culture became a contradictionary term for reaching a culture that is not material" (Olsen 2003: 89–90).

To be fair, this quotation applies also for my approach, as outlined above. The archaeological study of artefacts often demands some kind of cause relevant to our present society, and if it is not political, it is usually to find 'a meaning' and 'achieve further knowledge and understanding'. However, the last two decades have produced steadily increasing theoretical considerations and approaches to material culture, or more precisely, to the immaterial aspects of materiality. In response, an important question has been put forward: what about things, artefacts and materiality itself, what is the current role of the traditional main source of archaeology, and how can it again become a focus of our archaeological studies (Olsen 2003: 100; Conkey 2006: 355)? This recent debate has spurred a renewed focus on artefacts which shares a scepticism towards modern western cognition and conception of materiality and the relation between humans and the surrounding world (DeMarrais et al. 2004; Renfrew 2004; Robb 2004). A return to the focus on objects in archaeology is welcome, and different perspectives suggested in this new debate will be applied in my analysis of the sheaths and scabbards.

The empirical objectives concern an analysis of the concrete properties of this material, how the artefacts were made, and which techniques and materials were used. Relevant research questions concern decoration such as motifs and different ways of producing these, together with modifications, repairs and reuse. The spatial and chronological distribution of the artefacts may enlighten on the development of the artefacts, both on a local and regional level. For example, are certain types of artefacts used in specific areas and used in other regions later? As such, in a traditional manner the volume will be adding new information to the study of medieval sheaths and scabbards which is a rather narrow field of research. The comparative perspective is important. As containers for knives, daggers and swords, different solutions in the production of sheaths and scabbards may reflect various attitudes in different regions and among different people. Since only sheaths from London and Lund were published in any extent at an early stage, previous research has lacked comparative material, and consequently England has been looked upon as a source of origin for many of these items (van Driel-Murray 1990: 16). Recent research from the 1980s and onwards demonstrates that many types of sheaths were probably regional, thus requiring increased research and publishing to clarify such issues (van Driel-Murray 1990: 16; Schäfer and Schäfer 1997: 285; Goubitz 2002: 159; Cameron 2007: 6,10).

Methodologically, the main objective is to elaborate relevant methods for comparing and analysing the material, both on a local and regional level. This will be done by assessing classification as an analytical instrument in archaeological analysis. This methodological aspect has not been discussed thoroughly in earlier works on the subject, which influences comparisons and interpretations. The classification will serve additionally as a necessary mediator between the empirical and theoretical levels of the thesis.

A holistic and contextual approach to the artefacts will be necessary to approach such aims, not only related to their spatial and chronological distribution but possibly also their role in the medieval society on a more general level. However, one precondition will be to functionally analyse the sheaths as material culture in order to assess questions related to craft, production and import. The simple fact that these were objects of use must be remembered, as pointed out in the recent criticism towards over-focusing on the symbolic side (Olsen 2003: 88). To understand them both practically and symbolically, it is important to analyse the sheaths and scabbards in relation to the total unit they were part of, i.e. knives, daggers, swords and possible other equipment.

1.2 Research questions

In order to clarify the topics stated above, additional concrete research questions can be formulated. These questions obviously relate to the research material itself, or the sheaths and scabbards. This material must be identified, collected and classified with an assessment of its

context and dating. A basic empirical survey of this material is valuable as a reference for future research. A finds catalogue is therefore included as an appendix.

What kinds of sheaths and scabbards were found in Bergen? Do these reflect local production, foreign production and imports, or both? Although sketchy, earlier discussions of the Bergen sheaths and scabbards mainly present this material as being English imports (Koren-Wiberg 1908: 151; Grieg 1933; Herteig 1960: 184; 1969: 166). If parts of the material are of foreign origin, it is interesting to discover which parts are foreign and from where the material actually originates in order to assess the nature of this import.

How were these artefacts used, and what can be said of the contents of these objects? The preserved material of swords and daggers from medieval Bergen is sparse (Nøttveit 2000), and an analysis of the knives found in Bergen will be beyond the scope of this study. It is still important to study and assess this material as parts of the implements they originally carried, as sheaths and scabbards for swords, daggers, knives and other instruments can all sometimes be of ambiguous character.

As the study covers a time-span of several hundred years, from *c.* 1120 to 1700, changes in the material are to be expected. When do new types appear, and which changes can be seen in traits, decoration and use of materials?

What is preserved, where and why? Although the Bergen sheaths and scabbards form a relatively considerable assemblage in number, they represent mere fragments of this material. The representativeness of this material must always be carefully considered.

Can inferences be made of e.g. status based on this material? An assessment of use, quality, material and decoration will probably provide some hints and lead to other interesting and related questions concerning issues such as mentality, gender and social identity. Such implications cannot be assessed based on the artefacts alone, but demand both a theoretical foundation and an encompassing approach to the context of the artefacts. Here, the perspective is that materiality is assigned meaning, and that such meaning may develop beyond the intentions of the users of the artefacts. This view influences several of the questions listed above, has implications for both methodology and theoretical considerations (Chapters 3 and 4) and is of relevance to a wider field than sheaths and scabbards alone.

1.3 Definitions, etymology and terminology

A sheath can be defined as "A case or covering into which a blade is thrust when not in use; usually close-fitting and conforming to the shape of the blade, especially of a sword, dagger, knife, etc."(Oxford English Dictionary 2nd ed.). A scabbard is defined as "The case or the sheath which serves to protect the blade of the sword, dagger or bayonet when not in use. Also, a sheath in which a rifle, submachine gun, or similar firearm is kept."(Oxford English Dictionary 2nd ed.). The meaning of the two terms intertwines. Yet it seems that sheath may be used in a wider sense while scabbard is closer associated to weaponry. The etymology of the two terms is informative with regard to construction and intention of the objects:

The term sheath stems from Old Anglo-Saxon *scéaþ* with parallels in Old Saxon *skêthia* (Du *scheede*, *schee*), Old High German *sceida* (Ge *Scheide*) and Old Norse *skeiðir (*Norw. *skjede)* (Falk and Torp 1991). Old Norse *skeið* denotes a split, flat piece of wood. When denoting a sheath, it was used in plural form *skeiðir*, thus referring to the two wooden pieces protecting the blade.[1] These 'sheaths' were kept together by a wrapping (ON *umgerð*) or cover (Liestøl, KLNM XVII: 518). The term scabbard probably derives from a combination of Frankish *skâr* (blade) and *berg* (protect), and is found in a number of forms in the medieval period (Barnhart 1988: 962; Oxford English Dictionary 2nd ed.).

While the term sheath originally referred to the material that braces and stiffens the object, and thus a certain kind of construction, the term scabbard referred to the intention of the object, to protect the blade of the implement inside. However, the terms are used more loosely today, also in the archaeological literature. Al-

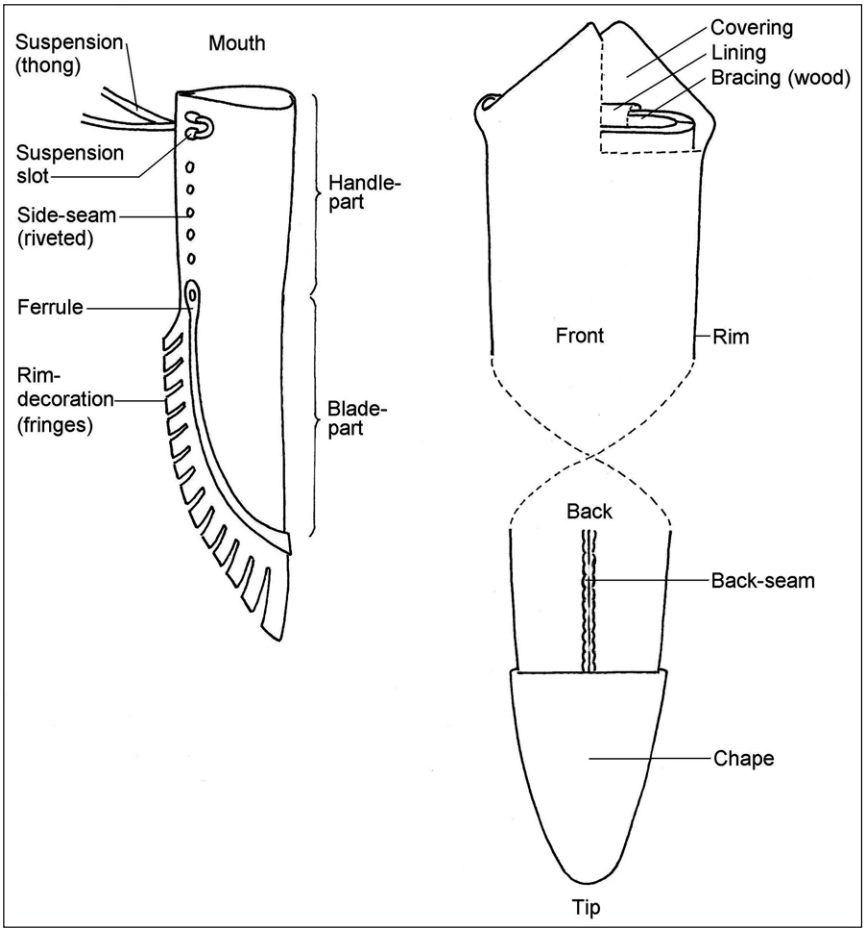


Figure 1.1 *Terminology used to describe medieval sheaths and scabbards. The upper part of the scabbard is depicted in front, the lower part is seen from the back.*

though normally associated with swords, the term scabbard is used in relation to knives in one of the major studies on the topic, *Knives and Scabbards* (Cowgill et al. 1987). The term sheath is used in relation to knife, dagger and sword alike in an early influential work, the *Medieval Catalogue* (Ward-Perkins 1940). The English archaeologist Esther Cameron defines sheaths as flexible and scabbards as not, implying that, for example, a knife, may have a sheath or a scabbard (Cameron 2000: 1). She is partly followed by Finnish archaeologist Janne Harjula who defines sheaths as: "…generally for knives and not lined with a hard material. Scabbards are generally for swords and may be lined with wood or other type of hard material" (Harjula 2005: 10). Ironically, both authors define a scabbard as having the properties originally implied in the term sheath, that is a rigid object. Having found none of the solutions presented as being completely sufficient, I use the term sheath primarily for knives, and the term scabbard primarily for swords, as this seems to be the most common understanding of the words today. I am aware of Harjula's warning that this implies a categorisation of objects based on what they carried, i.e. objects usually not available in the archaeological context (Harjula 2005: 11). The use of these terms is therefore not entirely consequent, and may sometimes be specified, especially when referring to other studies.[2]

Sheaths and scabbards can be manufactured of both hard and flexible materials, such as metal, wood, horn, antler, bark, leather, skin, textiles, and in many cases a combination of some of these. From medieval archaeological contexts, however, the leather objects or the leather parts are the most commonly preserved. In principle, the sheath or scabbard is modelled after the implement it is meant to protect and carry, but diverging forms also appear. The terms used are illustrated in Figure 1.1, exemplified by a *side-seamed* sheath and a *back-seamed* scabbard.

While scabbards are usually back-seamed, sheaths might be seamed at the back, the side or diagonally. Back-seamed sheaths might thus have an appearance more resembling that of the scabbard. The seam can be stitched together in different ways, by threads, thongs or rivets. The side of the sheath/scabbard that is visible when worn, is normally denoted the *front-side*, as opposed to the *back-side*. The edges are referred to as *rims*. With an explicit knife-shaped sheath, the rims might be labelled spine or edge, denoting the rims corresponding to the back or the edge of the knife-blade, respectively. The opening is called *mouth*, the lower end closes in the *tip*. Both the front and the back, although usually to a lesser degree, can be decorated with motifs and patterns in a variety of techniques. The rims and the tip might also be the centre of decoration, usually in the form of decorative *fringes* or other extensions. Both sheaths and scabbards might have different forms of fittings, usually in metal. When covering the tip, it is usually denoted a *chape*. A *ferrule* is essentially the same, but the word seems less specified. Other fittings might reinforce the mouth or rims, or be part of *suspension*. The simplest form for suspension is by a thong carrying the sheath by some *slots* near the mouth. Suspension can be a more complex matter, especially regarding scabbards. A scabbard is usually built by two wooden plates forming a *bracing*, with an outer *covering* and an inner *lining*. Sheaths might also have some type of lining or bracing of wood. Some sheaths are made for containing several knives, and both scabbards and sheaths might have integrated smaller sheaths, so-called by-sheaths, for smaller knives, by-knives or other implements such as needles. As definitions and main principles of construction are introduced here, specifications that are more detailed will be presented in the analysis.

1.4 Backdrop and demarcations of the material

The Bergen corpus comprises 332 sheaths and scabbards. These are complete and fragmentary, of leather, together with 9 sheaths/scabbards, or parts there of, made by other material. A wide comparative material from most of northern Europe, from Cork in the west to Riga in the east, will be examined for parallel finds and common traits to the Bergen finds. This comparison is included in order to make out whether different types or forms of sheaths and scabbards were in use in different areas, but also whether the material reflects contacts and impulses between areas. This comparison will be based on published accounts, ranging from excavation reports to monographs covering whole corpora.

In order to safeguard the quality of this comparison, three selected corpora from Oslo, London and Greifswald will be given special attention (Figure 1.2). These three towns are very or relatively rich in comparable finds, and evaluated as especially relevant to medieval Bergen. Methodologically, the classification of the Bergen corpus will be tested on the three corpora to evaluate its value as a tool for further comparison. However, the main objective is to assess the type of composition in these four corpora and discuss the similarities and differences between the different regions these towns represent.

The Oslo corpus is partly published (Bolstad 1991), but most of the material is recently excavated and has not been previously analysed. Altogether 118 sheaths and scabbards from Oslo are examined in order to compare the Bergen corpus with another representative assemblage from Norway. Due to Bergen's strong trading contacts with England and coastal areas of Germany in the Middle Ages, two corpora in the respective countries are included for a more detailed comparison. The extensive London corpus is partly published (Ward-Perkins 1940; Cowgill et al. 1987), but has been re-examined for this study, including a total of 456 artefacts.

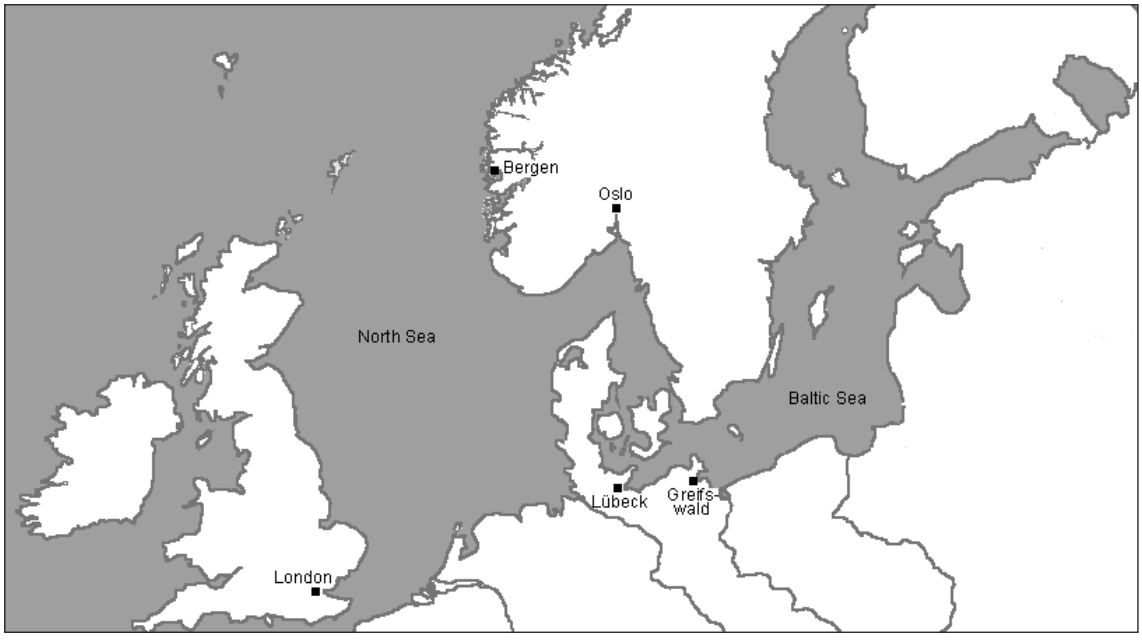


Figure 1.2 *Bergen, Oslo, London and Greifswald. While the Bergen corpus is the main subject, the three other corpora will be assessed as being representative of three different regional areas, respectively: Norway (Scandinavia), the British Isles (north-western Europe) and the Baltic region (north-eastern Europe).*

As Lübeck was the most prominent German trading contact of medieval Bergen, the material from this town would have been highly suitable for comparison. Unfortunately, it is not available for research for the time being due to reasons of conservation (Doris Mührenberg, personal communication). The best alternative for comparison is the sheaths and scabbards from Greifswald, described in a detailed analysis by Cathrin and Heiko Schäfer (1997). Here, 84 artefacts are included.

As the corpora from the four specified towns are studied in greater detail, a brief presentation will be given for each town to provide a historical and archaeological backdrop.

1.4.1 Bergen

Historically, Bergen became the largest town in Norway during the high Middle Ages, with close on 10,000 inhabitants at the beginning of the fourteenth century (Helle 2006: 110). In medieval Scandinavia, only Visby, Gotland was of a similar size. As an ecclesiastical, commercial and political centre, Bergen is considered to be the most prominent Norwegian town during the medieval and early modern period. The main reason for the strong position of Bergen was its role as a staple for trade between the northernmost parts of Europe and the rest of the continent, the most important goods for export being stockfish. In the multi-national trading milieu of Bergen, German and English merchants were strong proponents. German merchants gradually increased their control over the foreign trade from the thirteenth century onwards, establishing a German *Kontor* in Bryggen *c.* 1360.[3] Connected to the Hanse trading network, it constituted one of the four main trading stations and administrative centres within the Hanseatic League, situated at Bryggen within the town of Bergen, but in many ways segregated from the town itself.[4] The Kontor had its own regulations and was strictly governed from the central Hanse town of Lübeck, although other towns connected to the League also had their own 'Bergen guilds', or associations of merchants trading on Bryggen (Helle 1982: 748–749). The German colony in Bergen probably constituted

between 900 and 1800 males in the middle of the fifteenth century. During summer (trading) season, their number was probably between 2000 and 3000 (Helle 1982: 743–744). The Hanse merchants were forbidden to marry local women and demanded tax privileges, a repeating source of conflict with local and national authorities.

As for archaeology, Bergen is best known for the excavations after the extensive fire of 1955, a conflagration in which the northernmost part of the Bryggen area burned to the ground. The excavations that followed (1955–68, and partly in the 1970s) were groundbreaking in Norwegian archaeology, and came to influence the practice of medieval archaeology in northern Europe (Milne 2003: 14). The ceramic evidence shows widespread contacts but is dominated by German and English wares, coherent with written sources. The main part of the primary research material for this study, or 74 per cent, stems from the Bryggen site.[5] However, from an earlier Antiquarian phase within urban archaeology (late 1800s–1950s), a small number of distinct artefacts is documented and several later excavated sites have provided a number of sheaths and scabbards that also form an important part of my primary research material.

1.4.2 Oslo

Oslo was one of three other Norwegian towns that exceeded a population of 1,000 inhabitants during the Middle Ages, probably reaching around 3,000 during the first half of the fourteenth century. Politically and administratively, it served as the centre of east Norway, and was probably intended for a more prominent role from the fourteenth century onwards, marking an eastward orientation in Norwegian politics. However, during the political unions of late medieval Scandinavia, both Bergen and Oslo lost political significance. In contrast to Bergen, Oslo remained peripheral in the medieval mercantile revolution but gained a more prominent role in the timber trade from the 1500s onwards. However, the Hanse League had a *factory* in Oslo during the fourteenth and fifteenth centuries, a smaller unit where the Hanse merchants had a more independent status than within a Kontor. English merchants rarely appeared in Oslo; English trading goods came by German traders (Nedkvitne and Norseng 2000: 179, 189–193, 358–368).

The resituating of the town by a new royal foundation after the fire in 1624 left the old town area as pastures and fields, providing an archaeological situation different from that of Bergen, which had continuous settlement. However, the old town area was resettled as the town expanded during the nineteenth century. Archaeological fieldwork has been carried out as part of railway construction and other enterprises, with a focus on structures and architecture. From the 1970s, large-scale excavations have been undertaken, influenced by methodologies developed at Bryggen (Molaug 1997: 455–459). Recently, archaeological excavations have taken place in the area of Bjørvika, both underwater and in reclaimed areas, during construction of a subsea tunnel under the central city of Oslo. Material from the excavations in the 1970s and the recent excavations is studied for comparative purposes as a corpus within a Norwegian context, but with presumably less foreign influence.

1.4.3 London

A European metropolis during the Middle Ages, London reached its population peak around 1300, probably with more than 80,000 inhabitants (Keene 1995: 226). As Bergen, it was a centre of trade and political and ecclesiastical administration. However, a comparison would falter due to the size and number of people, which was somewhere between 10 to 20 times as many in London. While Bergen functioned as staple for long distance trade, London also dominated the local region in a profound manner. The different crafts executed in the city and the hinterland must have given a character of industry, due to volume, and contributed to large amounts of waste and garbage (Keene 1995). Foreign trade also prospered in London. Even though the Hanseatic League established a privileged Kontor here, it was unable to become a similar dominating political and economical force in London as it had in Bergen and Scandinavia.

Archaeologically, London has a long tradition, with artefacts unearthed at the early nineteenth century still preserved in the museum collections. As Bergen extended into the sea and harbour area, London reclaimed areas along the Thames, with similar good preserving conditions for organic material. Of special interest are the excavations from the 1970s onwards, mostly from the waterfront sites, often with relatively fine chronological sequences. With one of the largest collections of sheaths and scabbards found in northern Europe, the London corpus is an important comparative material to the Bergen corpus in many respects, due to the medieval contacts and an assumption in earlier literature that a number of medieval sheaths from different parts of Scandinavia stem from London (Grieg 1933: 248; Blomqvist 1938: 157–60; Ehn and Gustafsson 1984: 79).

1.4.4 Greifswald and the German area

Greifswald is situated in the eastern part of Germany in historic Pomerania, just west of the Vendish Hanse towns. First mentioned in written sources as 'oppidum Gripheswald' in 1248, it was granted the 'Lübeck law' in 1250, in some ways a predecessor to the Hanse League. Norwegian merchants are recorded in a custom's account from Greifswald in the 1270s, and the town was part of the Hanse trade blockade of Norway in 1284–1285 (Helle 1982: 326, 328, 365, 382; Schäfer and Schäfer 1997: 245, 251).

Several extensive excavations have been carried out in the town since 1993, and Cathrin and Heiko Schäfer have given a detailed analysis of the sheaths and scabbards in an article from 1997. Although not a major medieval trading contact with Bergen, Greifswald was closely associated to Lübeck and situated near the important Hanse towns at the Vendish coast: Lübeck, Wismar, Rostock and Stralsund. As the Greifswald corpus is well published, it will be used as a comparative source to the Bergen corpus in order to represent a German perspective.

1.4.5 Comparison with other finds, sites and corpora

Comparative material will additionally be searched for in the available published accounts from northern Europe, from both complete published corpora such as Dublin (Cameron 2007), Schleswig and Turku (Harjula 2005), and from more randomly presented finds and sites from other towns. This comparison will not be detailed like Bergen, and little attention will be given to the type distribution within the sites, such as within the three selected corpora of Oslo, London and Greifswald. The objective of this survey is primarily to map the foreign distribution of types found in Bergen, to assess whether they are common or not, and to see if broad regional tendencies can be discerned.

To sum up, the study will be carried out on three levels of detail. The 341 artefacts of the Bergen corpus form the primary research material for this volume, and these will be presented and studied in particular. To assess the Bergen material as a corpus, it will be compared to three other specially selected corpora which will be assessed to a certain degree on their own premises, but less so than the Bergen material. Altogether, 658 artefacts are included from the Oslo, London and Greifswald corpora. Finally, an assessment will be carried out in a more random manner, not to compare specific towns or areas to Bergen, but to map the distribution of types found in Bergen, in a North European perspective. As this assessment is more indiscriminating and based on the available literature, the number of these artefacts can only be given in an approximate manner, but it exceeds 1,000 specimens.

2 State of research

The research of medieval sheaths and scabbards should be seen in the wider context of medieval archaeology, which will be presented as a brief introduction to the specifically related literature and current status.

2.1 Medieval archaeology as a field of research

While prehistoric archaeology was established as an academic discipline during the nineteenth century, the main approach to the Middle Ages as a field of research remained that of the historical discipline, as a period covered with written sources. What is today considered medieval archaeology, was a rather diffuse research area with participants of diverse expertise ranging from architecture, history (history of art and churches in particular), ethnology and museology, as well as the occasional archaeologist. Sporadically and increasingly frequent during the interwar period, groundbreaking works and studies in medieval archaeology were undertaken by archaeologists, but more as single efforts than as coordinated labours within a research field. During the 1950s and 1960s, several larger excavations took place in different medieval European towns. This field activity was a major proponent for establishing medieval archaeology as an academic discipline.

As excavations of medieval towns have often proven to be rich in finds, work has been put into classifications, comparisons and chronologies for artefact groups from medieval towns all over northern Europe (Molaug 1989: 229; Gerrard 2003: 148). Certain problems have been addressed: difficulties with handling and publishing large quantities of fragmented materials, special conditions of deposition (especially extensive redeposition of waste in medieval times, and representativity), and more so than earlier periods, the medieval archaeological record consists of waste and garbage (Andrén 1986: 259; Molaug 1989; Augustson 1995: 35f). Considering the large amounts excavated, however, the published amount of the material of medieval artefact is modest. Many archaeologists have specialised in certain material and artefact categories, they usually analyse artefacts based on form and function and attempt to place these in a socio-historical context (Gerrard 2003: 172–180). Thus artefact studies can be said to have a certain importance and position in medieval archaeology, but often as a secondary objective (as indicators of dating and influences) and they are few in numbers when compared to the large quantities that are actually excavated.

Post-processualism has only influenced medieval archaeology in a selective manner, as the research-field has a strong and positive legacy from the earlier phases. The main impression is that recent perspectives have been used mostly on structures, landscape and buildings, but a more interpretative approach has also been used for artefact studies (Gerrard 2003: 223–225, 229–231; cf. Ersgård 1995). The recent plea for new focus on artefacts and materiality has not yet reached medieval archaeology, partly because artefact studies already maintain a relatively strong position. However, this is more from perspectives based on methodological objectives than from recent developments in archaeological theory.

2.2 Medieval sheaths and scabbards

Although made of several different materials, the remains of sheaths and scabbards most commonly found in medieval contexts are made of leather. Leather as a material category is dominated by remains of footwear. From the area connected to the medieval tenement of Gullskoen on the northern part of the Bryggen site, the largest of the four medieval tenements excavated during the Bryggen excavation, 9,624 accession numbers have been identified as shoes or parts thereof (Larsen 1992: 11).[6] This is a larger number by far than all of the sheaths and scabbards found in Bergen, but such a proportion seems to fall into a general pattern from urban excavations. Generally, footwear makes up nine out of ten parts of the excavated leather material from the medieval urban layers.[7] The second largest group, sheaths and scabbards, represents only a small percentage.

I will examine in more detail how medieval sheaths and scabbards have previously been analysed and presented, and according to which objectives, both methodologically and empirically. The present distribution of sheaths and scabbards from medieval urban sites is random, e.g. decided by conditions of preservation for leather materials, which sites have been excavated, and to what extent the material has been published (Figure 2.1). As applies to archaeology in general, theoretical and methodological approaches to the material have changed during the last century. Although an overview of the research has a bibliographical value of its own, my survey will focus on their relevance for my own analysis.

2.2.1 Scandinavia[8]

The publication *Middelalderske byfund* by the Norwegian archaeologist Sigurd Grieg (1933) represents a pioneer work in many respects, as it is the first comprehensive presentation of medieval artefacts written by an archaeologist. Typical for its time, this publication is primarily a culture-historical catalogue focusing on and describing the artefacts as sources that give access to understanding medieval everyday life and history. Parallels to the finds are frequently sought and the artefacts are often dated by comparison to iconographic or written sources, on a basis that sometimes would appear doubtful today. However, stratigraphic dating is also tenta-

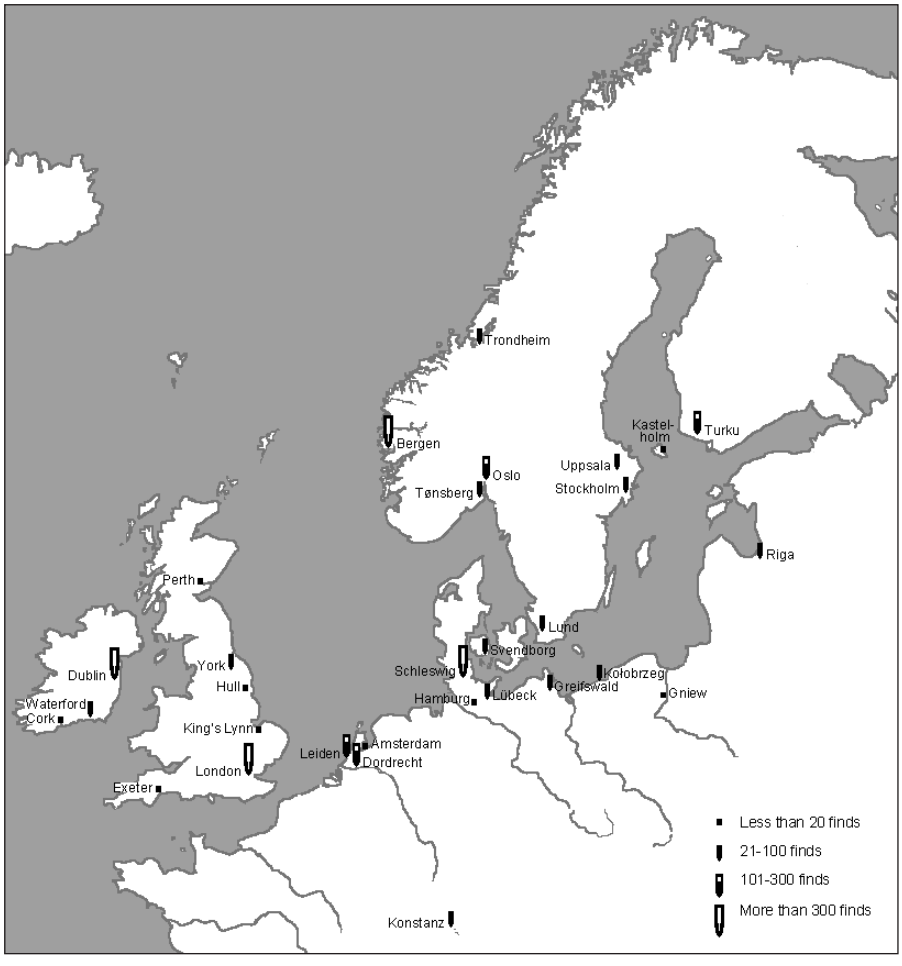


Figure 2.1 *Sites mentioned in the text. Relative amounts of finds are indicated, according to published accounts, based on publications referred to in the text. These are not necessarily the actual numbers excavated. With regard to Bergen, Oslo and London, however, the figure reflects the numbers analysed in this thesis.*

tively being used, and Grieg frequently refers to the context of the finds from medieval Oslo and Bergen. *London Museum's Medieval Catalogue* attests to the importance of his work: "The most valuable general work on medieval archæology is undoubtedly S. Grieg's *Middelalderske byfund fra Bergen og Oslo*" (Ward-Perkins 1940: 12). A small number of sheaths is also described. According to Grieg, the decorated leather works were quite common in the Middle Ages, where the impressed sheaths found in Norwegian urban contexts were most probably of English origin (Grieg 1933: 246–249). This opinion seems to have been established after it was first presented by Christian Koren-Wiberg, director of the Hanseatic Museum in Bergen (Figure 2.2) (Koren-Wiberg 1908: 151, 153).[9] Grieg also presents a few wooden knife scabbards and chapes of metal and bone, which is noticeable, as leather totally dominates the material of excavated medieval sheaths and scabbards.

An article from 1938 by the Swedish archaeologist Ragnar Blomqvist, "Medeltida svärd, dolkar och slidor funna i Lund", stands out as being remarkably early and thorough when it comes to publishing medieval sheaths. Weapons form a small group among the archaeological finds from medieval Scandinavia, and Blomqvist presents a rather diverse material of swords and daggers from Lund in Scania. Interestingly, he emphasises sheaths and scabbards and points out that this material lacks equivalence in Scandinavia. He discusses dating by decoration, as well as local production and import where England is pointed out as place of origin for the sheaths with plastic decoration.[10] As was usual at the time, his approach is rather descriptive without any explicit classification other than in broader functional groups, such as sheaths or scabbards for swords, daggers or knives, and artefacts with heraldic, linear or no decoration, of which the latter is most numerous. However, the sheaths and scabbards are studied integrally with the objects they contained (Blomqvist 1938: 151–169).

With the extensive excavations at Bryggen, Bergen (1955–68), methodological approaches used in prehistoric archaeology were applied and developed in urban contexts, and structures and

Figure 2.2 *Found at the site of the tenement Leppens Tomt at Bryggen and handed over to Bergens Museum in 1908, B 6237 represents the first acquisition of a medieval sheath in the archaeological collections. In several publications, the sheath is referred to as being of English or French origin due to the impressed motifs. The sheath measures approximately 30 cm (cat. no. 167) (After Koren-Wiberg 1908: 123).*

artefacts systematically recorded (Herteig 1969: 57; Clarke 1990; Augustson 1994). The artefact finds themselves were not analysed at this stage, but were initiated by the publication project that started in the early 1980s. However, sheaths and scabbards were noticed early, also this time with a reference to London material (Herteig 1960: 184; 1969: 166).

In spite of the massive increase in archaeological excavations of medieval urban sites (if not *because* of the extent of the excavations), sheaths and scabbards are often only described in very general terms. This is the case for the excavations at Helgeandsholmen in Stockholm in the late 1970s, where more than 50 sheaths and scabbards were found. The same state of research applies to the two excavations in Lund, Thulegrävningen in 1961 and PK-banken in

1974–75, where similar numbers have been recorded (Blomqvist and Mårtensson 1963: 197–199; Bergmann and Billberg 1976: 392–393). Another 50 sheaths from the 1978 Kransen excavation in Uppsala are described in no more than half a page (Ehn and Gustafson 1984: 79). The more than 60 sheaths and scabbards from the medieval town of Tønsberg, excavated in the 1970s and early 1980s, are published only as lists among different material groups, reflecting different crafts and activities (Ulriksen 1992: 111, 124, 131). As far as possible, I will use the information given in these publications when comparing the Bergen corpus. With regard to these corpora, however, the comparison must be rather cursory.

Some publications of artefacts are more detailed, however, such as from the excavation at the Folkebibliotekstomten in Trondheim which was carried out in the 1980s. Parts of 32 sheaths and 38 scabbards were found here and have been studied by Oddlaug Marstein (Marstein 1989: 96–101). A more thorough presentation comes from Denmark, where 24 sheath and 17 scabbard fragments were recovered at Svendborg (Groenman-van Waateringe 1988a: 83–103). Even though Marstein presents a formal typology for her sheaths, both publications only give a descriptive presentation of the sheaths, as footwear forms the main subject.

The archaeologist Gerd Bolstad has gone a step further in her analysis of a small group of sheaths and scabbards from two excavations in Oslo which were carried out in the 1970s (Bolstad 1991). She presents a classification connecting context and dating based on form, function and workmanship. Although the number of sheaths (23) is too small to draw substantial conclusions, her aim was to shed light on leather crafts and their working environment. She also draws parallels to the Bergen material, as she was engaged in the Bryggen publication project at that time. Although her study is limited, her perspectives have given input to my own analysis. However, the Oslo material will be re-examined together with a larger number of recent finds from the 'Tunnel-excavation' (2006–2007) in Bjørvika (Johansen in prep.). The Oslo corpus offers a comparison when assessing the Bergen material, as it is another corpus from a Norwegian town with a historically eastern orientation.

Two Finnish studies on this subject have recently been published. The article "Medeltida kniv- och svärdslidor från Kastelholm slott" from 1996 by Marita Kykyri is the first Finnish work entirely devoted to medieval sheaths. Based on a limited number of finds (12 sheaths and 1 scabbard), she focuses on their research potential, as aesthetic and artistic expressions, connected to leather workmanship. She also refers to their wider cultural connections, as impulses and contacts between different places (Kykyri 1996).

In his licenciat thesis from 2004, *Sheaths, Scabbards and Grip Coverings. A study of the use of leather for portable personal objects in the 14th–16th century Turku*, Janne Harjula has analysed a material encompassing 224 items: sheaths, scabbards, sheath-caps and leather grip coverings, mostly from a larger excavation in Turku in the 1990s (Harjula 2005). His study represents a pioneer work as the first Nordic monograph on medieval sheaths and scabbards. Here, Harjula clearly demonstrates the importance of basic research on artefacts and identifies artefact categories that have not previously been recognised in a Scandinavian setting. The material is examined according to leather types, size, form (symmetrical – non-symmetrical), techniques (such as seam-types), and decoration (technique and motif). His classification presents types according to what he proposes the medieval inhabitants of Åbo would have recognised as relevant. This thesis contains several interesting conclusions about leather workmanship and social stratification based on distribution of the material. As a comprehensive study, his work is important for comparison and discussion in my own study.

Finally, I want to mention a short article (Nøttveit 2006b) where I discuss gender implications of medieval sheaths and scabbards by introducing written and ethnographic sources. However, I do not refer to specific archaeological material in this article, and it remains to be seen if these sources can be advantageously combined.

Seen in perspective, Norwegian and Scandinavian research on sheaths and scabbards is sparse. In historiographic terms, the article by Blomqvist from 1938 stands out as an authoritative work on medieval sheaths. As the first analysis of these artefacts, it has been widely cited. Several of the later publications can be characterised as catalogue presentations, many of them quite brief in their descriptions of sheaths and scabbards. However, some of the articles proclaim the material's wider source potential, how it can shed light on issues such as leather handicraft and social environment, and how it can be seen as aesthetic expressions and traces of cultural contacts, as well as metaphors in the medieval society without going deeper into these questions themselves. This perspective has only recently been applied empirically to some extent by Harjula (2005). At the same time, Harjula claims that more basic research is needed to go deeper into such topics. Only three of the studies present clearly defined classifications, which all differ methodologically and have different aims. These classifications will be discussed further in chapter 4.

In summary, studies of medieval sheaths and scabbards in Scandinavian archaeology are both sparse and heterogeneous as concerns methodology and presentation. Although the scope has been widened during the more than 70 years time-span since Grieg's publication, questions concerning date and distribution are still in the foreground. Based on published accounts, the Bergen material is by far the largest corpus of sheaths and scabbards excavated in Scandinavia, in itself an argument that this material should be analysed and within a wider scope.

2.2.2 Northern Europe

As applies to neighbouring countries to the west and southeast, Britain and Germany are particularly important as these two areas maintained close contact with Bergen in the medieval period. People that originated from English and German areas resided in Bergen for shorter or longer periods during the Middle Ages. The town had a large proportion of foreign visitors during the summer sailing season, while also so-called 'guests' residing there on an annual basis. Due to the favourable preservation conditions in waterlogged deposits along the Thames, London is of particular interest and holds one of the largest corpora of excavated medieval sheaths and scabbards in northern Europe. As mentioned earlier, my analysis will include an examination of the London material. However, I will have to rely on published accounts alone for the German material.

The *Medieval Catalogue* from The Museum of London was published in 1940 (Ward-Perkins 1940). The chapter on sheaths and leatherwork focuses on the decorative techniques, and refers frequently to Blomqvist (1938). As a solid catalogue it is still valuable and is used as a classical reference, as testified by reprinting and new editions (Clark 1993: vii).

Several excavations in London from the 1970s onwards have extended the material. The comprehensive artefact publication *Knives and Scabbards* (Cowgill et al. 1987) serves as a more modern model catalogue presenting more than 300 knives and 120 sheaths, where every sheath is illustrated in the catalogue section. The objects are organised according to a relatively accurate chronology and by decoration, without being further classified defined types. The text part consists of several articles, somewhat contradictive with regard to the use of sheaths as status reflective. Margrethe de Neergaard claims that such a use is improbable, due to the small decorative area of the artefacts, the crudity of much of the work and the fact that they would have been largely obscured by the wearer's garments (de Neergaard 1987b: 61).[11] On the other hand, Tony Wilmott seeks to identify the families associated to different heraldic shields that decorate many of the London sheaths (Wilmott 1987). The publication holds a general focus on decoration, a main feature of the London finds; heraldic and zoomorphic motives, geometric and floral patterns with colour traces of red, vermillion and black together with the possible colours of brown, blue, yellow and even gilding. This focus in itself gives the impression that sheaths reflect status and are expressive, more than just being decorated. However, the thorough treatment of the artefacts has been referred

to as a source of inspiration (Cameron 2000: 1; 2007: 12), a view which I support. Nevertheless, the actual number of London sheaths and scabbards exceeds the published number by far, and altogether 456 artefacts from London are included here. Although the London corpus cannot be studied in the same detail as the Bergen material, a comprehensive treatment of this material provides new knowledge and serves as an important comparative material. The already published accounts from London provide a valuable resource in this analysis.

In her doctoral thesis, *Sheaths and Scabbards in England AD 400–1100*, Esther Cameron (2000) focuses almost exclusively on the pre-medieval period in Scandinavian terms. The work is strictly empirical and reflects her background as a technical conservator, focusing on the chemical and organic aspects such as decomposition of leather, tanning processes and cuir boulli.[12] Cameron is also one of the contributors to the volume *Leather and Leatherworking in Anglo-Scandinavian and Medieval York* (Mould et al. 2003), where sheaths and scabbards are analysed more thoroughly than what has been usual. In her latest comprehensive work, *Sheaths and Scabbards from Medieval Dublin* (2007), she analyses more than 300 sheaths and scabbards from the Viking period until the thirteenth century. Even though Cameron focuses on periods preceding the Middle Ages in Norway, i.e. *c.* 1000–1500, parts of her material are relevant for comparison. Her general interest in leather and a technical focus on its properties are also expressed in her other studies (1998a; 1998b; Cameron et al. 2006; ALGN).

Christiane Schnack from Germany distinguishes herself with her concise study *Mittelalterliche Lederfunde aus Schleswig – Futterale, Reimen, Taschen und andere Objekte* (1998), in which she analyses one of the largest assemblages of sheaths and scabbards in Europe.[13] The 402 artefacts still only make up 3.2 per cent of the identified leather material from the Schild-excavations in Schleswig. Here she presents a classification of knife sheaths divided into four types. Schleswig seems to have good preserving conditions for leather, as another 73 sheaths and 35 scabbards are mentioned summarily from another site, Plessenstraße (van de Walle-van der Woude and Groenman-van Waateringe 2001: 36–38). In the book *Mittelalterliche Lederfunde aus Konstanz* (1984), Schnack also touches upon the find group and identifies related leather artefacts such as grip-coverings and rain-guards for swords and daggers. This study represents a southern limit as to artefact publications of this material, probably coinciding with a North and East European archaeological focus on this period (cf. Andrén 1997: 41–42).

As mentioned earlier, a group of sheaths and scabbards from Greifswald has been analysed by Cathrin and Heiko Schäfer (1997). All 88 objects are described and illustrated in a manner well-suited for comparative objectives. Due to numerous dendrochronological samples, the finds are accurately dated and all stem from the period between 1250 and 1380. The authors urge the publication of other finds of sheaths and scabbards in the northern German area and pay special attention to certain traits in the material, suggesting that these were ethnically significant.

In Lübeck, several sheaths have been unearthed but are so far presented only randomly, lacking a complete analysis (Groenman-van Waateringe and Guiran 1978: 170, 172, Abb.72; Vons-Comis 1982: 247; Groenman-van Waateringe 1988b: 147, Abb.3; van der Berg and Groenman-van Waateringe 1992: 350–351, Abb.7–8; Volken and Volken 2002: 483, 500).

Urban sites from the Netherlands have also revealed many leather finds that deserve special mentioning. One of the larger assemblages known of medieval scabbards (more than a hundred objects) was recorded during diggings for sewage systems in Leiden. Although they could not be dated stratigraphically, Carol van Driel-Murray has labelled them to the two first decennia of the fourteenth century by matching dimensions and shape to the typology for medieval swords by Ewart Oakeshott (van Driel-Murray 1980; 1990). Her study is important with regard to one of the discourses in the field of medieval scabbards on how these objects were constructed and suspended.

Olaf Goubitz has presented a selection of 25 of the 230 decorated sheaths found in the town

of Dordrecht, but not including the altogether 272 sheaths excavated in the town, as he is focusing on decoration by using selected examples (2002). Goubitz touches upon several interesting subjects, such as comparison between Dutch and English finds and the meaning of the decorative motifs on sheaths, but not in a detailed manner in this short Festschrift article. A monograph on sheaths was planned, but remains incomplete and unpublished after his passing (van Driel-Murray 2007: 3).

A third Dutchman, Willy Groenman-van Waateringe, who has analysed the medieval sheaths from Svendborg and Viking Age sheaths from Hedeby, appears as an international specialist on leather material (Groenman-van Waateringe 1967; 1984; 1988a; 1988b). The same goes for Schnack, van Driel-Murray and Goubitz. As Cameron and Groenman-van Waateringe, they all figure as specialised 'leather archaeologists' where sheaths and scabbards represent one of several leather artefact-groups for study (Schnack 1992; Goubitz, van Driel-Murray and Groenman-van Waateringe 2001).

As in Scandinavia, several reports and material publications are valuable for reference and for mapping the distribution of types found in Bergen. From Great Britain, the material from York and King's Lynn deserves special mentioning as early examples (Richardson 1961: 102–105; Clarke and Carter 1977: 364–366). Other cases are Leicester (Mellor and Pearce 1981), Exeter (Friendship-Taylor 1984: 324, 327, 331–333) and Hull (Armstrong 1977: 52–53, 58–59; Jackson 1979: 55, 57; Watkin 1987: 219, 223–224) in England, together with Waterford and Cork (Hurley 1997a; 1997b) in Ireland and Perth (Bogdan et al. in prep) in Scotland. In the Netherlands and Germany, sheaths are presented in artefact publications from Amsterdam (Baart et al. 1977: 94–98) and Hamburg (Kabliz 2002: 179). Of course, publications of these artefacts are not exclusive to the countries referred to here. Several are for example described from Poland (Wiklak 1993; Wywrot 1996; 1997; Wywrot-Wyskzkowska 1998; 1999) and Latvia (Bebre 1998).

Occasionally, sheaths and scabbards are discussed in a manner of more general interest, as concerns for example weaponry (Waterer 1981; Oakeshott 1994: 239–248) or technology and decoration (Mathisen 1935; Russel 1939).

In summary, London distinguishes itself with a large corpus and a large part still remains unpublished despite several publications. Altogether the London material is especially suitable for comparison to the Bergen corpus, due to both numbers and the historic contacts. Other publications from the British Isles also provide valuable references. Unfortunately, a comparison to German areas has proven more difficult. The largest corpus published in Germany which is comparable to the Bergen material in size stems from Schleswig, which was actually Danish in the medieval period. However, based on published material, the Bergen corpus will also be compared to German areas as a valuable counterweight to an English focus. Studies concerning this group of artefacts are missing from France and Belgium (van Driel-Murray 1990: 182; Cameron 2007: 6), which is unfortunate from a comparative perspective. Nevertheless, the number of publications referred to above should be extensive enough to gain an overview of type distribution across the North and the Baltic Seas. Impulses and trade with western Europe south of England and the Low Countries will not be traceable in this material, with the exception of the town of Konstanz situated in Baden-Württemberg in the southernmost part of Germany (see Figure 2.1).

2.3 An overall evaluation

This brief overview clearly demonstrates that the archaeology of medieval sheaths and scabbards is specialised and of modest extent. Still, it can be seen as a field with its own 'small discourses'. Usually of a technical nature, a topic can be taken up by one researcher and later followed up by another in order to further shed light on the issue. An example is the suspension modes for swords discussed by Blomqvist in 1938 and later commented upon by van Driel-Murray (1980: 41; 1990: 169, 171), Schnack (1998: 39, 43) and Harjula (2005: 62), all of whom add elements from their own material. Other small discourses are the matters of decorative motifs or tech-

niques that hold the interest of the English publications in particular.

An overview of the studies leaves an impression of regional variation in the way sheaths were decorated and elaborated in northern Europe. However, differing classifications are used for knife sheaths and different scholars use different terms in their analyses such as typology, grouping, classification, etc, adding different meanings to the terms. Principles for classification are hardly discussed, and this complicates comparisons of material other than single specimens from different areas.

The approaches toward the material can be divided into three categories, which I label (1) museological, (2) empirical-descriptive and (3) interpretative approaches. As objects of archaeological interest, sheaths and scabbards have been recognised in an early phase (Grieg 1933; Ward-Perkins 1940) and given special attention due to their close relation to swords, daggers and knives (Blomqvist 1938). This early focus on the subject is denoted as the museological approach, with little attention to the wider archaeological context (by modern standards) but with a strong culture historical objective.

As medieval archaeology progressed, several publications have dealt with sheaths and scabbards from an empirical-descriptive perspective. The main presentation form has been excavation reports, where artefacts were often presented according to artefact and material categories. The genre of excavation reports seems to reproduce a number of implications dictated by convention rather than conscious argumentation (Bradley 2006). In my opinion, sheaths and scabbards provide such an example. They are usually presented as leather finds and according to the genre, leather finds consist of shoes and 'other leather objects'. The focus on material categories has taken attention away from the fact that shoes and scabbards are completely different artefacts that have more differences than similarities. As objects of everyday use, shoes are exposed to even and constant wear, while sheaths and scabbards are less exposed to repeated wear but probably more vulnerable to loss, accidents and random cuts. While shoes were probably worn by most urban inhabitants, there have probably been restrictions as to who could carry scabbards based on gender, age, status and official position, and according to written evidence and legal regulations (*L IV*,14; *Bl* IV, 15; *NgL III*: 25, 68–69). Found en masse, the excavated footwear is suitable for quantitative and statistical analyses, while sheaths and scabbards are more appropriate for qualitative analyses which will be a main objective in this study.

A number of publications distinguish themselves by trying to extend the empirical-descriptive approach of presenting leather objects. The publication *Knives and Scabbards* (Cowgill et al. 1987) does this by combining an empirical-descriptive approach with a museological perspective, following up traditions of the *Medieval Catalogue* (Ward-Perkins 1940). Inspiring, richly illustrated and with accurate descriptions, it is, however, not innovative in form or content. As for medieval archaeology in general, *Knives and Scabbards*, together with the other volumes in *Medieval Finds from Excavations in London* form an important basis and reference to the study of material culture of the Middle Ages.

Another way to develop the traditional empirical-descriptive approach can be more interpretative, focusing on the research questions that can be posed which are connected to the material culture of medieval everyday life, aesthetics and artistic expressions, impulses and contacts between different regions. Still, attempts to try out this potential are few so far. Studying these artefacts in a wider context, e.g. regarding their users or their meaning and significance as material culture and communication, is at this point more or less absent in empirical studies. Symptomatically, the broadest visions are to be found within the studies that refer to little or no empirical material. Both Bolstad (1991) and Kykyri (1996) refer to the research potential of leather crafts and work environment, aesthetic and artistic expressions, wider cultural connections, the sheaths as impulses and contacts between different countries, etc, but unfortunately without much empirical substance as both authors treat only a small number of objects, hardly sufficient to fulfil their objectives. Goubitz (2002) also reflects on the source potential in this material when referring to the

larger amount of sheaths from Dorhtrect. But again, his article covers only a few examples. My own article (Nøttveit 2006b), adding written and ethnographic sources in order to understand the roles and functions of the artefacts in society, could be criticised in the same manner. To some degree, problem-oriented approaches can also be found in the more comprehensive studies within the empirical-descriptive tradition. But generally, the objectives often centre on 'the small discourses' within the narrow field of sheaths and scabbards. Harjula so far presents the bravest attempt (Harjula 2005). In studying a large corpus, he presents a number of wider objectives. However, his overall aims are strongly influenced by the empirical-descriptive tradition, focusing on the concrete and measureable aspects of the material. Nevertheless, he shows a curiosity towards the users and makers of the objects and the status value of the artefacts, as sword-scabbard fragments derive from more restricted areas in Turku and some areas also have surprisingly few knife-sheath finds. In the end though, Harjula does conclude that more research is needed before such work of a more interpretative character can be undertaken.

An interpretative approach has been applauded and recommended in the study of sheaths and scabbards, more than it has actually been carried out. The situation may be explained by several factors. Mainly, medieval archaeology is a relatively young discipline within archaeology (Augustsson 1994: 33), where basic research and publishing is necessary to sustain more interpretative approaches (Harjula 2005: 76). A strong empirical focus is also expected and relevant for documentation in archaeological reports or artefact catalogues. To some extent, the situation can also be explained by different traditional approaches to artefact studies in different countries. The context of the artefacts is usually discussed in a stricter archaeological sense concerning dating as documentary evidence. However, a wider perspective should be the goal when using sheaths and scabbards as source material in more problem-oriented studies. Perhaps a narrow focus is also a result of limited faith in the informative potential of these artefacts, exemplified by the statement that sheaths do "… not seem a particularly good vehicle for display of livery" (De Neergaard 1987b: 61). The alleged reason is that sheaths are small, often crudely made and more or less hidden by the wearer's garments. On the other hand, Goubitz claims the decoration is the main feature of the objects, produced to be shown and to display symbols or fashions which the owner wished to be associated with (2002: 150).

The importance of artefact publications should not be underestimated. They provide important and necessary documentary evidence, including references of dating and spatial distribution. In general, such artefact presentations also contribute to comparison and identification of types, showing regional differences and specialities. These objectives underlie most of the works discussed here, and will also be one of the aims for my own study. Several of the more comprehensive works are also important for this study, as they comprise assemblages of similar sizes to the material from Bergen (Cowgill et al. 1987; van Driel-Murray 1990; Schnack 1998; Harjula 2005; Cameron 2007).

I would suggest that the main reason these works have not moved from the empirical-descriptive approach to include the interpretive aspects is not specifically related to sheaths and scabbards, but is perhaps related to a general reluctance to include theoretical perspectives in artefact studies in medieval archaeology. Now seems to be the proper time to apply some new perspectives toward the sheaths and scabbards as, according to the latest archaeological rhetoric, archaeology is about to 'return to the artefacts'. This objective will be considered in the following chapter.

3 Theoretical approaches and reflections

As seen in the previous chapter, research on medieval sheaths and scabbards has had a strong empirical focus. While keeping in mind that sheaths and scabbards are practical implements as containers for swords, daggers and knives, not considering their other meanings would be to underestimate the many roles of artefacts and material culture. As one of the main objectives is to approach these artefacts from several angles, new information and knowledge will hopefully be retrieved, not only empirically and methodologically, but also theoretically. In a wider perspective, these aims could be transferable to the larger field of artefact studies within medieval archaeology.

To consider any meaning of the sheaths and scabbards as artefacts, we need to discuss what material culture is and how humans relate to it – important questions for several disciplines studying the social human. The question is fundamental to archaeology, as the discipline interprets human activities in the past based on remains of material culture. What meaning did the sheaths and scabbards have beyond being holsters for objects of use, and how do they reflect other aspects than handicraft, trading or cultural contacts, such as facets of medieval society, man and mentality? By approaching these artefacts as objects used in both a practical and expressive manner, new knowledge can perhaps be found of both personal and societal matter.

Questions like these have been central in interpretative archaeology in recent years. Actually, focus has been so strong towards meanings and representations that several archaeologists plead for a return to the artefacts themselves (Olsen 2003: 100; Damm 2008: 147–148). As a discipline that studies material culture, one should expect that archaeology had a strong theoretical framework for interpreting this as information and meaning. Nevertheless, theoretical perspectives are usually borrowed from other disciplines and sociology and anthropology in particular. However, a theoretical concept that has been discussed for some decades now is the concept of *style*. In fact, archaeology has been a major proponent in this discourse, parallel with art history, where the concept has other connotations. The concept itself has been significant in archaeology since the nineteenth century. Here, I first want to focus on style as communication, the 'information-exchange theory of style' actualised in the late 1970s, to see if it can offer an interpretative framework for the sheaths and scabbards or material culture of the medieval period. Secondly, attention will be given to the recent focus on materiality in theoretical archaeology (DeMarrais et al. 2004; Damm 2008: 147). Both the style debate and the renewed focus on materiality are firmly based within the theoretical development of archaeology, which must be drawn into discussion as a necessary background. While the style debate has proved useful to archaeology, the new materiality focus has yet to prove its worth in practice beyond rhetoric. Can these sets of perspectives offer new understanding of a material such as sheaths and scabbards, or in a wider sense to the medieval material culture? When discussing the different approaches, sheaths, scabbards and related material will be used to exemplify my reflections.

3.1 The information exchange theory of style – the style debate of the 1980s

Even though style is a central concept in archaeology, it remains somewhat elusive and proves difficult to define in a way that most archaeologists can agree upon.[14] The term derives from Latin 'stylus', a tool for writing, denoting 'expression' or 'appearance'. Whether explicitly discussed or not, style is involved in most archaeological analyses. Style creates and defines types of artefacts and cultures, in many ways the three-period system itself and similar evolutionary trajectories (Conkey and Hastorf 1990: 1). However, it is complicated by etymology, several connotations in different languages and changing contents of meaning during the history of archaeology. A brief survey is therefore necessary before looking closer upon style as communication and the style debate of the 1980s.

Chronological and spatial variation and similarity in design and shape of material culture

and artefacts has been a central problem since the emergence of academic archaeology. Based on changes in style, Oscar Montelius (1885) introduced his typological method and was thus able to divide the Scandinavian Bronze Age into six chronological phases based on style. Analyses of style have been central to archaeology ever since. In the tradition of culture-historical archaeology, style in the archaeological inventory was associated with certain population groups, and artefact complexes were thought to reflect nations, cultural groups and race. Although variation of style was problematised, the notion of style itself was not. Style served as an almost a-priori concept of spatial and chronological classification and formed an interpretative basis for culture-historical understanding (Conkey 2006: 359).

During the 1960s, this model of explanation was replaced by more eco-deterministic models that explained artefact variability rather as a product of adaptation to environment, resulting in a function–style dichotomy in many processual archaeological interpretations. Lewis Binford (1962) actually divided material culture into three functional areas (the material, social and ideological domains with their respective 'sub-classes' of technomic, sosiotechnic and ideotechnic artefacts) and claimed that style was transgressing these sub-classes. An artefact could well have a function within all three domains. However, style has often been connected to the social and ideological domains, because it has been regarded as not decided by technological (functional) limitations. The focus on function within processualism thus led style to the periphery of the archaeological discourse, even though style prevailed in its role within classification. Style was seen as a reflection of meaning, but belonging to a domain the researcher could only access to a small degree. In many ways, this was an acceptance of the earlier view that style reflected ethnic groups, but no longer as a relevant topic of research in archaeology.[15]

James Sackett did not accept the processual dichotomy of style and function. According to Sackett, style is how an artefact actually appears among several equal options for how to produce the artefact, in choice of material, production, appearance, etc. Style is *isocrestic* (Greek: equal in use) because style is the expression of the practical ability of the artefact. Style is not an independent aspect parallel to a functional aspect of artefact variability. Style and function are insolubly connected. Thus, isocrestic variation is at hand in all artefact variability, even in its most functional aspects (Sackett 1977; 1982). As processualists in general, however, Sackett regarded style as a passive reflection of the normative rules of society.

Regarding sheaths and scabbards as examples, regional differences should be expected, i.e. different types. Disregarding imported objects, such differences are not a result of deliberate decisions in Sackett's view, but a result of practices, of how one normally produced a sheath from the material available, tools, circumstances of production and 'how things have always been done'. The sheaths all fulfil a function of holster. Their function is to carry knives, swords and daggers. Thus, sheaths in e.g. Bergen and London can be expected to have different isocrestic style. Is there any reason at all to expect the same style in different areas? Differences in shape and appearance do not necessarily reflect any 'hidden' meaning of social or religious nature.

This passive view of style was one of the topics problematised in the American ethnoarchaeology from the late 1970s. In the article "Stylistic behaviour and information exchange" from 1977, Martin Wobst expresses his dissatisfaction with the focusing on artefact function, reducing style to a series of measurements and descriptions, academic exercises where style is an important component but without real meaning.[16] He argues that style is communicative, that artefacts transmit 'stylistic messages' (Wobst 1977; Vankilde 2000: 8). To invest energy in material culture as markers will pay off in relation to groups, where expressing in other ways would be more energy demanding. Within family and close relations one should thus expect little use of stylistic messages. In relation to individuals and groups, the more peripheral they are the more one should expect the use of stylistic messages as long as they are still within a common understanding of the symbolism.

Stylistic messages are thus part of an information exchange where the effectiveness as markers reflects the energy devoted to production and use of the artefact. This is coherent with the system theory within processualism. However, it also partly represents a break with the processual dichotomy of function and style because style is function, albeit different than the pure practical one. An even larger break is implied in the evaluation of style as being actively communicative and not passively reflective. Probably based on this background, Margaret W. Conkey refers to Wobst's article as being paradigmatic (Conkey 2006: 360). Wobst's model may appear somewhat rigid. It is usually understood as style being the part of artefact variation that transmits information. However, the article forms the basis for what has later been labelled 'the information-exchange theory of style' (Hegmon 1992: 519, 521).

Wobst's conception of style was followed and developed by Polly Wiessner in her 1983 article "Style and Social Information in Kalahari San Projectile points". By style, she means the formal variability of material culture that expresses information about personal and social identity. Her point of departure is that individuals understand themselves as units, with certain characteristics that express their identity. The identity of an individual is shaped as part of a group in relation to other groups, and in relation to other individuals within the same group. This is expressed through material culture such as headbands, belts, bags and loincloths – in her case studies from the Kalahari. She focuses on arrowheads used by three different bands of San people, to see if the arrows express some kinds of identity. The arrows are chosen because they are of varied style, but not decorated as the other objects. The artefacts represent a certain value due to the work put into them, and they are expected to be used for some time, i.e. they have a potential to be seen and transmit messages through their style. Wiessner differs between emblemic style that transmits group identity, and assertive style, variation of style within the group.[17] She found a variety of emblemic style between the three San-groups. Individual style (assertive style) was more difficult to prove. She explains this with group identity being the most important aspect to transmit, and that individuals can easily change their group identity.

Wiessner's interpretation has been criticised by Sackett (1985), who claims that style is formed together with function. A certain arrowhead will be the result of a place- and time- typical choice among several differing options on how to make an arrow. Arrowheads might function as ethnic markers, but that is because individuals within a group are all socialised into the same way of producing the arrows. Style might be passively (re)produced, and Sackett fears that 'ethnic markers' are far more often read or interpreted than actually signalled (1990: 37f). According to Sackett, style as consciously expressed information is a by-product of the function of the artefacts. He labels this by-product as 'iconological style', which falls outside the isocrestic concept of style.

Transmitted to medieval archaeology and research on sheaths and scabbards, interpretations implying emblemic or iconological style are presented by Tony Wilmott and Esther Cameron. The arms of the FitzWalter family appear as decoration on several London sheaths and are interpreted as signs of livery, that the users or owners of the sheaths belonged to or were retainers of the FitzWalter family (Wilmott 1981; 1987). Cameron's type B2 winged sheath has its earliest and far most numerous appearances in Dublin, and is described as "…part of Dublin's identity" (Cameron 2007: 62). As a premise, I assume that medieval people were obviously able to differ between local and foreign products. Certain elements of shape and decoration could probably be connected to different parts of Europe, where they were the common type. Several people were also most likely able to identify the origin of foreign sheaths, having seen them other places or associated them with people from certain areas or perhaps as trading commodities from specific regions. The identification of the origin or 'regional styles' of the different sheaths and scabbards will be important in this study. Several sheaths found in Bergen are already supposed to be of English origin or inspired by English sheaths (Grieg 1933: 244; Herteig 1960: 184; 1969: 166; Bolstad 1991:

139–139). Such sheaths may thus have expressed cultural belonging and have thus had emblemic style. The important question is whether this was considered meaningful in its contemporary setting.

The main objection against Wobst and Wiessner must be that their notion of style covers only the communicative aspects of the artefacts. If these aspects are not grasped, it is no longer style to the individuals in question or to the researcher in retrospect. Still, the material variation does not cease to exist for that reason. Moreover, how are we to recognise style in archaeological material if this depends on perceptions of style in the past? This exclusive understanding of style neglects a long tradition within the discipline, and does not provide us with a tool that can be used in archaeology. It leaves the material traces dependent on secondary sources to affirm whether they were communicative or not, and whether they represented style or not.

Automatically interpreting a person carrying a foreign sheath as a foreigner would also justify Sackett's fears. It is not certain that sheaths were meant as emblemic markers, even though the possibility that they functioned in that respect exists. If so, it is reasonable to assume that the sheaths were part of a larger package, a style of dress with several markers. If not for expressing emblemic belonging, the sheath may have had a meaning as status, brand, protest, etc. In Sackett's view, the by-product or iconological style may have been an important aspect of the artefact. In a 'foreign' context such as Bergen, emblemic 'English' sheaths could have obtained new meanings and been a part of individual assertive elements of style instead. From the archaeological point of view, the main problem is not to identify the 'English' sheaths, but to ascertain whether they were used in an emblemic manner, a problem to which I will return to in chapters 7 and 8.

In spite of the assertive style of Wiessner, the style debate has been centred on ethnicity, first as reflective and later as active signalling. With the complex issue of ethnicity, Ian Hodder entered the debate. Hodder regards style as highly communicative, but also contextual. It is not given where and how style expresses ethnicity. However, style emerges in human cooperation and must be analysed from its context. According to Hodder, "Style is a way of doing" (1990: 51). Thus, style is something humans use to arrange and understand their world and it produces cultural meaning (Conkey 2006: 360). This view broadens the scope to encompass more than ethnicity or 'nationality', but is heavily dependent on a holistic approach towards context.

Some premises will be laid for further work regarding ethnicity, a complex term which is as theory-ridden as style and far too multifaceted to treat in depth here. Medieval writers describe groups of people by several terms such as *gens*, *natio*, *populus*, 'stock' or family, language, customs, beliefs, and sometimes also by terms which one would today consider racial, illustrating that ethnicity was not self-evident then either. Differing from later nationalism, however, it was not considered necessary or natural that each such group should constitute a political unit or nation. On the contrary, a king usually ruled a kingdom consisting of several different 'nations', 'languages', 'customs', 'groups', etc. (Bartlett 2001). This is also the case for northern Europe during the period in question, whether regarding the reign of the Norwegian King, the English King or the Holy Roman Emperor. Ethnicity was not an obvious matter during the Middle Ages. However, the main issue here will be within the context of Bergen and its medieval inhabitants. We know from written sources that the town's population consisted of a large part of what was perceived or described as foreigners from different areas. This included Englishmen, Germans, Icelanders, Gotlanders, etc. Some were in Bergen for the trading season only, while others were inhabitants or so-called guests for an entire year. As described in the Urban Code of 1276, the regulations of observation posts for defence state that each guard-team should consist of three men: two natives and one foreigner (*Bl III*, 3). Several sources describe foreigners by nationality, which is usually a reference to place of origin, probably associated with language and custom in varying degrees. Although ethnicity is fluid and negotiable, a premise for the further study is that some kind of awareness of regional

identity was present. This part of identity was probably kept intact to some extent, reflected in surnames or nicknames referring to place of birth.

The style debate of the 1980s ended without a clear consensus (Conkey and Hastorf 1990), but with a persisting notion that style (material culture) is expressive. Like Sackett, critics may not agree to the intent of conscious messages being expressed through material culture, but must admit that the 'passive style' of material culture is interpreted and given meaning even though the meaning is perhaps not intended. Since agreement could not be achieved as to what style is, Wiessner posed the conclusive question as to what stylistic behaviour is, and proposed the answer to be connected to identity and ethnic identity in particular. However, this is not a return to traditional culture-historical archaeology where material culture (style) reflects ethnicity or society. The point is that material culture is actively used in social relations. Individuals and groups use material culture in order to change or sustain society and norms.

The decade of the style debate was also the decade when the first more comprehensive analyses on medieval sheaths and scabbards were published (van Driel-Murray 1980; 1990; Cowgill et al. 1987). The debate did not have any visible effect on these works that should be seen instead as part of the establishing of medieval archaeology within the general discipline, ushered forward by the recent increase in medieval excavations and influenced more by the methodological than the theoretical approaches within processualism (Gerrard 2003: 172–180). On the other hand the style-debate came to represent an important catalyst in the shift of thought, away from processual archaeology. It originated safely embedded in the cost-effectiveness calculations and system-thinking of processual archaeology. However, the idea of style as communicative did lead the focus towards problems that would occupy postprocessual archaeologists to a larger degree. The information-exchange theory changed character and became a broadly encompassing information-exchange idea of material culture which most archaeologists can easily accept. Although referred to as clarifying (Olsen 1997: 187f), it has to be accepted that the style debate ended far from consensus. The debate has contributed to several aspects that most archaeologists feel are obvious today, such as material culture expressing meaning and being actively used by individuals and groups in order to obtain certain aims, and as a way of constructing, maintaining and changing society and cosmology.

For the archaeologists of the 1990s, it was natural to look elsewhere for analytical tools to interpret material culture as meaningful, such as within symbolism and semiotics. Style became one of several approaches to information exchange, also connected to linguistic metaphors through a wish to 'read' style. The linguistic metaphors are later criticised. But the idea that style communicates or has meaning survives (Conkey 2006: 359), also at a time when material culture seems to be understood more as a bodily experience that influences further than the human intent. The style debate and perspectives that followed have only been applied to the medieval sheaths and scabbards in a brief or indirect manner. However, recent thoughts on style together with newer perspectives on materiality should also be considered before this is done.

3.2 Style today

Conkey is as much a chronicler as a debater in her work on the concept of style. In her recent contribution "Style, Design and Function"(2006),[18] she states that fewer studies of style are undertaken than could be expected within the last 20 years of increased focus on materiality and the object world. Due to researchers focusing on the relation between humans and objects, she expects the result to be that the objects themselves have come in the background (Conkey 2006: 355). While materiality has received much attention in social studies for some decades, a number of archaeologists would disagree that this is a valid description of recent archaeology (Olsen 2003: 1–2). Before discussing materiality in present archaeological theoretical debate, I will take a closer look at recent year tangles with the style concept and start with Wobst's second endeavour on the topic.

In 1999, Wobst published a new article on style, 22 years after the article that in many ways started the discussion on style as information. In the meantime, he has omitted involvement in the debate he initiated. His tone is actually more ambitious and enthusiastic than in 1977, his understanding of the concept more "… encompassing, in ways that does not necessarily make it easier to work with" (Wobst 1999: 120–121). Focus has now been shifted from the group to the individual, and style cannot exist as a group expression without individuals to influence, uphold and change style. Individuals cannot express themselves through style without the group as a reference. The message might be the same even though style changes. Expressing scepticism to both processual and postprocessual approaches, Wobst now sees himself as a 'mellowed functionalist' softened by the structuration theory by Anthony Giddens. Style is the material shell of the individual, and in this shell we find material interferences or interventions, the aspects of material culture that communicate. Those expecting a new programmatic article will be disappointed. On the contrary, Wobst seems even more sceptical to the methods undertaken by archaeologists, among other things to understand style. Classification is one such method clouding the past realities and will be further discussed in the following chapter.

Is style still a relevant concept within the interpretative archaeologies, and is it applicable to the medieval sheaths and scabbards? At least the concept is still controversial. Some directions such as neo-darwinist archaeology see style as a concept that covers the non-functional variation in artefact variability, forming the basis for chronology and classification (Dunnell 2000: xix). Within behavioural archaeology, Michael Brian Schiffer and James M. Skibo want to rid the discipline of "…cherished but unhelpful concepts, including style and function" (1997: 27–28) through a theoretical framework focusing on the producer and the life cycle of the artefacts. Robin Boast (1997) and Chris Gosden (2005) make two important contributions to this 'second style debate'.

Boast also feels that the concept of style has lost its use in archaeology, and presents perhaps the most fundamental critique to the information-exchange theory and the following debate (1997). "The debate has been decisively won by the interpretative theorists", he states, that is, the archaeologists who see style as communicative (Boast 1997: 176). He used to consider himself one of those who means that style is the 'key to the social', until a growing dissatisfaction led him to ask the fundamental question of whether this key exists at all. The problem of style is unsolvable he claims, because it depends on a social categorisation of the world that is part of our western intellectual tradition especially rooted in the Cartesian dualism between subject and object. We do not discover any organising principle of the reality through studies and interpretations of style, but rather create a new. The border between *it* and *us* is neither stable nor factual. If we question the Cartesian dualism, the concept of style will be meaningless as analytical category everywhere else other than in a consumer society with a historically determined view of the world, that is, our own. Understandably, Boast cannot present the new 'correct' alternative, but suggests opening up to active influence by not only the subject, but also the object, so-called non-human agency. His thorough critique, however, embraces far wider than the style debate in archaeology and art history. The Cartesian way of thinking subject – object, thought – materiality has become so natural that it chains our archaeological imagination and therefore has to be challenged (Gamble 2000: 109–110). Doing so will undoubtedly prove fruitful to many archaeological interpretations. However, Descartes' revelation of his immaterial mind and material body did not originate in a vacuum. Dualism had been discussed in several forms since antiquity and through the Middle Ages. For the medievalists, I think this calls for interpretative reservations rather than rejection of the style concept. Following Boast's critique, we need to ask not only what materiality was in the Middle Ages, but also what individuality was.

An archaeologist who is not ready to discard the notion of style, Chris Gosden presents a similar conception of the influence of objects (2005). His view is that individuals do not

primarily rule style; on the contrary, style itself influences individuals to continue to make artefacts in (almost?) the same style. In a way, style is independent of humans according to Gosden. Individuals are socialised into a world where material culture and style has formed the frames already, a view similar to that of Sackett. This has to influence the understanding of context. To most researchers, society is the primary context of artefacts. We interpret the objects based on ideas and meanings of individuals from social groups such as class, gender, etc. This view makes the individuals active and the objects passive, only carrying meaning to the degree they are used in such a manner. Gosden proposes that the deciding context of an artefact is to be found in the other artefacts in the same style. The logical question then is not what the meaning is behind an artefact, but what the effect of it is and how the style of the artefact works. Effective elements are the shape, effect, genealogy and origin. Both Boast and Gosden present views that activate the objects. The question is whether human intentionality works in one direction only, from our thoughts and ideas onto or via the material world, or if the process is two way. Does the material world influence us in ways beyond human control and intention?

These differing views are labelled materialist perspectives and materiality perspectives, respectively (cf. DeMarrais et al. 2004: 2). Within a materialist perspective, humans consciously use materiality as instruments of e.g. authority and symbolic power. The opposing materiality perspective is where humans engage in materiality and are shaped by the experience.[19] Diverging in their view of style, both Gosden and Boast represent an important break from the information-exchange theory of style. What Gosden does is to move style from its materialist perspective within the style debate, to a materiality perspective where style and artefacts become almost like active agents just as their human counterparts.

In fact, both materiality and materialist approaches focus on the relationship between humans and things. But within a materiality perspective, artefacts become more active and probably more so the centre of attention. This shift of focus coincides with a recent trend in archaeological theory with renewed focus on artefacts. After a longer period of focusing on how the subject creates the object and how "everything is language, action, mind and human bodies", Bjørnar Olsen (2003: 100) wants to include the other 'half' or how materiality affects human beings independent of human intention. Such a plea for artefact focus should be welcomed within medieval archaeology where artefact studies still play an important role, although perhaps mostly for methodological reasons. However, the challenge within medieval archaeology is to incorporate newer theories into the research that is not always research-driven, yet frequently part of official management. The archaeologist John Robb (2004) provides some perspectives that are of relevance for this study.

Robb discusses agency of artefacts but not artefacts as 'conscious agents', which he suggests is a more polemic grip.[20] He claims that this is not the intention of Alfred Gell (Gell 1998), who has inspired the 'agency of objects perspectives' but distinguishes between the agency of humans and the agency of things, or 'primary agency' vs. 'secondary agency'. Robb uses the terms 'conscious agency' and 'effective agency', respectively. However, I find his view of the 'extended artefact' even more interesting. Artefacts cannot be reduced to their physical existence. As parts of institutionalised practises artefacts are given meanings, dictate actions and enmesh us into social relations. To understand how artefacts are active, one must look at the artefacts' extension into social time and space. Furthermore, artefacts presuppose other artefacts because they are linked functionally or semantically. Together they provide each other with efficiency. Artefacts have extensions in time, through general usage and individual use, and life-stories (Robb 2004: 131, 133).

Several perspectives on style and materiality have been presented here. Are they all relevant to the study of medieval sheaths and scabbards? The extended scabbard does not consist of a physical holster alone. It presupposes a sword, belt and number of practises including wear, use and storage. The extended scabbard involves a number of social habitats (Robb 2004: 134)

primarily of violent character in war and battle, but also social life and ritual practises. As specialised tools designed to inflict death and injury, weapons evoke response from humans (cf. Gosden 2005; Robb 2004) probably more far-reaching and in more ways than intended by the person who made the weapon. Weapons tend to be decorated and stylicised, they play roles in ceremonies, religion, etiquette and as symbols, and may serve as an example for …"how objects construct the subject" (Olsen 2003: 100). In a way, they are materialised possibilities of danger that offer the subject the opportunity to harm and exercise power, simply because they can effectively be used so. This also applies to knives to some degree. Although often a tool for multi-use, a knife is a potential weapon and carries the possibility of (being used to) inflict physical harm on humans. In this lies the materiality perspective, that humans are shaped by their experiences with materiality and that materiality influences humans. However, this does not totally exclude a materialist perspective as according to the information-exchange theory, people might use the artefacts in an expressive and obtainable manner precisely because of their effects as materiality.

3.3 Theorising material culture of the medieval period

The perspectives and approaches discussed have several implications for how to approach both the past and materiality. Context is usually an important if not crucial component. Consequently, some considerations and demarcations are necessary regarding the period of study, i.e. the Middle Ages and urban life. Medieval material culture is not neglected as discussed in the previous chapter (p. 24), but is characterised as slow to incorporate recent theory (Gerrard 2003: 229–231). Therefore, the perspectives outlined above will be especially interesting when reflecting upon and discussing the relation of medieval sheaths and scabbards to urban contexts.

When Conkey notes that fewer studies of style were undertaken than could be expected within the recent 20 years of increased focus on materiality, she assumes this to be a result of researchers focusing on the relation between humans and objects, and partially ignoring the materiality itself (Conkey 2006: 355). I think that a main part of the explanation is found in the origin of the style debate within ethno-archaeology, a discipline where contemporary societies are studied in order to obtain understanding of processes that form the archaeological record.[21] The phenomenon of style as communication is harder to transfer to past societies than several other processes studied by ethno-archaeologists, and one is struck by how quickly different authors use examples from our own everyday experience to explain what style is and is not (Wobst 1977: 324; Sackett 1990: 37; Hodder 1990: 37). Such examples are illustrating, but whether they are transferable to an earlier reality is quite another question. Context and historic particularism also tend to be more strongly emphasised within materiality perspectives than within materialist perspectives (DeMarrais et al. 2004: 2)

These are factors that give historical archaeology (including medieval archaeology) an advantage compared to prehistoric archaeology, as a broader spectrum of sources are available that can shed light on a wider context. Through written and iconographic sources, although restricted, the medieval archaeologist is able to utilise an 'ethnographic' approach that can legitimise use of an information-exchange model also in medieval archaeology. As 30 years have passed since the introduction of the information-exchange theory, not all the original implications will be attributed using the term information-exchange model today. This implies that I see style as communicative, although style is not communicative by definition. Even though the concept is used on an archaeological basis, several other sources contribute to form a context for understanding medieval material culture. Precisely because these other sources are available, the material culture of the medieval period should be studied not only as a source for past society and humans, but because this material culture is a source with more 'contexts' than the purely archaeological, contexts that can contribute to our understanding of, for example, style as communication. With regard to the views of

Boast and Gosden, however, one needs to modify the concept of style but also consider a pre-Cartesian understanding of the individual and its relation to material culture.The differences between medieval and ethno-archaeology still have to be kept in mind. The medieval society of northern Europe had many characteristics and distinctive features that are hardly comparable to most ethno-archaeological examples of today. Social structure and organisation, customs and beliefs and political and religious institutions have played formative roles in society. Although dramatically changed, these factors still influence modern northern Europe in some ways more profoundly than others. Thus, we also have a historic line for the period, which has left traces in language, customs and traditions where the extended artefact can be recognised. Regarding the sheaths and scabbards, direct links can be established and origins of customs are still remembered. To some extent they can be observed in technology, etymology and traditions concerning this material.

3.3.1 The medieval individual

An obvious consequence of Boast's critique regarding style and Cartesian dualism is to question what an individual and individuality are, in this case in the Middle Ages. This is relevant since individuality is also one of the presumptions for the style debate.

A strong presumption has long existed that a real sense of individuality first developed during the Renaissance, or the period that 'discovered' the social individual (Clanchy 2003). The evolutionary view that human consciousness during the medieval period laid half-awake under a veil "…woven of faith, illusion, and childish prepossession, through which the world and history were seen clad in strange hues. Man was conscious of himself only as a member of race, people, party, family or corporation – only through some general category", as described by Burckhardt in 1860, is still influential even though encountered by many scholars from disciplines as diverse as psychology, biology, anthropology and history (Clanchy 2003: 295). Within this presumption is also the conception of the traditional society versus the emergence of modernity, with the latter recognised by its individuals' abilities for independent and objective observation of the 'outer world', denied the 'traditional' personalities due to close group relations and strong traditional beliefs. The well-known description from Norbert Elias of medieval man as spontaneous and uncontrolled is also a part of this presumption and forms a premise for several theories of modernity (Bagge 1998: 14–15).

Such perspectives are well suited to a materiality approach of actually depriving humans of calculating intentionality and instead emphasising strong influence from the material world. While I do not contradict the influential powers of materiality as outlined by Robb (2004), the notion of medieval man as uncontrolled and primitive is harder to accept. It is safe to assume that the medieval experience of individuality differed profoundly from our own experiences today, as would be the same for e.g. the sense of individuality in the seventeenth or nineteenth centuries. Within social anthropology, theories of modernity are opposed due to common human traits across cultures but also due to the variability within cultures and societies (Bagge 1998: 15). How individuality was actually experienced and considered in the Middle Ages is a difficult question, partly due to the lack of relevant sources (Gurevich 1995). Still, several scholars point towards a number of medieval phenomena as expressions of a sense of individuality, such as the increase in personal correspondence, biographies, personal seals, the notion or romantic love, individual grave monuments and effigies and a more personalised notion of religion through confession and penance (Bagge 1998: 16–21; Bedos-Rezak 2000; Clanchy 2003).[22] Some of these are 'signatures' of modernity and several scholars will trace such signatures back to the period between *c.* 1000–1500. A relevant example is the attempts by Charles Radding to read an intellectual shift in the twelfth century, from copying to rational use of general principles in approaching certain problems, indicating a separation between the rational subject and the world, actually a Cartesian dualism (Radding 1985; Bagge 1998: 19). A main argument against these 'medieval renaissances' would be that most of them only

concerned or affected small groups of society. However, such an argument would also apply to several centuries after the medieval period. Thus, we should be open for the possibility that ideas and norms within influential groups would spread to other parts of society to some degree.

As a premise for this study, larger confidence will be given to the medieval individual as a more self-conscious personality than expressed in the influential works of Burckhardt and Elias. I see the individual as "a single entity which is the subject of cognition in various modes" (McCall 1990: 12). The level of cognition is partly deductive from context in a wide sense, and one objective of this study is to find out whether the medieval sheaths and scabbards can shed light on some aspects of the medieval individual and its material manifestations. Here the decoration of the artefacts will be especially relevant.

3.3.2 The medieval artefact

The borders between individuals and artefacts are culturally variable according to anthropologists since the early twentieth century (Hoskins 2006: 74). As medieval individuality differs from the present conception of it, it can also be expected that artefacts were perceived in another way in the Middle Ages. Artefacts may have had powers, like relics, or in other ways been 'magically' enhanced by certain situations or persons. Certain artefacts may have had personal names or important histories. On the other hand, some people such as slaves[23] or the poor may have been seen almost as depersonalised or as objects in some cases. The possibility must be considered that sheaths and scabbards were considered as something more than merely holsters in the Middle Ages, as would be the evaluation of these objects today.

An example related to sheaths is the medieval kidney daggers. Being one among several types in use on the Continent, the kidney dagger is the dominating type by far in Scandinavia. The shape of the dagger indicates some kind of phallic symbolism. English medieval terms for the dagger support this, as do iconographic sources. Interpreted on the basis of several written sources regarding the role of manhood with rigid conceptions of honour, masculine identity and sexuality and the dangers of transgressing from this role, the Scandinavian preference for this dagger can be explained (Nøttveit 2006a). The interpretation would be difficult to substantiate without the supplementary sources, and illustrates the role of materiality in society or how preference for a certain style of dagger possibly came to express a medieval Scandinavian conception of masculinity. Taken a step further, the dagger did not only express masculinity, it actually was masculinity. In certain contexts and situations, the dagger became what it symbolised.[24]

Although it was a period having written sources, the Middle Ages were in most regards a vocal society and a large percent of the population was illiterate. Just as important as what was actually written is the significance of text as materiality, and writing as a technology (Moreland 2001). Materiality plays another role in a preliterate society, and may have been suitable both as a tool to 'remember with' as well as to 'explain with'. As a society of signs and allegories, our interpretations of medieval artefacts should be open to double meanings. Our primary way of understanding the medieval individual is through context in a wide sense. These factors may exemplify that a materiality perspective should not be forgotten when approaching this period.

3.4 Style and materiality of sheaths and scabbards

Style is "always in motion, unresolved, discursive, in process" according to Wobst (1999: 130). However elusive, a discussion of the concept through the information-exchange theory of style was one of the internal processes that led to radical changes from processual to post-processual archaeology. Recent discussion on style has moved from a materialist view on material culture to an alternative materiality view, which actually deprives the subject of full control over the object. Humans do not only use material culture to express meaning and obtain certain aims, but also to construct, maintain and change society and cosmology. From a materiality perspective, material culture influences human beings beyond original intentions.

The many attempts at defining 'what style is and where it resides' have quickly been scrutinised and replaced by new attempts without this being the most rewarding part of the style debate. Still, I need an understanding of style that can be used for this study. As a starting point I find Sackett's isocrestic understanding of style useful and think it encompasses (although not intentionally) more recent understandings of material culture. Sacketts' view that people are socialised to make objects in certain ways opens for the later materiality perspectives, or that material culture 'shapes and socialises' humans. I will also include his iconological style, i.e. the acceptance that style and artefacts are in fact read and interpreted, although perhaps not as intended. However, I am also giving the individual credit that she or he may take advantage of this fact and consequently use materiality in an expressive manner. However, an explicit materialist or materiality view of material culture is not supported here, but rather a combination. The conception that materiality influences humans does not exclude the possibilities of humans using it actively, in particular because of these properties.

The style of sheaths cannot be separated from its practical function as holster. People were probably 'socialised' to make sheaths that were similar to the ones they already knew. However, these sheaths were produced and used in a period of increasing trade and connections in Europe, a period of growing distribution of material culture such as ceramics, textiles and weapons. Within these developing 'fashions' there were probably expectations but also regulations for people who were allowed to wear certain garments and so on (cf. Philips 2007). Clothes, sheaths and scabbards were status markers and socially distinctive. Thus, the central point is not to define what style is and what exactly is 'stylistic' with the different artefacts, but to search for the differences. In this manner, my understanding of style is rather old-fashioned: style appears, or more specifically becomes especially relevant when the same objects have different appearances. The medieval sheaths and scabbards are a highly varied group in both appearance and quality. I propose that one way to distinguish different styles is to focus on different techniques of manufacture when classifying these objects. Style and technique are intertwined. By classifying based on production techniques, different styles should be separated as well. By comparing distribution patterns of the different types of classification emerging, the possible regionality of styles may also be discerned. This will be a concrete result from following Sackett's view of the intertwined nature of style and technology. If types can be distinguished based on technological differences, it is still important to evaluate similarities that cross the types. These similarities may be seen as stylistic influences.

Context is important in a wide sense. The context of style will be necessarily multifaceted and central to interpretation of the meaning or information behind style. The context of style is the society where the style is used, other artefactual and design expressions in the same style and also the artefacts where style resides. Style will have some form of connection and meaning to all of these contexts, but which connection and meaning cannot be presupposed a priori. The meaning of style will depend on these connections to contexts, and these connections contribute meaning to style. But that can change over time and may be understood differently by different individuals and groups.

Context is also important for the notion of extended artefacts. The artefact cannot be reduced to its physical existence alone (Robb 2004: 133). It dictates ways and possibilities of usage, and is used and interferes in social action. The concept 'agency of objects' suggests almost an agenda of its own within materiality and is perhaps best left to philosophy. However, it cannot be excluded that materiality influences and structures human life in far more ways than was intended.

I do not propose that processes related to social and group identity can easily be understood from any archaeological material. Seen in relation to context in a wide sense and based on style analysis, however, the sheaths and scabbards can probably form a basis for interpretation. The central issue is that artefactual style *can* communicate on one level or another. In

the discourse the information-exchange theory of style has been under several attacks, some more aggressive than others. But its central core still stands and new layers of meaning have been added through new perspectives. Identity is multi-facetted, having aspects of regional belonging, status, age, gender, body, etc. Without claiming that the sheaths can be connected to all these aspects, it is likely that these aspects are manifest in material culture generally, some of them also in relation to sheaths and scabbards. Aspects such as attitudes, behaviour and ideology which are related to identity must also be considered. To some extent, simply carrying sheaths and scabbards could express such aspects, as the objects were either carried hidden in the folds of the dress or else carried visibly.

4 Methods

In this chapter, different methods applied in the analysis together with considerations regarding context and representativity of the material will be presented and discussed in relation to the research questions that have been posed. Focus will be on the archaeological processes of classification, as the methodological principles are seldom or never thoroughly discussed in earlier studies on sheaths and scabbards. However, classifications often constitute a basis for both analysis and inference. A conscious attitude towards this method is required in order to consider questions such as when comparing artefacts from different areas, which is important in this study. Whether and how different styles can be identified is also a relevant aspect to be considered. An important objective has been to activate and include as much as possible of the material but also the fragmented pieces in the classification. The identification of sheaths and scabbards in the archaeological record and the further functional identification as holsters for swords, daggers or knives are also related to the process of classification.

The principles of dating artefacts and structures recovered in Bergen will be outlined together with considerations related to this specific material. Methods and principles for documentation, such as identification of leather-types, will be accounted for. Questions related to representativity and comparison of sheaths and scabbards from different contexts will also be considered.

4.1 Identification

Identifying sheaths in the archaeological record as well as identifying them as sheaths for specific objects is a process in all studies on the topic and forms an example of a high level of functional classification that is basic in many archaeological studies (Adams and Adams 1991: 221–222). Here I prefer to denote this procedure as identification rather than classification, an action that a priori may seem simple but in reality is complicated by the fragmented state of the material.

4.1.1 Identifying sheaths in the archaeological record

The quality of a sheath or scabbard varies from the plain holster to a more advanced artefact of several components, as referred to in the introductory chapter. Basic principles of identifying fragmented remains of sheaths and scabbards is done by comparison, both with previously securely identified and published archaeological finds, but also present day specimens. The identification has a strong component of evaluation of functionality. But the possibility that these objects could have shapes that are unfamiliar to us today requires an open-minded evaluation of the archaeological artefacts as concerns whether they would have been suitable for carrying a knife, etc. Similarly, the possibility that the artefacts are remains of other kinds of objects must be kept in mind. Artefacts that can be mistaken for sheaths are different parts of containers such as needle-cases or boxes, but also grip-coverings and sheath-caps. Leather remains of scabbards can also be mistaken for belts or straps. Which parts of the sheaths and scabbards that are preserved vary depending on the circumstances of deposition, or whether the artefact was lost or discarded (perhaps as a torn or defect object). The physical environment of deposition also influences the state of preservation. In several cases of fragmented material or uncertain function, the identification will have an interpretative character where several indicative traits are taken into consideration and evaluated. Positive indicators that fragments have been a sheath or scabbard can for example be decoration, suspension holes or cut-marks on the inside of the artefact. As in many other artefact studies, the identification of sheaths and scabbards is a matter of familiarity and experience.

In general, parts of leather are the most common archaeological remains of medieval sheaths and scabbards, while metal parts such as chapes and ferrules also tend to be found. Parts of wood, bone and other materials are less common.

4.1.2 Identifying sheaths from scabbards

A further step in the identification process is to decide whether the artefact has been (part of) a sheath or a scabbard. Sheaths for knives/daggers and scabbards for swords have differing dimensions and manufacture, such as placement of the seam, stitch-types, etc., but also decoration. Generally, the scabbards for swords are broader, longer, and more even-sided than the sheaths, but artefacts have to be evaluated and identified based on several attributes (Groenman-van Waateringe 1988: 84; Bolstad 1991: 133; Schnack 1998: 17; Harjula 2005: 122).

Groenman-van Waateringe adds a criterion of length based on information given in the charters for the guild of the smiths in Flensborg in 1514, stating that "below the yard belongs to the knife-maker, above it to the sword-maker", assuming that the length of the yard is c. 65–70 cm (Groenman-van Waateringe 1988: 83, 103). However, such rules probably varied over time and in different regions, and may in this case reflect a specific agreement between the artisans in this particular town. When analysing the material from Schild in Schleswig, Schnack on the other hand observes that the knife blades vary from 8 to 30 cm in length. Thus, fragments more than 35 cm are identified as scabbards (Schnack 1998: 16–17). Even though length probably is the best criterion for identifying scabbards from sheaths, it is sometimes of less practical use when it comes to a fragmented archaeological record. For the Bergen material, distinction between these two functional groups has not offered any major difficulties. The parallel-sided or evenly tapering fragments of scabbards can be separated from the sheaths, of which none of the complete specimens are longer than 31 cm. The scabbards preserved in most of their lengths are more than 80 cm long, and a number of fragments are so similar in width and rims that they can safely be identified as scabbard remains. However, three artefacts have dimensions and proportions that differ from both knife and sword in the typical sense. Being longer than 40 cm, two of these will be treated together with the scabbards, but with certain reservations (cat. nos. *316, 324*). The third object remains unclassified (cat. no. *328*).

4.1.3 The problem of daggers

To distinguish sheaths for knives from sheaths for daggers represents more of a problem and is often regarded as being almost impossible. The knives and daggers are of more or less similar size, and many medieval knife-blades are quite like blades of single-edged daggers (Fredriksson 1982: 21; Bolstad 1991: 133; Schnack 1998: 15; Harjula 2005: 55). Certain specialised sheaths for daggers can be recognised, however, such as the rondel dagger sheath with its wide circular mouth designed to fit the rondel shaped guard of the dagger (Ward-Perkins 1940: 191–192; Cowgill et al. 1987: 164–165). Metal chapes and fittings found on dagger blades indicate symmetric sheaths, also known from pictorial sources.[25]

Sheaths for daggers are distinguished by Schaefer and Schaefer (1996) as sheaths with a back seam, evenly tapering rims and symmetrical decorated surface[26] (Schaefer and Schaefer 1996: 273). Thus, they have identified sheaths for double-edged daggers. Sheaths for single-edged daggers are not separated from the knife-sheaths, which is coherent with Knorr's definition of single-edged daggers as knife-daggers (Knorr 1971; Schaefer and Schaefer 1998: 162). Van Driel-Murray has also identified sheaths for daggers according to Knorr's definitions. She defines dagger-sheaths as shorter versions of sword-scabbards, with symmetrically tapering rims (van Driel-Murray 1990: 176). Consequently, certain kinds of dagger-sheaths are identifiable while others are harder to distinguish from sheaths or scabbards for knives and swords.

As pertains to the Bergen material, I find it relatively easy to distinguish sheaths from scabbards. However, it is difficult to distinguish sheaths for daggers in a consequent manner. The distinction between knife-dagger and dagger (single edged and double-edged blades) can barely be used, as the single-edged dagger dominates the material from Bergen and double-edged daggers are quite rare (Nøttveit 2000; 2006a). However, many sheaths are probably made exclusively for knives and can be distinguished by the division into a blade-part and a handle-part in both shape and decoration, which leaves no space for a guard of a dagger. A

strongly asymmetrical shape would also suggest a knife. Thus some sheaths can reasonably be assumed to be for daggers, and others for knives. However, many are uncertain (Figure 4.1).

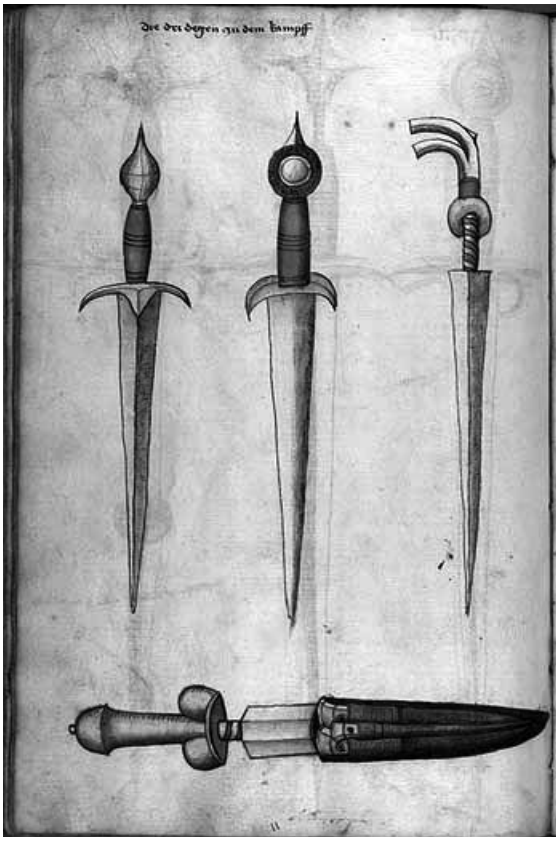


Figure 4.1 *From a version of Meister Hans Thalhofer: Alte Armatur und Ringkunst, from Bayern 1459. The page shows four daggers. Note that one of them, a kidney dagger that appears to be double-edged, is tucked halfway into an asymmetrical sheath (Thott 290 2° 108v. Det Kongelige Bibliotek, Copenhagen).*

During the later part of the medieval period, swords developed significantly from a rather standard size of the Viking Age to several types both smaller and larger by the end of the period (Hoffmeyer 1954: 177). The dagger appeared during the thirteenth century and some forms obviously have strong similarities to knives. Some daggers and also knives were quite large, thus blurring the distinction from smaller swords.

Thus, the Bergen material is divided into two functional groups: sheaths and scabbards for knives and swords, respectively. Some items of both categories could also have been used for daggers, but this will be an individual evaluation in the concrete analysis.

4.2 Classification

I regard classifying in a wide sense as a fundamental human way of thinking, a concept of transforming chaos into order by categorisation. The complexities of archaeological classification can be approached in an examining manner, as done by archaeologist and philosopher brothers William Y. and Ernest W. Adams (Adams and Adams 1991). Yet it is also often taken for granted without clarification, despite a multifaceted history within the discipline. Here I will define some basic but relevant aspects of classification regarding the material, before I make an evaluation of earlier approaches of classification of sheaths and scabbards to be followed by my own attempt.

4.2.1 Classification and typology

Archaeological classification or the process of separating a given assemblage into different apparently meaningful entities has traditionally been strongly connected to chronology. This has special relevance for typology, at least within Scandinavian archaeology, where typology was developed as a method for relative dating by correlating typological sequences from different areas based on an idea of evolution and degeneration of traits within the types (Montelius 1885). The typology of Viking Age swords elaborated by Jan Petersen may serve as an example (Petersen 1919). However, the chronological aspect of typology has lost ground as new dating possibilities have been developed. Many scholars today would disregard it, like Adams and Adams who define typology as: "…a particular kind of classification one made specifically for the sorting of entities into mutually exclusive classes which we call types" (Adams and Adams 1991: 370). However, even this definition does have chronological implications.

Traits or attributes of the artefacts on which classification is based, are usually selected by experience and based on the research questions posed. Thus, as an example, the medi-

eval sword typology by Ada Bruhn Hoffmeyer, based mainly on handle-parts, differs from the one by Ewart Oakeshott who used the whole form of the sword in his typology (Hoffmeyer 1954: 17–18; Oakeshott 1991: 2). This difference is also expressed in their perceptions of the medieval sword, as Hoffmeyer does not emphasise the practical significance and the historical impact of the sword as much as Oakeshott does (Hoffmeyer 1954: 11, 14, 177; Oakeshott 1991: 1). This approach of prioritising a selection of attributes is often denoted as intuitive or arbitrary classification (Dark 1995: 81). Still, a classification is not a 'natural' process; a meaningful pattern of a collected material does not simply present itself. It is based on an individual interpretation and consequently differing criteria. Controlled against closed finds on the other hand, assemblages, etc. and classifications, such as e.g. the Viking Age sword typology by Petersen (1919) have proven to be highly relevant and are still an accepted archaeological dating method. Stated or not, a concept of evolution or degeneration has traditionally been a premise for typological classification (Dark 1995: 81). Spatial and chronological aspects of a classification are usually interrelated, and classifications can thus reflect regional differences as well as similarities.

However, the intuitive aspect of classification can never be eliminated completely despite the many attempts to do so, and in particular from the 1960s and onwards during the positivistic era of New archaeology (e.g. Malmer 1963; Clarke 1968). Stronger emphasis on strict, quantifiable and logical definitions together with polythethic classifications which define types more as a group of traits or characteristics, more suitable for numerical analysis and attempting to avoid or reduce the intuitive aspects, has been among such attempts and seems to be more common among pre-historians than in historical archaeology (Dark 1995: 83–84). This difference is also due to differences in material. For instance, while stone tools can be described, analysed and classified from an overall evaluation of variable dimensions of the lithics, including the flakes that are results of the deliberate process of knapping, this is not the case for pottery. Ceramics are only rarely preserved in complete condition, with the result that most pottery typologies are designed for analysing small fragments that are products of unintended breakage. Thus the basic form is usually more important in lithic classifications, which also implicates a better suitability for functional analyses. The fact that some kinds of materials are more classifiable than others may partly explain why historical archaeologies, including medieval archaeology, still tend to use arbitrary or intuitive classification (Adams and Adams 1991: 228–229).

How classifiable are the sheaths and scabbards? Can this material be classified in a manner that covers not only the spatial and chronological aspects, but also facets related to style and identity as proposed in the previous chapter? In this respect, an examination of earlier studies may be useful before approaching the Bergen material.

4.2.2 Earlier classifications of medieval sheaths

Without describing the individual criteria of each classification, one main characteristic is the focus on the shape of the artefacts, such as the analyses by Marstein (1989), Bolstad (1991), Schaefer and Schaefer (1996) and Schnack (1998) have demonstrated.[27] These analyses can be described as formal classifications, also denoted as phonetic or morphological, i.e. based on visual attributes (Adams and Adams 1991: 159). With the exception of Bolstad's classification, they are all relatively simple and do nothing more than divide the material into a certain number of groups or forms. The general aim has been to obtain knowledge about a certain amount of collected material, also giving the 'economic' benefit of describing the material in a concise way rather than presenting it individually or selectively as Blomqvist (1938), Cowgill et al. (1987) and Groenman-van Waateringe (1987) have done earlier.[28] New types can be added to the classifications by Marstein, Schaefer and Schnack. But if the attributes of newly recovered artefacts should coincide with definitions of several of the groups within the classification, the classification itself must be altered. In such cases the classifications can

be characterised as 'closed' with regard to new forms or types. The criteria are then based on the attributes observable in the given corpus (Adams and Adams 1991: 226–227).

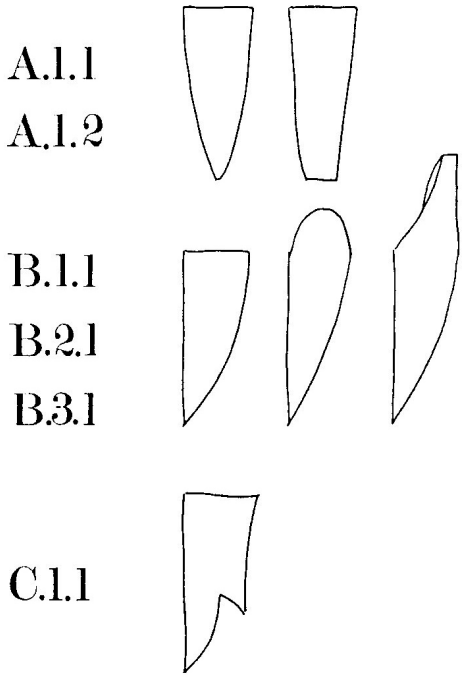


Fig.2. Typeinndeling av slirene.
The types of scabbards.

Figure 4.2 *The sheath classification by Bolstad. The sheaths are primarily classified by shape (capital letters A–C), further divided by shape of the mouth (3 variants) and the tip (2 variants). Here, the types from Gamlebyen, Oslo are presented. But new forms and variants can be incorporated at all three levels without altering the material already classified (After Bolstad 1991: 134).*

On the other hand, Bolstad's classification is more complex. It has a hierarchical structure, dividing the different types into several sub-types. Furthermore, her classification is 'open' and thus has a generative potential. It is designed for typing and sorting material not yet in hand (Adams and Adams 1991: 226–227). As each type is defined by variations of the same characteristics (mouth, tip, and symmetry), Bolstad's system also opens for other forms and types without changing its main criteria, and new characteristics can be added as subtypes without changing the main groups (Figure 4.2). In this way, the classification may also be more suitable for comparison not only restricted to the limited group for which it was initially designed, but also between different regions.

By presenting a classification of a more advanced character, Bolstad also leaves herself more open to criticism. Her classification is only tested on a material which is few in numbers, and disadvantages may appear more clearly when confronted with a larger corpus. A negative aspect of her classification is a dependency on complete objects, which can often be problematic for this type of material. The emphasis on symmetry/asymmetry as a main criterion represents a related problem. For many sheaths this difference is only observable in the shape of the tip, a part that easily disappears during the many processes of archaeological investigation and preservation.

Harjula's classification, or "examples of typing the sheaths" as he refers to it, is different from the others (Harjula 2005: 47). After having evaluated 168 sheaths according to different and separate criteria such as form, size, seams, etc (which, however, is more a quantification of different traits in the collected material than a proper classification), he divides parts of this material into seven types. Only 46 of the sheaths have been included in the actual classification where the categories are also partly cross-cutting and appear as somewhat 'instinctive' even though they are supported with foreign finds. The type-criteria are varied as to whether the sheaths had caps, carried specialised implements, had a certain decoration on the handle-part, etc. Well aware of the methodological inconsistencies of his approach, Harjula suggests that these are types that the inhabitants of medieval Turku themselves would perhaps have recognised as distinctive, and is thus denoted as an emic classification (Harjula 2005: 48, note 196). His approach is meant to reflect the original types as seen by the subjects in the society studied, an approach inherited from anthropology but clearly more problematic when transferred to archaeology. There are several

methodological and theoretical problems connected to such an approach, and there is no general consensus of how it should be solved or if it is possible at all (Adams and Adams 1991: 223). The problem is perhaps more that the emic approach may have been implicit in the traditional arbitrary classifications for a long time, without any discussion (Dark 1995: 82).

Cameron (2007) on the other hand has classified the Dublin corpus according to selected technical traits in a more detailed manner than with the relatively few medieval specimens from the York publication (Mould et al. 2003: 3385–3388). The sheaths are classified as E- and B-types (referring to Edge-seamed and Back-seamed, respectively) by the technical feature of seam placement, and further divided by selective criteria (usually shape).

The classifications described above differ in several respects and to a large degree are not compatible because the different corpora show strong dissimilarities. The Bergen corpus actually seems to be more varied than several of these assemblages, and a major challenge will be to classify this material into relevant types that also have potential for comparison with foreign finds. In the classifications of the earlier studies, two main criteria can be extracted: (1) presence or absence of decoration, and (2) symmetric or asymmetric shape (usually whether the sheaths have side seam or not). However, both principles are problematic with regard to the Bergen material. A consequent evaluation of decoration can be difficult, as decoration spans from simple incisions in the grain-layer of the leather via stamp decoration, moulding or pierced-through decoration, to decorative elements in the shape of the sheath such as fringes and a form diverging from the shape of the knife. Still, differences in decorative technique and the part of the sheath that is decorated (surface or rims) have spatial importance judging by classifications from different parts of Europe. Theoretically, differences between symmetric and asymmetric sheaths should be ascribed to the shape of the knife blade, making this a useful criterion for separating sheaths for knives and daggers. Unfortunately, the distinctions between blades of medieval knives and daggers are blurred, and dagger-sheaths have proven difficult to distinguish from knife-sheaths (Fredriksson 1982: 321; Bolstad 1991: 133; Schnack 1998). The flexible nature of the leather texture itself is perhaps an argument against relying too much on this criterion, at least as a primary criterion. Generally, I find leather to be a material that is not as 'classifiable' (Adams and Adams 1991: 229) as many others.

Summing up, the different approaches in classification are all used for handling a group of sheaths found within a geographically limited area, even though several artefacts may have been imported. Most of the researchers are attentive to finds from other areas for comparison, but these artefacts may have been classified within an incompatible system. Single documented artefacts can easily be drawn in for comparison, but this is more difficult to do when comparing groups of sheaths without clear criteria for their classification.

4.2.3 Classification of the Bergen material

The objectives for classifying the Bergen material are of both chronological and spatial character. The classification should also be comparable to material from other regions and, if possible, informative about questions concerning style and identity. One of my aims is to also include as much of the research material as possible in the classification, as many of the artefacts are fragmented. How and by which criteria the material should be classified, however, is by no means self-evident.

Classification of an archaeological group of objects represents a process comparable to a 'dialogue', where the material either 'responds' or does not to suggestions put forward by the researcher. Some of the approaches seem to fit the material better than others, and over time a classification emerges. This classificatory dialectic (Adams and Adams 1991: 333), or the continual input and feedback between the artefacts and my type concepts, has been a long process. Inspired by Bolstad's classification (1991), my initial aim was to establish an open classification that would include the material not only from medieval Norway but also from the rest of northern Europe in mutually exclusive classes with chronological and spatial relevance, a clas-

sificatory system where new types and material from new areas could easily be included in a coherent system. After several attempts, however, ambition and theories were defeated by the archaeological record and practicalities. A neutral classification system where all the different factors and possibilities regarding shape, technique and motifs were taken into account would not only be complicated and difficult to apply to the (partly fragmented) material, but would also be an ineffective tool for further analysis.

The alternative has been to classify the Bergen material as a closed group (a corpus), as other researchers have done with their respective material. However, one of my aims will be to classify the Bergen material by broad main traits that are widely comparable and as inclusive as possible to fragmented material, and to further classify it into sub-classes that are probably more locally determined. Such a classification still has a comparative potential, but the original material which in this case is from Bergen will stand as the reference group in the end.

Based on an overall objective to discern regional differences, I generally find the shape of the sheath to be a less suitable criterion for classification. As discussed above, the flexible properties of leather make it less 'classifiable' than other materials, and an evaluation of shape and symmetrical/asymmetrical shapes particularly is dependent on rather complete artefacts. With Sacket's concept of isocrestic style in mind, I find traits related to the manufacture of the artefact a promising point of departure. Similarly, decoration is of special interest. However, the classifying principles will rest on technique of decoration and where the sheath is decorated, and not on the motifs. Form and shape of the artefacts will be considered, but not as main criteria for classification.

Figure 4.3 illustrates the main principles of classification in this study. The classes will here be denoted types, without necessarily implying the chronological aspects of the concept, but rather as mutually exclusive entities. Sheaths and scabbards will be treated separately but according to the same principles. A main type is indicated by a capital letter, and numbers indicate further division into type and subtype. A small letter 'x' instead of a number indicates a collected group that could not be further classified within the type, usually due to its fragmented state. Several types, however, are not divided into subtypes, usually due to small numbers, not necessarily indicating a homogeneity that defies further classification. Small numbers reduce the validity of the type, and types that are perhaps hinted at in the Bergen material might first be recognised after comparison to assemblages from other areas.

In his second take on style in archaeology, Martin Wobst criticises the archaeological need of classification and categorisation of artefacts, fearing that it minimises differences within the classes and maximises the differences between the classes in an artificial manner. In this way the dynamics of style and the informative potential of the artefacts are suppressed (Wobst 1999). I do not expect my classification to solve the problem of style. But by classifying based on the premises described above, I find it likely that relevant aspects regarding style will also be discerned. The classification of the Bergen material is first and foremost a starting point and an analytical tool for further analysis, where similarities between separate objects from differ-

Main type	Classification based on presence/ absence of technological (-decorative) elements	A						B	
Type	Technical classification, depending on main type characteristics	A1			A2			B1	B.x
Subtype	Technical classification, depending on type characteristics, where shape might be taken into consideration	**A1.1**	**A1.2**	**A1.3**	**A2.1**	**A2.2**	**A2.x**	etc	etc

Figure 4.3 *Classification system for the Bergen corpus.*

ent types will also be given focus in a discussion on traits that cross-cut type definitions. Such similarities will comprise decorative motifs and shape of the objects. Stylistic influence will be a relevant theme here.

4.3 Methods of dating

Several extensive fires have ravaged the town and the wooden buildings that dominated the settlement of medieval Bergen (Helle 1998). Manifesting themselves as burnt stratigraphic layers in the subground, the fires have been linked to historically known conflagrations as a method of absolute dating during the Bryggen excavations. The method was supplemented by datable finds such as ceramics, coins and even runic inscriptions (Herteig 1969: 28–33; 1985: 21–33). As the fire layers fluctuated and did not cover the entire excavated area, there have been some problems with the chronological reliability of parts of the site. Archaeological evidence of an extra fire-layer below the fire-layer positively identified to 1248 according to the recorded historic sources has been another problem. Discussing several alternatives, Herteig assumes that the unknown fire occurred before the earliest historically documented fire in the winter 1170/71, finding this option more likely than an unmentioned interim fire among those described in written sources (Herteig 1985: 27). Supported by a wider reference of medieval ceramic groups and an evaluation of dendrochronological and radiocarbon dating samples, the chronological development of the Bryggen area is presented in *The buildings at Bryggen: their topographical and chronological development* by Herteig (1990; 1991). Although discussed (Hansen 1998; Dunlop 1998), the chronology by Herteig is now generally accepted and provides a firm base for dating the finds at Bryggen (Figure 4.4). Based on evaluation of dendrochronological samples from buildings, the earliest fire has now been dated to the 1120s (Hansen 1998: 123; 2005: 63).

The fires are given numbers from I to VIII, starting with the fire of 1702 and going back in time. The intervals or the periods between the fires are numbered chronologically, each starting and ending with a fixed date, i.e. the year

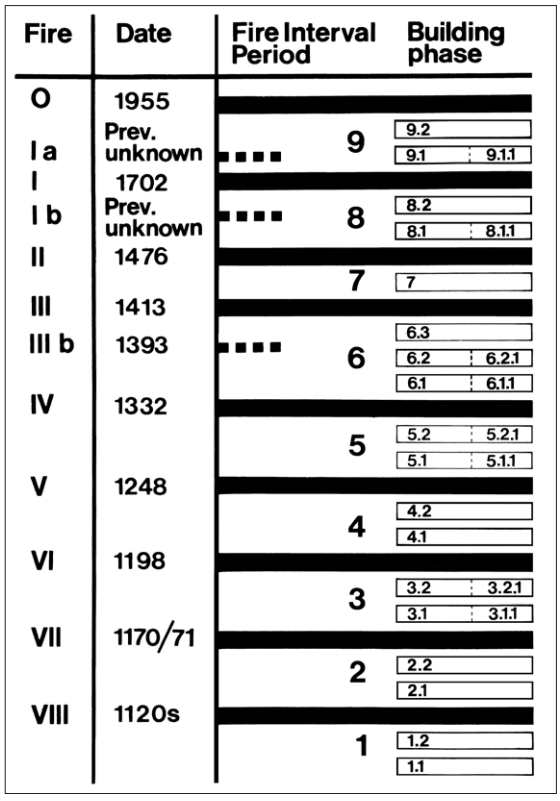


Figure 4.4 *Fire-layer chronology at the Bryggen site (after Herteig 1990: 12, modified regarding year of fire VIII).*

of the historically known fire. Most periods consist of several building phases that can be dated relatively within the period. Altogether 74 per cent of the artefacts in this study are found at the Bryggen site, and most of these can be dated stratigraphically within these periods.

Artefacts are recorded in relation to fire-layers, and eventually related to a structure that has a datable relation to a fire. Artefacts dated 'over' or 'under' a fire can reasonably be connected to the respective fire interval period. The fire-layers are essential in the dating sequence of the Bryggen site, and artefacts found in the fire-layer are usually considered *in situ*, deposited at the time of the fire. Although no sheaths are found *in* a fire-layer, some are found very close, recorded as 'about' or 'on level' with a fire-layer. These are considered to have been deposited around the time of the fire and are here dated to the preceding period, as the fire interval periods will be the

main dating reference for this material both for the chronological distribution locally and when comparing with other sites.[29] Whether an artefact is found *in situ* or in relation to a building can also narrow the dating from a period to a building phase, although this dating will often be of a more relative character within the period in question. However, these contexts are sometimes relevant regarding the spatial distribution and interpretation of the artefacts.

Most of the finds, however, derive from fill-layers indicating a subsequent depositing and implying that the objects were in use sometime at an earlier stage. The material in such fill-layers can theoretically stem from the preceding period or even earlier, but the common interpretation of these masses is that they can be dated to the period in which they were deposited. The caissons in particular represent a problem in this respect. Serving as foundations for the quays, caissons were placed on the beach and filled with stone in period 2 (1120s–1170/71), the so-called 'beach period'. From period 3 (1170/71–1198) onwards, the establishing and filling of caissons and fundaments was to be done in deeper water in front of the wharf-front, and organic material instead of stone was used for fillings both between and in the structures (Blackmore and Vince 1994: 19). During a period, the sea-bottom level in front of the quay would rise due to filling of masses, mainly garbage of organic material. The main rise, however, would be immediately after a fire when the burnt area was cleared up and the masses shovelled into the bay. When dating artefacts found in relation to caissons, the artefacts *in* or *between* structures are interpreted here as deposited at the same time and period as the structure, i.e. these objects have been in use until the time of deposition. In some cases, there is a strong possibility that these objects stem from the preceding period and have been redeposited as part of the clearing after fire, thus representing an older dating of the artefacts than the structures.

The dating of artefacts deposited in front of the wharf and under the caissons from the following period may also represent a problem. Should this be regarded as a continuous illegal dumping resulting in a slowly increasing deposit, or as a larger organised dumping just preceding the establishment of foundation units at a given time? Herteig finds the last option the most likely. Primarily based on ceramic datings, he regards the caissons 92, 93, 100 and 101 as having been established in periods 4 (1198–1248) and 5.1 (1248–1332, first phase). Thus, artefacts found almost 2 m under a caisson are assumed to have been deposited shortly before the caisson, and not one or two periods earlier (Herteig 1990a: 47). Dating of such artefacts may vary in different publications on the Bryggen material. In my experience, slowly deposited residual layers on the sea-bottom are generally difficult to date absolutely, and I find it safest to stick to the established datings as presented by Herteig (1990a; b) and the database/accession protocols in these cases. Nevertheless, some artefacts are found deep under the caissons and when coordinates and nivellements are given for layers under such structures, I have tried to date the object in relation to stratigraphy. In this way, some objects are given an older dating than other artefacts published from the same contexts.[30]

While the major part of the finds from the Bryggen site can be dated within its general chronological framework, some finds are open for discussion. These have been dated by several methods, such as by checking with plan-drawings, stratigraphy and field observations as they were recorded in the original diaries from the excavations. If finds from the same context have already been analysed and published (Øye 1988; Larsen 1992; Molaug 1998; Moldung 2000; Olsen 2002; Vangstad 2003; Olsen 2004 [1998]; Hansen 2005 [2004]; Høie 2005; Reinsnos 2006; Mygland 2007 [2003]), their dates are accepted with few exceptions.

With several objects there may be uncertainty regarding the exact find spot and dating. Here I use the most probable dating, but the alternative dating will be specified in the appendix.[31] If these finds are central in any argumentation, the uncertainty will be considered. In addition, some finds proved undatable, but from the Bryggen finds this is a rather small percentage.

Altogether, the Bryggen excavations provide a good chronological framework for dating the artefacts; the chronology has been thoroughly discussed and applied on archaeological material analysed from several different objectives. Within the general guidelines presented and due to the nature of several artefacts being waste disposal, the datings will perhaps have a bias towards a somewhat younger date than the actual production and use period of the artefact. What is dated is time of deposition. Relatively speaking, the Bergen corpus is accurately dated compared to other corpora. While some corpora such as Dublin and Greifswald provide good dating sequences, other corpora are more loosely dated. The London corpus consists of both categories: the excavations carried out from the 1970s onwards are comparable to Bergen both in terms of methods and dating frames. The majority of the London finds, however, is not archaeologically dated. Dating of the three corpora that are chosen for primary comparison to the Bergen corpus is discussed in chapter 6.

The other 25 per cent of the artefacts from Bergen is uncovered at sites and surveys carried out after the extensive Bryggen excavation. After 1980, the methods of excavation have taken a slight turn with a stronger emphasis on stratigraphic layers and contexts in general. These are dated primarily by artefacts and especially ceramics, also using C14-datings, dendrochronology and thermoluminescence. However, fire layers are still of decisive importance and there are only minor problems correlating the phases from the excavations carried out after the Bryggen excavation.

4.4 Documentation

Most artefacts of this study are previously documented as leather sheaths or leather objects with information of context and dating. As sheaths and scabbards they are documented and described only to a limited extent.[32] Documentation and description is essential in order to fulfil many of the objectives of this study and is also important regarding comparison to material from other areas. Furthermore, the documentation of the material will have value of its own, for reference and comparison to the Bergen corpus in future research. In order to make the Bergen corpus accessible to researchers and a wider audience, an appendix compiling all the material has been produced, including information such as museum number, photo of the artefact, measurements and a short description of the artefact. However, as much of the information will be used in the classification and analysis, some supplementary explanation related to documenting these artefacts is presented here.

4.4.1 Identifying species by leather

Leather is produced from the skin of vertebrate animals, chemically changed through different procedures and by different techniques, usually tanning, to obtain new qualities. Tanned skin, or leather, is non-putrescible and water-resistant and may acquire many other properties such as hardness/flexibility and colour by further treatment. Unlike leather, untanned skin or hide will normally rot under moist and hot conditions (Waterer 1981: 3-4; Thomson 1998: 1).

As to questions of manufacture of sheaths and scabbards, the animal species used for leather should be identified. In addition to a few smaller sites, species used for sheaths have so far been identified in Dublin, London, York, Svendborg, Schleswig and Turku (Cowgill et al. 1987; Groenman-van Waateringe 1988; Schnack 1998; Mould et al. 2003; Harjula 2005; Cameron 2007). The leather used in both sheaths and scabbards is dominated by calf (*bovinae*). But cowhide and goatskin (*caprinae*) appear frequently, while sheepskin (*ovis*) is rare. The proportion of the different species used varies between these towns. The frequency of leather types used for the Bergen corpus may shed light on production and cultural contacts as well as the manufacturer's choice of leather. Imported and locally produced artefacts may be discerned through comparisons with other regions. The leather identification can also serve as a test case for the classification, where the relation between leather species is expected to vary between the types.

Microscopic observation of hair follicle patterns is used to identify the species of the archaeological leather. As this method is purely visual, it does not damage the objects. Differ-

ent animal species have characteristic fur or hair which is reflected in characteristic patterns on the skin or hides in the form of hair follicles. The relation between primary and secondary hairs together with their distribution and pattern forms a distinct grain-pattern that can be recognised by using low-powered magnification (Hansen 1980; Larsen 1989; Haines 2006: 17–19). Besides discerning species, the grain-pattern can indicate whether the individual was juvenile or mature and from which part of the body the leather derives. Such a precise analysis demands both skill and experience. In addition, the grain-pattern on the archaeological leather is often more difficult to identify than on new leather, because it may have been heavily worn, exposed to taphonomic processes and deteriorated during the deposition in the ground. Where parts of the leather surface remain intact, it is possible with some training to identify several species. I have identified most of the Bergen material (91 per cent) by grain-pattern analysis.[33] However, some objects could not be identified due to lack of preserved grain-pattern or due to polyetylenglycol (PEG) conservation which has covered the holes of the hair follicles, leaving a plain surface without any pattern left.[34]

As the grain-patterns of sheep and goat can be difficult to distinguish from each other, these are treated as one group: *ovri-caprine*. Although it is easier to discern juvenile from mature individuals of cattle, these are also presented as one group: *bovine*. This simplification is done to avoid misinterpretations, as is done in another study (Mould et al. 2003: 3265). In some cases, however, the identification has been more specific if the grain-pattern is obvious.

Species can also be identified by the relative thickness and structure of the grain and corium layers of the hide. In some cases such as when distinguishing a small deer from a goat, such a method is required (Larsen 1989: 23–24) but would also be of help with regard to the undecided specimens in the Bergen corpus. As this method usually demands a clean vertical cut for inspection, it is not an ideal method for archaeological material and has not been used in this study.

4.4.2 Stitch-holes and seams

As discussed above, many options are possible when producing a sheath. Some of these principles of manufacture will be used in classification, e.g. riveting vs. sewing. Others will be described for the different types such as seams and stitch-holes.

When joining the edges of a leather piece by sewing in order to make a holster, three main variants of stitch-holes can be observed in the material (Figure 4.5): (1) A flesh-grain stitch-hole protrudes the leather, or (2) an edge-grain stitch-hole goes from the leather edge to the grain-side (outside) of the leather. Likewise, an (3) edge-flesh stitch-hole goes from the leather edge to the flesh-side (inside) of the leather. (4) 'Tunnel-stitch-holes' (edge-edge, flesh-flesh, grain-grain) are not common for joining the edges of a holster, but e.g. flesh-flesh stitch-holes for fastening thongs or threads for suspension are observed.

I differentiate between two main variants of seam, butted and closed (Figure 4.6). With a butted seam (1), the edges of the leather are joined face to face. A closed seam (2) joins e.g. the flesh-sides along the edges, leaving the edges themselves as compressed and elevated to the grain side. However, a butted seam of edge-grain stitches sewn very tightly with e.g. a shoemaker's stitch will also press parts of the edge upwards, leaving an elevated seam similar to that of a closed seam (3).

The placing of the seams also differs, and I differentiate between (1) centre-of-back seams, (2) side-of-back seams and (3) side-seams (Figure 4.7). A closed side-seam differs from the closed centre-of-back seam, as the leather is more bent to the sides along the seam on the latter. In addition, diagonal seams (4) are added. This seam usually crosses the backside of the sheath diagonally, and is not straight like the others are.

I have chosen not to refer to the stitch-type used on each sheath, whether it was shoemaker's stitch (sailor's stitch), running stitch or whip stitch, etc. (Figure 4.8). Although visible on many artefacts, this interpretation relies on impressions along the stitch-holes, and is more difficult to detect in some cases. The main char-

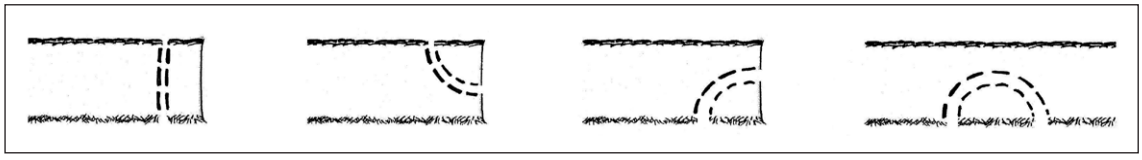


Figure 4.5 *Stitch-holes, from left to right: (1) flesh-grain, (2) edge-grain, (3) edge-flesh, (4) tunnel-stitch, flesh-flesh.*

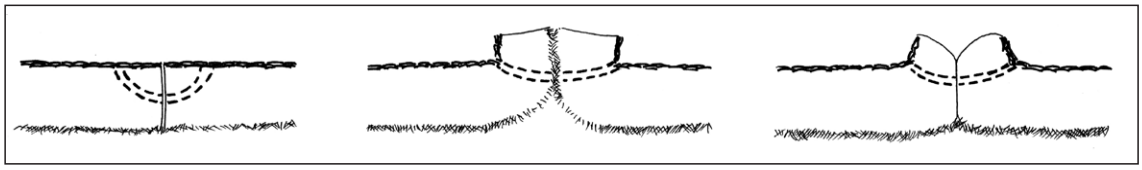


Figure 4.6 *Seams, from left to right: (1) butted seam, (2) closed seam, (3) butted seam, but when sewn tightly with edge-grain stitches, part of the edges presses upwards, appearing almost as a closed seam.*

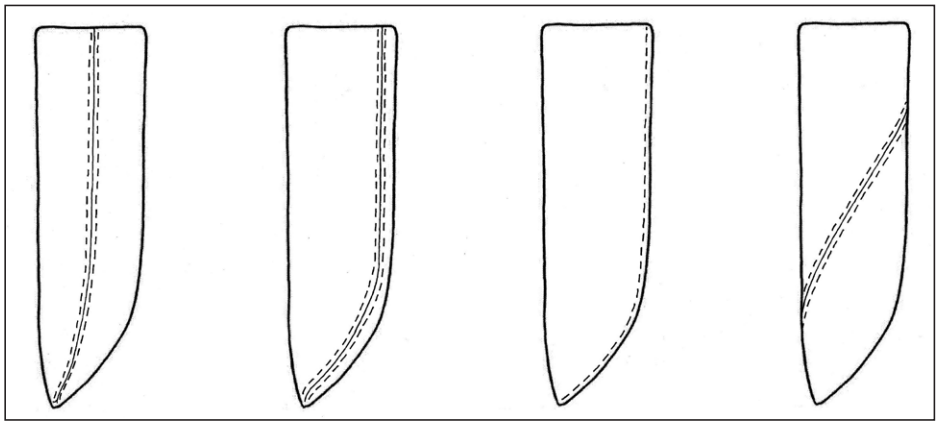


Figure 4.7 *Placing of seam, from left to right: (1) centre-of-back seam, (2) side-of-back seam, (3) side-seam, (4) Diagonal seam.*

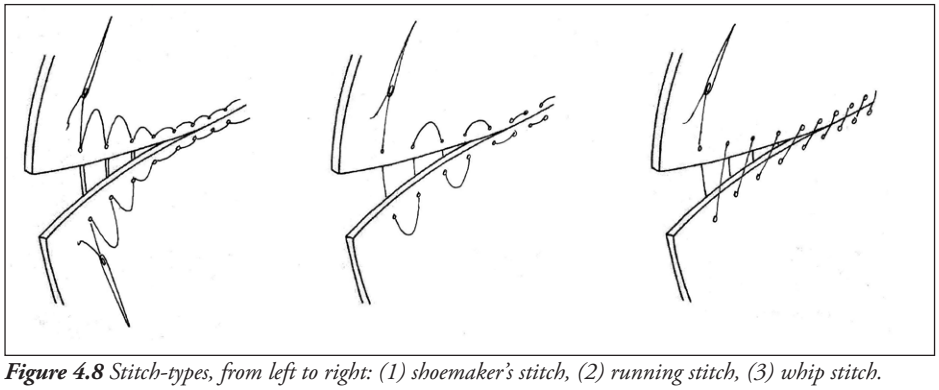


Figure 4.8 *Stitch-types, from left to right: (1) shoemaker's stitch, (2) running stitch, (3) whip stitch.*

acteristics of the sewing techniques will be discerned by including stitch-holes, seam-type and placment of the seam. In addition, some variants are implicit both due to choices and ways-of-doing of the artisans, and repairs and later modifications on several of the artefacts.

The level of documentation of these features varies in different studies, and my documentation is slightly less detailed than Harjula's (2005), which also includes stitch-types that are more detailed than in e.g. *Knives and Scabbards* (Cowgill et al. 1987).

4.5 Representativity and comparison

The past is gone and appears as fragments. Usually, the archaeological record represents only minute fragments of a past reality, and our interpretations rely on several considerations, reservations and assumptions that are ascribed to our archaeological sources. Here I will sketch some of the many source critical factors that influence archaeological interpretation in general and relate to my research material in particular. Such archaeological source criticism involves awareness of different conditions and processes that affect the research material. These are cultural circumstances influencing what has been deposited in the archaeological record and how. Further, a number of factors and taphonomic processes affects, if not destroys, the deposited material until being uncovered. The different archaeological methods and procedures of excavating, documenting and interpreting the material also strongly affect the archaeological data.

Bergen may serve as an example here, with its large quantities of the excavated material being rubbish, or at least it was considered so in the Middle Ages (representativity is therefore assessed several times, e.g. right after the classification of the Bergen corpus – chapter 5.11.1). A recovered sheath does not necessarily represent a frozen moment in time when the owner lost it. More commonly it has been discarded and removed after it was worn out or destroyed. Spoils and garbage also served as fill masses in the reclamation of the harbour area, especially with clearing the areas after the many fires that occurred. The attitudes towards waste also change through the period, and rubbish seems to have been removed from the settlements in a more organised manner from the fifteenth century (Økland 1998: 107, 123). The size of occupational layers decreases but does not necessarily reflect a decrease in activity due to contemporary changes of attitudes toward.

Preservative conditions can be highly variable when the artefact is deposited, also within a smaller area. In the harbour area where most archaeological activities have been carried out in Bergen, conditions are generally good for conservation of organic material in the waterlogged parts of sites near the bay, Vågen. The moist anaerobic conditions preserve the tanned leather well, while untanned skin detoriates rapidly as the water restarts a bacterial degradation that has been temporarily stopped.[35] The environment is less moist and perhaps more exposed to oxygen further away from the waterfront on dry land, creating less favourable conditions for preserving the leather. However, metal stands a better chance for preservation here.

Methods and conditions for excavating the material also vary strongly – over time, within a town or perhaps even within a site. Covering an area of 5,700 square meters, the Bryggen site was excavated over a period of more than 20 years and methods of documentation developed over the years. The whole area was not excavated top to bottom; in parts of the site the upper layers were removed by machine down to the Fire Level V (1248). Thus, the periods following the fire of 1248 are not archaeologically excavated over the whole site. On the other hand, the settlement area was smaller than the excavated area in the earliest periods, or the first phases of the reclamation (Figure 4.9). Despite a number of reservations in regard to representativeness (spatially, chronologically and methodologically), the Bryggen site must be considered a site of total excavation. When analysing medieval material from Bergen, considerations must be taken as to whether the material reflects the town as a whole or the specific milieus at Bryggen, as the Bryggen site has yielded far more archaeological material than all other Bergen excavations together.

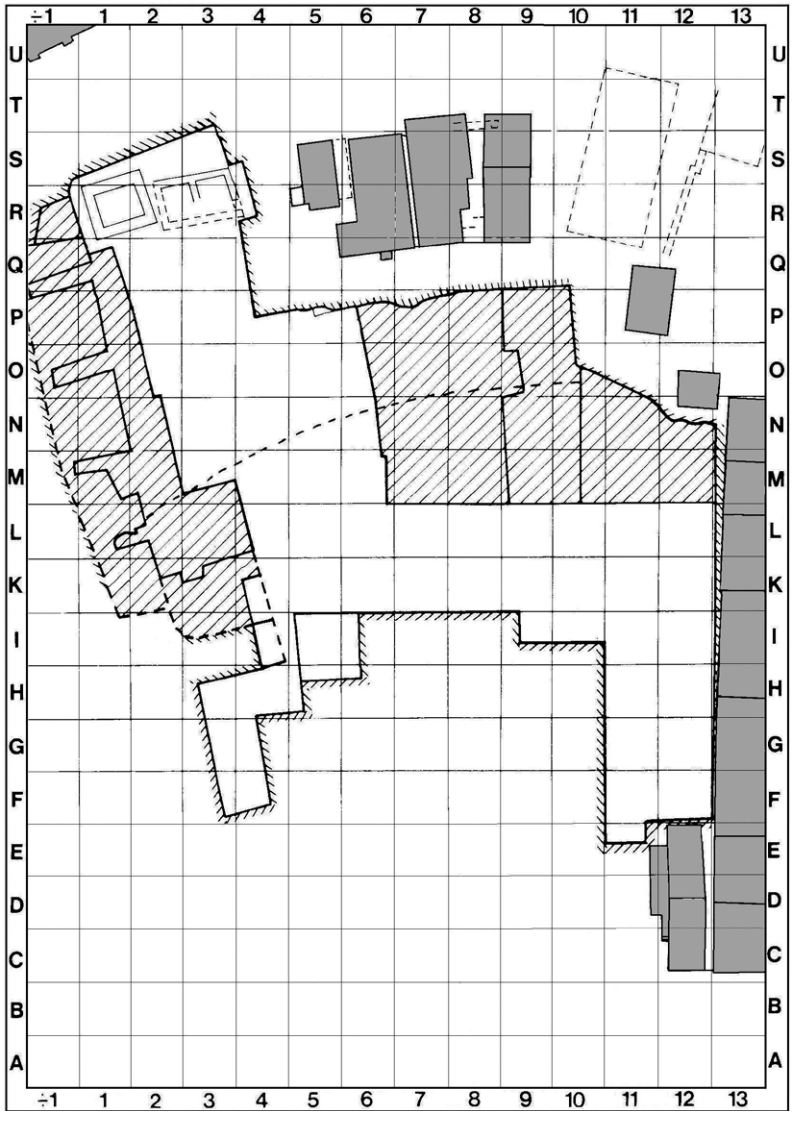


Figure 4.9 *The Bryggen site, divided into grid-squares of 8m x 8m. Hatching indicates the areas where the upper layers were removed by machine down to Fire Layer V. The remaining site was excavated from the uppermost fire-layer down to Fire VIII. Note the dotted line indicating the original shore, limiting the earliest settlement to the northern part of the site (After Øye 1988: 18, modified).*

Reservation is also a keyword when it comes to comparing the material to other areas. Methodologically, the Oslo and London assemblages differ from Bergen in several respects, making comparison difficult. The London corpus is larger, while the Oslo corpus is smaller. Compared to the size of the medieval towns, however, the excavated material from Bergen is proportionally more extensive than that from London. Reclamation deposits and dating methodology of the London and Bergen assemblages have more in common than the Oslo corpus, where the main part is made up of river deposits. The chronological concentration of the three assemblages cannot be expected to coincide. Even more problematic is comparison to areas where the material is only accessible through brief published accounts. However, these problems apply not only to sheaths and scabbards. Mapping the occurrence of certain artefacts and ceramics particularly over large areas has been one of the major tasks within artefact studies in medieval archaeology. I intend to compensate for these differences whenever possible by e.g. compar-

ing the London corpus with published material from other English towns in order to evaluate representativity of the material. In this case and as with these comparisons in general, classification is an important analytical tool.

Methodologically, I make use of several approaches ranging from the rather straightforward techniques such as grain-pattern analysis, to a more comprehensive classification which has complicated theoretical implications that are not always fully acknowledged. As for chronology, my study rests on the efforts of several researchers. An individual evaluation of the artefacts of the Bergen corpus has nevertheless been carried out. More specific methodological considerations will appear in the concrete analysis of the sheaths and scabbards.

5 The Bergen material – classification and comparison

The medieval sheaths and scabbards found in Bergen will now be presented according to principles described in the previous chapter. The terms sheath and scabbard do not necessarily cover complete artefacts – often only fragments are preserved. As we have seen, leather forms a significant group among the archaeological finds from Bergen. Regarding sheaths and scabbards, leather represents an entire 97 per cent of this material. As an overall typology for sheaths and scabbards has not been worked out, my classification will also be applied on the comparative material to include both foreign material and other finds from Norway. The Bergen classification will then form a reference when analysing the other material. One interesting aspect will be to evaluate to what degree this material will fit into my classification. In this way, the classification will form a basis for a broader discussion of the material and allow to observe whether the types recorded in Bergen are found at other sites and if certain types are confined to specific regions or represent a common European fashion. To ascertain whether types are international or represent regional preferences, four different corpora of sheaths and scabbards will be compared; Bergen, Oslo, London and Greifswald, supplemented with material from geographically adjacent sites for controlling their representativity.

5.1 Material

The material is presented according to three main categories: (1) sheaths and (2) scabbards of leather, and (3) sheaths/scabbards of other materials. The sheaths are classified into four main types, denoted A to D. Types are given a number, with possible further subdivision marked with a second number. For instance, type B1.2 denotes sheaths with decorated surfaces (B), with stamped decoration (1) where the stamps make a repetitive pattern (2). The scabbards are classified according to the same principles, and their alphabetical type denotation continues the sheath classification and is denoted types E to F.

5.1.1 Sheaths

The Bergen sheaths form a diverse collection that can be divided into four main types with distinct qualities of construction. The types are established by criteria that are exclusive for the type, based on a combination of technical and decorative features. Decorative in this respect implies technical choices of decoration, i.e. in which technique and where the artefact is decorated:

- Type A: The sheaths of type A are all plain. They have undecorated surfaces and even rims. The placing of the seam may vary, but all sheaths are sewn. However, the shape of the opening and tip may vary.
- Type B: This type includes sheaths with surfaces decorated by different techniques not protruding the leather. None of the sheaths are decorated by embroidery, cut through- or openwork decoration. All sheaths are sewn, but the placing of the seam may vary. No sheaths of this type have fringes or other decorative excisions along the rims or at the tip.
- Type C: The sheaths of this type are all folded at one side but cut in the lower part, replacing the fold with a closed seam that 'frames' the sheath, giving a decorative focus to the rims sometimes emphasised by openwork decoration. The surface of the sheath can be decorated with embroidered or openwork decoration.
- Type D includes sheaths that are folded along one rim and kept together on the opposite rim with rivets or metal fittings. Openwork decoration may appear on the surface, but is usually concentrated to the rims.
- Indefinable sheaths. A few sheaths do not fit into the above classification. These will be described individually.

The classification is based on the lack or inclusion of technical features such as surface decoration. The further classification regarding decoration is also primarily technical, as it is based on the technique used and not motifs. Other

technical choices are for example use of seam vs. use of rivets. Like technique of decoration, a technical feature is a constant feature. A sheath is either stamped or not, riveted or not. From a classifier's point of view, this is an advantage. If reassessed by another researcher, the classification would give the same result. A stronger focus on the shape of the objects would be more subjective due to the flexible leather material. But first and foremost, it would require a higher degree of complete artefacts. According to my classification, most of the fragmented objects can be included in the analysis. Several sheaths are repaired, modified or made as reuse of other artefacts. Most of these are also included in the classification.

5.1.2 Scabbards

With regard to both decoration and shape, the Bergen scabbards constitute a more uniform group than the sheaths. The scabbards, or leather coverings, are divided into two types: scabbards of type E and type F. As for the sheaths' type A, type E is plain while type F has a decorated surface and follows the same principles for sub-typing as type B-sheaths.

5.1.3 Other materials

Besides leather, few sheaths and scabbards of other materials have been found. This open category includes objects or fragments that are made of other material than leather or that were not found as parts of leather artefacts, and also includes objects of metal, wood and bone. As they are few in number, these objects or fragments are given individual descriptions.

5.2 Type A – plain sheaths

Type A represents the plain sheaths. These all have undecorated surfaces and even rims. Placing of the seam may vary, but all sheaths are sewn. However, the shape of the opening and tip may also vary.

Altogether 132 sheaths can be classified as type A. Two specimens have simple cut-through decoration in the form of a slashed surface, but this is crudely carried out and interpreted as a secondary modification. The artefacts are further distinguished according to different features that may have had decorative as well as practical use, such as the shape of the mouth and tip. The seam and sewing technique is a feature that is not strictly type-defining and varies between subtypes. The two main variants of seam are a fine butted seam of edge-flesh stitches and a closed side-seam of flesh-grain stitches (cf. Figures 4.5 and 4.6).

5.2.1 A1 – plain sheaths with two-curved mouth

All of the 73 sheaths of type A1 have a plain, undecorated surface with even tapering rims. The main characteristic is the mouth ending in two curved or pointed flaps, which were parts of the suspension and sometimes decorated. The tips are sometimes extended to decorative tails of different shapes that form a basis for further sub-typing (Figure 5.1). The seam is fine-stitched and sewn so that it is nearly invisible. The sheaths have a slightly asymmetrical shape with a stronger bending along one rim in relation to the other. In several cases, the bending is so small that the sheaths appear as almost symmetrical.

Size. Measured from the mouth to the tip, the sheaths vary from 10 to 22 cm in length (possible prolonged tip not included), but the smaller specimens are rarer.

Leather type. The A1-sheaths are most commonly made of ovri-caprine leather, or goatskin, which has been identified in 34 of the 73 sheaths of this type. In addition, eight sheaths have a probable identification as goatskin. Eighteen sheaths have been identified as bovine, and three of these only as probable. Thirteen sheaths have not been identified as to leather type, and three of these due to conservation – nine had surfaces too worn to discern the grain-pattern and a last sheath was of indefinable species (Diagram 5.1).

Seam and construction. On three sheaths, (parts of) a wooden lining, or blade protection, has been preserved. It is a relatively thick carved stick with a round or oval cross-section, with a deep groove for the blade edge. On another sheath, an imprint of the wooden implement is clearly visible. Several other sheaths may also have had these wooden implements originally,

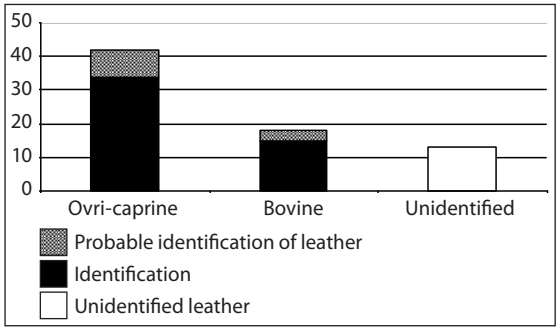


Diagram 5.1 *Distribution of leather types used for sheaths of type A1.*

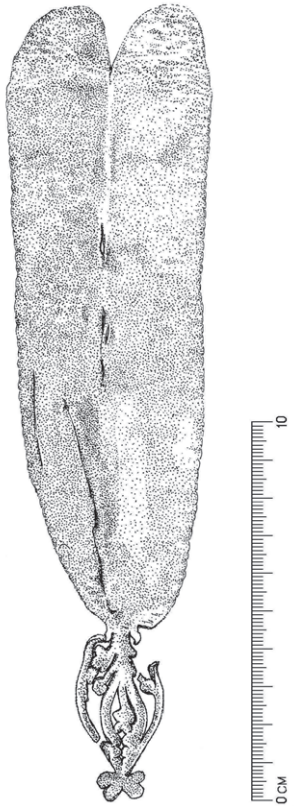


Figure 5.1 *Example of type A1-sheath. The mouth ends in two characteristic curved flaps. The sheath is unfolded and illustrates a slight bending of the seam at the lower left part. The depicted sheath is of subtype A1.7, with tail of openwork decoration (cat. no. 69).*

but as these have decayed they have not left a clearly visible impression in the leather. This wooden lining differs from wooden linings usually associated with scabbards, consisting of two thin wooden plates hollowed at one side and glued to each other to tightly fit the blade.

The seam of a type A1-sheath is usually uneven. Often it crosses from the back to the side of the sheath, sometimes even progressing into the flaps at the top. Two main variants can be discerned. Most sheaths, or 58 out of 73, have a butted seam (edge to edge) with edge-flesh stitches. The seam is then barely visible on the outside. One would assume that these sheaths were originally sewn inside-out and warped afterwards. One argument against this assumption is that several sheaths are probably too small and narrow for such a procedure. Furthermore, some of the sheaths are so closely fit around the wooden blade-protection that it seems unlikely that it was inserted afterwards. On the other hand, starting at the tip of the sheath, it is possible to sew edge-flesh stitches from the outside, closing the sheath along the seam.[36] An alternative sewing technique of flesh-grain stitches can be observed on 14 sheaths. Here the seam also appears to have been butted, but the threads must have been visible on the sheath's surface. Ten of these have visible whip-stitch impressions. On one sheath the seam could not be identified.

The two-curved mouths appear in two main variants, reflecting two techniques for suspending the sheath (Figure 5.2): Variant 1 includes

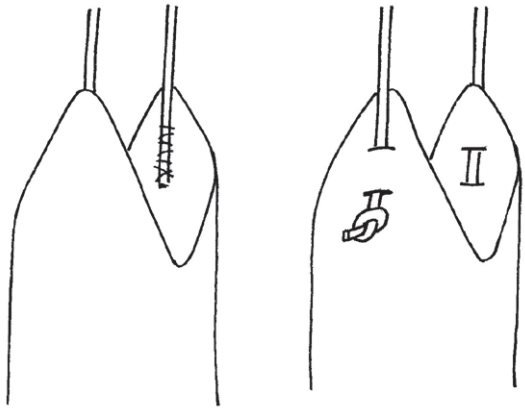


Figure 5.2 *The two main variants for fastening a strap or a thong for suspension.*

the sheaths where some kind of thread or thong has been sewn onto the flesh-side of the curves. The sewing is very fine and seldom protrudes the leather (tunnel-stitching). Variant 2 includes the sheaths in which the curves are perforated with one or several slots where a thong has been fixed. In some cases the flaps may have been cut or notched, leaving a cruder impression.

Decoration. Stitch-holes can be observed on ten sheaths along the rims of the flaps of the mouth. On two others the remains of the thread are preserved, decorating the borders of the flaps. Four sheaths have similar arrangements on the protruding tails, and on two of these the threads are preserved. The colour is now faded, but on two sheaths a distinct red dye is recognised (cat. nos. 52, 54). One of these has earlier been analysed as silk (Bolstad 1991: 138) (Figure 5.3). Several other A1-sheaths have probably had similar decoration, untraceable today due to wear and decay during deposition. Although rather unnoticeable in the archaeological record, many A1-sheaths have probably been highly decorative both in terms of shape and colour.

The type can further be divided into nine subtypes based on the shape of the tip (Figure 5.4):

A1.1: The tip of the sheath is plain and pointed (N=42).

A1.2: The tip of the sheath is plain but ends vertically (N=2).

A1.3: The tail of the sheath is a prolonging of the tip, ending as a whip (N=6).

A1.4: The tail of the sheath ends as a trapezoid (N=8).

A1.5: The tail of the sheath is split into several threads (N=3).

A1.6: The tail of the sheath is pointed, sometimes sliced in the upper part (N=7).

A1.7: The tail of the sheath widens and ends in an openwork decorated piece (N=2).

A1.8: The tail of the sheath is rounded (N=1).

A1.9: The tail is round but folded, as the sheath barely narrows before the tip. The extended tip is, however, not sewn (N=2).

Figure 5.3 *Remains of decorative seam along the tail of a sheath of type A1.4 (cat. no. 54).*

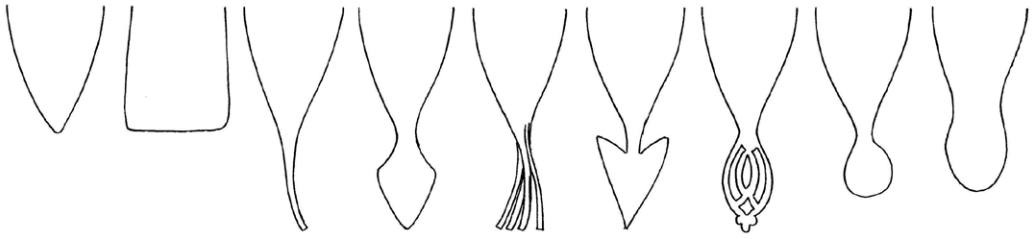


Figure 5.4 *Tip/tails of subtypes A1.1–9.*

It should be mentioned that on three of the 73 sheaths, the curved mouths are not preserved. However, the curved mouth is indicated by the sewing and extended tips that do not appear elsewhere in the material. The possibility cannot be ruled out that several A1.1 sheaths have had some kind of tail that has been torn and is missing. The surface is cut on two sheaths by several repeated slits. This is probably a secondary feature and is not interpreted as decoration.

5.2.2 A2 – plain sheaths with multi-shaped mouth

This small group of eight sheaths denoted as A2 mainly resembles type A1 in size and appearance, but differs in the shape of the mouth. As an unusual trait in the Bergen corpus, the mouths of the A2-sheaths extend into one or several straps for suspension. Two of the sheaths have two extensions with the same length as the sheaths themselves (Figure 5.5), while another sheath has several extended straps that end in an interlaced knot at the top. Another sheath has a prolonging that ends in a loop. Whether these single items represent separate types or reflect single choices of those who made them is not possible to ascertain without more finds. In the case of the two sheaths with the long extensions of the mouths into straps, I assume they reflect a more common solution.

Even though they are finely sewn with a butted seam, all the sheaths have flesh-grain stitch-holes unlike type A1 where edge-flesh stitch-holes are common (80 per cent). Two of the sheaths have closed seams, also unlike the A1 sheaths. One of the sheaths has an inserted wooden blade protection (Figure 5.5).

The sheaths are even in size, ranging from 14 to 19 cm in length excluding the extensions

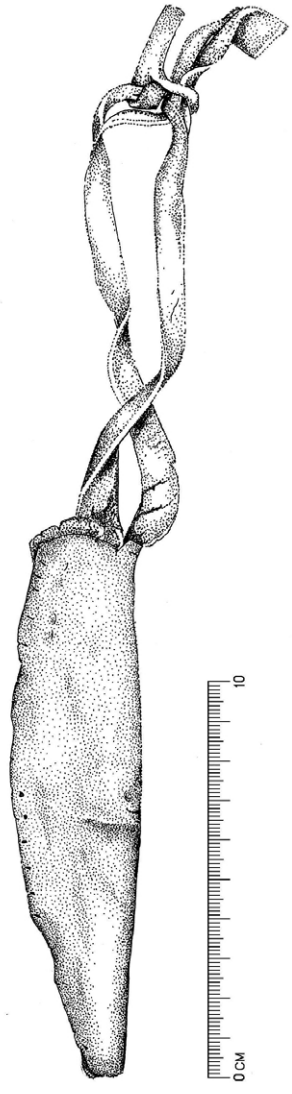


Figure 5.5 *Example of sheath of type A2. An inserted wooden blade protection gives a rounder appearance and a visible impression to the blade-part of the sheath (cat. no. 78).*

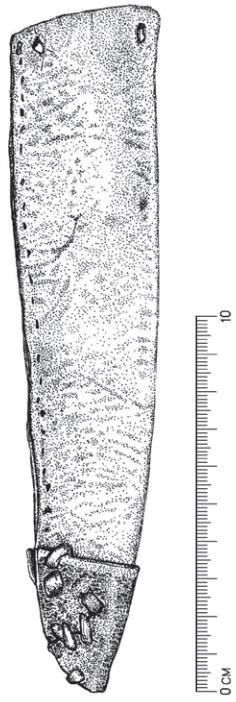


Figure 5.6 *Example of type A3-sheath, with a closed side-seam of flesh-grain stitching. The type is plain, simple and functional without any decorative features. This particular sheath, however, is characterised by repair of the tip. The sheath is of calf-leather, the repair in goat-skin (cat. no 107).*

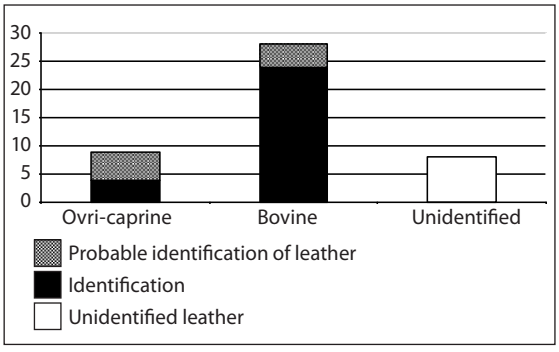


Diagram 5.2 *Distribution of leather types used for sheaths of type A3.*

from the mouths. Five sheaths are made of goat-skin and three of cattle-hide. However, two of each category must be labelled as probable due to the worn grain surfaces.

5.2.3 A3 – the remaining plain sheaths

The main characteristic of the 45 sheaths denoted as type A3 is actually a lack of attributes. These sheaths are simple and straightforward, usually consisting of a folded piece of leather that is sewn along one rim (Figure 5.6). The tip is pointed and the mouth is straight, occasionally with two curved cuts. Most of them have one or several holes for fastening straps for suspension. The sheaths' lengths vary evenly from 9 to 24 cm except for a single specimen of 31 cm.

Most of the A3-sheaths are made of bovine leather (N=28) and usually calf. Nine are made of ovri-caprine skin, mostly goatskin, but one or two of sheepskin. One of the calf-hide sheaths has been repaired with a new tip made of goat-skin. Eight sheaths, however, could not be identified as to leather-type (Diagram 5.2). Thirty of the 45 A3-sheaths have closed side-seams with flesh-grain stitch-holes. This is a relatively simple solution for how to manufacture a sheath and is performed rather crudely on several artefacts. The remaining third sheaths are sewn together in a variety of ways of closed and butted seams, along the side, back or diagonally and usually with flesh-grain stitches while also edge-flesh stitching appears. On two of the sheaths, thongs are used for sewing. Two sheaths have wooden blade protections preserved while another has a clear impression left. Several sheaths are reuse of other objects and many of the sheaths of type-A3 appear as the least refined in the Bergen material, although some are manufactured more carefully.

5.2.4 A.x – plain sheaths that defy sub-typing

The remaining six sheaths of type A are collected in type A.x. Although plain and even-rimmed, these are nevertheless too fragmented to be safely ascribed to any of the other A-sub-types. Sewing and shape suggest that three of these are of type A1. Since this cannot be confirmed though, they are here classified as A.x.

5.3 Type B – surface-decorated sheaths

This type includes the sheaths with surfaces decorated by different techniques not protruding the leather. None of the sheaths are decorated by embroidery, cut through or openwork decoration. All sheaths are sewn but the placing of the seam may vary. No sheaths of this type have fringes or other decorative excisions along the rims or at the tip.

Altogether 70 sheaths are classified within this type. In terms of shape, type B is quite varied as are the decorative motifs that may consist of a number of different elements. The many motifs might have invited a special classification, but in order to attain a more objective approach the sheaths are classified by the technique used for decoration. Four separate techniques can be discerned: impressing, stamping, embossing and incising.

Impressing (engraving with a blunt tool) is a method where a blunt tool is pressed onto the dampened leather surface, leaving a permanent and often darker mark when the leather dries up. Suitable for drawing lines and motifs, the effect could be enhanced by using hot implements, thus making a darker line or mark. The term engraving is well established and seems to be frequently used in publications (Russel 1939: 133; Ward-Perkins 1940: 185; de Neergaard 1987a: 40). The term is, however, somewhat misleading since the blunt tool actually impresses a line in the leather surface rather than cutting through it (Hodges 1964: 152). In recent literature the term impressing is used (Groenman-van Waateringe 1988: 83; Cameron 2000: 5; Harjula 2005: 39), and as it is more accurate it will also be used here. The term tooling has also been applied recently for this technique, but the term has connotations that are more general in my opinion (Cameron 2007: 52). The technique can be observed on many Bergen sheaths and scabbards, and the motifs vary from simple lines to decorative motifs.

Stamping is a related method and was done by pressing stamps with motifs onto the surface of dampened lather. A distinction can be made between stamps with motifs pressed onto the leather, and stamps of pricks or dots pressed onto the leather to make a textural surface using other implements than a stamp. Here I use the term stamping in an excluding manner, meaning stamp impressions with motifs. In the case of dots or small circles, they could be regarded as stamps. But in the case of pricks, it can just as well be labelled as impressing.

Embossing is a more comprehensive term, denoting techniques used to shape deeper relief in the leather to form motifs. This could be done by working the back (flesh) side of the softened leather to create a low relief on the front (grain side), or by moulding with flat and pointed tools from the front. Moulds could also be used. The Norwegian word *pauting* refers to a special technique of embossing, demanding that the leather is not tanned throughout, leaving a layer of raw hide between the flesh and grain side (Wåle 1987: 60; Dahl 1994: 10). Using blunt tools on the grain side without breaking it, the raw layer is gently pushed into position and a relief is created for further decorating. Sheaths might have been moulded, e.g. to widen the ridge between the blade and the handle parts. As this is not part of decoration, it does not qualify to be classified as embossed in my classification.

Incising represents a simple form of decorating by superficially cutting the grain layer of the leather with a sharp implement, leaving a line on the leather surface. Contrary to the three other techniques, it breaks the surface of the leather but does not protrude the leather itself. Furthermore, this technique does not require the leather to be softened.

As for the variety in motifs, several techniques could be used in combination. But this appears to be impressing, supporting the other techniques. Consequently, I will classify them according to the dominant technique: as stamped, embossed or incised if this technique is used, sometimes supported with impressing. The sheaths are classified as impressed, if this is the only technique used. The different decorative motifs such as different zoomorphic figures, foliate decoration, geometric patterns, heraldic emblems, etc. may appear in several of the subtypes. The method of stamping requires specialised tools to make the impressions in the leather, but would be a method well suited to an 'industrious' production for making many similar or standardised sheaths. The methods of embossing are the most advanced and time-consuming, probably adding to the artefact's value in terms of work-time invested. Incising on the other

hand is the easiest way to tool the artefact. And excluding the more complicated motifs, such decoration could easily have been applied on a finished product.

5.3.1 B1 – stamped sheaths

Twenty-three sheaths are decorated by stamping technique only, or supported by impressed lines. However, different stamps form the main decorative elements. The term stamping is used in an excluding manner, meaning stamps with motifs. Type B1 is further divided into two subtypes.

B1.1: Sheaths with stamps as motifs and patterns

Fourteen sheaths (four of these fragments) are decorated by stamps in such a way that the motifs of the stamps remain the main decorative element. Four of these are decorated by stamps only, while the rest also have impressed lines as borders or fillers for the stamped motif or the different sections of the sheath. The sheaths vary in size and state of preservation.

Five sheaths are asymmetric similar to the one in Figure 5.7, which is the most decorated. It has three different stamped motifs: fleur-de-lis, castle triple towered and shield with three lions passant. These five sheaths have centre-of-back seams, except for one that has a flesh-grain side-seam. As for decoration, the latter is in the other end, casually decorated with randomly placed stamps of fleur de-lis. A sixth sheath is also asymmetric, but more evenly tapering along one of the sides.

Five sheaths are symmetrical in shape. Three of these are slim, with the lower parts preserved. Being narrower than 2 cm, they are decorated with a single line of stamps. The two other symmetrical sheaths are wider, one with a slightly widened handle-part which leaves room for a handle wider than the blade. The other is predominantly decorated with impressed plaits encircling small stamped lions. A small fragment is similarly decorated. Small stamps of fleur-de-lis are bordered by marked impressed lozenges. Another fragment of a handle-part has two central fleur-de-lis impressions bordered by impressed lines.

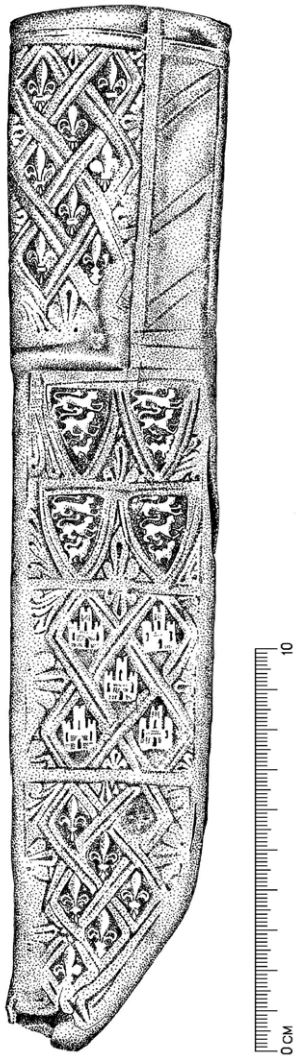


Figure 5.7 *Example of type B1.1-sheath, the most heavily decorated. Three different stamps are used, fleur-de-lys, a castle triple towered and a shield with three lions passant guardant. This sheath is also richly impressed with lines surrounding the stamps in a plaited manner, or forming leaves filling in blanks (cat. no. 135).*

One sheath appears as rather unusual, as it is made of two reused pieces of leather sewn together with flesh-grain stitches at both sides, giving it a rectangular shape. Both pieces have a line of different fleur-de-lis stamps.

The fourteen B1.1-sheaths are all made of bovine hide, one of them probably bovine. The

sheath made of two separate reused pieces, however, consists of one piece of calf and the other of goat.

In addition to the calf-goat sheath, only one specimen has a closed side-seam of flesh-grain stitches. The remaining twelve sheaths have centre-of-back or side-of-back seams. Six specimens have a closed seam of flesh-grain stitches and thus a clearly visible seam. The remaining six have butted seams of edge-grain stitches, the opposite of the common solution among the A1-sheaths. However, the sewing is very tight, thus pressing part of the edges to form marked seams as if the seam were closed.

Regarding stamp impressions on the B1.1-sheaths, the most common motif is fleur-de-lis which appears on eight of the 14 sheaths (one has two different fleur-de-lis) (Figure 5.8). Lions or similar beasts are used on six sheaths, usually as *passant* (walking with forepaw raised). One of the lions is *rampant* (standing). The three lions on the shield are *passant guardant* (walking with forepaw raised, facing the viewer).[37] This heraldic motif resembles the royal coat of arms of England, except that the animals are walking in the opposite direction. Birds appear on two stamps (one is perhaps a dragon). Three motifs are less common: *a castle triple towered*, an 'ave'

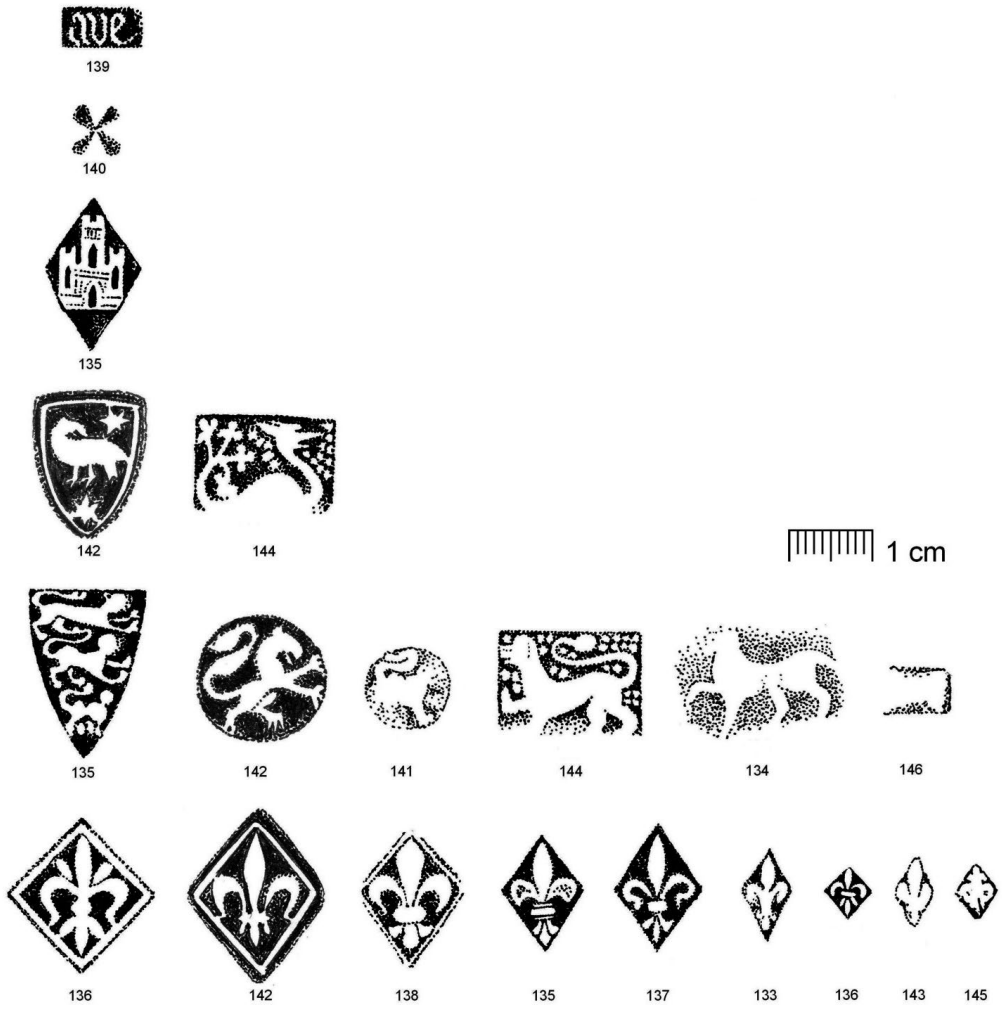


Figure 5.8 *Stamp impressions on type B1.1. The numbers refer to numbers in the appendix.*

and a simple foil or flower. The stamp may have the shape of a kited shield or circle, but most commonly a rectangle or lozenge encloses the motif. Although not actual arms, the decoration is obviously inspired by heraldry in both motifs and shapes.

B1.2: Sheaths with stamps as decorative surfaces

Nine sheaths, three of these fragments only, have a repetitive pattern of small stamps as their main decoration; the stamps are arranged to cover the surface in a regular way that creates an even pattern or texture (Figure 5.9). The stamp motif is not central, as it is on the B1.1-sheaths. It is hardly visible yet its arrangement creates a characteristic effect.

Four of the sheaths are decorated with fleur-de-lis stamps ranging from 3 to 5 mm in height. Four are decorated with flowers or foils from 2.5 to 4 mm in height (Figure 5.10). The remaining sheath has 1.5 mm heptafoils on the front and fleur-de-lis on the back (Figure 5.11). All sheaths have had impressed single-lined panel-borders. In addition, the sheath with both motifs stamped has a panel of impressed tapering lines covering half of the handle-section of the backside of the grip. One of the fragments has

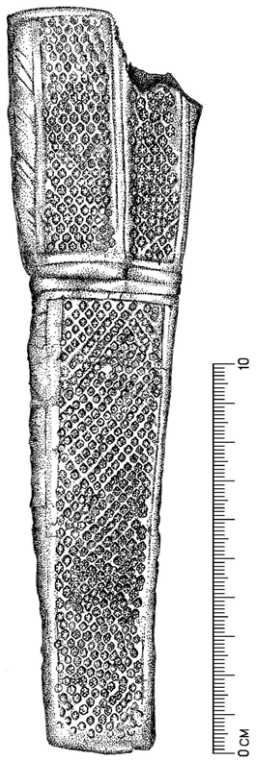


Figure 5.9 *Example of type B1.2-sheath, decorated with stamped heptafoils of 3 mm height. The stamped decoration is supplemented with impressed lines (cat. no. 153).*

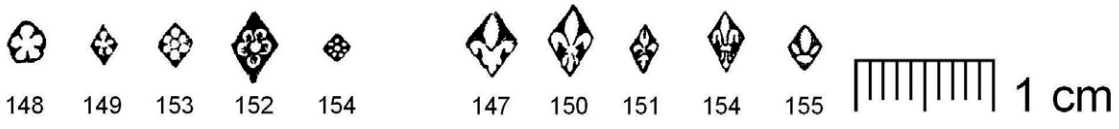


Figure 5.10 *The different stamp-impressions on type B1.2-sheaths from Bergen. The numbers refer to the numbers in the appendix.*

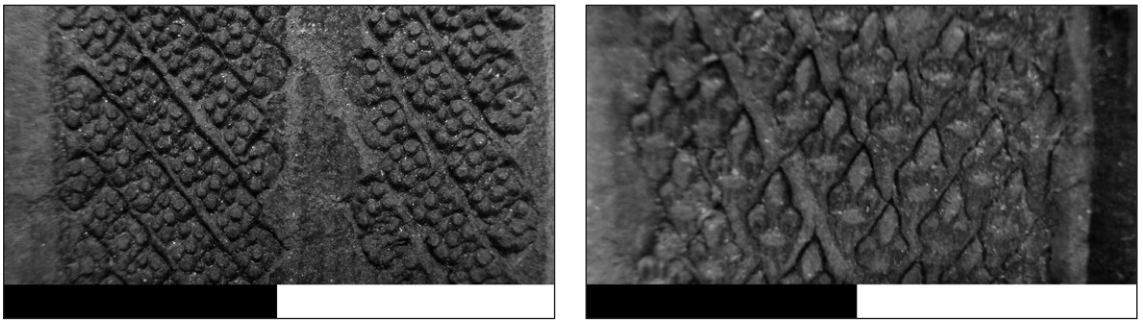


Figure 5.11 *Front and back of B1.2-sheath, the one with two different stamp motifs: heptafoils in front and fleur-de-lis stamps decorating the back. The sections are 2 cm wide (cat. no. 154).*

had a similar arrangement, probably at the back of the blade section. The only sheath with parts of both mouth and tip preserved has a total length of 18.5 cm, while the remaining sheaths also seem to have been of a similar size.

Of the nine sheaths, four are too fragmented to be able to determine the form. Three are asymmetrical or 'knife-shaped'. Two are rectangular but rather narrow, with the tip cut vertically (Figure 5.9). One of these has originally been longer, the new tip being the result of a modification. Whether the tip was symmetrically or asymmetrically pointed earlier, or cut vertically, is not possible to determine.

All the B1.2-sheaths are made of bovine leather. Both butted and closed side-of-back and centre-of-back seams can be observed. As with the sheaths of type B1.1, the butted seams are tightly sewn, leaving a clearly marked seam.

5.3.2 B2 – sheaths with impressed decoration

Type B2 is characterised by the surface decoration having been done exclusively by impressing. This type is represented with 37 sheaths and is the most diverse among the B-sheaths as regards form, size, state of preservation and choice and combination of motifs. Despite this, some of the sheaths have morphological characteristics that call for further sub-classification.

B2.1: Sheaths with expanded handle part

Though they vary in dimension from 19 to 30 cm, four sheaths are made with a handle-part that is widened to include a folded part with suspension-holes at the left side of the sheaths, giving them a distinctive shape among the Bergen sheaths (Figure 5.12).

All these have a butted centre-back seam of edge-grain stitches on the blade-part, but placing and seam-type vary at the handle. All four sheaths display similar impressed lattice decoration with impressed dots, and all are made of bovine leather.

B2.2: Sheaths with slit handle

Three B2-sheaths have a symmetric outline and form a single subtype with the handle split in the front all the way down to the blade. All are of similar length: 23, 25 and 27 cm long, respectively, with a centre back-seam. Two are made of cattle, the third is uncertain due to heavy PEG-treatment during conservation, but probably cattle as well. The seam is centre-of-back with flesh-grain stitches, and in one case edge-grain stitches.

The decoration varies. One has only faint traces of an impressed dragon or bird motif on a pricked background on the blade part, another has an impressed geometric line and pattern with pricks (Figure 5.13), and the last specimen a delicate impressed floral pattern of almost embossed qualities on a dotted background.

B2.x: Remaining sheaths of type B2

The remaining 30 sheaths of type B2 are not divided into subtypes. The type varies in size, form and decoration motifs, but also in preservation. To distinguish this type as separate subtypes would leave a number of very small groups that are not as easily recognisable as subtypes B2.1 and B2.2. Therefore these remain collected here as B2.x (Figure 5.14).

Except for one sheath, all are made of bovine leather and two of these probably of bovine leather. The flesh-side has impressed but faint imprints. The last sheath is made of ovri-caprine leather probably, probably goat.

Most sheaths are back-seamed, 13 by side-of-back seam, 12 by centre-of-back seam, and one diagonally. Two sheaths are side-seamed, and on two fragments the placing of the seam could not be decided. Most sheaths (18 specimens) are sewn with flesh-grain stitches and eleven are sewn with edge-grain stitches. One fragment lacks stitch-holes.

Decoration of B2.x-sheaths is heterogeneous, and a sheath is often decorated with a variety of motifs, often one or several main motifs in front with additional impressing to fill empty spaces. As many of the specimens are fragmented and others heavily worn and difficult to discern clearly, I will present some motifs and main tendencies here, starting with the most striking ones.

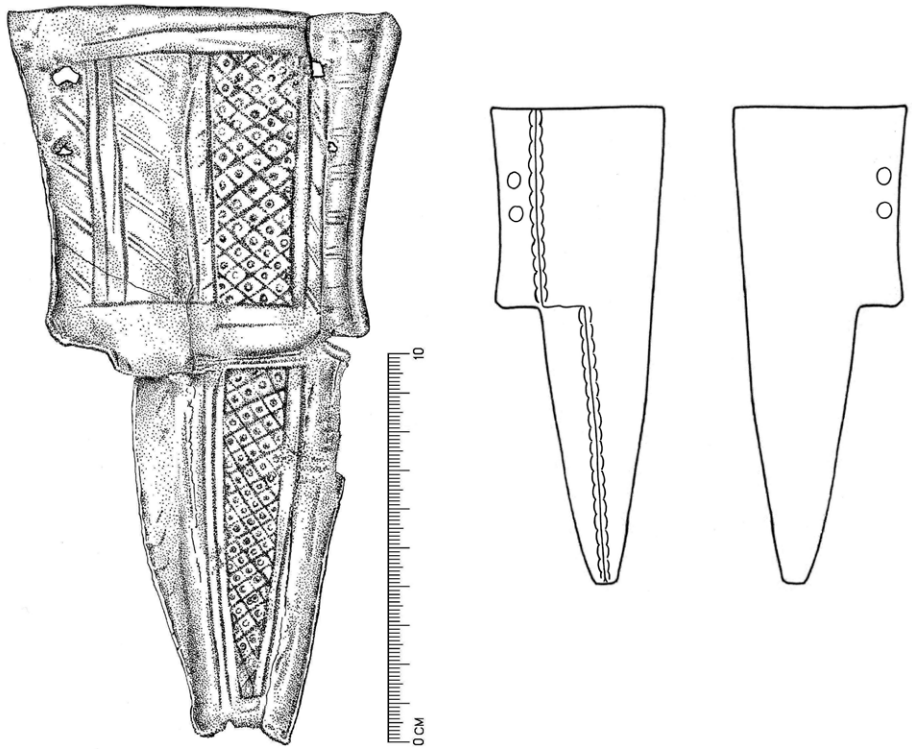


Figure 5.12 *Example of B2.1-sheath (cat. no. 156). The sheath is unfolded. When folded and in use, the expansion at the handle part will be at the right side of the sheath, as seen on the drawing to the right. The four specimens found in Bergen all have similar decoration, an impressed lattice pattern on both handle and blade-part.*

Heraldic Arms appear as conventionally depicted shields on six sheaths. Nine different arms are documented (Figure 5.15).[38]

1 A fess between two chevrons
2 Gyronny of eight
3 Three chevrons
4 A chevron
5 A pile in chief above a fess
6 'Quarterly, the first and fourth quarters per bend' (unfinished Gyronny of eight?)
7 A fess
8 Per saltire
9 Per bend sinister

While one sheath only has one heraldic shield, another has six different arms impressed. The most popular motif is *a fess between two chevrons*, which appears on five of the six sheaths with this impressed decoration. The designs *gyronny of eight* and *three chevrons* also appear on several sheaths, while the remaining arms are documented on one sheath each. The two sheaths that have both arms 1 and 2 have these depicted on the back-side, both displaying the same design of bird/dragons in floral tendrils in front. Two other sheaths have arms as only motif, supported by impressed lines. Other heraldic motifs also appear, such as fleur-de-lis and *a castle triple towered*, although not as arms but framed in lozenges (cf. Figure 5.8, cat. no. 135).

Zoomorphs are common motifs and impressed on nine of the 30 B2.x sheaths, sometimes in several variants. While some appear bird-like, they are usually mythical creatures such as dragons or the like (Figure 5.16).

Floral tendrils can be noted on at least eight of the sheaths, sometimes as the main motif on the blade-part, other times framing other motifs.

Arches are used for framing but also as the main motif, but not as frequently as floral tend-rils.

Patterns of impressed lines appear on many sheaths, usually several parallel and running

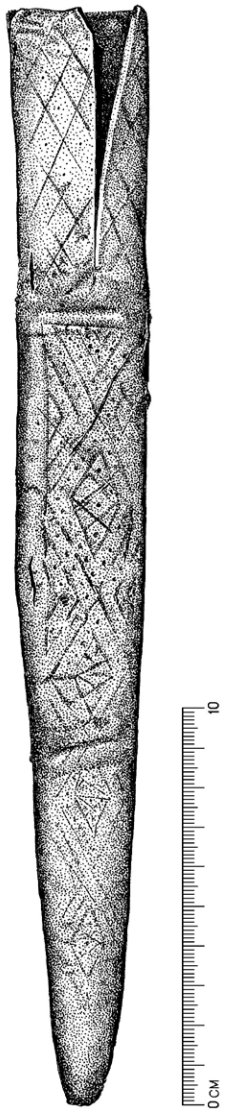


Figure 5.13 *Sheath of type B2.2, with impressed lattice variant pattern (cat. no. 160).*

vertically, horizontally or diagonally. Impressed lines usually decorate the backside of the sheath or are used for framing a motif. Two sheaths seem to have been decorated with horizontal lines only. Parallel diagonal lines meeting opposite lines are slightly more advanced, creating a herringbone or parallel zigzag patterns as seen on some sheaths. Plaits are not common in the Bergen corpus, but are documented on one B2.x fragment where they are made in a rather coarse manner. Some fragments are assigned to

Figure 5.14 *Example of type B2.x-sheath. The type is diverse (cat. no. 172).*

type B2.x based on such simple patterns, but could theoretically belong to any other B-types since these lines are used for support on all these types.

Lattice pattern is the most common of these relatively simple geometric patterns and is used as main decoration on three B2.x-sheaths. Variants of lattice are also known from other types like the four B2.1-sheaths and one of the B2.2-sheaths (cf. Figures 5.12 and 5.13).

There are several options for the different patterns, and these are some examples observed in the Bergen material (Figure 5.17):

1 Floral tendrils, foliate
2 Arches, lobed and three-lobed
3 Zigzag, herringbone
4 Herringbone
5 Lattice
5 Plaits

The motifs of the B2.x-sheaths are also known from other types in the Bergen corpus, and are done in other techniques or impressed as lines or floral tendrils to accompany other

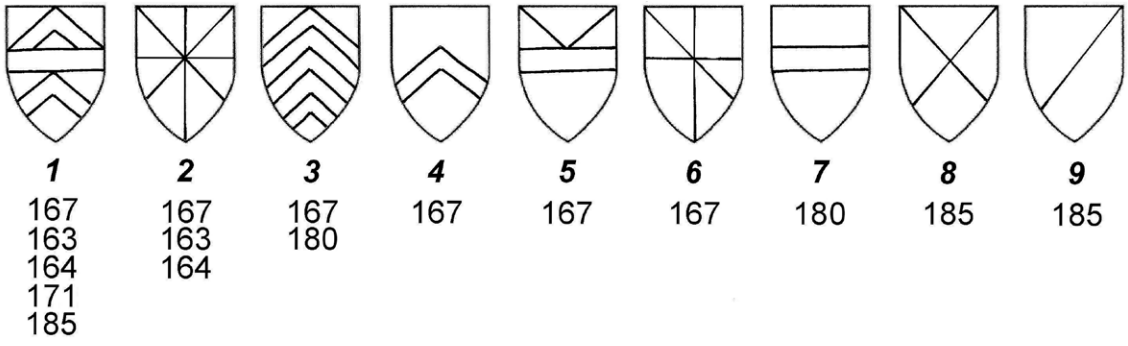


Figure 5.15 *Arms depicted on B2.x-sheaths, arranged after their frequency. The arms are numbered in italic. The numbers below refer to numbers in the appendix.*

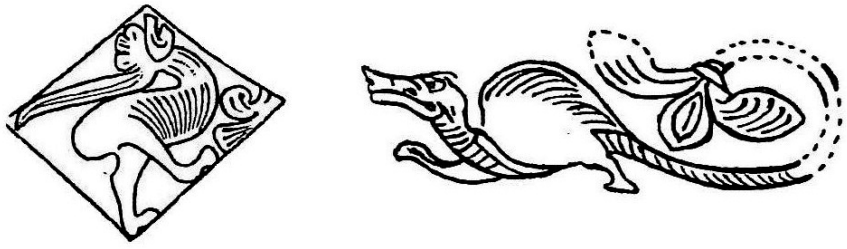


Figure 5.16 *Zoomorphs on B2.x-sheaths. The creature to the left is one of five similar beasts on a richly decorated sheath, also decorated with arms, arches and floral tendrils (cat. no. 167). The dragon is from the blade-part of another sheath, of which only the handle-part with impressed vertical lines is preserved (cat. no. 176) (After Mathisen 1935: figs. 5 and 8).*

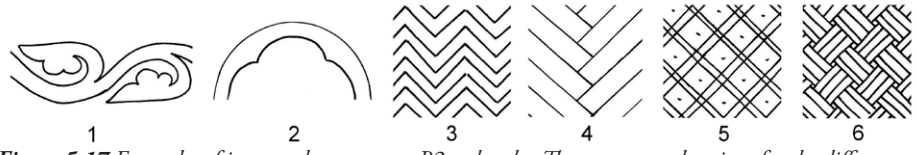


Figure 5.17 *Examples of impressed patterns on B2.x-sheaths. There are several options for the different patterns and these are some examples observed on Bergen sheaths.*

designs. Further subtypes are hinted at within type B2.x, based on a combination of form and decoration motifs. On the other hand, a classification based on motifs alone is difficult. Sometimes the motifs appear alone, in other cases in combination with different designs on the blade and handle-parts.

5.3.3 B3 – sheaths with incised decoration

This small group containing only six sheaths is varied and will not be further divided into subtypes. Their common classificatory quality is the decoration having been done by incising, and two of the sheaths being reuse of other incised objects underlines that this method is not commonly used among the Bergen sheaths.

Two of the sheaths are symmetrical. One of these shows only faint traces of incision and is perhaps a strongly modified sword scabbard. The other is a small sheath for two knives and probably some kind of needle or other small implement, and has a herringbone and lattice decoration on the front (Figure 5.18).

Another sheath sewn in a simple way of flesh-grain side-seam also displays lattice decoration, but the sheath is more distinguished by a 5 mm widening on the handle section, reminding

Figure 5.18 *Example of B3-sheath (cat. no. 197). The short incised lines mark each side of three holes, probably meant for a small pointed object like a needle or an awl. Below the mouth is an opening, probably intended for an additional smaller knife.*

one of the B2a-sheaths but without the widening being made for suspension.

One sheath with deeply incised flower tendrils has a rectangular shape but is clearly a cut-out from another object, folded and sewn along the rim and the tip.

Two more fragments include a blade part with incised small V-shaped notches in a repetitive pattern, resembling the stamped sheaths of type B1.2. Another sheath, also a blade-part, has incised lines of a random placing.

The sheaths of B3 are all made of bovine leather, two of them probably bovine. All are sewn with closed seams of flesh-grain stitches.

The decoration of these sheaths is simple, like cruder versions of examples known from type B2.x (Figure 5.17, nos. 3 and 4).

5.3.4 B4 – sheaths with embossed decoration

Decoration performed in embossed, or moulding, technique is the main characteristic of type B4, and appears on six of the sheaths in the Bergen material. All the sheaths are well preserved, but not all of these are complete. The sheaths are of similar size, and all the whole sheaths are nearly 20 cm long.

Two specimens widen downwards to the tip. As an unusual characteristic in the Bergen corpus, these two form a separate subtype.

B4.1: Widening blade-part

Except for one sheath of type A1, only two other sheaths in the Bergen material show this peculiar characteristic of widening downwards towards the tip, leaving space for a larger blade than would fit into the sheath through the grip-part. One is decorated with framed birds (Figure 5.19), the other with a hunting scene framed by floral tendrils. The grip and back are decorated by repeated fleur-de-lis and birds, but stand

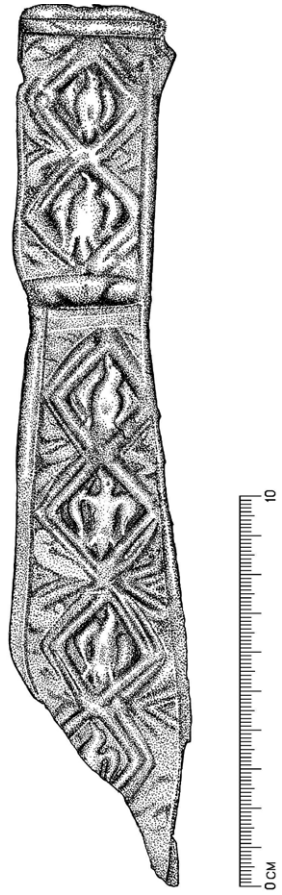


Figure 5.19 *Example of B4.1-sheath (cat. no. 200). The birds are in low relief due to embossing. The surrounding frames and leaves are partly embossed, partly impressed.*

out as they are embossed and not stamped as one could expect from such a repetitive pattern.

Both sheaths are made of bovine leather. Both have butted seams of flesh-grain stitches, one as centre-of-back and the other as side-seam.

B4.x: Remaining sheaths of type B4

While two sheaths are asymmetrical, two have a symmetrical shape. None of the latter actually have a pointed tip, but are evenly tapering at both sides before the vertically cut tip.

Two sheaths, a whole one and a blade part, have embossed animals framed within plant like frames, a so-called hunting scene. Dragons are the main motif on two other sheaths, one with a dragon on the blade-part and another on the grip-part (Figure 5.20). The second has a dragon on the front and back of the blade section, with an impressed pattern on the grip section. This sheath has been modified. Parts of the framing of the dragons are cut and a new flesh-grain seam narrows the sheath.

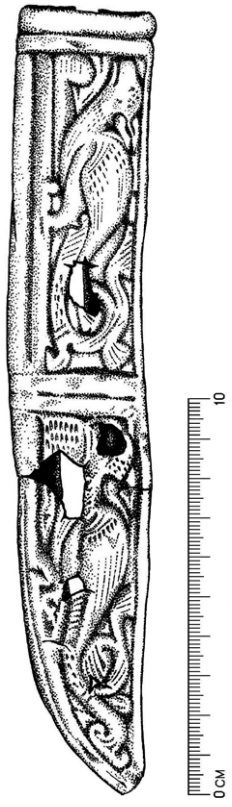


Figure 5.20 *Example of sheath of type B4 (cat. no. 203). The use of relief in the moulding technique gives a plastic effect that is especially apparent with the two dragons that decorate this sheath.*

All sheaths are made of bovine leather and excluding the modified one, have butted seams of edge-flesh stitches.

As moulding is more time-consuming than the other techniques and leaves a more visual impression, these sheaths seem to have been given more detail than others. The motifs are mainly dragons and animals. Two sheaths depict hunting scenes with several animals in line (Figure 5.21).

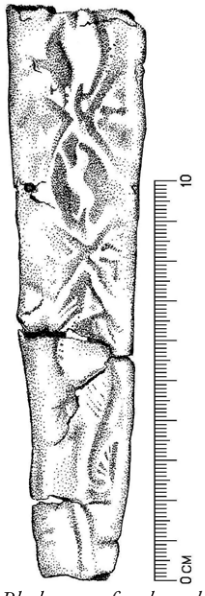


Figure 5.21 *Blade part of embossed sheath, showing part of a hunting scene (cat. no. 204).*

5.4 Type C – seam-framed sheaths

The sheaths of this type are all folded at one side but cut in the lower part, replacing the fold with a closed seam that 'frames' the sheath and gives a decorative focus to the rims which are sometimes emphasised by openwork decoration. The surface of the sheath can be decorated with embroidered and/or openwork/cut-through decoration.

The decorative techniques of the type B-sheaths (impressing, stamping, incising and

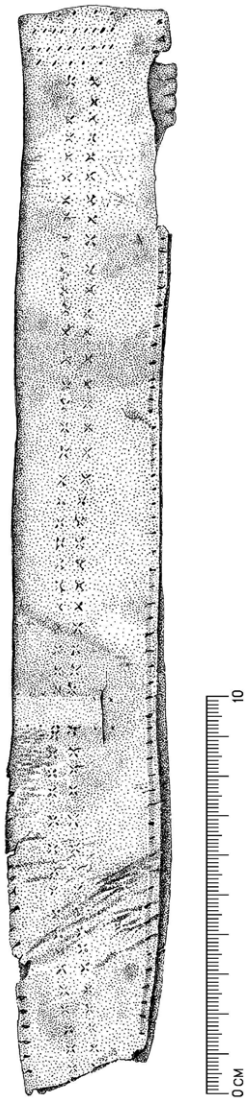


Figure 5.22 *Example of sheath of type C1. Imprint and slit for a small leather band is visible c. 9 cm above the tip. Two vertical lines of cross-stitches have decorated the front of the sheaths, and seaming along both the rims and at the mouth has been visible and probably of a decorative character (cat. no. 206).*

embossing) do not appear within type C. The embroidery has left traces as long lines of stitch-holes, or small groups of four holes for cross-stitches. In some cases, traces of fibres can still be seen in the stitch-holes (Figure 5.23). One sheath has an undecorated surface, but it has the seamed frame that characterises type C. Some of the sheaths also have openwork decoration or decorative fringes along the rims. These characteristics give an impression that is not 'immediately knife-like' as are most sheaths, and makes them more difficult to recognise in the archaeological record.

The sheaths are further divided into two subtypes based on whether they have openwork decoration along the outer side of the closed seam or not.

5.4.1 C1 – seam-frame only

Five sheaths have no openwork decoration along the rims. Two sheaths have embroidered decoration only, two have both embroidered and openwork decoration, and one sheath is undecorated. None of these sheaths are preserved in full length, but when excluding the undecorated one they have been rather long, exceeding 25 cm. The more complete sheaths have a long, rather narrow handle-part and a shorter blade-part and are perhaps not immediately recognisable as sheaths (Figure 5.22). The function as sheaths is attested, however, as one sheath was unearthed with a knife inside (cat. no. 205), which is unfortunately missing today. The sheath also has a small leather band attached, covering the link between blade-part and handle-part. Similarly, an impression after such a leather-band remains on another sheath, together with a small slit for inserting the band. Similar slits can be seen on the remaining three sheaths.

Two sheaths are made of bovine leather, three of ovri-caprine. Of the latter category, one is goat and probably two are sheep.

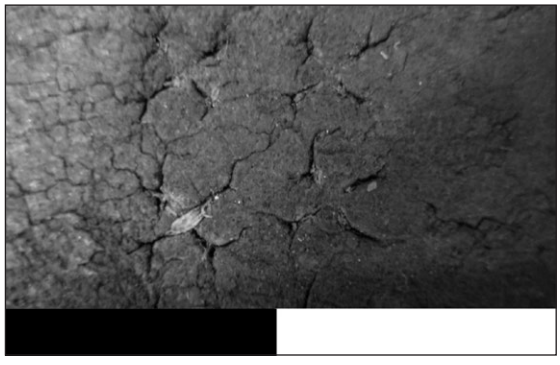


Figure 5.23 *Section showing fibre remains of embroidered decoration, cross-stitches, at C1-sheath. The section is 2 cm wide (cat. no. 206).*

5.4.2 C2 – seam-frame with open-work decorated rims

Three type C-sheaths differ from type C1 by having openwork decoration along the rims along the outer side of the closed seam (Figure 5.24).

All sheaths have embroidered lines. Two have openwork decoration surface and openwork decorated fringes at the rims. One of these also has a small slit, probably for attaching a band such as on the C1-sheaths. This sheath has another leather band inserted, visible through the openwork decoration. It can very well be expected that similar bands have been inserted in the two C1-sheaths with openwork decoration. The third sheath has cut through decorations for decorative bands at the handle part, and fringes at the blade part rims.

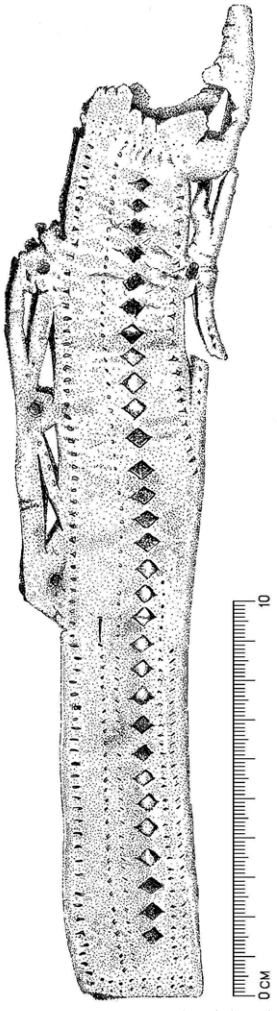


Figure 5.24 *Example of sheath of type C2 (cat. no. 211). Remains of a leather band are visible through the holes of the cut-through decoration, and a slit for a possible small leather band is visible 9 cm above the tip.*

Two sheaths are made of ovri-caprine leather – one goat and one probably sheep. For one sheath, the leather species is not identifiable due to conservation.

5.5 Type D – riveted sheaths

This type includes sheaths that are folded along one rim and kept together on the opposite rim with rivets or metal fittings. Openwork decoration may appear on the surface but is usually concentrated to the rims.

Though missing today, the metal rivets or fittings may be recognised by rivet holes or impressions in the leather. Although several sheaths of type D are fragmented and thus difficult to further classify, some sheaths do distinguish themselves.

By definition these sheaths are asymmetric, even though some may have a vertical tip.

5.5.1 D1 – sheaths with rim ferrule

Riveted or sewn at the handle, the common feature of this type is a metal rim ferrule to keep the blade-part of the sheath together (Figure 5.25. The sheath in Figure 1.1 is also depicted with a rim ferrule).[39]

On three of the sheaths, the ferrules have also continued on the handle part. The type contains 11 sheaths wherein the rim ferrule is preserved on four. On the remaining seven, the rim ferrule has left an impression. The sheaths vary in length from 14 to 29 cm.

The rim alongside the ferrule has ended in protruding fringes or threads of leather on seven sheaths, three as fringes (Figure 5.25) and four as threads. One of the sheaths has a row of five pairs of lunate slits on the handle. On two of the three sheaths with rim ferrule along the whole rim, the mouth ends in several flaps.

Regarding leather species, one sheath is probably made of bovine leather and the remaining of ovri-caprine. Two can be identified as goat and sheepskin, the remaining of probable sheep and one goat.

5.5.2 D.x – remaining riveted sheaths

Eight sheaths are characterised by riveted side seam, but are lacking the wire ferrule. Most riveted sheaths belong to type D1, but the riveting itself is a feature distinguished enough to treat the remaining eight sheaths as a single category. It is, however, diverse like the other 'x'-groups and a larger number would probably qualify for further sub-typing. Two specimens, for instance, are large and broad of seax-like qualities. Another has a chape with protruding arms at each side, almost reminding one of a small double-sided rim ferrule. Although made with elaborate rivets, there is a provisory feel to this sheath. The chape strongly resembles a belt strap-end found in London (Egan and Pritchard 1993: 127, fig. 575) (Figure 5.26).

The leather type is evenly divided between bovine and ovri-caprine with four specimens of each.

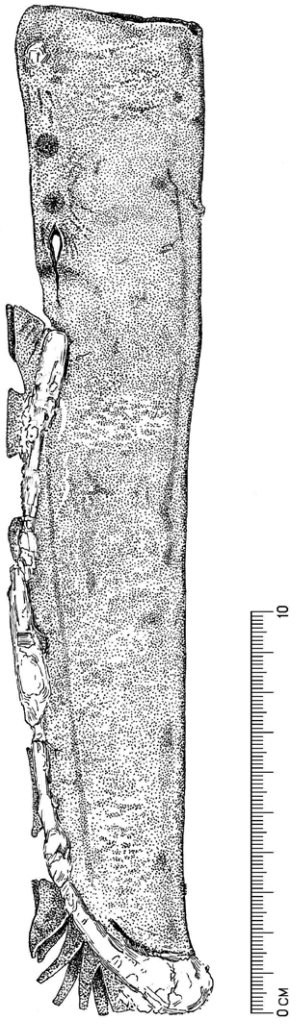


Figure 5.25 *Example of sheath of type D1 (cat. no. 221). The rim ferrule is corroded but still preserved. It has partly left its original position, leaving an impression on the leather surface. Fringes have decorated the rim along the outer side of the ferrule.*

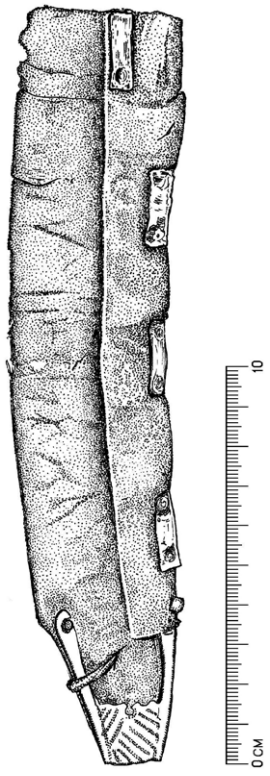


Figure 5.26 *Example of type D.x. The sheath is made with a chape that was probably originally a strap-end for a belt (cat. no. 227).*

5.6 Type E – undecorated scabbards

Among the scabbards or leather coverings, 42 artefacts have no decoration (Figure 5.27). None of the plain scabbard coverings are complete. The fragments, however, are all of similar dimensions with the width of the fragments varying from *c.* 3–4.5 cm just above the tips, to 6.5 cm closer to the mouth. While not a matter of classification, ten of the scabbards are fragments of the mouthpart. Several of these are among the 19 fragments with slits that were used for

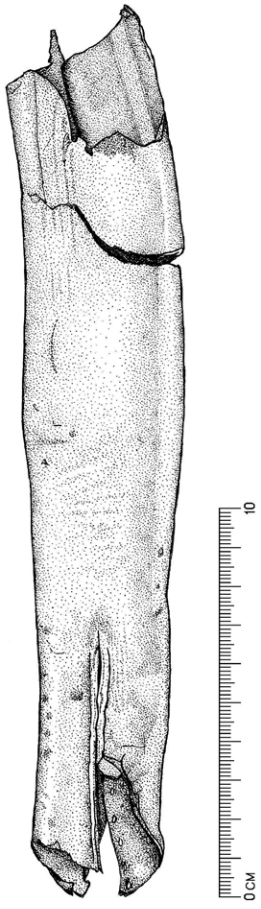


Figure 5.27 *Example of scabbard type E, one of the six tips preserved. On this scabbard, the seam on the back-side continues up in front, at least 8 cm of the lower part of the scabbard (cat. no. 250).*

straps as part of the suspension of the scabbards, and on one mouthpart parts of the suspension itself are also preserved. Six tips of scabbards are preserved among this type.

The type is usually made of bovine leather and these include 34 specimens (six of these probable). Eight scabbards are ovri-caprine: four of goat, three of probable goat and a last of probable sheep.

The majority of the E-type scabbards, or 31 specimens, have centre-back seams. However, the seams are not all straight and some are rather uneven. Eleven scabbards have side-of-back seams. Three of these are fragments of tips, and the seam looks like it is orientated towards the centre towards the upper part of the scabbards. As none of these scabbards are preserved in whole lengths, the possibilities must be kept open that the placing of the seam varied along the length on several. Twenty-eight scabbards are sewn with flesh-grain stitches. However, 15 of these have the seam facing inwards, leaving a seam that is hardly marked but rather similar to the twelve scabbards that are sewn with edge-flesh stitches. Only two scabbards are sewn with edge-grain stitches.

5.7 Type F – surface-decorated scabbards

Altogether 49 scabbards have a surface decorated by stamping, engraving or incising. These scabbards are further divided into three subtypes in the same manner as the sheaths of type B, according to decoration technique. As with the sheaths, impressing may appear on the stamped and the incised scabbards.

5.7.1 F1 – scabbards with stamped decoration

The 15 scabbards with stamped motif decoration have a varied degree of preservation, from one almost complete leather covering of 101 cm in length to small fragments of a few square centimetres (Figure 5.28). Several of the scabbards are preserved in a length of more than 50 cm. The small fragments are identified as parts of scabbards rather than sheaths, based on the placing of the stamps which forms a regular pattern. With one exception, the stamps are placed to form long vertical rows, sometimes with an impressed line in between. The scabbards are stamped at both the front and the backside. Ten scabbards have several stamp impressions, with up to five different motifs on one and the same scabbard (Figure 5.29, cat. nos. 275, 276, 280, 286). Of the five remaining specimens, one scabbard displays five rows, three in front and two at the back, with the same stamp used repetitively (cat. no. 288). Three of the pieces are too fragmented to exclude use of several stamps, while one fragment is stamped but the motifs are too faint to be described more accurately.

The find numbers BRM 0/14435, 0/14445 and 0/14890 are three fragments of the same

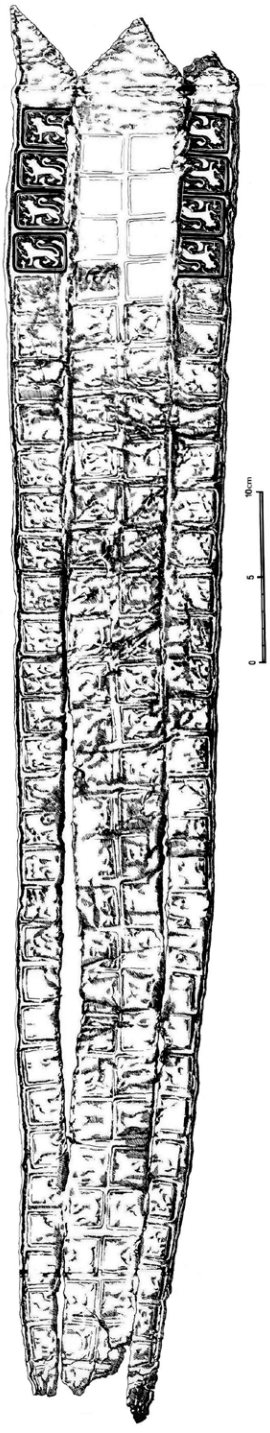


Figure 5.28 *Scabbard of type F1 (cat. no. 282). The impressions are faint, but the artist has drawn out eight of the lion passant impressions running on the back of the scabbard (Drawing by Asbjørn Solheim, undated).*

scabbard and count as one object in this study (cat. no. 281). The fragments are not found together, albeit in relatively close vicinity. The two larger fragments BRM 0/6793 and 49160 display five identical stamps (cat. nos. 280, 286). However, these two are found in contexts without any connection and are therefore not regarded as parts of the same artefact.[40]

Parts of the tip are preserved on four objects, and the mouth only on the complete specimen. Another scabbard has several slits probably connected to the suspension, and therefore from the upper part of the sheath. Thus, most fragments are random parts from the length of the scabbard.

Eleven of the scabbards are made of bovine leather, one of them probably bovine. One scabbard is made of ovri-caprine leather, probably goat. The remaining three could not be identified as to leather, due to worn surfaces and conservation. Thirteen of the scabbards have had centre-of-back closed seam of flesh-grain stitches.

As with the stamped sheaths, the most common motif is fleur-de-lis which is found in eleven different versions (Figure 5.29). Most of them, however, are more complicated, with additional petals or more carefully arranged frame. Other foliate motifs appear, such as a fern or plant in a petal or drop-shaped frame found on two scabbards. One fragment has lozenges and triangles with foliate motifs that should perhaps be seen as stylized fleur-de-lis. Lions or similar beasts are common, and usually depicted in *passant* position. One lion, however, is depicted as *rampant*. This might also be the case for a blurred impression depicting two animals. Birds are found on three scabbards. But as for the sheaths, one of these is perhaps a dragon. One antlered animal is depicted and another probably zoomorphic motif remains uncertain. As mentioned above, one fragment had impressions that were impossible to discern. Although fleur-de-lis and lions are the most common motifs, the decoration can be characterised as varied both with regard to choice of motifs and variations of the different motifs. Similar to the stamp-decorated sheaths (type B1), there is a heraldic influence in these motifs.

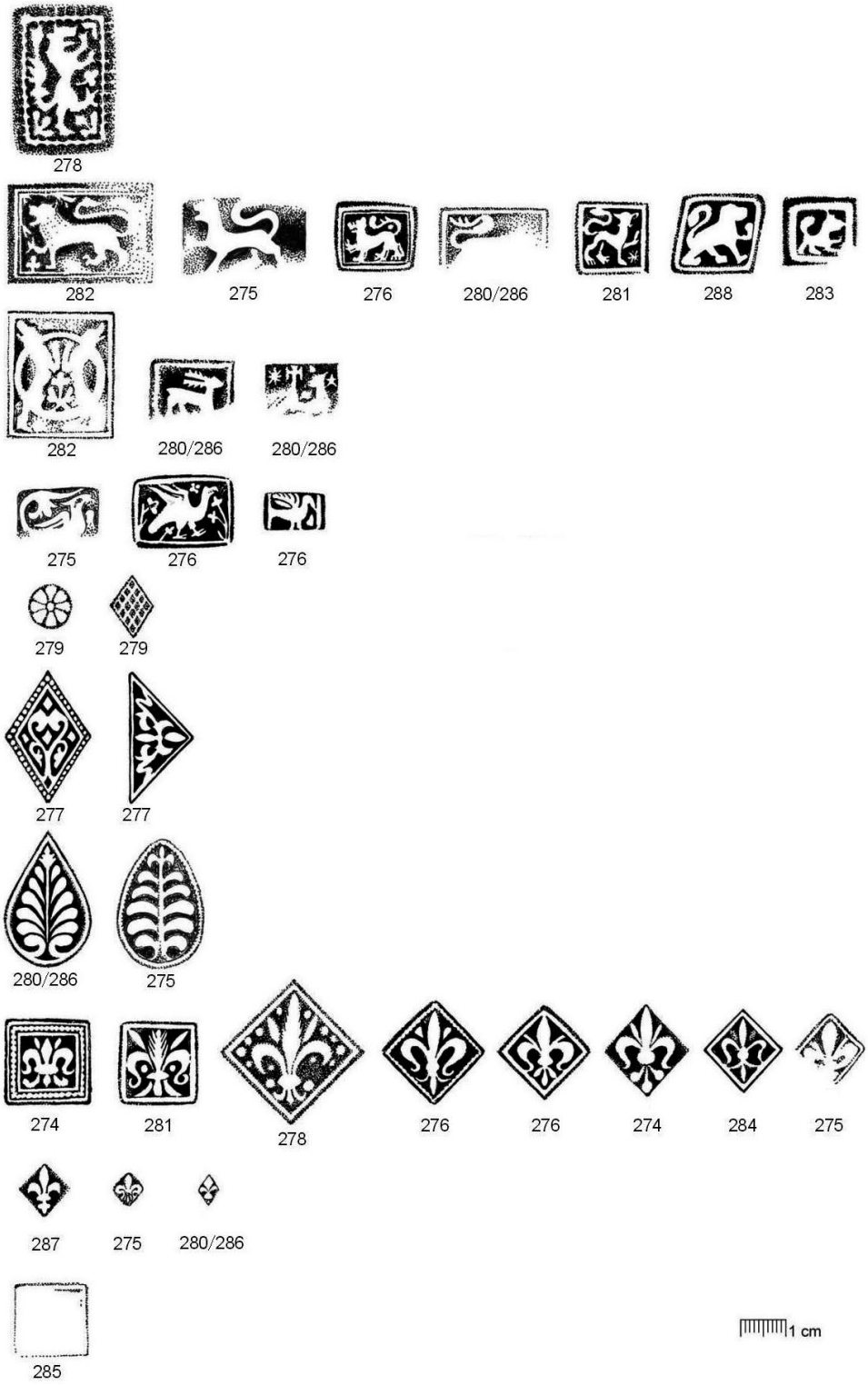


Figure 5.29 *Stamp impressions on scabbards of type F1, numbers refer to the catalogue.*

5.7.2 F2 – scabbards with impressed decoration

Twenty-one scabbards are decorated by impressing technique only (Figure 5.30). The variation is limited. The material is fragmented, but two, possibly three tips or parts of tips are recorded, as well as four mouths or parts thereof. Slits for suspension can be recognised on five fragments.

Twenty of the scabbards are made of cattle (four of them only as probable); the last is made of goatskin. All have centre-of-back seams, but on two artefacts no traces of seam could be seen.

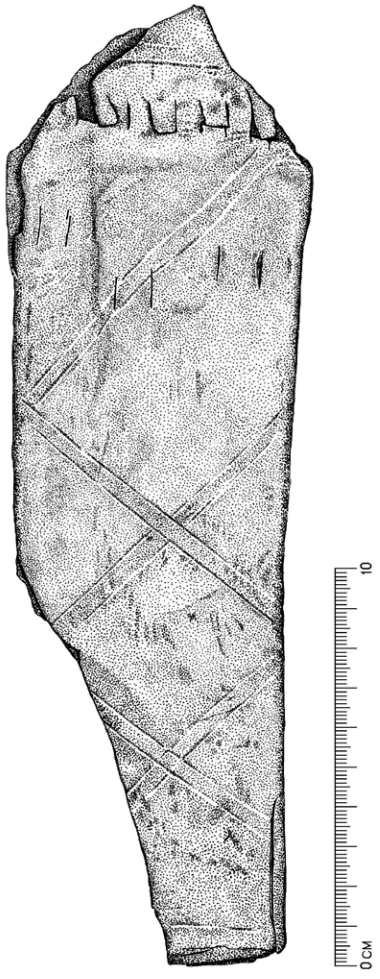


Figure 5.30 *Example of scabbard type F2. The motif consists of a simple lattice pattern of impressed lines. Slits for suspension can be seen as a vertical row on the mouth of the scabbard (the mouth is partly cut). Below this row, three pairs of slits have also been part of suspension (cat. no. 291).*

The stitch-type is mostly flesh-grain stitches that can be seen on 19 scabbards. Only one scabbard has edge-grain stitches. While three scabbards have butted seams, the common solution is closed seams as seen on the remaining 16 scabbards. The seam usually faces outwards, but on four scabbards it faces inwards and has originally been less visible.

The decoration is fairly consistent with different geometric patterns (Figure 5.31). Seven of the 21 specimens have longitunal lines impressed only, usually close to the rims. Twelve have different geometric patterns, of which three have plain fronts. But decoration is on the back of the scabbard, on the sewn side. One scabbard has varied decoration, with lozenge-framed dragons and floral fillers in front. The back is decorated with heraldic motifs, but barely discernable. The fragment is 60 cm long and the pattern is repeated at least six times. The scabbard is also unusual in that the seam is not centre-back, but side-of-back.

5.7.3 Type F3 – scabbards with incised decoration

Fifteen scabbards have incised decoration (Figure 5.32). As a whole, the specimens of this type are more fragmented than any other type in the Bergen corpus. The incised decoration has added to the disintegration, as cutting of the grain surface leads to the grain layer splitting more easily from the corium layer of the leather. Most of the scabbards seem to have been decorated in a consistent manner, the motifs being a combination of floral and elongated lattice patterns. Two scabbards are shorter than the dimensions suggested by most scabbards in the Bergen corpus. One is preserved in an almost complete but fragmented condition, and is 43.5 cm long. In front it has an opening for an additional sheath, or a by-knife. The other consists of two fragments, the longest being 26 cm long. This scabbard may also have carried by-knife(s), as indicated by the decoration. These two scabbards have been used for smaller swords, possibly large daggers or knives, with additional by-knives.

Thirteen of the scabbards are made of bovine leather, one of these only as probable bovine. The largest piece is made of ovri-caprine

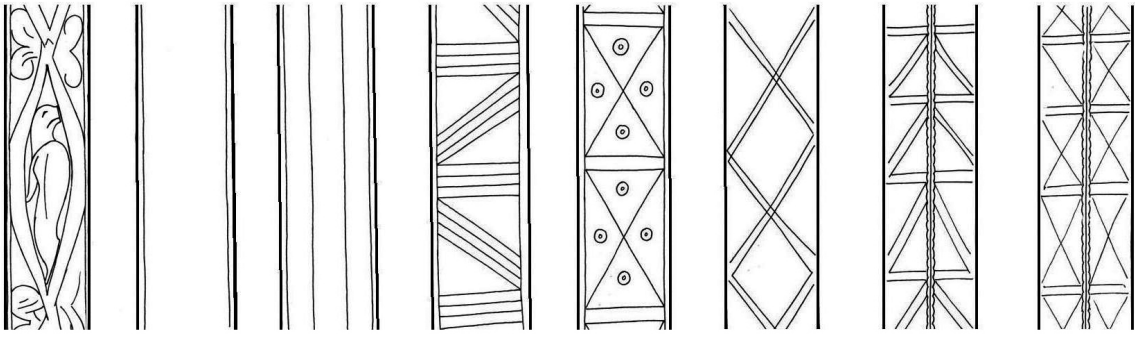


Figure 5.31 *Examples of impressed decoration on F2-scabbards. Excluding the dragon-motif, the decoration consists of variations of simple geometric patterns of vertical, horizontal and diagonal lines, zigzag and lattice. Four scabbards are decorated on the back-side only, with the seam forming a natural division or centre of the decoration.*

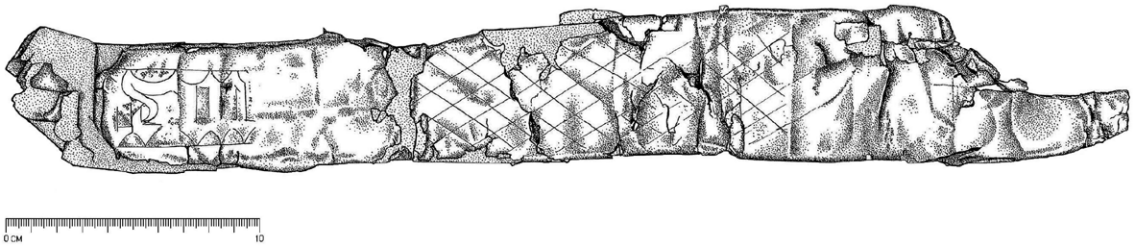


Figure 5.32 *Example of scabbard type F3. A lattice pattern and Gothic letters are incised in the leather surface (cat. no. 314).*

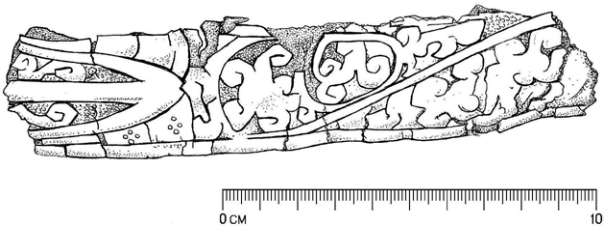


Figure 5.33 *Example of decoration on F3-scabbards. The motifs are floral and the lower part of a heraldic motif can be seen to the left. The incising technique has left the leather vulnerable for lamination. The illustrated fragment stems from a scabbard that was also decorated with incised lattice pattern and Gothic lettering, similar to Figure 5.32 (cat. no. 313).*

leather and the species of a last fragment was not decidable.

Due to the fragmented state, seam and stitching is missing on four of the objects. The remaining specimens have closed centre-of-back seams with flesh-grain stitches. One exception, however, is the single mouth-fragment which is sewn with edge-grain stitches.

The decoration on most of these scabbards is best exemplified by Figure 5.32 and Figure 5.33. Three fragments have remains of Gothic lettering, 'maiia', '…ren' and 'm…[quasi-lettering]'. The incised patterns range from simple lines and lattice pattern to floral and heraldic motifs against a punched background. Similar to the F2-scabbards, two fragments are plain at the front but decorated at the backside (seam-side). Most of these scabbards are so fragmented that it is hard to get an overall impression, yet a group of ten scabbards fits well into the above description. Four scabbards, however, stand out: The largest fragment (56 cm long) was probably plain originally, but has been given a more graffiti-like decoration of random lines and herring-bone pattern resembling sheaths of type B3. The mouth-part is already mentioned because of its

diverging seam, but it also has impressed lines along the rims like the F2-scabbards. Its only incised decoration is a row of short vertical lines below the mouth. The two shorter scabbards are decorated with herringbone-patterns and similar rather simple motifs.

5.7.4 Scabbard with embossed decoration

While several scabbards of types F1, F2 and F3 are decorated by the same techniques as sheaths of types B1, B2 and B3, respectively, only one scabbard is decorated by moulding, as the sheaths of type B4. The scabbard is a fragment of a tip, with an embossed ridge in front (Figure 5.34).

The scabbard is made of bovine leather and has a closed centre-of-back seam with flesh-grain stitch-holes.

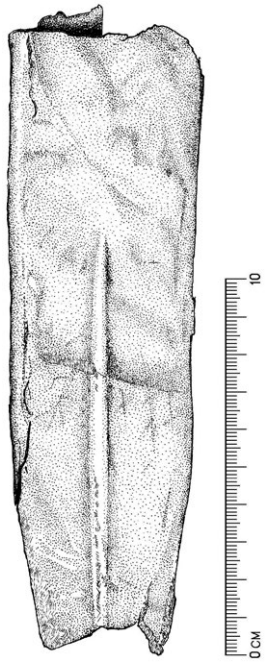


Figure 5.34 *The scabbard tip with embossed decoration (cat. no. 325).*

5.8 Suspension of scabbards

As relatively light implements, sheaths with knives or daggers were suspended by relatively simple means, usually by a strap, thong or loop of leather or another suitable material. Variants are occasionally described above, and further description is given in the catalogue.

Scabbards with heavier contents on the other hand are a more complex matter and have been given attention in most publications dealing with the subject. A description of the Bergen corpus is also needed in this respect. Nineteen scabbards among the Bergen corpus have slits that are clear traces after the suspension (cf. Figure 5.30 for an example). One of the scabbards even has parts of the suspension preserved. Eleven of the scabbards are of type E, five of type F2. Types F1 and F3 have one and two specimen each respectively.[41]

As shown in Figure 5.35, the suspension belt consisting of two parts is attached to the scabbard through slits. The method of suspension is often denoted the Naumberg type or mode, after donator statues in the Naumberg Cathedral, Germany, and frequently domumented among archaeological finds (Blomqvist 1938: 167; Seitz 1965: 143; Groenman-van Waateringe 1988: 84; Oakeshott 1994: 239-241). It is also attested, however, from preserved scabbards (Oakeshott 1994: 242). Seven Bergen scabbards have a similar row of slits as shown on the figure. With only one pair of slits below, some of these are in principle identical to the figure. The other eight scabbards lack the row of slits below the mouth, but have several slits both in front and back and are thus carried in a similar manner. Numerous examples are shown by van Driel-Murray who has analysed the Leiden corpus in detail regarding this question (van Driel-Murray 1980; 1990). Scabbards are also suspended by metal-fittings, although no examples of such fittings are found in Bergen. However, it is also possible to attach suspension similar to the Naumberg type to scabbards without using slits. Based on iconographic evidence, Viollet-le-duc presents several examples (Viollet-le-duc 1874: 195–200). Alternatively, scabbards could be worn in a hanger suspended and shaped like the upper part of a scabbard, into which the actual scabbard was slided. An example is documented in Bergen, as one of three scabbards consisting of a double layer of leather. The inner leather covering lacks slits for suspension, while the outer leather covering has several such slits (cat. no. 272). Preserved upper parts of

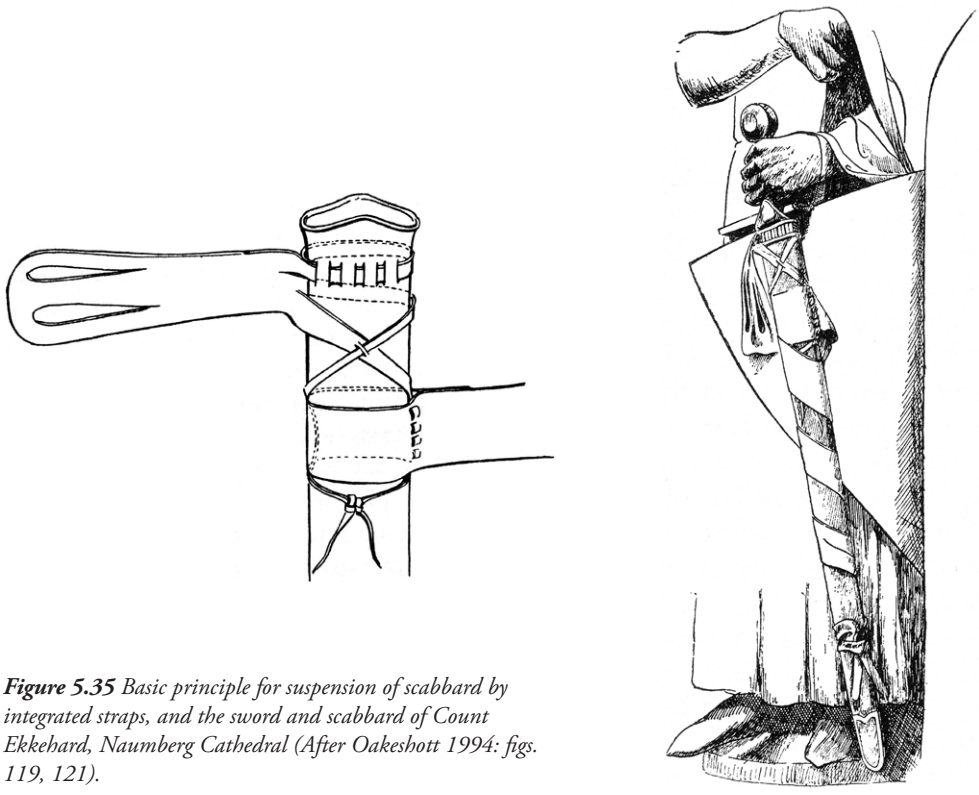


Figure 5.35 *Basic principle for suspension of scabbard by integrated straps, and the sword and scabbard of Count Ekkehard, Naumberg Cathedral (After Oakeshott 1994: figs. 119, 121).*

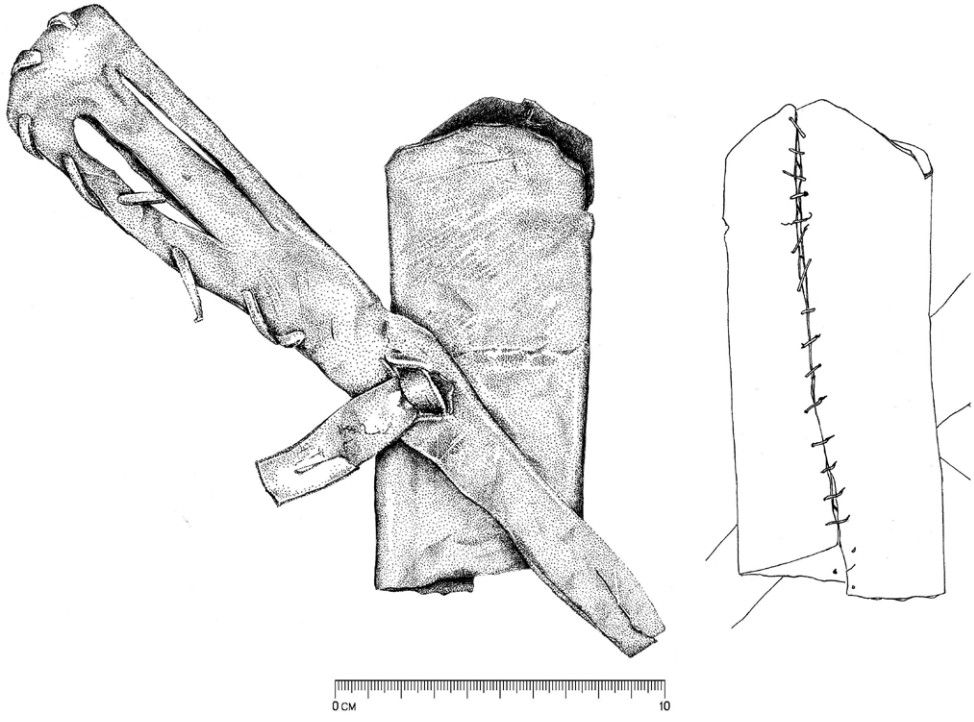


Figure 5.36 *Scabbard of type E with part of suspension preserved (cat. no. 271).*

scabbards without slits or other traces of suspension (see Figure 5.28 for example) indicate that such methods of carrying the scabbards were also used in medieval Bergen.

The type E-scabbard with part of the suspension preserved may have actually been a sword-hanger suspended in a similar manner to the Naumberg mode, but is more probably a replacement for the upper part of a scabbard (cat. no. 271) (Figure 5.36). The back-seam is butted and sewn with a simple whipstitch, unlike the more careful sewing found on most scabbards. This sewing adds to the provisory character of this particular artefact. The lower cut of the fragment has stitch-holes after a seam. The upper part of another fragment (cat. no. 266) is cut in the same angle and has similar stitch-holes. Although the two pieces do not fit, they indicate a specific manner of repair, where part of the scabbard leather is replaced. Such seams are documented on seven Bergen scabbards, five of type E and two of types F1 and F2.

5.9 Indefinable sheaths and scabbards

Seven leather artefacts (six sheaths and one of a more ambiguous scabbard-like character) could not be classified within the characteristics described for the types above and are here described individually.

One sheath resembles A1-sheaths, with edge-flesh seam-holes and impression left after wooden blade protection. On the other hand, it has four loops protruding from the top and the blade-part is decorated by ten cut-out lozenges.

Two sheaths would fit the encompassing A3-type, but these have slits along the handle-part for fastening of leather-bands, as known from type C.

A sheath with side-seam coarsely sewn with a thong is a reused shoe. Incised lines with seam-holes in a pattern typical for embroidered shoe uppers are found on the blade part of this sheath.

Another two plain sheaths are rectangular in shape, with a triangle as the ending for the tip. Both have side-seams, one of them all the way around and consisting of two pieces. These two sheaths are perhaps used for other implements than blades.

The final last sheath is 46.5 cm long with centre-back seam. It is 1.8 cm wide at the tip and only widens to 3.5 cm below the opening. It has contained a long thin object.

The small group is varied and is separated from the remaining due to methodological reasons, either because the sheaths cross-cut several types of the classification or else the sheaths are made in a manner that the classification does not encompass.

5.10 Finds of other materials

The number of sheath and scabbard fragments of other material than leather is small, and several stem from old excavations. This is the case for three wooden sheaths for knives, one with fittings of tin, while the other consists of two small plates that have probably been tied together by a string of some kind. The last one cannot be found but has been described earlier (Grieg 1933: 245–247). A sheath of brass is also recorded. Whether it was made for knives is uncertain. A chape made of bone and one of metal is also among the older archaeological finds.

During the Bryggen excavations and a later survey, two mouth-bands of metal have been recorded. The mouth-bands are for sheaths for knives or more likely daggers. Finally, a chape intended for a dagger-sheath is found, but the information of provenience is lost.

5.11 Summing up the Bergen material

Altogether 341 sheaths and scabbards or parts thereof have been presented in the above classification. Of these, 231 leather sheaths and 94 leather scabbards are classified according to defined features (Table 5.1)

By using technical features as main components of classification regarding both production and decoration, almost all fragments could be included in the analysis. This classification describes types that have been produced in distinctly different manners. Some features, however, appear across the types, such as stamped decoration which is diagnostic for both type B1-sheaths and type F1-scabbards. Some sort of

relation can thus probably be expected between these two types, geographically or chronologically. Other features are not type-determining, such as motifs of decoration, stitch-type and placing of the seam. Still, the different variants tend to cluster around different types, strengthening the impression that the types in the classification are significant and of chronological or spatial relevance.

Type	Number			
A1.1	42	73	132 (57.1% of type A–D)	231 (67.7%)
A1.2	2			
A1.3	6			
A1.4	8			
A1.5	4			
A1.6	6			
A1.7	2			
A1.8	1			
A1.9	2			
A2	8			
A3	45			
A.x	6			
B1.1	14	23	72 (31.2% of type A–D)	
B1.2	9			
B2.1	4	37		
B2.2	3			
B2.x	30			
B3	6			
B4.1	2	6		
B4.x	4			
C1	5		8 (3.5% of type A–D)	
C2	3			
D1	11		19 (8.2% of type A–D)	
D.x	8			
E	42		(44.7% of type E–F)	94 (27.6%)
F1	15		52 (55.3% of type E–F)	
F2	21			
F3	15			
F4	1			
Unclassified leather	7			7 (2.1%)
Other materials	9			9 (2.6%)
Σ				341

Table 5.1 *The Bergen corpus according to classification.*

Although the distinction between symmetrical and asymmetrical shape has not been used as a principal feature in my classification, it has been mentioned for several types as more of an observation. This may be relevant for considering whether the artefact was used to contain a knife or a dagger, as clear dagger sheaths have not been recognised in the material with the exception of a small chape that has been part of a dagger sheath (cat. no. 338). That which is carried in the sheaths and scabbards is also highly relevant when trying to understand the differences between them in a wider context. Although the knives, daggers and swords will been drawn into this discussion, an archaeological analysis of the bladed implements from Bergen would be too extensive to handle within the scope of this thesis. However, a certain generalisation of these artefacts will be given based on the sheaths and scabbards.

The objects classified as scabbards are used for swords. I have not tried to classify the scabbards according to the blades that they have covered, as van Driel-Murray has done according to Oakeshott's classification (van Driel-Murray 1990: 165–169). In most cases, such a classification would be difficult. Two scabbards (cat. nos. 316, 324), however, both of type F3 (incised decoration), are shorter and were probably used for a large dagger or a short sword.

Among the sheaths, holsters for daggers can be identified by their symmetry and lack of handle-part (cf. chapter 4.1.3).[42] Still, relatively few specimens stand out as probable or possible dagger-sheaths. By definition, types C and D are asymmetrical sheaths, which theoretically does not exclude the possibility that they originally housed symmetric objects (daggers). Type A-sheaths are predominantly asymmetric in shape, but not in a very distinct manner for the A1-sheaths. The A3-sheaths with closed side-seam are asymmetrical, but this subtype also comprises some symmetrical shaped sheaths with centre-of-back-seam that could have contained double-edged blades for daggers.

The possible dagger-sheaths should most likely be found among type B-sheaths, where several specimens are relatively symmetrical and well fitted for dagger-blades. However, two of these sheaths of type B2.1 have a handle-part indicated by shape and decoration. The three B2.2-sheaths are all symmetric. Their handle-

parts are slit in front, possibly leaving room for a dagger. However, most type-B sheaths were clearly intended for knives.

The situation for Bergen then is a solid number of scabbards for swords, sheaths for knives, and a relatively low number possibly fitted for daggers. As pointed out earlier, the dagger material of western Norway and Bergen is dominated by kidney-daggers and single-edged daggers, while a possible use of knife-sheaths also for daggers cannot be omitted (Nøttveit 2006a).

A number of different sewing techniques can be observed in the Bergen corpus. While other fastening methods of producing a sheath can be type-determining, such as riveting of type D, different sewing techniques are only broadly coherent within certain types. Most of the type A1-sheaths are sewn with a butted seam of edge-flesh stitches, leaving the seam barely visible. Type B-sheaths are sewn with closed or butted seams, usually at the back. The butted seams of edge-grain stitches are so tightly sewn, however, that they leave the same impression on the outer side of the sheath, as if sewn with flesh-grain stitches in a closed seam. The same applies for scabbards. As most scabbards and sheaths of type B are made of bovine leather, and ovri-caprine leather dominates among the A1-sheaths, there is a correspondence between sewing method and leather type used, although not in a consequent manner. This might indicate that different sewing methods were suited for different materials, but it also opens for different traditions of sheath-making originating from different areas or regions. The sewing methods also differ visually. The method used for many A1-sheaths is intended to be invisible, while the seam is clearly visible on B-sheaths and scabbards, and the surface-decoration is adjusted thereafter.

Bovine leather dominates the material, as 208 of 332 artefacts (62.7 per cent) are identified as bovine or probable bovine. Less than half as many artefacts are identified as ovri-caprine (goat or in some cases sheep), altogether 94 artefacts (28.3 per cent) including the probable ones. On a further three sheaths, both bovine and ovri-caprine leather are used. What is interesting is that the leather type is distinctly distributed among the different types (Diagram 5.3). Type B-sheaths are made of bovine leather almost exclusively. Scabbards are also mostly made of calf leather, although ovri-caprine leather is frequently documented on type E scabbards. With the remaining sheaths (types A, C and D), ovri-caprine leather actually dominates. The distribution of leather-type is also coherent with surface decoration. Surface decoration is a characteristic feature of types B and F, the types where bovine leather dominates most strongly.

Altogether, leather completely dominates the archaeological remains of sheaths and scabbards found in Bergen, which is not surprising as leather was a main component for producing

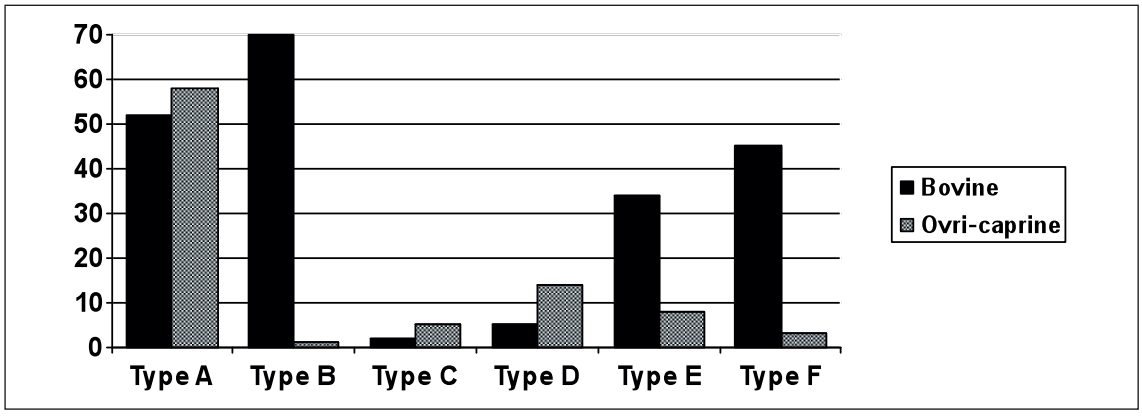


Diagram 5.3 *Distribution of leather type used for sheaths and scabbards in the Bergen corpus. Both affirmative and probable identification of leather type is included. Artefacts of unidentified leather type are not included.*

Figure 5.37 *Metal sheath for a Swiss-dagger, first half of the sixteenth century (Zürich Landesmuseum, after Haenel 1913: figure 21).*

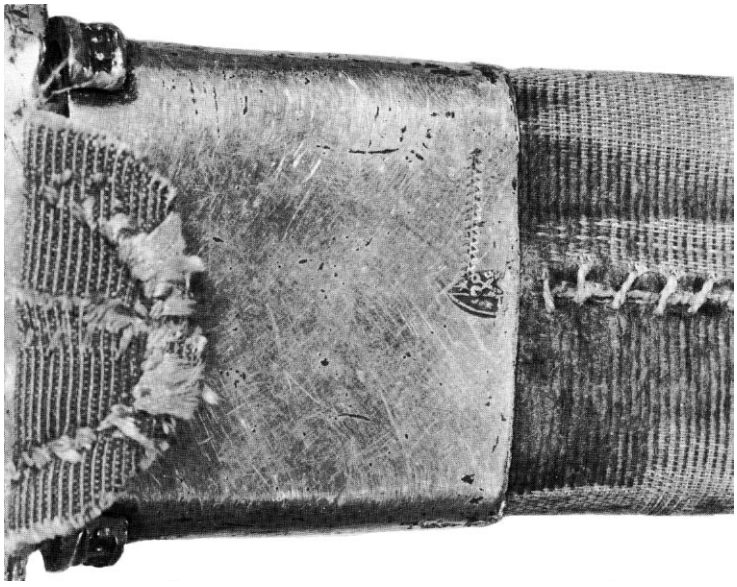


Figure 5.38 *Detail of scabbard from the Toledo Cathedral. The scabbard is made of wood, covered with red velvet and silver-gilded fittings (After Oakeshott 1991: 109).*

these artefacts. However, only ten non-leather (parts of) sheaths or scabbards are found, not counting other materials found as parts of leather objects. Even though leather was an important raw material for such objects and many sheaths were made of leather only, there seems to be a discrepancy in the relation between the materials preserved today. The wooden parts that were probably part of many (if not all) scabbards in the Bergen corpus have not been preserved. Similarly, wooden implements have probably been parts of more sheaths than the six type A-sheaths where they are today preserved. Thus, it is reasonable to assume that a larger percentage of the sheaths in medieval Bergen was made of wood, and probably also of the other materials documented such as bone and metal. However, the conditions in the moist Bergen ground near the harbour have favoured the leather remains. Thus, one has to consider the representativity of this material.

5.11.1 What is missing in the archaeological record?

As mentioned in chapter 4.5 (p. 57), the archaeological material to a large degree represents the waste of the medieval town. This gives a bias towards some material groups, and in the case of the Bergen corpus as many other medieval corpora, mostly worn-out leather artefacts are preserved. Missing are the already noted wooden plates and inner linings of sword scabbards that most researchers agree must have been used in medieval scabbards, but rarely survive in the archaeological record (van Driel-Murray 1990: 162; Harjula 2005: 58–60; Cameron 2007: 50). Harjula proposes that untanned leather would have the same use, yet untanned leather rarely

survived in the ground (Harjula 2005: 58–60). Similarly, wooden knife sheaths have probably been more common than what is reflected in the Bergen corpus. Grieg describes two from Bergen and two from Oslo, the latter found during mud removal in the harbour (Grieg 1933: 245–247). Wooden sheaths seem to be better preserved in water, and several are known from shipwrecks in the Low Countries (Olaf Goubitz, correspondence).

From museum collections of which many have been handed down through generations by aristocratic families and collectors, a variety of sheaths and scabbards are preserved. These are usually high quality pieces and display sheaths and scabbards that rarely find their way to the archaeological record.

A number of metal sheaths for daggers are preserved from the fifteenth and sixteenth centuries (Figure 5.37). They are also well known from portraits of royalty and aristocracy. Designs and sketches of such sheaths and daggers have been made by artists like Dürer, Aldegrever and Holbein, thereby the frequently used term Holbein-daggers. Such valuable artefacts only rarely appear in the archaeological record, although a silver sheath from Denmark is discussed (see chapter 8.2.2, Figure 8.3). Of lesser value were the common metal-sheathed Landsknecht-daggers, also well known from iconography and weapon collections (Dean 1929: 23,101; Bruhn 1950: 33–35; Mann 1962: 384–392).

From Spain, several swords in their scabbards are preserved as parts of royal and aristocratic burial goods. Rather than leather, some of these scabbards are covered with textiles such as red velvet (Oakeshott 1991: 71,109–110) (Figure 5.38). Although textiles are preserved among the Bryggen finds, I have not searched for scabbard coverings here, as the material is fragmented and an identification would be difficult to verify.

These examples are far from exhaustive, but meant to illustrate that although the Bergen corpus is relatively comprehensive, it cannot be regarded as a representative selection of medieval sheaths and scabbards. As discussed in chapter 4.5, there are many distortions regarding representativity of the archaeological record, both with regard to which artefacts actually get deposited, and whether they are preserved. The sheath and scabbard parts of other materials than leather make less than 3 per cent of the Bergen corpus and are mostly older finds with little information of context. Most probably, these material groups are under-represented. However, given the bias towards leather artefacts in the archaeological record, sheaths and scabbards or parts thereof of other materials will be given little attention in the following analysis.

5.12 The comparative material

A main objective when comparing the Bergen corpus with other assemblages is to look for similarities and differences. Does the Bergen material show resemblances that may imply import or cultural connection to other towns or regions, or does it reflect local production and tradition? An answer or indications to such questions may be found by comparing the type distribution within different corpora of sheaths and scabbards from the four different corpora (Oslo, London and Greifswald) representing different geographical and cultural areas of relevance to Bergen. The comparison will also serve as a test case on a more general level for the contradicting assumption and views presented earlier as to whether sheaths were common over large areas or display regional differences.

Several variables must, however, be taken into account. When comparing with material from other sites or towns, as mentioned earlier I have had to rely on published accounts in several cases and according to other classifications and objectives of research, regardless of whether they focus on chronology or production or only material presentation in catalogues. As mentioned in chapter 1.4.5, such a comparison is therefore dependent on how the material is published as pertains to drawings, photos and description. Criteria used in classification are also important, as few publications give a complete overview of all artefacts from a specific site or area. To assess the representativity of the three corpora for comparison, each of them is also compared to published finds from sites that are relatively adjacent geographically. The objective with this comparison is to evaluate similarities and differ-

ences in four medieval corpora, a method that will be followed up from a wider scope in chapter 6.

5.13 Oslo, Norway

As mentioned earlier, Bolstad presents a small group of sheaths and scabbards from the two sites 'Mindets tomt' and 'Søndre felt' in Gamlebyen, or the old town in Oslo, excavated in 1972–72 and 1973–76, respectively (Bolstad 1991: 131). Recently, in connection with tunnel construction under the harbour of Oslo, an additional number of sheaths and scabbards have been excavated at Sørenga. The sheaths together with other lightweight organic materials were among the seabed deposits of the old Alna River that flowed alongside the southern part of medieval Oslo (Johansen 2006). The medieval estuary of the river has later been reclaimed and is now crossed by the entrance of the Bjørvika tunnel which is under construction. Working alongside the construction workers, archaeologists ended their two year long investigation in summer 2007, and a total of 132 leather objects are classified as (possible) sheaths and scabbards. I have had the opportunity to inspect the artefacts before conservation, and have included a hundred of these as comparative material for the Bergen artefacts.[43] I have also included 16 of the sheaths examined by Bolstad, together with two sheaths from an excavation in 1987 at 'Oslogate 6' in Gamlebyen.[44] Altogether this includes 118 artefacts.

Classified according to the same criteria as for the Bergen corpus, the Oslo corpus is presented in Table 5.2. Only eight of the Oslo artefacts, or 6.8 per cent, could not be classified as types identified in the Bergen material. This was due to the fragmented state of the material, e.g. it could not be safely decided whether fragments with impressed decoration should be classified as B2.x or F2, or the specimens displayed characteristics that crosscut the classification.

Altogether, type A-sheaths dominate the Oslo corpus, and more so than in Bergen. Due to their fragmented state, a third of the 60 A-sheaths from Oslo can only be classified as A.x, not within the finer sub-typing of the Bergen corpus. However, some subtypes are identified. The situation is similar regarding the type B sheaths; they are all within type B2x or B3, two rather open types in the Bergen corpus. A single D.x-sheath is found, while type C is not observed.

Type	Number			Σ
	Sørenga	Gamlebyen		
A1.1	1	7	60 (79% of type A–D)	76 (64.4%)
A1.4	1			
A2	3	2		
A3	22	4		
A.x	20			
B2.x	8	1	15 (19.7% of type A–D)	
B3	5	1		
D.x		1	1 (1.3% of type A–D)	
E	2		2 (5.9% of type E–F)	34 (28.8%)
F1	19		32 (94.1% of type E–F)	
F2	13			
undefined	6	2	8	8 (6.8%)
Σ	100	18		118

Table 5.2 *The Oslo corpus according to classification.*

Among the undefined sheaths are two parallels to two undefined sheaths from Bergen, of a rectangular shape with a triangular tip (cat. nos. 330, 331). As mentioned earlier, these are perhaps not intended for knives. However, it is interesting to observe that they appear both in Bergen and Oslo. One sheath remains undefined even though it was found in very good condition. The blade-part is decorated by impressing as in type B2, but the cut-through decoration of the handle-part is inconsistent with the definition of type B (Figure 5.39). Another sheath is classified as type B3 due to incised lattice decoration. This incising, however, is clearly intended as a background for an impressed floral decoration, and the classification of this sheath as type B3 is therefore somewhat tentative. These two examples illustrate that even though the Oslo corpus mainly consists of types known from Bergen, it has some distinctive characteristics that are not represented in the Bergen material.

The distribution between sheaths and scabbards from Oslo is more or less identical with Bergen, with classified scabbards constituting 28.9 per cent in Oslo and 27.6 per cent in Bergen. In Oslo, however, almost all scabbards, or 94.5 per cent, are of type F, showing that they are decorated, while this applies for a little more than half of the Bergen scabbards. Subtype F1 is the most common type in Oslo, with 19 scabbards decorated with different forms of fleur-de-lis motif stamps. Of the 15 F1-scabbards that are found in Bergen, fleur-de-lis is only one among several stamp-motifs used.

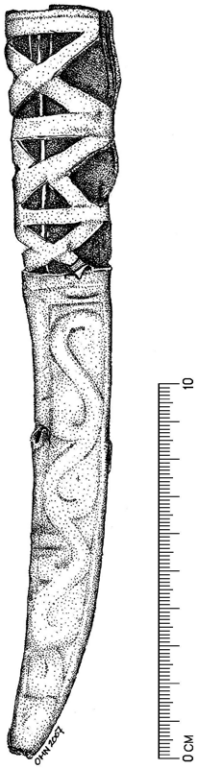


Figure 5.39 *Oslo sheath that combines decorative traits in a way that is not seen in the Bergen material. The blade-part decoration is consistent with type B2.x, but the sheath is labelled as undefined since the handle-part cut-through decoration lacks any parallel in the Bergen corpus (C55189/4280).*

Of methodological reservations with regard to comparison between the Bergen and Oslo corpora, the former displays a larger chronological and spatial variety. This will be further discussed in chapter 6.

The relation between the compositions of the Bergen and Oslo corpora as assemblages from contexts in Norway could be nuanced and better understood by also including other Norwegian towns in the study. Several excavations in the medieval town of Tønsberg have uncovered more than 60 sheaths and scabbards. These are published, however, only as lists among different material-groups reflecting different crafts and activities. Some of these have a minimum description added, such as 'decorated' or 'stamped fleur-de-lys', and another with 'three-lobed ending below the actual tip' (type A1.4?) (Ulriksen 1992: 111, 124, 131). This presentation is therefore too fragmented and imprecise to be used for comparison. The Trondheim material from the site 'Folkebibliotekstomten' is sufficient in numbers, and described in a manner that is more open for comparison despite a rather cursory description here, too (Marstein 1989: 9). However, half of the 32 Trondheim sheaths stem from the earliest phases in the eleventh century, and are thus not directly comparable to the Oslo and Bergen corpora that are later. Sheaths with decorative patterns of silver rivets are documented, but unknown in Bergen and Oslo. The 38 scabbards (eight of them possible) on the other hand are with few exceptions undecorated (type E). The type is numerous in Bergen, but few in number in Oslo.

If anything, the Tønsberg and Trondheim material confirms an impression that assemblages of this material in Norway share common traits, but each assemblage also contains characteristics of its own.

The Oslo corpus is less varied, generally less preserved and smaller, amounting to about one third of the size of the Bergen corpus. Most artefacts from Oslo are well-known from Bergen, especially type A-sheaths and F2-scabbards. In that manner, the Oslo corpus confirms the classification of the Bergen material, with a main concentration on a certain selection of the types known from Bergen.

5.14 London

Kept at several institutions and collected and excavated over a period of the last 170 years, the London material of sheaths and scabbards is

extensive in numbers but varies in methods of documentation. The three institutions including the London Archaeological Archive and Research Centre (LAARC), Museum of London (often abridged MoL) and the British Museum reflect these differences. The material from each institution will therefore be handled separately to some degree. As the material is more comprehensive than the Bergen material, it also gives an opportunity to evaluate the classification based on the Bergen corpus. To test whether the London material is representative for England as a whole, published accounts of material from other English medieval towns will also be drawn in for additional comparison. However, these publications which are mostly excavation reports do not reflect any total corpus of material of sheaths and scabbards such as the London corpus.

5.14.1 Three collections – three traditions

As a unit under the Museum of London, LAARC stores the archaeological material and reports from excavations in Greater London. From these collections I have included 201 leather sheaths and scabbards. Approximately half of these are already thoroughly presented in *Knives and Scabbards* (Cowgill et al. 1987). The artefacts stem from modern archaeological excavations carried out between 1972 and 2001, meaning that most of the artefacts have documented and datable contexts.

The Museum of London itself houses collections that reflect an older tradition of excavating and collecting. From these collections, 117 sheaths and scabbards are included in my study. Thirty-four of these are described in *Medieval Catalogue*, some are depicted, and many are dated by comparison of decoration to other sources (Ward-Perkins 1940). Altogether 62 artefacts originate from the Guildhall Museum collections, which were transferred to the Museum of London in 1974. More than half of these are listed as early as in the 1908 edition *Catalogue of the Collection of London Antiquities in the Guildhall Museum*, and cannot be attributed to the later excavations by the Guildhall Museum.[45] The datings referred to in these two catalogues are not verified archaeologically and must be regarded as suggestions. If a context or find spot is recorded, it is hardly accurate by modern standards.

A large group of sheaths and scabbards with even more uncertain dating and provenance that cannot always be verified as being of London origin is stored in the collections at the British Museum. Of these, 138 artefacts are included here. The major part, or 110 pieces, were collected by Charles Roach Smith, an influential collector and antiquarian of his time, and bought by the museum as part of a large 'London collection' in 1856 (Kidd 1977). Some of the artefacts are described with provenance to London in his *Catalogue of the Museum of London Antiquities collected by, and the property of, Charles Roach Smith* (1854), but many lack information about provenance. The common opinion is, however, that the items collected by Roach Smith are almost certainly of London origin (James Robinson: personal communication 2006). Fourteen objects stem from another collection, purchased in 1903 from Rollin and Feudarent, partners in a French firm of antiquities with a branch in London. The only information to be found about the sheaths is in the register, where they are part of "lot 127, cuir boulli, of XV c, mostly from London".[46] Little information is found about the remaining 19 objects. The register states that two are found in the Thames, the rest lacks information about provenience. Some of the sheaths and scabbards in the British Museum are given a date frame within some centuries, but the material as a whole can be regarded as undated but generally medieval.

5.14.2 The London finds

When classified according to the same principles as the Bergen material, the London corpus shows several distinct characteristics (Table 5.3). Types and subtypes found in Bergen are not represented in London and vice versa. The London corpus also shows a clustering to a limited number of certain types. A third notable phenomenon is the differences between the collections of sheaths and scabbards in the three London institutions, indicating different biases in the records.

Sheaths of B-type, that is sheaths with decorated surface, are predominant in London and it is obvious that the London material can be classified further within the subtypes that could be identified in smaller numbers in Bergen.

Of type B1, 56 sheaths are found in London. Differences from the Bergen material are that the B1.1-sheaths tend to have less dominating motif stamps. The sheaths are more elaborately decorated with impressing around the stamp. Some B1.2-sheaths have the repetitive stamps distributed in a manner that leaves the undecorated areas almost as foliate, while others closely parallel the Bergen finds.

Type	Number					
	LAARC	MoL	B.M.	Total		
A3	7	8	2	17		338 (74.1%)
B1.1	14	11	2	27	56	
B1.2	21	4	4	29		
B2.1	32	11	7	50	206	
B2.X	78	33	45	156		
B3	8	9	14	31		
B4	11	7	10	28		
E	11	3	1	15		69 (15.1%)
F1		8	13	21	54	
F2	16	9	7	32		
F3	1			1		
Unclassified	2	14	33			49 (10.7%)
Σ						456

Table 5.3 *The London corpus of sheaths and scabbards according to classification.*

Four sheaths of subtype B2.1 are found in Bergen, all with a lattice pattern. In London, 50 sheaths are found, the common pattern being plaits which is the sole motif on 21 sheaths. Lattice as sole motif appears on only four sheaths. The rest can be divided into similar small groups with heraldic, foliate, zoomorphic or linear designs, or combinations of these. It can be noted that most B2.1-sheaths are in the LAARC collections, where most of the plait-decorated ones are to be found. The subtype displays larger variety at the other two museums (Figure 5.40). Type B2.2-sheaths are not documented in London.

A whole 157 sheaths are classified as B2.x. Obviously, these could have been classified further based on motif or motif combination, or perhaps even shape. Many of these 'types' are not found in Bergen, but this group does have a comparative potential for the 31 sheaths of B2.x found in Bergen. One distinctive group among the B2.x-sheaths consists of sheaths that seem to have been produced following a certain convention of decoration. The sheaths are usually even-sided with a tip that curves at one of the sides near the tip. The decoration is divided into three panels, one at the blade-part, while the handle part consists of two panels, one wider than the other. The blade panel decoration is usually of bird/dragon figures framed in flower tendrils at the blade panel, often with a similar zoomorph at the largest handle panel. The backside is usually decorated by trilobite arches. However, some of the motifs are sometimes replaced, for example with heraldic emblems. Twenty-five of the London sheaths fit this description (LAARC 17, MoL 3, BM 5). Another 13 sheaths show similarities. Five type B2.x-sheaths of the Bergen corpus and one Oslo B2.x-sheath belong within this type, which I will denote as type B2.3 for the further study (Figure 5.41).

Type B3, or the 31 sheaths decorated by incising as the main technique, are relatively few but outnumber the Bergen specimens by far. They are also far more elegantly decorated. Their low frequency is also noted in *Knives and Scabbards* (Cowgill et al. 1987: 143). An interesting feature is that a few of these incised sheaths show traces of red colour. Similar is documented in the Netherlands (Baart et al. 1977: 96; Goubitz 2002: 158). Goubitz proposes that other colours have also been used for sheaths, but have not survived deposition in the ground (Goubitz 2002: 158). Still, there seems to be a link between incised decoration and red dye, often in combination with simple floral motifs. Although not floral, a combination of red dye and incised decoration on leather is exemplified by the object on Figure 5.40.

Of type B4, 28 specimens have been found. A curious technique that is not observed in Bergen is the moulding or relief effect created by inserting leather cubes into the leather (Cowgill 1987: 42). The moulding or relief by these cubes appears almost as random among other decora-

Figure 5.40 *Sheath of type B2.1 from London. The plaited pattern on the blade-part is common on the London B2.1 sheaths, the trifolium motif on the blade-part is uncommon. Unlike most sheaths, this lacks suspension slots, as it was stuck through a loop on another leather object thought to be part of a saddle. This object is decorated by incised spirals and vertical lines, the latter coloured with a distinct red dye (B. M. 1856.0701.1664).*

tion, usually impressed, and is observed on nine of the B4.x-sheaths. With its embossed decoration and a shape widening downwards to the tip, the B4.1-type is not observed in the London material. However, the widening downwards shape does also occur among sheaths of types B1.1 and B2.x, and could justify further classification into subtypes here.

Seventeen sheaths in London could be classified as type A3 due to lack of surface decoration. Eight of these are, however, actually linings from other sheaths or by-sheaths, often confirmed by the fact that the flesh-side is turned outward. Another six specimens are probable linings. The remaining two sheaths are reuse of other objects. The A3-sheaths of London are thus not comparable to the larger A3-group in Bergen, as most of them are in fact inner parts of other sheaths.

Scabbards make up 15 per cent of the London finds, a smaller share than the 27.5 per cent of the Bergen material. However, in the Bergen corpus sheaths and scabbards are easily distinguished from each other, and only two objects have dimensions suggesting a shorter, narrower scabbard. In London, however, several scabbards are shorter and narrower. A group of eleven fragments at the British Museum all have a repetitive stamp pattern and would naturally fit into type B1.2. The longest of these fragments are 34.7 cm long, and were probably intended for large daggers or small swords, perhaps with a blade length of 50–60 cm. Similar scabbards also in the collection at the Museum of London are found with impressed decoration. These are all classified as scabbards here.

Of plain scabbards, 15 specimens are found in London, less than half of the number found in Bergen. Several scabbards with stamped or impressed decoration are found. The stamped decoration on the Bergen scabbards is usually denser and of other motifs than in the London

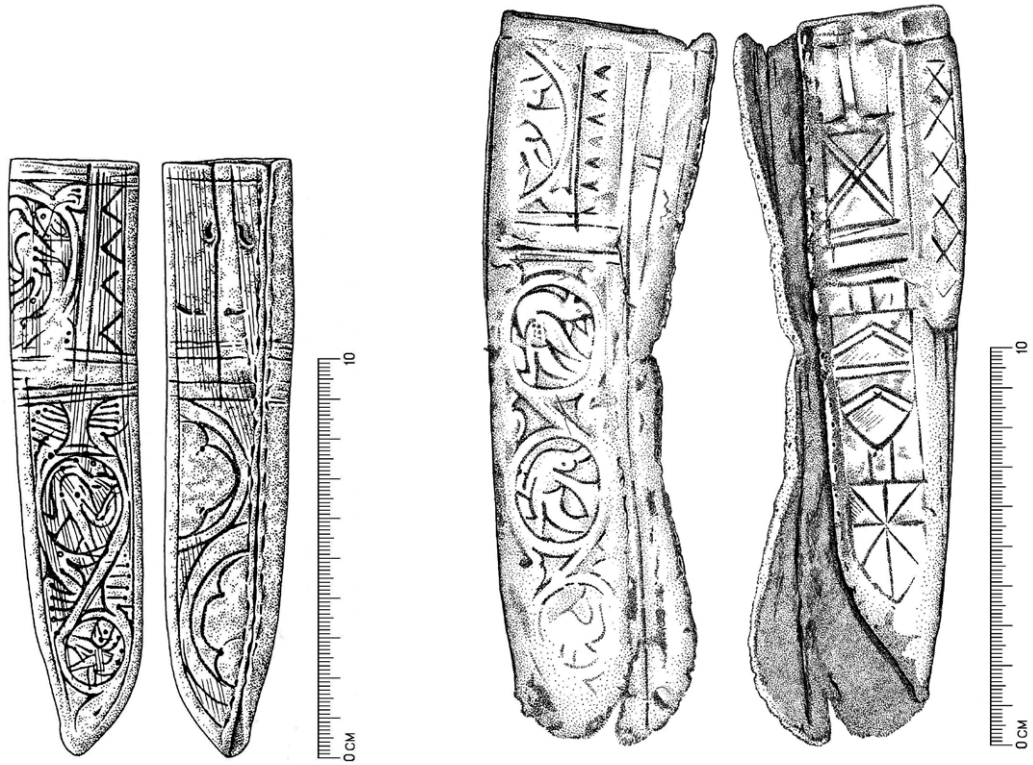


Figure 5.41 *Sheath from London to the left (BC72 [250]<3630>), and sheath from Bergen (cat. no. 164). Both are divided into three panels in front, the blade panel depicting zoomorphs in floral tendrils. The arches are the most common decoration on the back of the London sheaths, but also heraldic motifs appear, as with the Bergen example illustrated here. (BC72 [250]<3630> – Drawing by Nick Griffiths, after Knives and Scabbards 1987: 138, cat. no. 164 – Drawing by author).*

corpus. As in Bergen, many F2-scabbards are impressed with long parallel lines only, or simple geometric patterns. An exception is three objects in the Museum of London, all densely decorated with heraldic motifs (one stamped, two impressed). These are denoted as sword-hangers in the catalogues, and were parts of the suspension of the scabbards. Shaped as the upper part of the scabbard, the scabbard itself was sled into it.

Several London finds do not fit into the classification scheme of the Bergen corpus. Seven sheaths for rondel daggers with their easily recognisable wide handle-parts are found. This type has not been recorded in Bergen, although a slightly widened handle-part is noted on one of the A1.1-sheaths. The London rondel dagger-sheaths are all decorated with varying techniques: stamping, impressing and embossing. A group of 40 sheaths, ten at the Museum of London and 30 at the British Museum, also lack parallels in Bergen. Most of these sheaths are between 15 and 20 cm long, a few somewhat longer, up to 27 cm. They are decorated by engraving, often in combination with stamping and/or incising. Many are sectioned by embossed rings, and they often have a rounder cross-section while most sheaths are rather flat. These sheaths are not sewn or riveted, but are glued or pressed together so the 'seam' is hardly noticeable. Several also have thin wooden linings or bracers. Still, both the rondel dagger sheaths and the 'glued sheaths' have decorated surfaces and therefore most in common with type B-sheaths (Figure 5.42).

In conclusion, the London corpus has comparable value to the Bergen material. Several sheaths found in Bergen have close parallels in London. Although the London material is more varied in motifs and decoration, it is more homogenous in the way that almost all sheaths

Figure 5.42 *Two types of London sheaths not documented in Bergen, a rondel dagger sheath to the left (MoL 4658) and a glued seam sheath to the right (MoL 35.22/40a). The rondel dagger sheath is decorated by engraving, with motifs known also in Bergen. The decoration of the glued seam sheath lack parallels in Bergen (MoL 4658 – Drawing by Nick Griffiths, after Cowgill et al. 1987: 164. MoL 35.22/40a – Drawing by author, after photo).*

are surface decorated, belonging to type B. A number of the LAARC-sheaths are identified by leathertype, and bovine leather seems to have been used on 99 per cent of the 120 sheaths presented in *Knives and Scabbards* (Cowgill 1987: 34–35).[47] This is also very similar to type B in Bergen. The apparent English influence in the Bergen material was already noted among the early archaeologists in Norway (Koren-Wiberg 1908: 151, 153). An important question to be followed up will be to investigate the nature of this influence.

As to type diversity, the London corpus does not seem as varied as the Bergen material. Types C, D and most A-types are missing. One can ask whether there are many 'foreign' sheaths to be found in London. This dominance of type B-sheaths in London is therefore another interesting issue to look into. Despite variation within type B, this dominance reflects a strong uniformity among London sheaths. Is this pattern representative of England as a whole, or is it a London phenomenon?

5.14.3 The London corpus compared to other English urban sites

To evaluate whether the uniformity of sheaths in London as surface decorated (type B) is representative for medieval sheaths from England on a more general level, a brief survey of sheaths from other English urban sites will be carried out. The main aim is to substantiate or re-evaluate an English preference towards type B-sheaths.

York

Finds of medieval sheaths from York have been published on several occasions.

Four sheaths uncovered during the excavations in Hungate 1950–51 were given a thorough treatment in an article about the site in 1961, and can be identified as subtypes B1.1, B2.3 and B2.x, with two specimens of the latter. In the discussion of the four sheaths, Katherine M. Richardson points at the close resemblance between the B2.3-sheath and similar pieces in the Museum of London and the British Museum (Richardson 1961: 102–105).

During the Coppergate excavations in 1976–81, followed by several smaller excavations and investigations, a dozen medieval sheaths were uncovered. Although the sheaths from the Anglo-Scandinavian period are given more attention, the medieval sheaths are presented together with a few other medieval finds, in *Leather and Leatherworking in Anglo-Scandinavian and Medieval York*. The twelve sheaths have been classified as types D, E and F by Esther Cameron in a shape/chronology based classification continuing from Anglo-Scandinavian sheaths (Mould et al. 2003: 3354–3390). The types partly coincide with Bergen types A and B, and can be classified according to my scheme as follows: A3 (N=3), B1.1 (N=1), B2.3 (N=2), B2.x (N=6). Possibly two of the B2.x-sheaths should be classified as B2.1 and B2.3. Seven fragments of medieval scabbards are also described, but not sufficiently for my classification as only three are of type E (plain), and one is of type F2 with impressed lines and possibly two more.

Even though type B-sheaths dominate the material from York (N=13), it is interesting to note that three A3-sheaths are also documented. These are undecorated sheaths, not linings as most of the undecorated sheath-parts found in London.

Hull

Also situated in northern England but closer to the coast than York, medieval Hull maintained close trading contacts with Bergen during the high Middle Ages (Nedkvitne 1977).

Several excavation reports have been published, and sheaths are recorded from the excavations at Sewer Lane (Armstrong 1977), Chapel Line Staith (Ayers 1979), Scale Lane / Lowgate (Armstrong 1980) and High Street and Blackfriargate (Armstrong and Ayers 1987). The twelve sheaths published can be classified as follows: B1.1 (N=2), B2.1 (N=2), B2.x (N=7) and D.

However, these reports do not necessarily present the complete material from the excavations (Watkin and Armstrong 1987: 183). The booklet *Leather and Archaeology. The Leather Industry in Hull from the late 13th to the 17th century* (Jackson 1985) gives a more popular presentation, including illustrations of ten sheaths found in Hull, of which two are described in the reports mentioned above. The other eight sheaths that can be added are of types B1.1 (N=2), B2.3 (N=1), B2.x (N=2), B4.x (N=1) and D (N=2).

By no means a complete examination, this brief survey of 20 sheaths provides interesting information. While 17 sheaths display surface decoration by stamps, impressing and embossing and can be seen as typical, three sheaths are of type D, a type that is not found in London, and is quite unlike the type B-sheaths with regard to decoration and production. The three type D-sheaths are probably all of type D1, but this was not possible to ascertain based on the descriptions alone.

Lynn

Situated further south on the east coast, Lynn had similar contact with Bergen during the high Middle Ages. Ten sheaths are published in *Excavations in King's Lynn 1963–1970* (Clarke and Carter 1977: 364–366). They can be classified as follows: A3 (N=3), B1.1, B2.1 and B2.x (N=5)[48].

The B-sheaths dominate with seven specimens, but also three sheaths of type A3 are found.

The referred to number of medieval sheaths found in York, Hull and Lynn is, however, higher than the 46 sheaths classified here in this incomplete survey. Still, the material offers valuable insight related to the large London group. Six of the sheaths are of type A3. While sheaths that can be classified as A3 appear in London (N=17), most of these are clearly linings, i.e. they have had an outer cover that was most like-

ly decorated. The-A3 sheaths found in York are classified as type D by Cameron; "…an amorphous group of sheaths of crude design and construction sometimes found in urban deposits" (Cameron 2003: 3387). This description also fits many of the A3-sheaths found in Bergen. The three sheaths of type D, probably D1, found in Hull are also interesting, as this type displays distinct difference to type B in several respects and has not been found in London.

5.14.4 Summing up the English material

By sheer numbers, the London sheaths and scabbards represent a valuable resource and potential for comparison. The many sheaths sorted into subtypes under type B would obviously call for further subtyping. In my study, however, this variety is only used for comparative reasons to support or contradict the classification of the Bergen material. The uniformity of the finds as surface decorated (type B), despite a variety and richness in decoration, is an interesting aspect of the London sheaths. Sheaths of other types present in Bergen hardly appear in London, if at all. This trend, however, seems to be a special London feature. My brief survey of sheaths from three other English towns shows that other types are also present within the greater English material. However, the decorated sheaths of type B still hold a very strong dominance.

5.15 Greifswald, Germany

Finds from German medieval towns would also be of interest for comparison to the Bergen material, especially the Hanse towns with close contacts to Bergen such as Lübeck, Hamburg, Rostock and others in the late Middle Ages in particular. As already mentioned, the material from these towns has not been available for research. To assess the Bergen corpus also from a German or Hanseatic perspective, I have chosen to compare the material to the published finds from medieval Greifswald, published by Cathrin and Heiko Schäfer (1997). They analyse 84 sheaths and scabbards from the period 1250–1380, all of them presented with drawings and descriptions.[49] As for the English material, a brief survey of finds from other German towns of relative close vicinity will be carried out to see if the Greifswald finds are representative for a larger area.

5.15.1 The Greifswald sheaths and scabbards

Catherine and Heiko Schäfer classify the Greifswald material into the following types for description:

- Knife sheaths with metal wire ferrule
- Double knife sheaths with metal wire ferrule
- Knife sheaths with side seam
- Knife sheaths with one rim broadened (for knife daggers)
- Dagger and knife sheaths with centre back seam
- Sword sheaths (scabbards)

The classification of the Greifswald material mainly differs from my own, as it distinguishes between sheaths for daggers and knife-daggers in addition to sheaths for knives and scabbards for swords. Still, the classification is partly compatible, and compared to the Bergen corpus the Greifswald material can be classified as follows (Table 5.4).

Type	Number		
A3	7	(10.6% of type A–D)	66 (78.6%)
B1.1	8	14 (21.2% of type A–D)	
B1.2	2		
B2.x	4		
C1	1	3 (4.5% of type A–D)	
C2	2		
D1	42	(63.7% of type A–D)	
E	7	(39% of type E–F)	18 (21.4%)
F1	1	11 (61% of type E–F)	
F2	7		
F3	3		
Σ			84

Table 5.4 *The Greifswald corpus 1280–1350.*

The relation between sheaths and scabbards found in Greifswald and Bergen is rather similar, with scabbards making up 21 per cent and 27.5 per cent, respectively. Furthermore, a similar relationship between type E (undecorated) and type B (decorated) is present, with type F

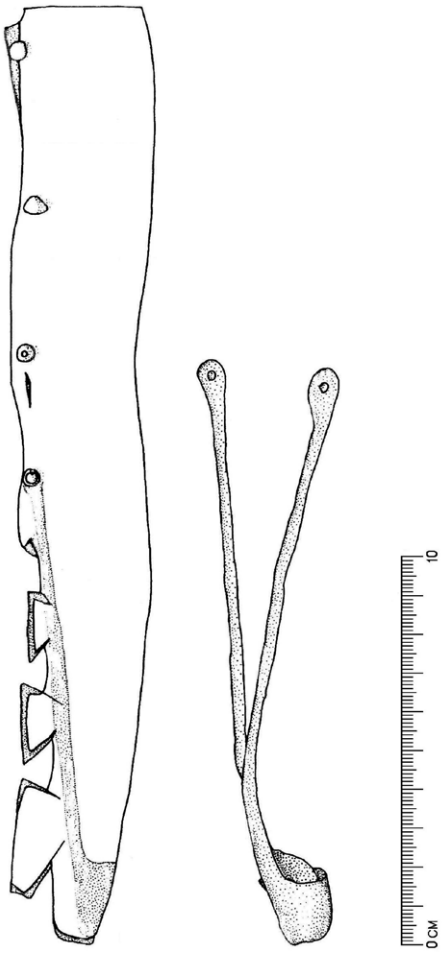


Figure 5.43 *One of the D1-sheaths from Greifswald, with one of the loose rim-ferrules. The ferrule from the sheath is not preserved, but has left a visible imprint in the sheath (Drawing by Hannelore Krüger, after Schäfer and Schäfer 1997: 265).*

constituting a little more than half of the scabbards in both corpora.

The common sheath in the Greifswald material is of type D1, sheaths with rim ferrule (Figure 5.43). Two of the 42 D1-sheaths are double. However, of 16 of these, only the metal ferrule is preserved. As most of the other sheaths are identified by preserved leather material only, there is a bias towards type D1 in that they are also identified through other material groups such as metal. Still, the D1-sheaths constitute a far larger group than the others. In Bergen, only eleven D1-sheaths are found, a little more than 4.5 per cent of all the sheaths. However, all main types documented in Bergen are also present in Greifswald. In order to see if the Greifswald material is representative, the sheath material from the towns of Schleswig and Lübeck will be briefly looked into as far as the documentation goes.

5.15.2 The Greifswald corpus compared to other German urban sites

Sheaths and scabbards are also published from other German towns. It is, however, difficult to compare this material in the same manner as the Greifswald sheaths, as long as the sheath are not described or depictured individually. Still, a brief account will give an impression of the type representation.

Schleswig

More than 400 sheaths and scabbards from the eleventh until the fourteenth century were uncovered during the Schild-excavations in Schleswig 1971–75, and are studied and classified by Christiane Schnack (1998). Her classification of four forms is presented in Table 5.5.

Type	Number	
Form 1 sheaths	4	168
Form 2 sheaths	31	
Form 3 sheaths	55	
Form 4 sheaths	10	
Different sheaths	13	
Unclassifiable sheaths	55	
Sword Scabbards	155	
Not decidable as sheaths or scabbards	81	
Σ	404	

Table 5.5 *Sheaths and scabbards from the Schild-excavation as classified by Schnack (1997).*

Schnack's form 1 consists of four undecorated sheaths from the eleventh century. By outline shape, they can resemble the Bergen type B2.1, but the latter are decorated and have a different placing of seam.[50] Schnack's forms 2 and 3, 'simple, with or without fitting' and 'decorated with flapped decorations along the rim', respectively, are not directly compatible to the Bergen classification. Schnack's form 2 comprises sheaths of Bergen types A3, C1, D1 and D.x. Likewise, Schnack's form 3 covers

Bergen types C2 and D.x. Notably, however, is the dominance of these sheaths in the Schleswig material. Schnack's form 4 on the other hand corresponds to the Bergen type B1, and both subtypes B1a and B1b can be observed in the illustrations. The group 'different sheaths' contains several specimens that would be classified as A3, but interestingly also one sheath of type B2x. The Schleswig material is difficult to compare to Greifswald in numbers, but strong similarities can be observed. Type D-sheaths are common and the only B-type documented more than sporadically is type B1, the dominating B-type in Greifswald.

Of the 155 scabbards, 19.3 per cent is decorated, mostly by impressed lines but stamping and incising are also used.

Lübeck

As the most important trading contact for Bergen in the late medieval period, Lübeck is an interesting town for comparison. So far, sheaths and scabbards have only been described sporadically in the *Lübecker Schriften zur Archäologie und Kulturgeschichte*. Presented without a standard in regard to descriptions or whether or not illustrations are included, it is difficult to compare the Lübeck material to the Bergen corpus in terms of numbers. However, some types occur frequently in the publications: types C2, D1 and D.x, which are types that are well-known from both Greifswald and Schleswig (Groenman-van Waateringe and Guiran 1978: 170; Groenman-van Waateringe 1988: 147; Berg and Groenman-der Waateringe 1992: 350–351).

5.15.3 Summing up the German material

As the material is published in detail with accurate datings based on a large number of dendrochronological samples, the Greifswald corpus has been suitable for comparison. The most notable characteristic trait of the Greifswald corpus is the dominance of D1-sheaths (63.7 per cent of the sheaths). However, all other main types of sheaths from Bergen were also represented. Type B is relatively numerous with 21.2 per cent and type B1.1 dominating.

Comparison to other German towns proved to be somewhat more problematic than for the English material, but demonstrated types not found in London, i.e. the types C and D, with the latter as a dominating type. As London displays a larger variety within type B than seen in Bergen, the same situation applies for types C and D in the three German towns compared to Bergen. Of surface decorated sheaths, type B, the stamped ones seem to be the most common while the other B-types are rare.

5.16 Leather types

The leather used in the Oslo and Greifswald material has not been identified, and neither has the London corpus as a whole. However, the 120 sheaths analysed in *Knives and Scabbards* are identified to leather type (Cowgill et al. 1987). Leather type is also identified in the studies of sheaths and scabbards from Dublin, York, Svendborg, Schleswig and Turku (Groenman-van Waateringe 1988; Schnack 1998; Mould et al. 2003; Harjula 2005; Cameron 2007). These different corpora are, however, not immediately comparable. Of the Dublin corpus, 41 per cent of the sheaths and scabbards were selected and identified. This corpus is also generally older than the other corpora. While some have differed between calf and mature cattle, others like myself have treated these collectively as bovine leather. More commonly, goat-skin and sheep-skin are treated collectively as ovri-caprine skin. The published information from Dublin, London, Schleswig, Svendborg and Turku is presented in a comparable manner to the Bergen corpus in Diagram 5.4.

It is evident that bovine leather was most commonly used for sheaths and scabbards. Ovri-caprine skin is less common, but in Bergen and Schleswig more than 20 per cent of the material is made of skin of goat and sometimes sheep. Schleswig is the only corpus where ovri-caprine skin outnumbers bovine leather for sheaths, although only slightly. Bovine leather is used exclusively for scabbards in Dublin, Svendborg and Turku. The use of ovri-caprine skin for scabbards is documented in Schleswig but used more in Bergen, where 3 per cent of the total corpus consists of scabbards with ovri-caprine skin.

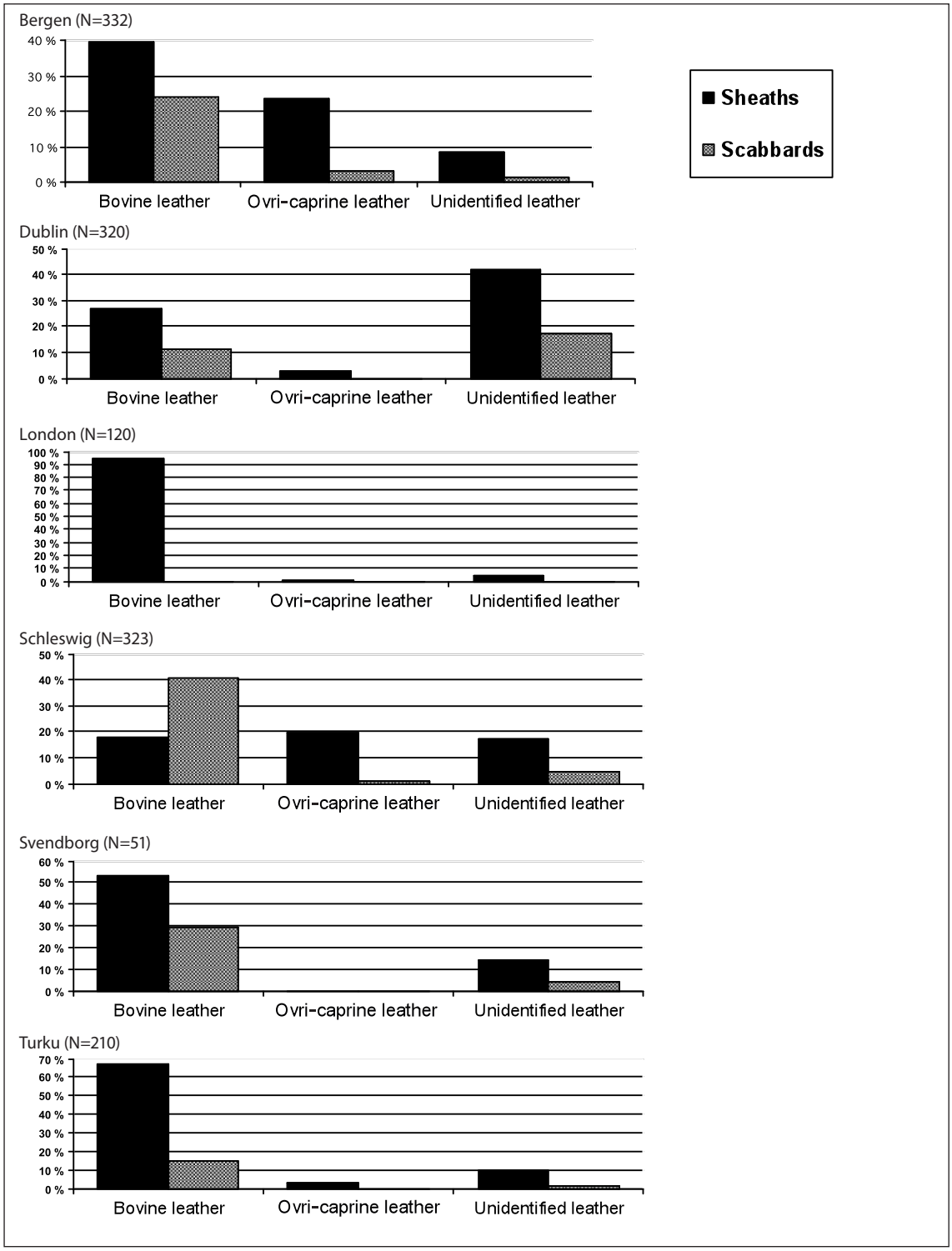


Diagram 5.4 *Use of leather type for sheaths and scabbards in Bergen compared with five other corpora (Cowgill et al. 1987; Groenman-van Waateringe 1988; Schnack 1998; Harjula 2005; Cameron 2007).*

The differing preferences may be due to several factors, perhaps of technical nature. As shown earlier, surface-decorated sheaths and scabbards are almost exclusively made of bovine leather. Ovri-caprine skin is most commonly used for A1-sheaths in Bergen that have undecorated surfaces and are sewn with another kind of stitching than most sheaths. Other factors may be differing availability and price of bovine leather and ovri-caprine skin. Judging by numbers, bovine leather seems to have provided the preferred quality for sheaths and scabbards, but ovri-caprine skin seems to have been sufficient in some cases. Nevertheless, differences in use of leather also point towards different traditions of sheath and scabbard production in northern Europe.

5.17 Preliminary conclusions

The Bergen material has been classified into several types and subtypes and compared to other assemblages in Norway (Oslo), England (London) and Germany (Greifswald), and a wider supplementary material based on literature has also been included. Although several types are documented at urban sites in all three areas, clear differences can be observed as the type representation between the countries differs. The English supplementary material also sheds light on the London corpus, suggesting a stronger uniformity here than for other English towns. As for Greifswald, the supplementary material has been affirmative.

The Bergen material is classified on a selection of attributes of appearance that reflect how the object was manufactured. This classification gave four main types of sheaths and two main types of scabbards. The comparison to English and German material revealed types that are not represented in Bergen, such as sheaths especially designed for rondel daggers, but also ordinary sheaths such as the multi-technique decorated London sheaths with glued seam. As certain types are found in larger numbers abroad (B-types in London and D1-types in Greifswald), these could obviously have been further classified without that being an aim of this thesis. The comparison thus exposes differences in type frequency, or 'preferences' or 'traditions' in different geographical areas. Some of these differences are rather sharp (Diagram 5.5).

The type A1-sheaths that are common in Bergen are not known from the investigated areas in London and Germany. However, they are also common in Oslo. Plain sheaths (A3) appear in London and Greifswald without being very common. Most of them are linings (London) and thus not proper sheaths but inner coverings, or perhaps rather simple and perhaps unprofessionally made sheaths, which I would expect to appear most places.

Surface decorated sheaths are the common feature in London. Altogether 204 of the London sheaths are of type B2 with impressed decoration, or approximately half of the London corpus (the rest being shared by other B-types or scabbards – types E and F). Type B2-sheaths

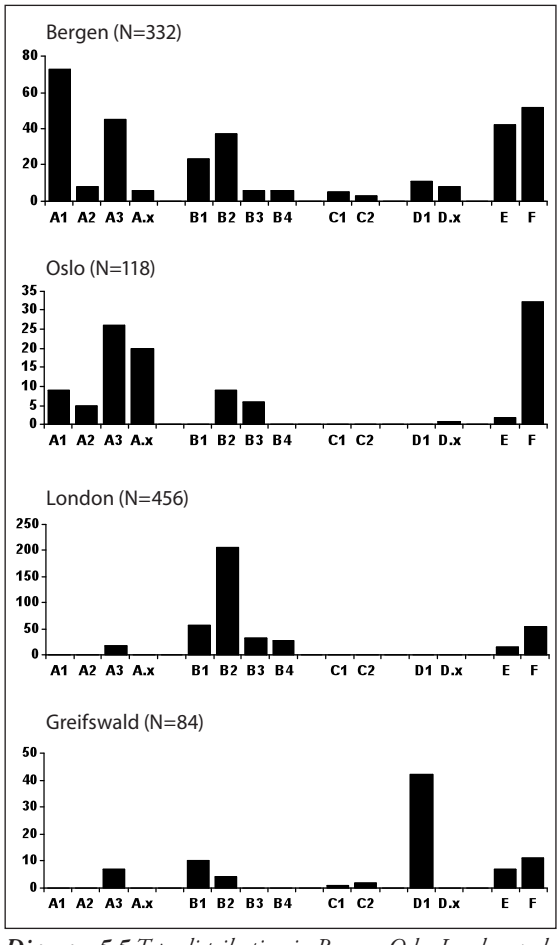


Diagram 5.5 *Type distribution in Bergen, Oslo, London and Greifswald.*

are still documented in the other corpora, but in far smaller portions. The distribution of type B2 in these four corpora seems to support the assumption that such sheaths are imported when found in Bergen and Norway. However, type B1-sheaths decorated by stamped motifs are far more equally shared between Bergen, London and Greifswald, although London still has a slightly larger percentage of this type. This type is probably less likely to be of English origin?

Type C-sheaths are found only in small numbers in Bergen, are not documented in Oslo or London, but are found in a similar share in Greifswald as in Bergen. Further, they seem to be well known in Schleswig and Lübeck, suggesting a more 'eastern' type opposed to the more 'western' type B. This is even more so regarding type D, as type D1 has a similar representation in the Greifswald corpus as type B2 in the London material. The type is documented in Bergen but not known from London. It is found, however, in Hull.

Scabbards are more difficult to compare, as they are generally more fragmented and often not as characteristically decorated as sheaths. They make up a slightly larger share in the two Norwegian towns. But even though the relation of undecorated (type E) and decorated (type F) scabbards can be compared, there were other differences between the corpora that could not be easily included in the classification. The London scabbards include several specimens of smaller dimensions than for example the Bergen and Oslo corpora.

Naturally, the classification based on the Bergen material characterises the type and subtype distribution of the Bergen corpus more accurately than for the other towns. The London corpus contains a larger variety within type B than the Bergen corpus. Similarly, the Greifswald corpus shows a larger variety within type D1. As the classification is based on the Bergen corpus, this variation in London and Greifswald is only crudely expressed by my system. The other corpora also reveal finds that lack any direct parallels in Bergen, but could still be classified due to similarities in techniques and appearance on which my classification is based. Thus, the classification seems to be suitable for comparing different corpora. An overall impression of this comparison is that the Bergen corpus can be characterised as diverse. Compared to the Oslo and Greifswald material, the larger diversity in Bergen might be due to its larger number, reflecting wider and more intense excavation activity. Compared to London, on the other hand, this explanation is less relevant. While the Bergen material is varied in types and clearly different in technical regards, the London corpus is fairly homogenous. The London material displays diversity in terms of motifs of decoration and shape of objects, but almost all within type B.

Based on the comparison of the four corpora, clear regional variation in sheath types emerges. Furthermore, type A1-sheaths seem to have a northern distribution pattern, type B2 a westward, and D1 an eastward orientation. Type B1-sheaths are the sheaths that are most equally distributed. Whether this pattern actually exists or is a result of my selection of comparable corpora will be discussed in the next chapter that will pay more attention to the general spatial and chronological distribution of the different types, both within Bergen and over wider areas within northern Europe.

6 Chronological and spatial distribution

This chapter primarily focuses on chronological and spatial distribution of sheaths and scabbards in Bergen. The datings of the Bergen material will also be compared to the datings of the three other selected corpora, as well as similar material from urban sites from a larger North European area. Here my focus will be fixed on the types in order to assess the different types from Bergen in a wider North European context both chronologically and spatially. In the previous chapter, the comparative analysis demonstrated different type compositions between the corpora, indicating regional differences in production or use of sheaths and scabbards. A wider comparison may substantiate these differences and by including the datings, will perhaps inform us on the development of the different types as well as their temporal spread.

From an early stage, the town area in Bergen can roughly be separated into five different socio-economic zones with each their own characteristics: Holmen, Bryggen, Øvrestretet, Vågsbunnen and Strandsiden (Helle 1982: 228–259) (Figure 6.2). Holmen was the royal and ecclesial centre from the end of the eleventh century. Situated further south on the eastern side of the harbour bay Vågen, Bryggen was a main commercial and habitation area characterized by long-distance trade from the twelfth century onwards. Øvrestretet, i.e. 'the upper street', ran parallel to the north-eastern side of the Bryggen area, and more than 20 different

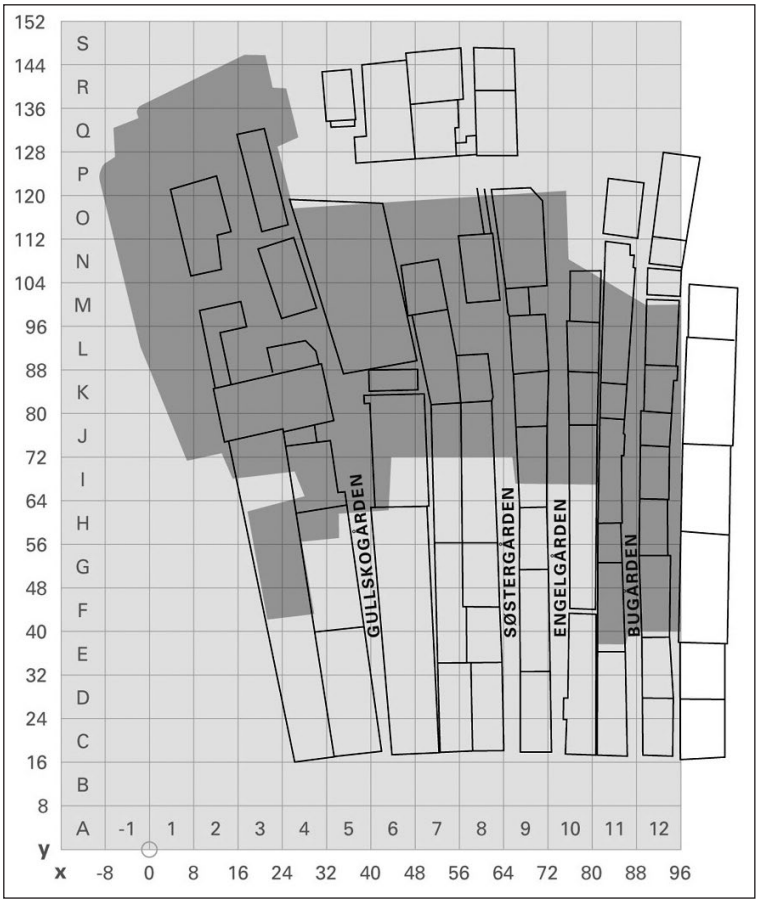


Figure 6.1 *The Bryggen site covered Gullskogården, Søstergården, Engelgården and Bugården, four of the approximately 31 tenements from the Bryggen area (After Øye 2005: fig. 15).*

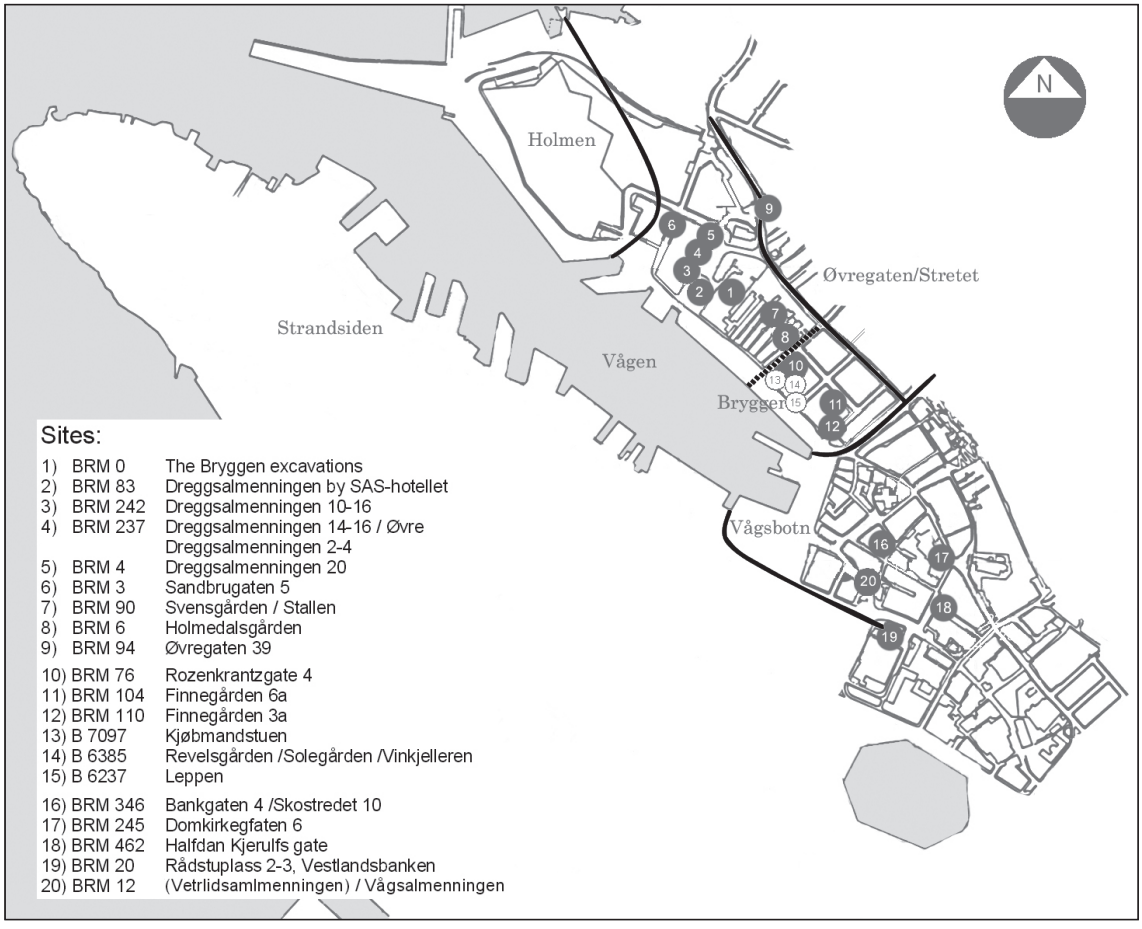


Figure 6.2 *Location of sites with finds of sheaths and scabbards in Bergen, numbered as used in the following presentation. The socio-economic zones are indicated by black lines, the division between northern and southern part of Bryggen is indicated by a dotted black line (Based on Mygland 2007: 14).*

crafts and workshops were situated here by the end of the thirteenth century. Situated at the head of Vågen, Vågsbunnen was also an area of different crafts at this time and many of the craftsmen were of foreign origin. Located on the south-western side of Vågen opposite to Bryggen, Strandsiden had a more scattered settlement before *c.* 1300 and is characterised as an area of ecclesiastical and monastic institutions from the early twelfth century, with a steadily growing secular settlement from the fourteenth century onwards.

The finds, however, are unevenly distributed within these zones. As we have seen, the Bryggen site in the northern part of Bryggen provided most of the finds of sheaths and scabbards from Bergen, or about 74 per cent. The excavation uncovered four of the approximately 31 medieval tenements known from the Bryggen area as a whole according to written sources (Figure 6.1). The presentation of the finds from the Bryggen site will be followed by presentation of the other sites with such finds, divided into the three topographical zones of the northern Bryggen area, the southern part of the Bryggen area and the Vågsbunnen area. As the finds from the Bryggen site constitute almost three quarters of the Bergen material of sheaths and scabbards, the find distribution here will be described in more detail and finds from the other sites more briefly, emphasising similarities and differences to get a better understanding of the material as

a whole. My main objective is to get an impression of the chronological and spatial distribution of the various types and subtypes, seen in a broader context related to the different users of the artefacts in different socio-economic areas of the town.

This analysis will form a basis for a comparison of the Bergen finds to the foreign material in the latter part of the chapter, with regard to chronology and the presence of comparable types known from Bergen.

6.1 Northern Bryggen area: site 1 – the Bryggen site

The finds from the Bryggen excavation (BRM 0) are presented according to the fire-layer chronology, from the earliest fire that struck the area (probably during the 1120s) until the extensive town fire in 1702.[51] Very few artefacts have been dated before the 1120s, and no sheaths or scabbards (Hansen 1998: 123; 2005).

6.1.1 Period 2 (1120s–1170/71)

Only four sheaths can be dated to period 2, the period between the fire levels VIII of the 1120s and VII in 1170/71 (Figure 6.3).

One of these is a sheath of type D.x, typical within its type criteria. Undefined sheaths/scabbards according to type, the remaining three are unusual in the Bergen corpus. One is a reused shoe, with the stitch-holes for embroidery still preserved. Another is quite similar to type A3, but surface-decorated with cut lozenges and slits protruding from the mouth, similar to type A2. The fourth specimen is unusually narrow and cannot have been intended for an ordinary sword, if for a sword at all. From this early stage there are only a few finds, of which three are atypical.

The fire-layer identified to 1170/71 covered the whole inhabited area of period 2 within the site (Herteig 1991: 82). The objects are found near caissons, but not related directly to any specific structures. The D.x-sheath, however, was found close to a post in the fire-layer, probably deposited in the end of the period. The four sheaths are complete although worn, indicating that they were lost rather than discarded.

6.1.2 Period 3 (1170/71–1198)

In the layers between the fire-levels of 1170/71 and 1198 and accumulated in a relatively short interval of no more than 28 years, eight sheaths and seven scabbards have been found (Figure 6.4).

Type A dominates, with one A1.1-sheath, three of type A2 and two of type A3. Type D.x is represented by one specimen, as in the previous period. The last sheath is of type B1.2, decorated with a repetitive pattern of small stamps. It was found under the lowest beam of a well (well 13), just north of the area of the later Gullskoen tenement in the northern part of the site. The scabbards are all of type E, except for one of type F2 which was one of the least elaborated within the type, with engraved lines along the rims.

Although 15 artefacts represent a small number, a spatial pattern can be discerned. About half of the artefacts, or four sheaths and two scabbards, are found on land. The two scabbards are small fragments found in foundations near the waterfront, while the sheaths are located in the Gullskoen area, although not in situ in buildings. The rest, and most of the scabbards, are found outside the waterfront, mostly deep below the caissons of the proceeding period, usually in a distance of 1–2 meters, probably discarded together with other garbage and waste in the accumulated layers in front of the quays. While the sheaths are worn or partly damaged, many are still complete and might have been lost. The scabbards are altogether more fragmented, and often deliberately cut and therefore discarded.

6.1.3 Period 4 (1198–1248)

Ten sheaths and five scabbards can be assigned to period 4. Considering the time span of 50 years, the deposition rate of sheaths and scabbards is actually halved compared to the previous period (Figure 6.5).

The representation of type A is similar to that of the previous period, with three A2-sheaths, three of type A3 and one sheath of type A1.4. One sheath of type B2.1 is found. Of the four Bergen sheaths of this subtype, this is the only one found at the Bryggen site. In this

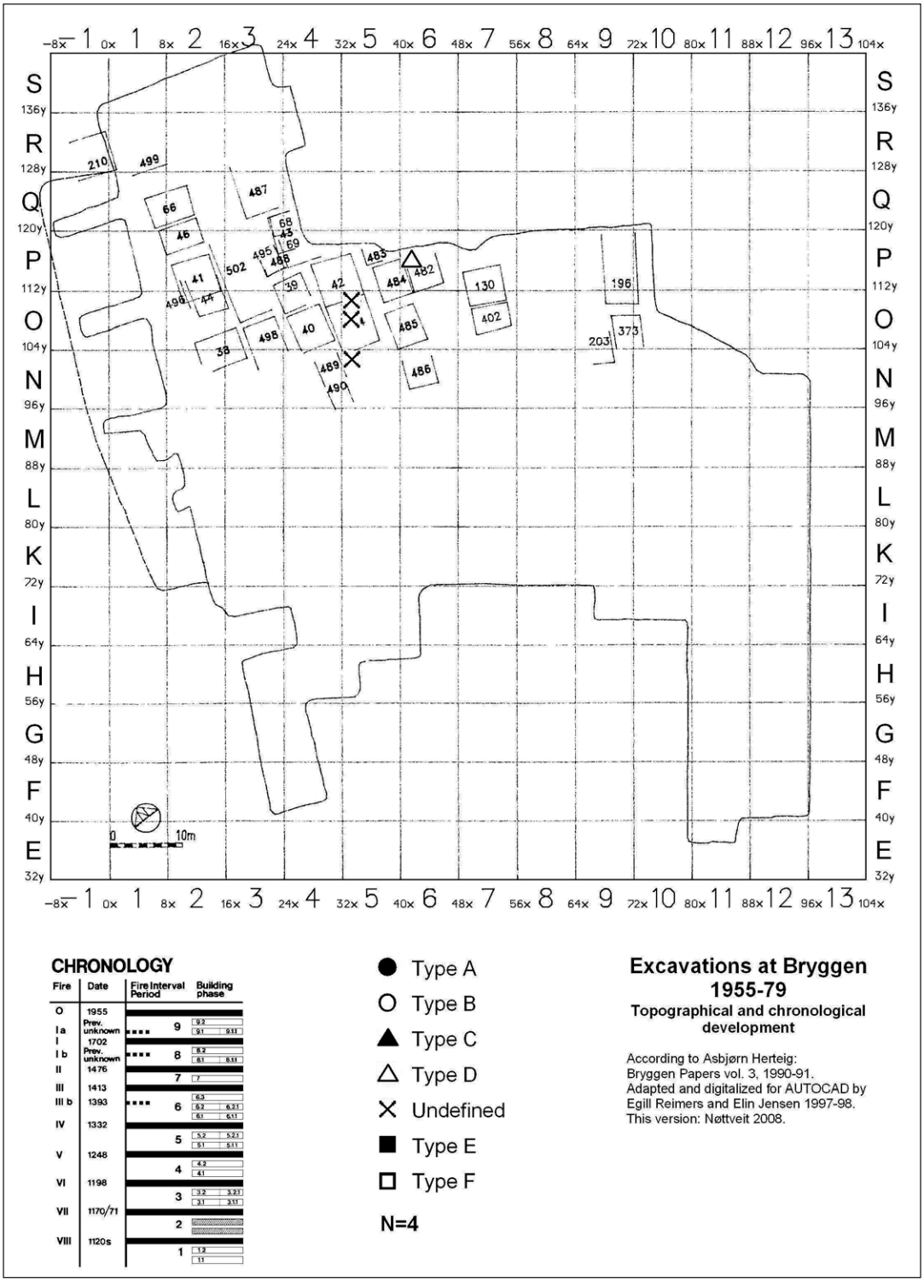


Figure 6.3 *Spatial distribution of sheaths at the Bryggen site, period 2 (1120s–1170/71).*

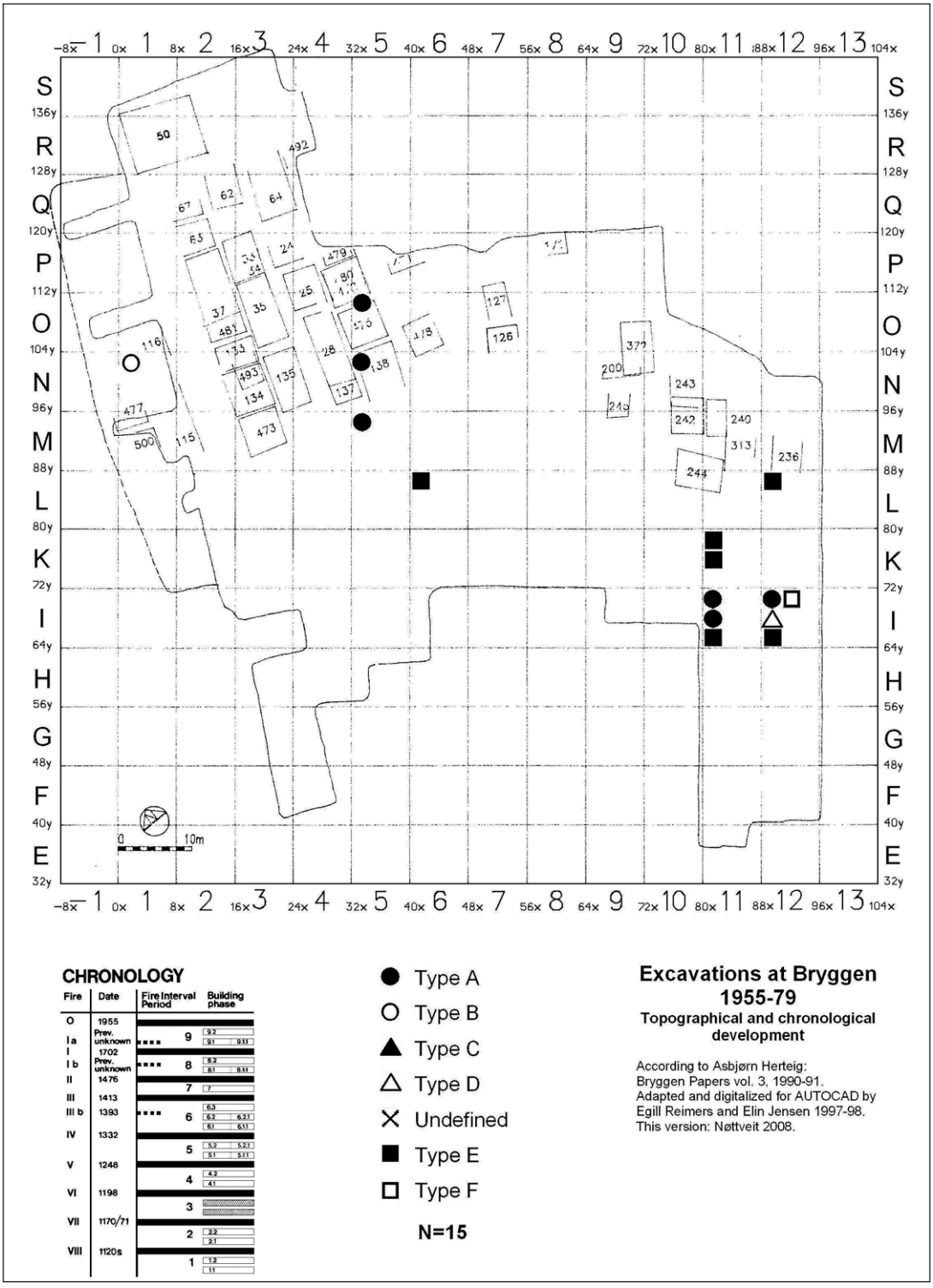


Figure 6.4 *Spatial distribution of sheaths and scabbards at the Bryggen site, period 3 (1170/71–1198).*

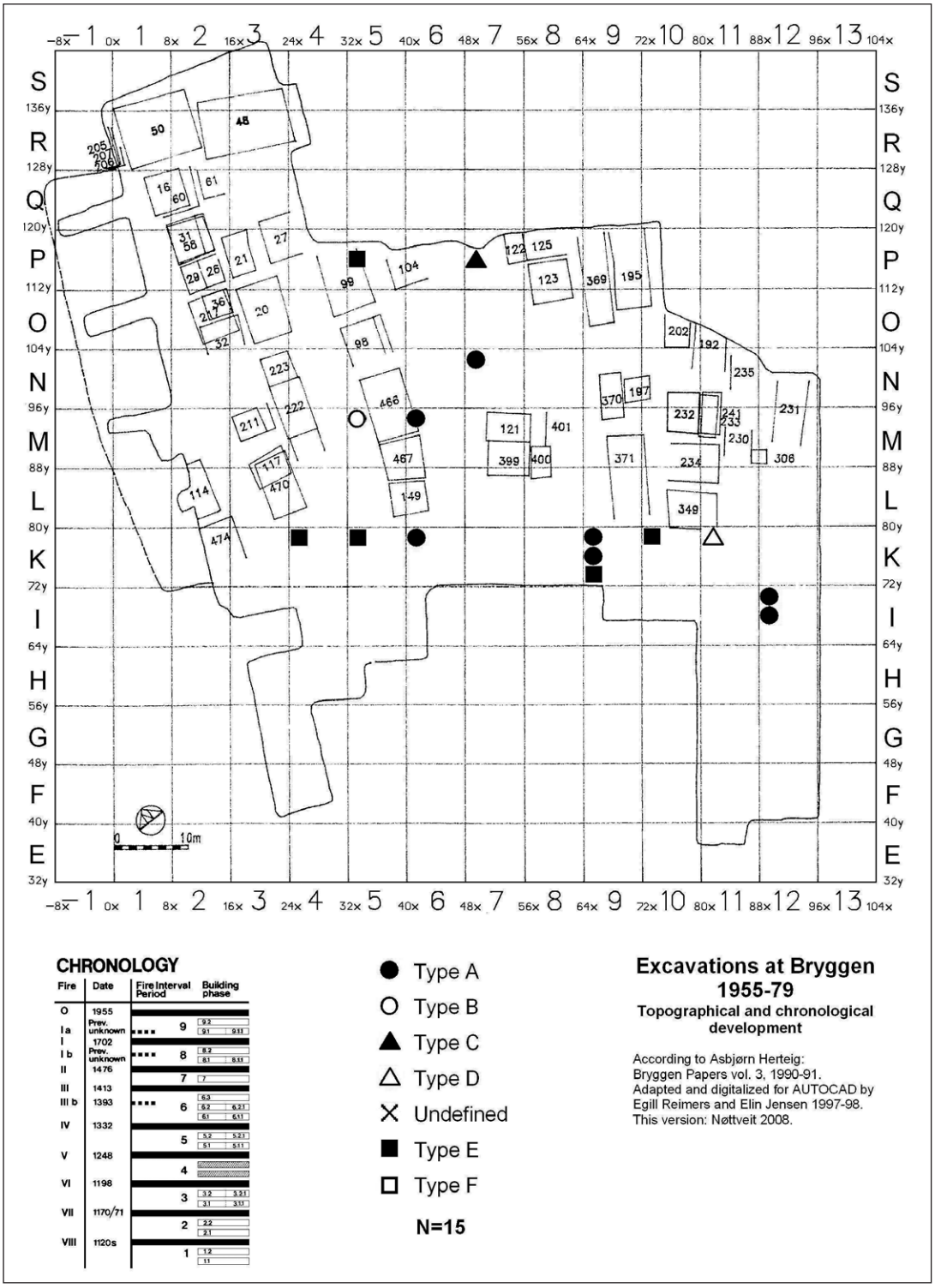


Figure 6.5 *Spatial distribution of finds at the Bryggen site, period 4 (1198–1248).*

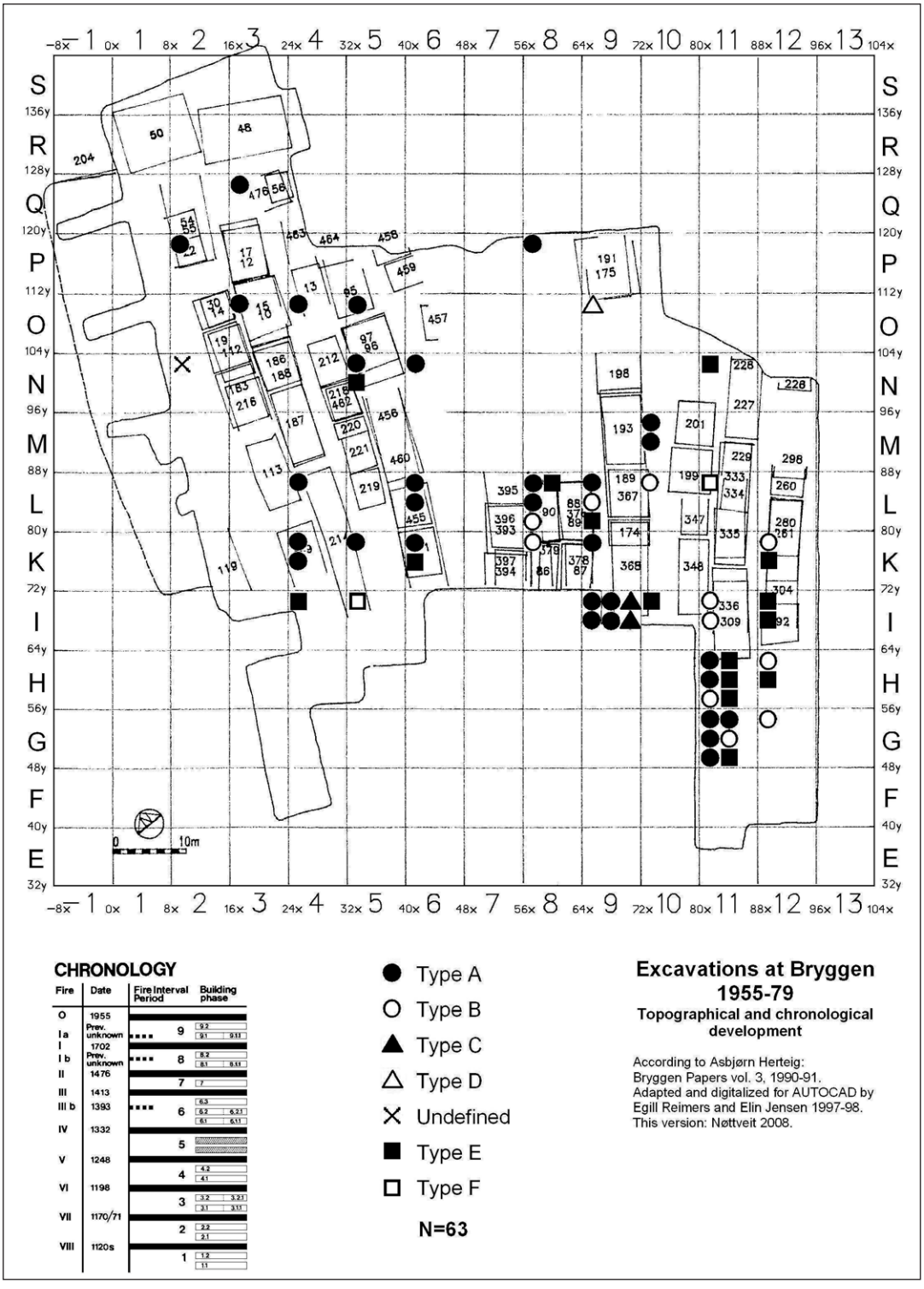


Figure 6.6 *Spatial distribution of sheaths and scabbards at the Bryggen site, period 5 (1248–1332).*

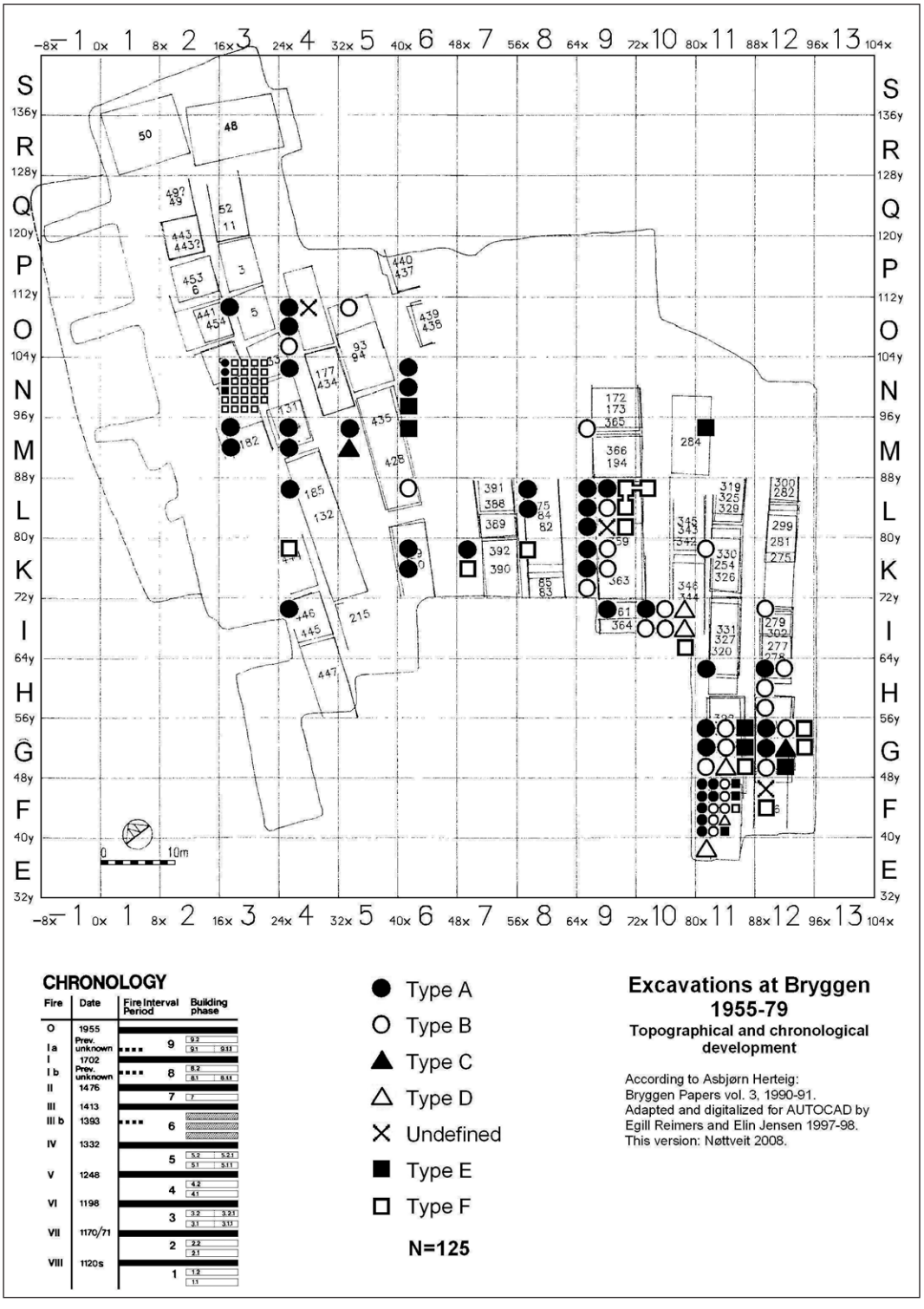


Figure 6.7 *Spatial distribution of sheaths and scabbards at the Bryggen site, period 6 (1332–1413).*

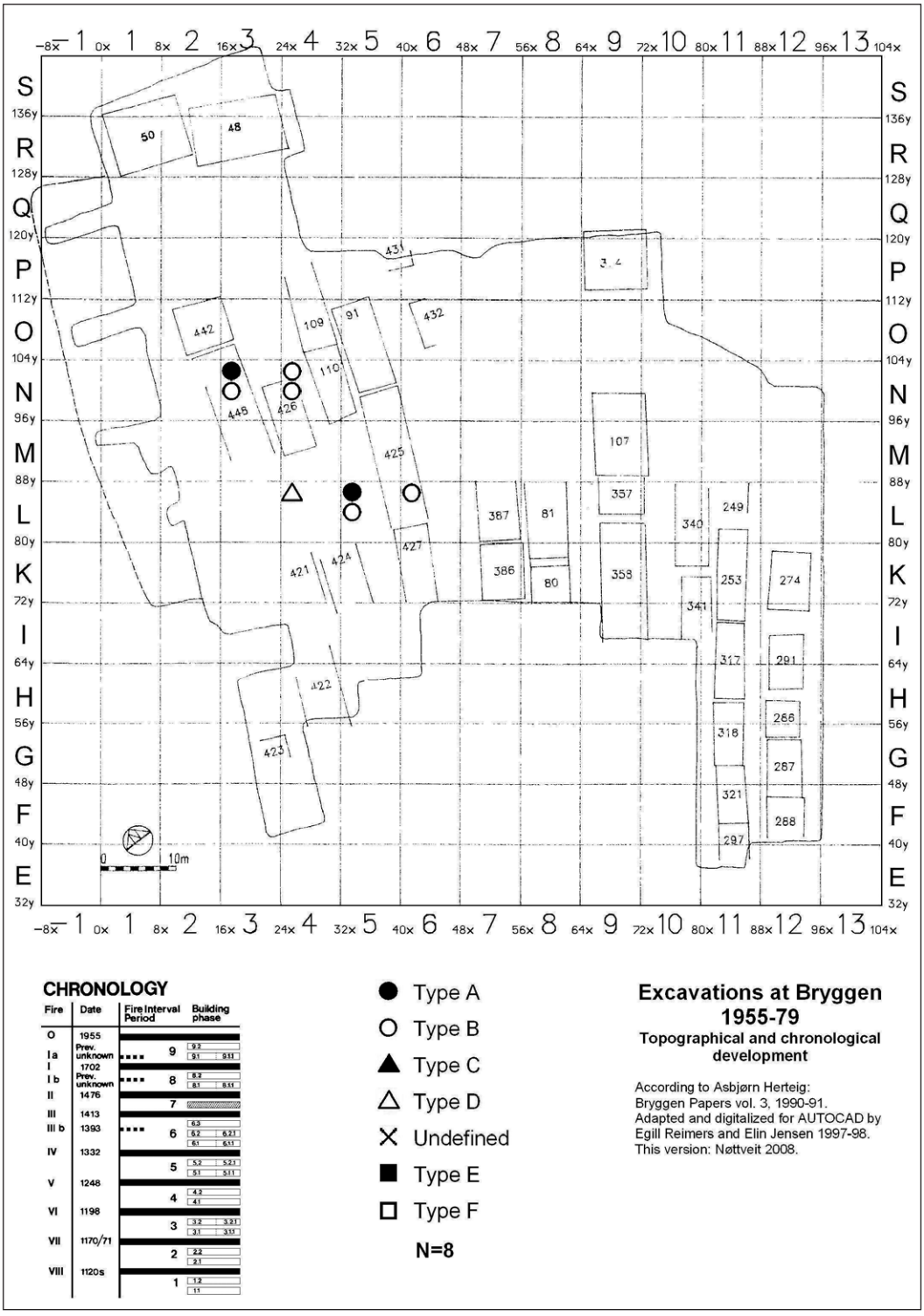


Figure 6.8 *Spatial distribution of sheaths at the Bryggen site, period 7 (1413–1476).*

Period	A1.1	A1.2	A1.3	A1.4	A1.5	A1.6	A1.7	A1.8	A1.9	A3	A.x	B1.1	B2.2	B2.3	B2.x	B4.1	B4.x	C1	D.x	Undef.	E	F1	F2
5	9	1	3	3	3	2	1	1	1	6	1	1	3	1	4	1	1	2	1	1	15	1	1
Σ	31											11						2	1	1	15	2	
	46																				17		

Table 6.1 *Distribution of types and subtypes within period 5 at the Bryggen site.*

context, however, it is the earliest sheath with impressed decoration. A sheath of type C1 represents the earliest C-type sheath at the site. A single D.x-sheath is also recovered, as in the two preceding periods. Keeping the low numbers in mind, the sheaths are more varied, with all main types present.

The five scabbards are all of type E, continuing a homogenous impression pattern with regard to scabbards.

The sheaths are now located both west and east in the settlement area and near the waterfront, while the scabbard-fragments are still concentrated to the western part of the site in fill-masses connected to the quays, except one fragment found near a passage in the eastern part of the site. The B2.1-sheath is found in building 466, a post-built house, and may possibly belong to the proceeding period. No specific activities have been identified in relation to this construction (Herteig 1991: 57; Moldung 2000: 50, 100).

6.1.4 Period 5 (1248–1332)

From period 5 there are 63 finds, representing an increase in both numbers and deposition rate according to the length of the period. The distribution of finds is shown in Figure 6.6 and the distribution of types in Table 6.1.

The A-sheaths are the most frequent, with 31 finds. In contrast to the previous periods, type A2 is not represented. Type A1 dominates and makes a varied appearance, with all subtypes represented. In addition, six specimens of type A3-sheaths are documented. With 11 specimens, the B-sheaths constitute a larger share in this period and in numbers correspond to about a third of type A. While only one sheath of subtype B1.1 is documented, sheaths of subtype B2 are more numerous. The three B2.2-sheaths found in Bergen all stem from period 5 at the Bryggen site. Four B2.x-sheaths and a single sheath of subtype B2.3 are also found. Furthermore, two B4-sheaths are recorded, sheaths with moulded decoration that form a small group in the Bergen corpus. Two sheaths of type C1 are found, and a single D.x-sheath, as in the previous periods. Even though type A-sheaths dominate, the sheaths are more diverse in this period, especially subtypes of types A and B.

Of the seventeen scabbards, all are of type E as in the previous period, except two scabbards of types F1 and F2. The scabbard of type F1 has an uncertain date and may belong to the proceeding period. With regard to the F2-scabbard, it has engraved decoration of the least elaborate kind, single lines along the rims of the scabbard, as documented in period 3.

The distribution pattern shows continuity from the previous periods, but not as clearly as before. Still the scabbards tend to have ended up in fill-layers in the western part of the site, closer to the sea. The sheaths, however, appear over the whole excavated area, but the eleven B-sheaths are not evenly spread as the A-sheaths. Confined to the south-western part of the site, this area has a more diverse representation than the north-eastern part, i.e. the Gullskoen area.

The material from period 5 is then altogether more diverse and larger in number than in previous periods. The sheaths are varied in type, and type A1 displays a large variety in subtype. Types A and B seem to have a somewhat different distribution in different areas of the site, while the fragmented scabbards have been discarded as rubbish in the harbour area.

6.1.5 Period 6 (1332–1413)

Approximately half of the datable finds at the Bryggen site stem from period 6, altogether 125 sheaths and scabbards (one scabbard consists of three separate finds). Even when considering the different time-spans of the preceding periods, the number is doubled from the previous period. The distribution of finds is shown in Figure 6.7 and the distribution of types is shown in Table 6.2.

As in the previous period, the A-sheaths outnumber the rest, but are less dominating than earlier. Types B, C and D together (N=37) now almost count as many as type A (N=41). Type A also appears as less diverse than in the previous period, with fewer subtypes represented among the 41 type A-sheaths. The 27 type B-sheaths, on the other hand, are slightly more varied than in period 5. Twelve have stamped decoration, nine impressed, but also two are incised and five embossed. Two sheaths of type C2 occur for the first time, although in small numbers. Similarly, five sheaths of type D1 are now recorded, whereas only type D.x has been represented earlier.

In period 6 scabbards also demonstrate more varied forms, with all types present, in contrast to earlier periods. Eleven type E-scabbards are spread over the site, and half of these are situated in the south-western part. Six F1-scabbards are found, with a dispersed distribution. As already mentioned, one of these scabbards consists of three separate finds from two different but adjacent grid squares. Fifteen F2-scabbards are uncovered; four of these in the western part of the site, and eleven found together in grid N3 in a deposit alongside thirteen scabbards of B3-type and the only scabbard classified as F4. In this grid, altogether 27 scabbards and two A3-sheaths were found. Except for one type E-scabbard, all stem from a fill-layer below building 433. This context then comprises almost all scabbards of type F3 found in Bergen (13 of 15), the single F4-scabbard, more than half of the scabbards of type F2 (11 of 21), and one type E-scabbard. Containing more than one quarter of all scabbard fragments documented in Bergen, this fill-layer is of special interest. The layer also illustrates the issue of representativity, as discussed earlier. Without it, the Bergen corpus of scabbards would have shown far less variation.

The distribution of sheaths shows a similar spatial pattern to period 5. While type A-sheaths are located over the whole site, type B-sheaths are concentrated in the south-western part, where also the five type D-sheaths are found. In both periods 5 and 6 then, the type distribution of sheaths seems more homogenous at the Gullskoen area than in the rest of the site, with a preference for type A-sheaths.

Several objects may also be characterised as found in situ. A sheath of type B1.1 (cat. no. 136), a reuse of two motif-stamped leather pieces sewn together, is recorded in building 329 from the floor level (0–5 cm). Another B1.1-sheath (cat. no. 142) is found in building 359, 0–5 cm below the fire-layer of 1413.

Even when disregarding the cluster of scabbards in square N3, the period represents a clear increase of sheaths and scabbards, a doubling from the previous period. Although still dominating, the A-sheaths are relatively fewer in number than in the previous period and display less type variety. A large share is constituted of other types, mostly B-types. The scabbards are varied in contrast to the earlier periods when they were almost exclusively represented by type E.

Period	A1.1	A1.3	A1.4	A1.6	A1.9	A2	A3	A.x	B1.1	B1.2	B2.3	B2x	B3	B4.1	B4.x	C2	D1	Undef.	E	F1	F2	F3	F4
6	16	2	3	2	1	1	14	2	8	4	2	7	2	1	3	2	5	3	11	6	15	14	1
Σ	41								27							2	5	3	11	36			
	78																		47				

Table 6.2 *Distribution of types and subtypes within period 6 at the Bryggen site.*

6.1.6 Period 7 (1413–1476)

With only eight finds from the 63 year long period between the fire-layers of 1413 and 1476, there is a marked decrease in finds from the preceding period (Figure 6.8).

Only two type A-sheaths of subtype A1.1 are recorded. For the first time type B is more numerous than the A-types, with five sheaths of this type. Two are stamped (B1.2), two impressed (B2), while one has an incised decoration (B3) and in this case imitating stamped decoration. A single sheath of type D1 is found. The numbers are too small to discern any clear pattern, but the sheaths are concentrated to the northern part of the site. No scabbards are documented from this period.

6.1.7 Period 8 (1476–1702)

Only one sheath and one scabbard are documented from the layers deposited over the fire-layer of 1476. A sheath of type A3 is found in grid P3, a scabbard of type F3 is found in grid H11, near the waterfront.

While type A3-sheaths appear in most periods, scabbards of type B3 are more limited in time. This is the only scabbard of the type found outside period 6 (1332–1413). This one, however, is one of two F3-scabbards that are mentioned earlier, as they are shorter and of other proportions than most scabbards.

6.1.8 Undatable finds

Eight sheaths and five scabbards from the Bryggen excavation could not be dated stratigraphically.

One of the scabbard-fragments is of type F1, and was found in layers dated to period 8 (1476–1702). Deposited in the same context were three shards of Grimston-ware and one shard of Humber-ware, indicating that the layer was redeposited from older contexts.[52] Furthermore, the fragment have five stamp-motifs identical to one of the F1-fragments from period 6 (1332–1413). Whether the two fragments stem from the same scabbard or the same workshop is not possible to decide, but they are from different parts of the scabbard, both of bovine or probably bovine leather and have the same stitching with similar space between the stitches in addition to the identical stamps. Nevertheless, the date to period 8 (1476–1702) cannot be seen as representing the use of the fragment, and the fragment is here regarded as undated.

6.1.9 Types and frequency

From the Bryggen site, 163 sheaths and 82 scabbards are represented, or altogether 245 artefacts. Of these, 95 per cent could be dated to periods 2–8 according to the Bryggen chronology (Table 6.3).

From periods 2–5, scabbards tend to be deposited in the western area of the site in fill-masses in the harbour area, while the sheaths are more evenly spread over the whole site. This is reasonable considering that a small sheath might have been lost more easily during use in the buildings and passages at Bryggen, while scabbards are a result of deliberate dumping in the harbour area, underlined by the fact that scabbards are usually more fragmented and removed from wooden plates and fittings.

The most common type of sheath from the Bryggen site is type A1, appearing in all periods from period 3 onwards, through period 7. As the general pattern, the type is most numerous in periods 5 and 6. The largest variety, however, is represented in period 5, with all subtypes from A1.1 to A1.9 present. Even though type A1 increases in number in period 6, the rate is lower than the general increase in sheaths from periods 5 to 6. Type A2 on the other hand appears in periods 3 and 4, with only a single specimen in period 6. Type A3 follows the general curve from period 3 to 6.

B-sheaths seem to be more concentrated to periods 5 and 6 than the A-types. In contrast to type A with the largest variety in period 5, type B-sheaths display the largest variety in period 6. With their stamped decoration, most of the B1-sheaths also stem from period 6. One early appearance can be noted though, in a B1.2-sheath from period 3. The B2-sheaths are also most numerous in period 6, but follow the general curve of sheaths in the periods 4–7. While the subtype B2.1 is only represented in period 4 with one specimen, all three sheaths of subtype B2.2 from Bergen are all from period 5. Type B3-sheaths appear in periods 6 and 7. All sheaths

Type	Period								Σ		
	2	3	4	5	6	7	8	x			
A1.1		1		9	16	2		2	30	91	**156**
A1.2				1					1		
A1.3				3	2				5		
A1.4			1	3	3				7		
A1.5				3					3		
A1.6				2	2				4		
A1.7				1					1		
A1.8				1					1		
A1.9				1	1				2		
A2		3	3		1			1	8		
A3		2	3	6	14		1		26		
A.x				1	2				3		
B1.1				1	8			1	10	49	
B1.2		1			4	2		1	8		
B2.1			1						1		
B2.2				3					3		
B2.3				1	2				3		
B2.x				4	7	2		2	15		
B3					2	1			3		
B4.1				1	1				2		
B4.x				1	3				4		
C1			1	2					3	5	
C2					2				2		
D1					5	1		1	7	11	
D.x	1	1	1	1					4		
E		6	5	15	11			1	38		**82**
F1				1	6			2	9	44	
F2		1		1	15			2	19		
F3					14		1		15		
F4					1				1		
Unclassified	3			1	3						7
Σ	**4**	**15**	**15**	**63**	**125**	**8**	**2**	**13**			**245**

Table 6.3 *Chronological distribution of sheaths and scabbards at the Bryggen site.*

with embossed decoration found in Bergen, six B4-sheaths in all, are confined to periods 5 and 6 at the Bryggen site; two from period 5, the remaining from period 6.

Among the sheaths, type C is the least numerous in Bergen; type C1 is represented with three artefacts in periods 4 and 5 respectively, and type C2 with two artefacts in period 6.

Although the D-sheaths form a small group, they seem to reveal a chronological pattern similar to type C. Type D.x is represented with one specimen from each of the periods from 2 to 5. The D1-sheaths appear in the following periods, with five sheaths in period 6 and only one in period 7.

The scabbards present a somewhat different pattern. Type E-scabbards are represented from period 3 to 6, and are most numerous in period 5. Even though single type F-scabbards appear earlier, it is not until period 6 that all types of scabbards are represented. The 47 scabbards found in period 6 constitute half of all scabbards found in Bergen. Almost all type F3-scabbards, the only F4-scabbard and more than half of the F2-scabbards, however, are found in a single fill-layer containing 26 scabbards and two sheaths. Scabbards are completely absent in the following period. The scabbard found in layers from period 8 is a remaining type F3-scabbard, one of the two unusual small scabbards.

Altogether, periods 5 (1248–1332) and especially 6 (1332–1413) reveal a rich and varied material of sheaths and scabbards, with all main types present but also comprising most of the sheaths in number. Period 6 alone, with 125 finds, yields half of the finds from the site. The question is whether this distribution is representative, or due to some depositional bias. The different length of the periods may partly be an explanation. Periods 5 and 6 last 84 and 81 years, respectively, and are longer than the other periods excluding period 7. Another factor is that parts of the site were removed by machine down to the level of fire V (1248), period 4. Still, periods 5 and 6 have more finds.

To get a more accurate picture of find-frequency over time, the sheaths and scabbards should be compared to leather finds in general in order to also assess the distribution in relation to preservation conditions for leather. For the chronological distribution of leather finds, I have used the Bryggen Database based on the original catalogues from the excavation. The database operates with 11,926 accession numbers of leather finds, of which 4,028 entries represent single items. Another 6,798 entries contain from 2 to 98 items each, with an average of 7.78. The remaining 2,770 entries all contain several items, without exact numbers presented in the catalogue or database. For comparison, these entries will be estimated as eight items per entry.[53] Based on these premises, the 11,926 accession numbers represent a total of 66,317 leather items.

The dates given in the Database are based mainly on relations to buildings and structures as presented in Herteig's accounts from 1990 and 1991, and the finds are not dated and checked individually as are the sheaths and scabbards. Still, given the large quantities, it provides a general impression of leather finds over time that should be roughly reliable and comparable to number of finds of sheaths and scabbards (Diagram 6.1).

When comparing the frequency of leather finds at Bryggen over time to that of sheaths and scabbards in the same area and periods, some tendencies become clear. The doubling of finds compared to the previous period in both period 5 (1248–1332) and period 6 (1332–1413) does not concur with the general tendency in the leather material as a whole, even though both diagrams illustrate an increase of finds up to period 6. As sheaths probably are longer lasting than many other leather artefacts, especially shoes, one should expect relatively fewer finds from longer periods, and not an increasing frequency. The marked increase of sheaths and scabbards is even clearer if we compare finds per decade within the periods (Diagram 6.2).

The highest deposition rate of leather material in general is to be found in period 3 (1170/71–1198), with 2873 leather finds per decade. From the end of the twelfth century, there is an even decline in deposited leather per decade during the following periods, with a slightly more marked drop in period 5 (1248–1332). As both the town and its population grew during most of this period, this deposition may indicate changing attitude towards deposition of waste leather. The shoes recorded from the Gullskoen area of the Bryggen site show a similar chronological pattern to that of the general leather, both in numbers and deposition rate, with most finds in period 3 (Larsen 1992: 39).[54] The smaller material of sheaths and scabbards, on the other hand, have a chronological deposition rate that is markedly different, with a repeating doubling of deposited material through periods 4–6, indicating that the representation is culturally significant. The short period 3, however, has almost as many finds per decade as period 5. The concentration of sheaths and scab-

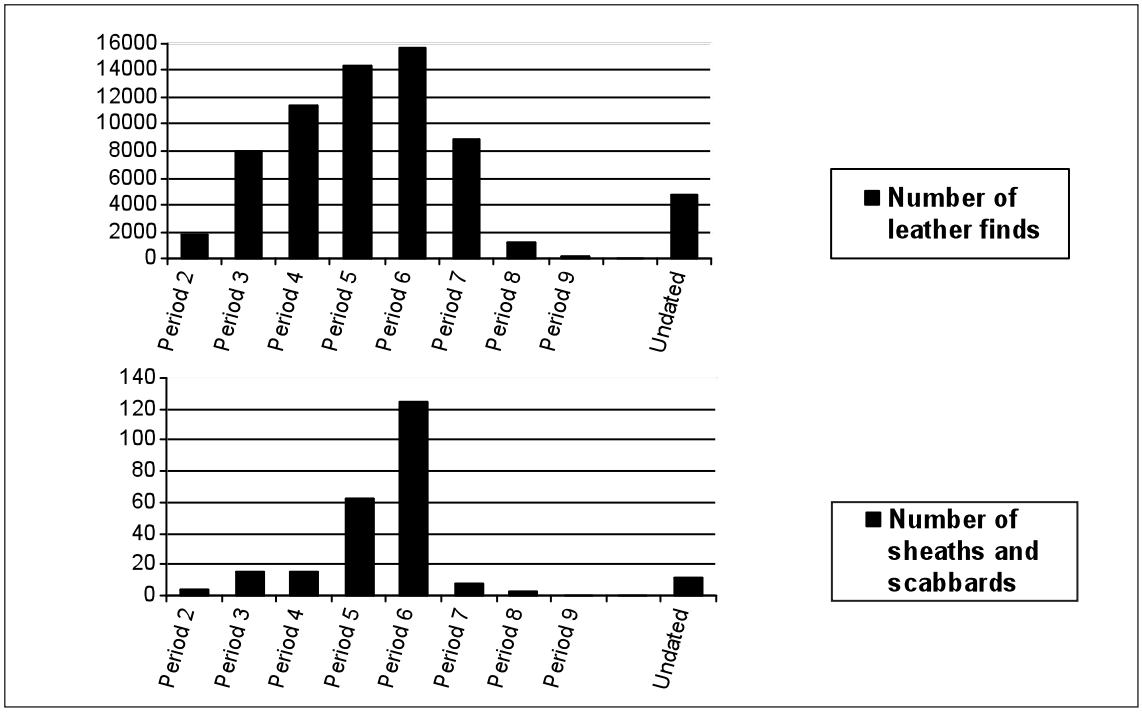


Diagram 6.1 *Number of leather finds and number of sheaths and scabbards found in periods 2–9 at the Bryggen excavations.*

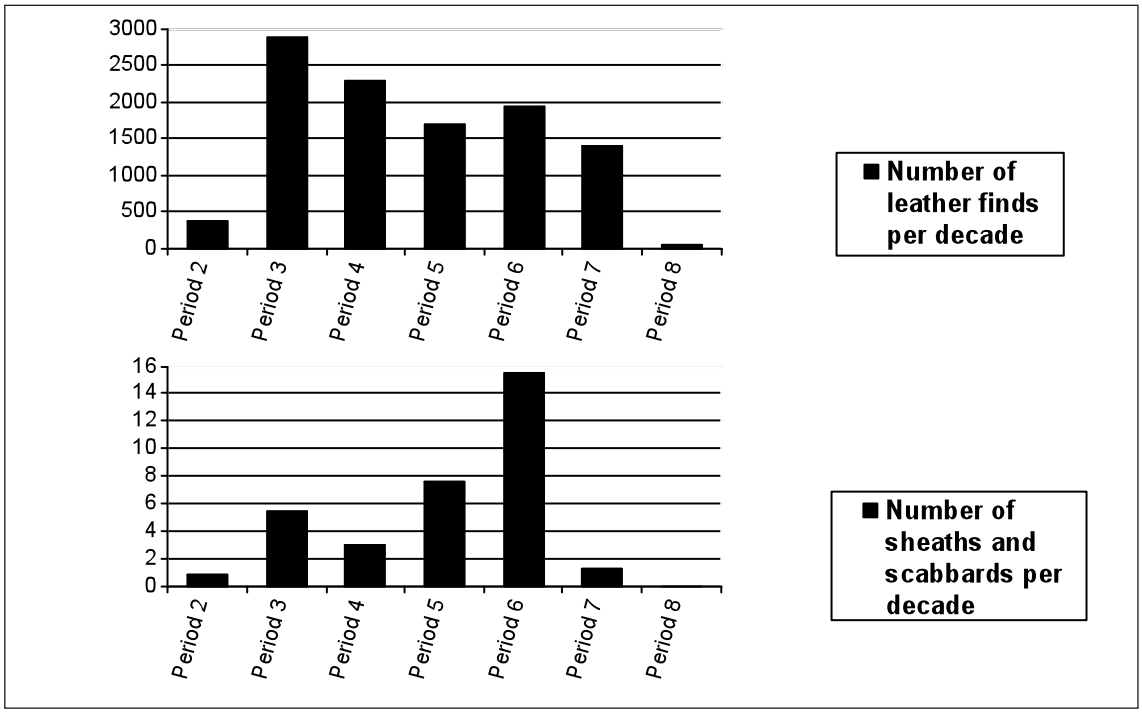


Diagram 6.2 *Number of leather finds per decade and number of sheaths and scabbards per decade from periods 2–8 at the Bryggen excavations.*

bards to period 6 (1332–1413), both in numbers and in deposition rate, is not part of the general deposition of leather in Bergen during the Middle Ages, and an explanation ought therefore to be sought elsewhere. Nevertheless, the material indicates an increased use of sheaths and scabbards, culminating in period 6.

Clear tendencies can be seen in the material from the Bryggen site, with regard to the spatial distribution of sheaths and scabbards, but also chronologically, with the concentration of finds to period 6, but also the preceding period, both in numbers and deposition rate. In the following, the remaining material from Bergen will be evaluated against the distribution from the Bryggen site to see if the trends here are representative for the rest of the town area.

6.2 Northern Bryggen area: sites 2–9

Several other excavations have been carried out in the northern Bryggen area, and a further 21 sheaths and four scabbards have been found. Most of these are documented in close vicinity to the extensive Bryggen site, originating from three excavations and one trench survey in the Dreggsallmenningen area (BRM 4, BRM 83, BRM 237 and BRM 242) (Larsen 1967b; Long and Marstrander 1980; Dunlop 1986; Golembnik 1994a). A small number of objects are found at the Sandbrugaten 5 excavation further north (BRM 3), and at the sites of Stallen, Svendsgården (BRM 90), and Holmedalsgården (BRM 6) further south (Larsen 1967a; 1969; Dunlop, Göthberg and Christensson 1984). Finally, a single sheath from Øvregaten 39 (BRM 94) is included here, although found slightly west of the northern Bryggen area (cf. site 9, Figure 6.2). To make the survey clearer and easily accessible in my context, I refer to these sites from the northern part of Bryggen as sites 2–9 (Table 6.4).

6.2.1 Sites 2–5: Area of Dreggsallmenningen

The finds in the area of Dreggsallmenningen, the common-fare just north of the Bryggen site, stem from four different sites (BRM 4, 83, 237, 242). The 15 sheaths and three scabbards found here are mainly coherent with the finds from the Bryggen site, bordering to the southern part of Dreggsallmenningen. The excavation with most finds of sheaths and scabbards (Site 5 – BRM 4) has provided only a wide date frame for the objects, which were deposited after 1215–1225 (Larsen 1967b; Hansen 2005: 77–80, 265–267). The other excavations (Sites 2, 4 – BRM 83, 237 respectively) and the trench survey (Site 3 – BRM 242) in the area provide finds that are datable within the Bryggen framework. Some differences from the Bryggen site can be noted, though. No finds are dated to period 6 (1332–1413), the period with most finds at the Bryggen site, except some artefacts of wider date-frames that also cover this period. Four of the sheaths are of type B, which is interesting since most B-sheaths at the Bryggen site were found in the south-western part, giving a lacuna of B-sheaths in the northern part of the Bryggen site. One of the B-sheaths, of type B2.x, dates to period 4 (1198–1248) and earlier than at the Bryggen site. The three scabbards are all of type F1, while one of these has a younger date than usual – the late fifteenth or early sixteenth century.

One of the sites (Site 2 – BRM 83) stretches south-west with bulwarks and quays directly connected to the Bryggen site, but lacks the same amount of finds of sheaths and scabbards.

6.2.2 Sites 6–8: Sandbrugaten 5, Stallen (Svendsgården), Holmedalsgården

Three other sites (BRM 3, 6, 90) in the northern Bryggen area have unearthed finds of sheaths and one scabbard. They are situated further away from the Bryggen site, and the finds are few. At Sandbrugaten 5 (Site 6 – BRM 3), north of Dreggsallmenningen, two A1.1-sheaths and a scabbard of type F1 are found in layers deposited later than *c.* 1300 (Larsen 1967a; Hansen 2005: 72–77, 263).

South of the Bryggen site, a D.x-sheath is documented at Stallen, Svendsgården (Site 7 – BRM 90) in a layer dating from *c.* 1400–1476 (Dunlop et al. 1984). This is later than the similar finds from the Bryggen site where this type appears in periods 2–5, but only represented with one sheath from each period. In addition, two B2.x-sheaths are found at Holmedalsgården

Site 2: Dreggsallmenningen (BRM 83). Open area excavation, c. 288 square metres, conducted 1979 (Long and Marstrander 1980).

Period / Date	A3	A.x	B2.x	D1	F1	Σ
5 (1248–1332)			1		1	2
7 (1413–1476)	1			1		2
8, first part (1476–1527)					1	1
Undatable		1				1
Σ	4				2	6

Site 3: Dreggsallmenningen 10–16 (BRM 242). Trench survey,1986, (Dunlop 1986).

Date	A3
c 1230–1248	1

Site 4: Dreggsallmenning 14–16 (BRM 237). Open area excavation, c. 675 square metres conducted in 1986 and 1990 (Golembnik 1994a).

Date	B2.x
c 1198–1248	1

Site 5: Dreggsallmenning 20 (BRM 4). Open area excavation, c. 740 square metres (c. 1,450 cubic metres), conducted in 1967. (Larsen 1967b; Hansen 2005: 77–80, 265–267).

Date	A1.1	A3	A.x	B1.1	C2	D1	F1	Σ
1215/25 to 17th century	2	2	1	2	1		1	9
Undatable						1		1
Σ	9						1	10

Site 6: Sandbrugaten 5 (BRM 3). Open area excavation, c. 480 square metres (c. 800 cubic metres), conducted in 1967(Larsen 1967a; Hansen 2005: 72–77, 263).

Date	A1.1	F1	Σ
After c. 1300	2	1	3

Site 7: Stallen, Svensgården (BRM 90). Open area excavation, 75–80 square metres, conducted in 1980/82 (Dunlop, Göthberg and Christensson 1984).

Date	D.x
c 1400–probably 1476	1

Site 8: Holmedalsgården (BRM 6). Open area excavation, 192 square metres, conducted in 1967 (Larsen 1969).

Date	B2.x
probably late medieval	2

Site 9: Øvregaten 39 (BRM 94). Open area excavation, 70 square metres, conducted in 1981 (Dunlop1982a).

Period / Date	A3
5 (1248–1332)	1

Table 6.4 *Sites 2–9, sheaths and scabbards found in the northern Bryggen area, excluding the Bryggen site.*

(Site 8 – BRM 6) above an undated fire-layer (denoted fire 2) that provides no date other than being late medieval (Larsen 1969).

6.2.3 Site 9: Øvregaten 39

The Øvrestretet area was in many ways separated from the northern Bryggen area (cf. chapter 6, page 117). It is of special interest, however, since the Urban Code of 1276 prescribes the workshops of the different categories of craftsmen to this area (Øye 1988: 16). Few excavations have taken place here and only a single A3-sheath is documented, during the excavation of Øvregaten 39 (Site 9 – BRM 94). It was found in a layer containing much leather, in association with a structure supporting a building from period 5 (1248–1332). The building cannot, however, be interpreted as a shop for leatherworking. On the other hand, a separate layer deposited in situ containing pure horse excrement and grass supports a theory that the building was used as a stable (Dunlop 1982a: 36, 40).

6.2.4 Preliminary assessment of the northern Bryggen area

The finds from the areas excavated near the Bryggen site coincide with the dates from the Bryggen excavation with only minor variations, but lack the concentration to period 6 (1332–1413). All main types of sheaths are documented, with a similar representation as at the Bryggen site. Regarding scabbards, however, only type F1 is documented and no specimens of type E which is the most common at the Bryggen site. Most finds derive from the Dreggsallmenningen area, and by an overall evaluation the finds of the remaining northern Bryggen area support the chronological pattern from the Bryggen site.

6.3 The southern Bryggen area: sites 10–15

Fewer excavations have been undertaken at the southern part of Bryggen, but six of these have unearthed sheaths and scabbards here denoted as sites 10–15. Sites 10–12 (BRM 76, 104, 110 – Roszenkrantzgate 4, Finnegården 6a, Finnegården 6b, respectively) represent modern excavations, while sites 13–15 (B 6237, 6385, 7097) represent older watching briefs from several tenements in the Southern Bryggen area. The northern and southern parts of Bryggen are divided at Nikolaikirkeallmenningen, a wide common fare that was the main town square during the high and late medieval period. The medieval Town Hall and Wine Cellar were situated here, and were excavated as part of the largest site at this part of Bryggen (Site 10 – BRM 76) (Lind 1979; Ekroll 1981). Further south, the two sites 11 and 12 are situated in close proximity at Finnegården (BRM 104, 110) (Dunlop 1982b; Golembnik 1993). During the early twentieth century, the local historian Christian Koren-Wiberg collected four sheaths in the ground at this area, two in front of the old Town Hall (Site 13 – Kjøbmandstuen – B 7097) and two other specimens further south (Table 6.5).

6.3.1 Site 10: Rozenkrantzgaten 4

The 27 sheaths and scabbards from site 10 (BRM 76) constitute slightly more than eight per cent of the total amount of leather sheaths and scabbards from Bergen, making it the site with most finds, apart from the far larger Bryggen site. Site 10 covers the area of the Wine Cellar, built after 1248, and the Town Hall, mentioned in written sources from the first part of the fourteenth century (Helle 1982: 197), together with parts of the adjacent ordinary tenement area south of these buildings. It is in this southern part of the site that the sheaths and scabbards are found.

The representation here differs from the Bryggen site in some respects. More than half of the datable finds stem from period 4 (1198–1248), and with 13 finds that is almost as much as at the Bryggen site, with 15 finds from the same period. Periods 5 and 6 (1248–1413) on the other hand show a repeated doubling of finds at the Bryggen site, and only represent four and five finds, respectively at this site. The site also reveals earlier appearances of subtypes in several cases: sheaths of types A1.5, A1.6, B1.1, B2.x. and D1. The other types found at site 10, however, are documented at the same time or earlier at the Bryggen site: A1.1, A1.2, A1.3, A3, B2.1, C1, E, and F1. In addition, the Bryggen

Site 10: Rozenkrantzgaten 4 (BRM 76). Excavation, *c.* 400 square metres conducted in 1978–79 (Lind 1979), *c.* 55 square metres in 1981 (Ekroll 1981) (Correlation between phases and fire-layers: Hansen 1994: 51, 171–75; 2005: 94–95; undated).

Period / Date	A1.1	A1.2	A1.3	A1.4	A1.5	A1.6	A3	B1.1	B2.1	B2.3	B2.x	B3	C1	D1	E	F1	Σ
4 (1198–1248)	1			1	1	1	1	1	3		1		1		2		13
5 (1248–1332)							1			1				1		1	4
6 (1332–1413)		1					2				2						5
7 (+8) (1413–c.1600)							1										1
Undatable	1		1				1					1					4
Σ	13							9					1	1	2	1	27

Site 11: Finnegården 6a (BRM 104). Open area excavation, *c.* 40 square metres, conducted in 1981, (Dunlop1982b; 1992: 44, 47; Hansen 2005: 91).

Period / Date	B1.2	F2
6 (1332–1413)	1	1

Site 12: Finnegården 3b (BRM 110). Open area excavation, 87 square metres, conducted in 1982 (Golembnik 1993).

Finnegården Phase / Date	A1.1	A1.6	A1.7	A3	B2.x	B3	C1	D1	D.x	E	F1	Σ
III (1. quarter 12th C – 1248)			1		1							2
IV (1248– c1400)	2	1		1				1	2	1	1	9
V (c.1400–1476)	1											1
Undatable						1	1					2
Σ	6				2		1	3		1	1	14

Site 13: Kjøbmandstuen (B 7097). Investigation/observation during construction work, conducted early 20th century (Shetelig 1922: 61).

Period / Date	B1.1	B2.x
5–6 (1248–1413)	1	1

Site 14: Revelsgården, Solegården and Vinkjelleren (B 6385). Investigation/observation during construction work, conducted early 20th century (Koren-Wiberg 1908; Shetelig 1910: 44).

Date	B2.x
Undated	1

Site 15: Leppen (B 6237). Investigation/observation during construction work, conducted early 20th century (Koren-Wiberg 1908: 151; Shetelig 1910: 30).

Date	B2.x
Undated	1

Table 6.5 *Sites 10–15, sheaths and scabbards found in the southern Bryggen area.*

site has a far larger type spectre represented. Of type B2.1, however, only one specimen is found at the Bryggen site from period 4, and at site 10 the remaining three Bergen specimens of this type are documented from the same period.

Although only represented by small numbers, type B-sheaths are relatively more numerous compared with type B-finds at the Bryggen site, or they are perhaps more similar to the southern part than the northernmost part of the Bryggen site. The tendency is strengthened by the two B-sheaths from site 13 (cat. nos. 135, 176) nearby, which were collected during observations in the early twentieth century.[55] Type B also seems to have an slightly earlier representation at site 10, but it is hard to conclude as this site has an almost reversed deposition rate from period 4–6 (1198–1413) compared to the Bryggen site. However, the deposition of sheaths and scabbards at this site drops markedly with the establishment of the Wine Cellar and the Town Hall.

6.3.2 Sites 11 and 12: Finnegården

A sheath of type B1.2 and a scabbard of F2 are documented at site 11 (BRM 104 – Finnegården 6a), and were deposited during period 6 (1332–1413); the scabbard inside a house for dwelling and the sheath underneath it (Dunlop 1982b; 1992: 44, 47; Hansen 2005: 91).

The two artefacts from site 11 appear as typical in terms of chronology from the Bryggen site; the same applies for site 12 (BRM 110 – Finnegården 6b) nearby with 12 sheaths and 2 scabbards, mostly concentrated to periods 5 and 6 (1248–1413). However, the early appearance of subtypes A1.7 and B2.x from period 4 (1198–1248) can be noted for site 12. At this site, type D-sheaths are relatively well represented, although too few to make any conclusion. A remarkable aspect with site 12 is the relatively high number of finds, or 14 specimens. Sites of similar size, such as the slightly smaller sites 7 (BRM 90) and 9 (BRM 94), have documented only one sheath each.

To measure finds per square, not per cubic, is methodologically doubtful. But as the cubic metres excavated at each site is difficult to estimate with any accuracy, I will here compare the Bergen sites to sheaths per 100 square metres excavated, to consider possible differences without viewing this representation as directly reflecting the actual representation.

Site	Sheaths/scabbards	Square metres	Finds pr 100 sq. m.
1	245	5700	4,3
2	6	288	2,1
4	1	675	0,1
5	10	740	1.4
6	3	480	0.6
7	1	80	1.3
8	2	192	1.0
9	1	70	1.4
10	27	455	5.9
11	2	40	5.0
12	14	87	**16.1**
16	8	160	5.0
17	3	300	1.0
18	1	35	2.9
19	2	550	0.4

Table 6.6 *Numbers of sheaths and scabbards found per 100 square metres excavated at different sites in Bergen.*

Measured in square metres, site 12 represents a frequency more than three times higher than the other sites in the southern Bryggen area, far more than most other sites in Bergen. Most finds at site 12 stem from redeposited layers, and the number of finds may at least partly be explained by the find conditions in the humid and deep layers in waterlogged areas, resembling those at the deep harbour deposits at the Bryggen site. However, site 12 indicates that the deposition of sheaths and scabbards is considerable also in the southern part of Bryggen. That the number of finds is lower is most probably due to the differences in the scale of excavation activity in different areas of the town.

6.3.3 Preliminary evaluation of the southern Bryggen area

Although only three excavations are represented from the southern Bryggen area and were added by three digging observations from the early twentieth century, giving a total number of 47 finds against 270 from the northern Bryggen area (245 from the Bryggen site), some differences can be observed. Disregarding the Bryggen site, the southern Bryggen area is more var-

ied than the northern area, as sites 10 and 12 are the most varied in Bergen, with most types represented compared to numbers. Early appearances of types are noted both at sites 10 and 12, and include B-subtypes but also some A-subtypes. A slight bias towards B-sheaths can also be noted. The seventeen finds from the Bryggen site and the northern Bryggen area from period 4 (1198–1248) is a relatively low number. The southern Bryggen area provides a valuable representation here, with almost as many finds from this period, or 15 finds.

The few excavations that have been carried out in the southern Bryggen area yield a relative high frequency of finds, showing that the variety of finds of sheaths and scabbards in Bergen is not exclusive to the Bryggen site.

6.4 Vågsbunnen: sites 16–20

The area of Vågsbunnen is situated at the inner end of the bay, Vågen, making it the southern part of the medieval settlement and an expanding settlement area in the late medieval period. Only 13 sheaths and two scabbards are uncovered in this area, from five different sites (BRM 12, 20, 245, 462, 346 – Vågsalmenningen, Rådstuplass 2–3 (Vestlandsbanken), Domkirkegaten 6, Halfdan Kjerulfsgate, Bankgaten 4 / Skostredet 10 respectively). Site 19 (BRM 20) in the southern part and outskirts of the Vågsbunnen area is categorised with only two finds among these sites. Regarding excavations with finds of sheaths and scabbards, almost twice as large an area is uncovered compared to the southern Bryggen area. However, only a third as many sheaths and scabbards have been documented and will here be discussed as an entity, even though it comprises both older and newer excavations (Table 6.7).

Although few finds are recorded, and only 13 sheaths and two scabbards from the whole Vågsbunnen area, some tendencies appear. Type A is dominant, while only two sheaths are of other types (B3 and D.x). Eight sheaths are of

Site 16: Bankgaten 4 / Skostredet 10 (BRM 346). Excavation, 160 square metres, conducted in 1992 (Golembnik 1994b; Golembnik and Dunlop 1996).

Skostredet 10 phase (Date)	A1.1	A3	B3	D.x	Σ
VII: (13th century)		1		1	2
VI: (14th century)	2	2			4
V: (End of 14th century – 1. quarter of 15th century)		1	1		2
Σ	8				8

Site 17: Domkirkegaten 6 (BRM 245). Open area excavation, *c.* 300 square metres, conducted in 1987 (Komber et al.1994).

Domkirkegaten phase / Date	A1.1	A3	F1	Σ
7 (c.1280–c1350)	1			1
6 (c.1350–mid/late 15th century)		1	1	2
Σ	2		1	3

Site 18: Halfdan Kjerulfsgate (BRM 462). Open area excavation, 35 square metres, conducted in 1993 (Dunlop 1993).

Period / Date	A3
undated	1

Site 19: Rådstuplass 2–3, Vestlandsbanken (BRM 20). Open area excavation, *c.* 550 square metres, conducted in 1963 (Næss 1963).

Period / Date	A3	F2
Undated Late medieval	1	1

Site 20: (Vetrlidsalmenningen and) Vågsalmenningen (BRM 12). Trench survey, 1969 (Solberg 1970).

Period / Date	A3
After c. 1400	1

Table 6.7 *Sheaths and scabbards found in the Vågsbunnen area.*

type A3, but three A1.1-sheaths are also found. Furthermore, the B-sheath is of type B3, which is a rarer type in Bergen. The B1 and B2-sheaths frequently found at the southern Bryggen area and at the southern part of the Bryggen site are not found in Vågsbunnen. With regard to scabbards, only type F is documented. The finds are altogether few but suggest another type distribution than does the Bryggen area, as there are few sheaths other than type A, and A3 dominates, denoting undecorated sheaths and many rather plain ones.

6.5 The distribution of types in Bergen

In order to compare the Bergen corpus with other corpora, the corpus should also be assessed as an entity, typologically and chronologically.

6.5.1 Chronological distribution

The sheaths and scabbards from Bergen can in most cases be dated relatively accurately. Nearly three quarters, or 73 per cent of the material stems from the Bryggen excavation and of these, 95 per cent could be dated within the fire-layer chronology. From the other sites in Bergen, the remaining 27 per cent, or 75 sheaths and 12 scabbards, are excavated in a less uniform manner. Of these, 80 per cent can be dated, approximately half of them by means of the fire-layer chronology used at the Bryggen site or within directly compatible frames (Table 6.8).

The rest, however, could be dated only within wider frames, for instance *c.* 1200– *c.* 1400 or 1248–1413, both examples comprising several periods of the fire-layer chronology. This makes it difficult to work out an accurate find frequency table for the whole Bergen corpus. A reliable indication can be presented from the Bryggen site (Table 6.3). But as we have seen, the finds from the Bryggen site are not representative for the whole Bergen corpus in all respects. The other sites lack the numerical peak of finds in period 6 (1332–1413), and have a somewhat earlier documentation of several types. The distribution of types and subtypes according to periods (Diagram 6.3) illustrates how the types are recorded chronologically, with increasingly darker colour indicating higher find frequency.

The diagram shows that all main types are documented from period 3 to 7, except type C which is only recorded in periods 4–6. Type B is only represented by a single B1.2-sheath from period 3 (1170/71–1198). Although the context of this sheath seems clear enough, the remaining sheaths of the subtype do not appear until after 1332, and the presence of type B in period 3 should therefore be accepted only with reservations. Chronological changes are best observed on subtype level, and some subtypes only occur within one or two periods. A typological development can perhaps be observed for type C, starting with type C1 in periods 4 and 5 (1198–1332), while the more extravagant type C2, similar but with decorations along the seams, appears in period 6 (1332–1413). Disregarding the single B1.2-sheath from period 3 (1170/71–1198), a similar development is indicated within B1-sheaths. Sheaths with stamps as motifs, B1.1, are documented from periods 4–6 (1198–1413), and gradually replaced by sheaths with stamps as repetitive patterns, B1.2, in periods 6–7 (1332–1476) with an overlapping in period 6 (1332–1413).

Regarding scabbards, the undecorated type E is recorded from periods 3 to 6, i.e. 1170/71–1413. In addition, a single fragment of type F2 is related to period 3 (1198–1248). Otherwise, decorated scabbards are not documented until period 5 (1248–1332), and then in low numbers. Period 6 (1332–1413) is the period when the scabbards stand out, both in type and vari-

Period	**2** 1120s–1170/71	**3** 1170/71–1198	**4** 1198–1248	**5** 1248–1332	**6** 1332–1413	**7** 1413–1478	**8** 1476–1702	**Dated within other chronological frames**	**Not dated**
Bryggen (BRM 0)	4	15	15	63	125	8	3		12
Other sites			17	7	7	2	1	38	15
Σ	4	15	32	70	132	10	4	38	27

Table 6.8 Number of finds in Bergen that were datable and could be placed within the fire-layer chronology.

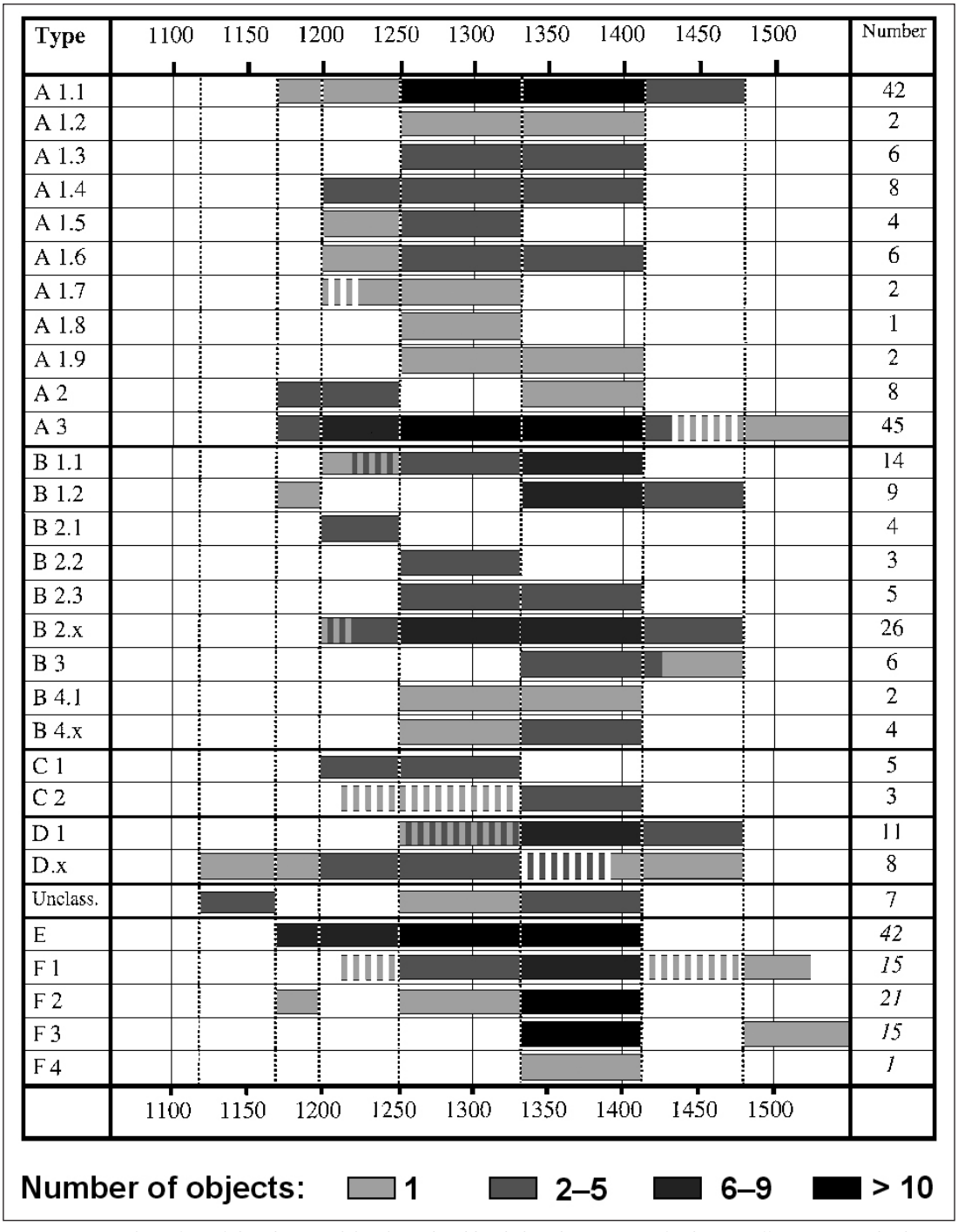


Diagram 6.3 *Chronological distribution of sheaths and scabbards found in Bergen. The diagram illustrates periods of time the various types and subtypes are documented, in most cases coinciding with the fire interval periods of the Bryggen chronology (indicated with dotted vertical lines). Thick horizontal lines indicate finds within a date frame of a fire interval or period of similar length. Dotted horizontal lines are within a wider date frame of an object, but not supported by finds that can be dated within the same fire interval or similar short period.*

ety. No scabbards are represented in the following period 7 (1413–1476), although a single F1 scabbard has this period within a wider date-frame.

The diagram illustrates that the broadest range of types occurs in period 6 (1332–1413), with all types and most subtypes of both sheaths and scabbards represented. Disregarding scabbards, the variety is as strong in the previous period 5 (1248–1332), with slightly more than half as many artefacts. This is largely due to type A showing largest variety in this period. As for sheaths, period 4 (1198–1248) also has a broad type variety, even though far less specimens are documented from this period. The broader range of types in period 4 is apparent at the Bryggen site (chapter 6.1.3), and even stronger at site 10 (BRM 76) (Table 6.8).

Summing up then, only type D is documented in period 2 (c. 1120–1170/71). In the following period 3 (1170/71–1198), type A is also represented by several subtypes. A single find of type B1.2 has a doubtful date. From periods 4–7 (1198–1413), all main types are recorded. The chronological changes are thus observed on both type and subtype level. Even though period 6 (1332–1413) contains most finds by far, a similar broad range of types is documented in the preceding period 5 (1248–1332) with regard to sheaths. The decrease in range in period 7 (1413–1473) coincides with a marked drop of finds.

6.5.2 Development of decoration

The decorative development is not immediately lucid, as the main types can barely be compared in this regard and the subtypes tend to cluster around a few periods. Chronological differences in decoration may thus relate to types and subtypes rather than motifs within type B, for instance. Still, broad tendencies can be observed.

Type A has plain surfaces, and types A2 and A3 are best described as undecorated. Type A1, on the other hand, has a decorative focus towards the tails, or extended tips, that characterise subtypes A1.2 to A1.9. While four of these subtypes are documented in period 4 (1198–1248), all eight are documented in period 5 (1248–1332) and mark a peak in decorative variety for this type.

With their tooled surfaces, the B-types are also rather homogenous in period 4. The decoration is mainly geometric (types A2.1 and A2.x), with one stamp-decorated sheath being decorated by fleur-de-lis. Another stamp-decorated sheath is decorated with animals, but this sheath may be younger, dated after 1215/25. With period 5 (1248–1332), the decoration is clearly more diverse. The B2-types display zoomorphs, foliates and letters together with heraldic shields and designs in addition to the geometric patterns. The tendency is strengthened by types B1.1 and B4, but these are found only in small numbers. The same motifs are found in the following period 6 (1332–1413), but the variety is further strengthened by larger numbers of types B1 and B4. Type B1-sheaths, with stamped motifs at its most varied in this period, also coincide with the highest number of stamped scabbards. Disregarding the single B1.1-sheath found in layers from period 3 (1170/71–1198), this type is first introduced in this period with its miniature foils and fleur-de-lis. Broadly summing up the tooled surface-decoration for sheaths and scabbards, it is mainly geometric in period 4 but more varied in the following two periods. From period 5 (1248–1332) to period 6 (1332–1413) there is a tendency towards more heraldic designs in the latter. This may perhaps be due to increased numbers and many stamp-decorated artefacts, where this type of decoration is generally favoured.

Most type C-sheaths have cut-through decoration and embroidery. Although they are found in relatively low numbers, I would like to see the replacment of type C1 by type C2 between period 5 (1248–1332) and period 6 (1332–1413) as a decorative development, as the latter is characterised by decorative rims.

Among the D1-sheaths there are also certain decorative elements such as slits on the handle part, decorative fringes, etc, probably a result of decorative development. However, the type is too varied related to numbers for clear tendencies to be discerned among the Bergen corpus.

6.5.3 The spatial distribution

As mentioned earlier in this chapter, the medieval town of Bergen can be divided into five different areas, each characterised by their main socio-economic functions. Unfortunately, the archaeological activity in Bergen has not been evenly spread over these five zones. As shown, sheaths and scabbards are documented only in the Bryggen and Vågsbunnen areas, where the latter represents only 4.5 per cent of these finds. A single A3-sheath has been found at Øvrestretet (site 9 – BRM 94), but as this rather common type of sheath does not stem from a workshop, it has been assessed together with the finds from the northern Bryggen area. No leather finds are recorded from Strandsiden, although site 19 (BRM 20) borders close to this area. However, remains of a single wooden sheath have been found and delivered to the museum (cat. no. 335). No finds have been documented at Holmen, but a wooden piece, now lost, is reported as being a possible part of a scabbard (Fett 1952: 45). Based on the description, however, I find it unlikely.[56] However, a scabbard chape has been found, but may well be of post-medieval date (cat. no. 337).

A number of methodological precautions regarding representativity have already been considered for the Bergen corpus (Chapters 4.5 and 5.11.1). Another must be added here, with regard to which parts of the medieval town that are represented e archaeological material. Regarding sheaths and scabbards from for instance a perspective of military and professional armament, such artefacts from the Holmen area would have been of interest. Largely due to a bias towards excavated sites, the Bryggen area contains the most finds. When the Bryggen area is seen as a whole, to include both the northern and southern part, some differences emerge. Yet a number of sheaths have probably originally been lost, since they appear in the archaeological record as well-preserved objects sometimes found under the floor of a specific building, pavement or in a well. Concentrations of artefacts that are usually worn and torn are found in redeposited layers. Several such specimens are documented at the Bryggen site among the caissons and bulwarks in the quay-constructions, but also a specific concentration containing mostly F2 and F3-scabbards under a building from period 6 (1332–1413) farther away from the bay. Site 12 (BRM 110) probably reflects a similar situation. Although the contexts do not support the existence of any workshop in close vicinity to these concentrations, it is not unlikely that some of them represent waste from such an enterprise. The meaning and implications of the spatial distribution will be further discussed in chapter 7.1.

6.6 Comparative chronologies

How does this chronological pattern coincide or diverge with the comparative material?

6.6.1 Oslo

The Oslo corpus consists of two main parts with regard to chronology and context: the relatively few finds from excavations in Gamlebyen, and the marine deposited material at Sørenga. The first group contains material deposited at different times during the Middle Ages, and their chronology is partly based on fire chronology and datable artefact groups presented in publications (Lidén 1977; Schia 1979; Bolstad 1991). The material from Sørenga was probably deposited as part of a deltalobe in the estuary of the Alna River, indicating that it originally was thrown into the Alna River and carried downstream before deposition. Such lobes grow relatively quickly in a meandering river, indicating a deposition over a relatively short time-span. As to the question pertaining to when the material was deposited, however, the stratigraphy of the marine layers gives little chronological information in itself. The preliminary hypothesis is that the material was deposited during the fourteenth century (Johansen in prep.). The dates given by Bolstad and Johansen will serve as a basis for this material and are presented in Table 6.9.

The dates of the material from Gamlebyen overlap, but show two clusters within the periods *c.* 1100–1175 and *c.* 1225–1325. The former cluster from the twelfth century contains types A2, A3 (N=3), D.x and two undefined sheaths. This pattern thus coincides with the Bergen material. The A3-sheaths show an earlier repre-

	A1.1	A1.4	A2	A3	A.x	B2.3	B2.x	B3	D.x	E	F1	F2	Undef.	Σ
c. 1100				1										1
c. 1100–1150				1					1					2
c. 1125–1175			1	1									2	4
c. 1225–1300	1													1
c. 1250–1300	1													1
c. 1250–1325	1			1		1								3
c. 1275–1325	2													2
Probably 14th C	1	1	3	22	20		8	6		2	19	13	6	101
c. 1600			1											1
undated	2													2
Σ	8	1	5	26	20	1	8	6	1	2	19	13	8	118

Table 6.9 *Dates of the sheaths and scabbards from Oslo.*

sentation in Oslo. But as mentioned, this type is rather encompassing. Similarly, the material from the thirteenth century shows likeness to Bergen with the A1-sheaths and the single B2.3-sheath.

However, constituting most of the Oslo finds, the Sørenga material is preliminarily dated to the fourteenth century, corresponding to the latter part of period 5 (1248–1332) and the major part of period 6 (1332–1413) in terms of the Bergen chronology, or the periods with most finds in Bergen. Disregarding the few Oslo specimens that lack parallels in Bergen (cf. chapter 5.13), the Sørenga finds are all represented within periods 5–6 (1248–1413) in Bergen. The scabbards of types F1 and F2 are barely found outside this time-span in Bergen and are heavily concentrated to period 6 (1332–1413). The incised B3-sheaths, of which 6 are documented at Sørenga, do not appear in Bergen until period 6 (1332–1413). The remaining Sørenga finds are found within wider date-frames than in Bergen.

Although the finds from Gamlebyen are few, their dates are coherent with the dates of the Bergen material. If we accept the proposed date of the fourteenth century for the Sørenga material, this is also coherent with the Bergen corpus as the Sørenga material shows most similarity to the Bergen material of period 6 (1332–1413). As the Oslo-material shows strong similarities to the Bergen material in types, if not with the same wide type-spectre, it seems that the Bergen material confirms the date of the Sørenga material to the fourteenth century, perhaps more likely towards the latter part of the century.

6.6.2 London

The chronological situation is more complex with regard to the London corpus. As mentioned earlier, the London material has been compiled under several archaeological traditions, where mainly the latest finds are archaeologically dated by stratigraphy, dendrochronology and datable finds. A scrutinizing survey of all London sheaths and scabbards in order to correlate the archaeological dates with older dates based on comparison of style goes beyond the scope and aim of this study.

In processes similar to those in medieval Bergen, the riverside encroachment of the City of London was made up of successive timber or masonry waterfronts, and the area behind the new revetments was filled with dumps of refuse, often of organic materials. Many of the excavated sequences have provided datable finds such as coins, tokens and jetties. Supplemented by dendrochronology, the evidence would date the mass of pottery at the sites, laying the foundation for a chronology or series of successive periods or phases when certain types of pottery were in general use in London (Vince 1985; 1987;

Milne 2003: 18–20). Thus, many of the reclamation sequences can be dated rather accurately, which is also the case for many of the contemporary dumps of refuse behind the revetments.

Many of the sheaths from London have been published with dates in *Knives and Scabbards* (Cowgill et al. 1987), while others are published in reports. I have dated the other sheaths and scabbards from excavations after 1972 that are included here by several means. In different ways, the excavations are conducted after a principle of single context recording (Carver 2005: 107–8). Excavated objects are usually identified with a combination of the initials of the excavation, a context number and an individual number. The context number is usually a layer, sometimes constructions or other features. If a context number from an excavation is published, e.g. in the series of *Medieval Finds from Excavations in London*, I have applied the same date to sheaths and scabbards from the same context. Other context-numbers have not been published, but archive-reports may provide dates based on e.g. coins and dendrochronology of structures, but mostly on ceramic comparison to the pottery chronology by Alan Vince (1985). The reliability of these comparisons depends largely on the number of shards from the context, and few shards provide only an uncertain date. Some of the reports are so far preliminary, with reservations that new data can alter the interpretations.

The dates are presented as 'early to mid' or 'late' for each century in *Knives and Scabbards*. With overlapping dates, the artefacts are assigned to the later of the two (Cowgill et al. 1987: 78). Here, I follow this practice when presenting the London finds excavated after 1972 (Table 6.10).

The sudden decline of sheaths from stratigraphical contexts from the fifteenth century onwards is commented upon in *Knives and Scabbards*. While knives and other leather material are still found in large numbers after *c.* 1350, there is a marked decline in sheaths. An explanation could be new ways of storing knives, especially knives for eating, in the late Middle Ages. A major source of the datable material in the LAARC collection is the rubbish-laden deposits from the steady reclamation of land along the Thames. This practice declined after mid-fifteenth century, when a stone wall was constructed along parts of the riverbank (Grew 1987: x). However, the peak of sheaths and scabbards in Bergen is in period 6 (1332–1413), thus coinciding with a tendency of decline in London where the peak is in the first half of the fourteenth century.

The part of the London corpus kept at the Museum of London (MoL) is largely dated by other sources such as contemporary medieval illustration and ornamentation. For this material, the same warning should be heeded as for the material published in *Medieval Catalogue*;

	B1.1	B1.2	B2.1	B2.3	B2.x	B3	B4.x	E	F2	Rondel	Σ
Late 12th C			1								1
Early to mid 13th C			3		6		5				14
Late 13th C	2	9	3		1						15
Early to mid 14th C	7	4	10	9	19	1	1	4	2	1	58
Late 14th C	5	3	4	4	17	1	2		2	1	40
Early to mid 15th C							1				1
Late 15th C									3		3
Early to mid 16th C								4	7		11
undated		5	11		18	6	2	3	2		51
Σ	14	21	32	17	61	8	11	11	16	2	194

Table 6.10 *The sheaths and scabbards from the LAARC collection, excavated after 1972. Seven plain sheaths are not included, as these have been linings of decorated sheaths.*

not to be trusted without reference to more recent results (Clark 1993: vi). Some of the artefacts, however, are dated, though crudely, by archaeological contexts such as the sheaths and scabbards found at the Moorfields. This marshy area north of the medieval town wall was used for waste deposits in the late medieval period or early sixteenth century, and thus artefacts found here are usually assumed to be of late medieval or Tudor date. The same applies for the finds from Finsbury, Tabernacle and Worship street (John Clark: personal communication 2006)

When comparing the MoL material (Table 6.11) to that at LAARC (Table 6.10), there seem to be generally later dates for the former, by a century or so. The chronological pattern is, however, not unambiguous. While the LAARC-finds of sheaths and scabbards are relatively concentrated chronologically, the respective MoL-finds are more spread over time. Several types seem to have one single specimen dated a century earlier than the remaining specimens of the type (e.g. B1, B2, B4.x, glued type). The glued sheaths are not represented in the LAARC-collection, i.e. in deposits older than the fifteenth century. Their manufacture with a glued seam, a distinct style with combination of detailed stamped ornaments and moulded ridges, also set them apart from the finds from medieval deposits. One of the MoL-sheaths was found at Moorfields, another at Tabernacle Street, suggesting relatively younger dates for these sheaths. The collection at the British Museum encompasses 30 sheaths of this type, but these are not dated.

Of the more than 450 artefacts from London, only a third are dated from archaeological contexts. These dates, however, are confined to relatively few types, and will be included in the following comparison of Bergen types to other corpora.

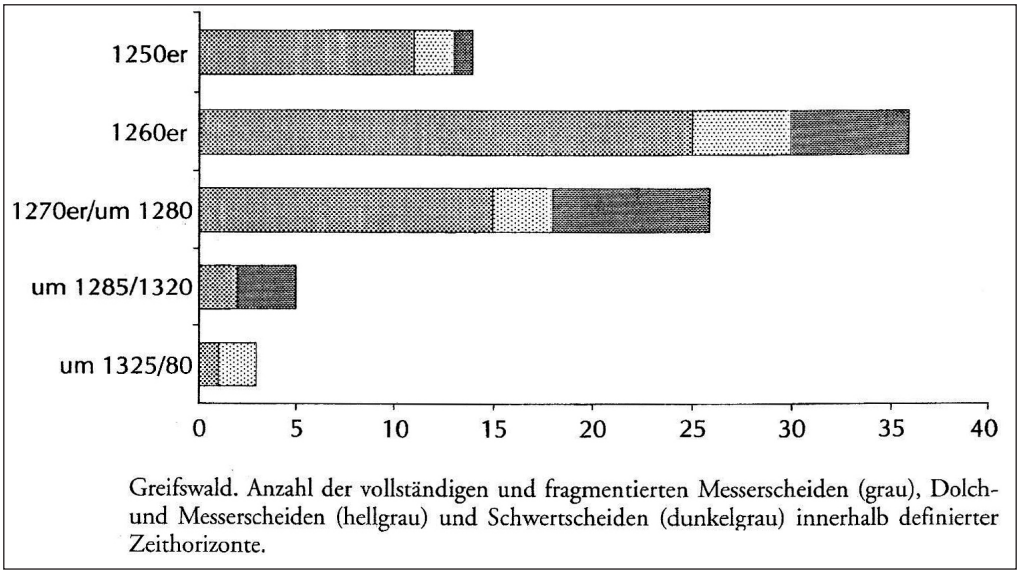
6.6.3 Greifswald

As mentioned, the Greifswald corpus is accurately dated by dendrochronological samples, supplemented with coin finds and ceramics. While the Greifswald corpus stretches from *c.* 1250 to *c.* 1380, the majority of the material was actually deposited during the 30 years from *c.* 1250 onwards, giving some of the most precise dates available for medieval sheaths and scabbards. They can be separated into five phases of which the three first, the 1250s, 1260s and 1270s, are short and rich of finds, while the two latter are longer and contain few finds (Diagram 6.4). By the end of the thirteenth century, regulations of the town seem to have taken effect, and waste material was generally dumped outside the settlement, with the exception of such structures as latrines, where sheaths occasionally ended up (Schäfer and Schäfer 1996: 261–262).

The chronology of the Greifswald corpus is presented according to my classification in Table 6.12.

	B1.1	B1.2	B2.1	B2.3	B2.x	B3	B4.x	Glued	rondel	Unident.	E	F1	F2	M
12th C				1										1
12th –13th C					3			1						4
13th C	1	1			4		1							7
13th –14th C			1		6	2								9
14th C			4	1	4							1		11
14th –15th C	2	2	3		6	2	2					1		18
15th C	5		1		4	2	2	2	3	1			2	22
15th –16th C	3	1			1		1						1	7
16th C						1		5			2	5	3	16
Undated			1		3	2	1	2			1	1	3	14
Σ	11	4	10	2	31	9	7	10	3	1	3	8	9	117

Table 6.11 *The sheaths and scabbards at the Museum of London collection. Eight plain sheaths are not included, as these were linings or worn sheaths of other types. Several of the sheaths are dated as probable.*



Greifswald. Anzahl der vollständigen und fragmentierten Messerscheiden (grau), Dolch- und Messerscheiden (hellgrau) und Schwertscheiden (dunkelgrau) innerhalb definierter Zeithorizonte.

Diagram 6.4 *Chronological distribution of sheaths and scabbards from Greifswald (After Schäfer and Schäfer 1997: fig. 21).*

	A3	B1.1	B1.2	B2.x	C1	C2	D1	E	F1	F2	F3	M
1250s		2			1	1	9			1		14
1260s	2	2	1	2			23	1		3	2	36
1270s–E1280s	4	4		1		1	8	4	1	2	1	26
c.1285–1320	1						1	2		1		5
c.1325–1380			1	1			1					3
Σ	7	8	2	4	1	2	42	7	1	7	3	84

Table 6.12 *Dates of the sheaths and scabbards from Greifswald according to type.*

The dominance of type D1-sheaths in Greifswald is already noted, but as other types appear in low numbers, it is difficult to discern clear tendencies. One trend is perhaps indicated though. While type D1 outnumbers other sheaths in the 1250s and 1260s, this is not the case in the 1270s, when types A, B and C together outnumber type D1.

Granted the 'Lübeck Law' in 1250, it is reasonable to assume that the town experienced an increase in trading activity. From such a perspective, the change in type frequency is relevant to Bergen. The Greifswald types are documented in Bergen, generally at the same time, although Greifswald seems to have somewhat earlier representations in some cases. Only one, possible two, sheaths of type D1 are dated to period 5 (1248–1332) in Bergen, while the type is more common in the following period 6 (1332–1413). Scabbards of type F3 are not documented in Bergen before period 6.

6.6.4 Dates from other corpora and sites in northern Europe

The four corpora presented have different chronological concentrations, e.g. most finds from Greifswald are earlier than the majority of finds from Oslo. An overview of the different chronological time-spans from some main North-European corpora is presented in Diagram 6.5 to further illustrate the problem when comparing different corpora, as they reflect different chronological deposits.

Thus, an important supplement will be to include the material from other sites, although these are often presented in a manner less com-

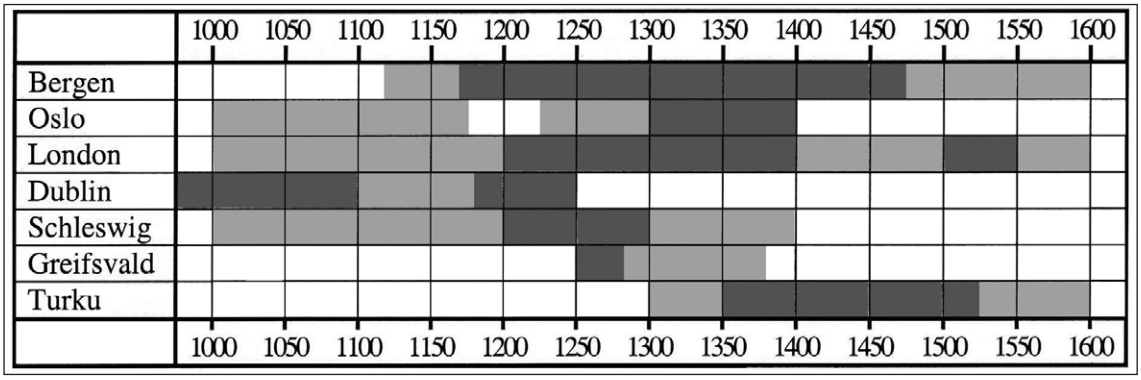


Diagram 6.5 *The time-spans covered by some of the largest corpora of medieval sheaths and scabbards in northern Europe. Darker colouring indicates concentration of finds. The different corpora are not directly comparable in terms of numbers, but the tendencies are illustrated. These may largely reflect biases of excavation. The fourteenth century concentration of the Oslo corpus is based on the premise that the Sørenga material has this date. The 1250–1400 concentration of London reflects the dates of the LAARC collection, the early sixteenth century concentration reflects a suggested concentration of glued sheaths and F2-scabbards with similar stamps (Schäfer and Schäfer 1997; Schnack 1998; Harjula 2005; Cameron 2007).*

parable to the Bergen corpus. The London material is therefore supplemented by reports from several other English towns, but this information is even more insufficient in terms of chronology, and sometimes no more can be said than that a type is documented. A similar situation applies for several areas in Sweden, Poland and also partly in the Netherlands. The presentation of the Turku and Dublin corpora are, however, well suited for comparable studies (Harjula 2005; Cameron 2007).

Most corpora such as Oslo, London, Dublin and Schleswig date further back in time than the Bergen corpus. However, these are fairly comparable to the Bergen material in terms of chronology, with concentrations of dated finds to the periods with most finds from Bergen. Different chronological representation has geographical biases. This probably owes to excavation activity and depositional conditions more than actually reflects the use of sheaths and scabbards at different times, although this factor cannot be dismissed. Although assessed within a number of source-critical factors, the Bergen corpus does show a high find frequency in period 6 (1332–1413). Similarly, researches in London have pointed to a decline of sheaths after the mid-fourteenth century, one century earlier than a general marked decline of finds due to depositional conditions, i.e. the construction of a stonewall along parts of the Thames (Grew 1987: x).

When presenting a survey of the geographical and chronological distribution of types represented in Bergen, I will thus include finds from other sites and attempt to fill the gaps in representation. As already demonstrated, the published material of medieval sheaths is patchy (Chapter 2.2; Cameron 2007: 6). The limited evidence from sparsely published material also holds a number of sources for erroneous inference, based on lack of representativeness, lack of dates, random selection, etc.

6.7 Comparable finds to the Bergen types

In the following, the regional and chronological distribution of types known from Bergen will be presented according to types. Both the three corpora drawn on for comparison, and the corpora and finds from other sites are referred to by their respective towns. Only in few cases are the numbers high enough and described in sufficient detail to calculate percentages for comparing the frequency of types at different sites and within specific periods. As these periods vary between the different sites and corpora, they are not directly comparable. But the percentage within a period can indicate popularity at a given time within a town. The table starts

with Bergen, Oslo and other Norwegian urban centres before including finds from other North-European towns, presented from west to east. The objective here is to trace possible trends and chronological and spatial patterns concerning the different types over larger areas. Types that are not found in Bergen will only be given little attention, if any.

6.7.1 Type A

Type A-sheaths form a major part of the Bergen corpus and are divided into three subtypes. Although documented and numerous from periods 3 (1170/71–1198) through 7 (1413–1476), the type seems to have a relatively less dominating position from period 6 (1332–1413) onwards (Diagram 6.6).

All type A-sheaths have undecorated surfaces and undecorated rims (although types A1.3–A1.9 have decorative prolongings of the tip). Several A1-sheaths have had decorative seams along the mouth or tip, though almost untraceable today, so that the sheaths appear as undecorated. Undecorated sheaths are generally given far less attention in publications than the decorated sheaths, and they are often only mentioned or described in a cursory manner that defies identification according to Bergen types. Table 6.13 presents a list of undecorated sheaths from different urban sites that shed information about chronological representation from a wider area of northern Europe, in order to assess the Bergen material in a wider geographical context. Most of these would probably fit within the wide criteria of type A3. Sheaths that can be identified to other A-types will be described individually.

Undecorated sheaths are common but sparsely described, making a comparison difficult. Notable, however, is the low frequency of undecorated sheaths in the British Isles. The London corpus is not included in Table 6.13, as undecorated sheaths here are identified as linings, i.e. inner parts of sheaths. Some undecorated artefacts from Leiden are interpreted likewise (van Driel-Murray 1990: 201). Undecorated sheaths are documented, however, at other English and Dutch sites. Although the relative representation is high in Bergen, it is somewhat misguiding. Several A-sheaths have had deco-

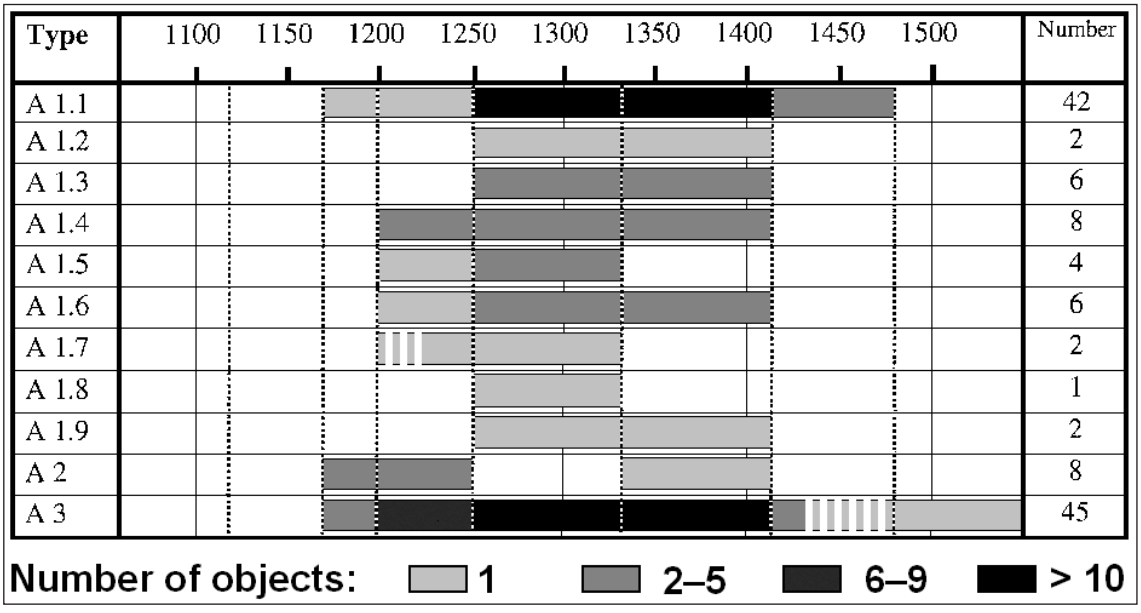


Diagram 6.6 *Chronological distribution of type A-sheaths in Bergen. A1-sheaths are documented from periods 3 through 7, but only the subtype A1.1. The other A1-subtypes have a more limited chronological distribution. A2-sheaths are early, from periods 3 and 4, with a single specimen in period 6. Type A3 is documented from period 3 onwards, but with few specimens from c. 1425 onwards.*

	Number	Datable	Date	% of sheaths in total
Bergen	132	121	1170/71 onwards	57.1
Oslo	60	57	1100–1400, *c.* 1600	78.9
Tønsberg	several			
Trondheim	9	9	12th–15th C	Probably 100
Cork	1			
Waterford	11			
Perth	5	3	L12th–M13th, E14th C	31
York	3	2	12th–13th C	
King's Lynn	3			
Dordrecht	42			15.4
Hamburg	1			
Schleswig	several			
Lübeck	several			
Greifswald	7	7	*c.*1260–1320	10.6
Konstanz	2			
Svendborg	4	4	1150–1190, 1270–1300, E16th C	
Lund	'predominant'			'predominant'
Stockholm	*c.*25		Mainly 14th C	*c.* 50
Uppsala	'predominant'		Mainly 14th–15th C	'predominant'
Gniew	>10		12th–14th C	>67
Kołobrzeg	Identified			
Åland	8	8	L14th–E15th C	67
Turku	80		14th–E16th C	48

Table 6.13 *Geographical and chronological distribution of undecorated sheaths. Percentage is of documented sheaths at the site, not including scabbards (Blomqvist 1938: 158, 160; Clarke and Carter 1977: 366, fig. 95, 97, 98; Dahlbäck 1982: 232; Von-Comis 1982: 244, fig. 86: 155d; Ehn and Gustafsson 1984: 79; Groenman-van Waateringe 1988: 86, 90, 92, fig. 7.2.1:4, 7.2.3: 2, 7.2.4: 8, 11; Marstein 1989: 96–97; van den Berg and Groenman-van Waateringe 1992: 350–351, fig. 8: 6, 13; Ulriksen 1992: 124; Wiklak 1993; Schnack 1994: 40, fig. 41: 1045, 1962; Wywrot 1996; 1997; Hurley 1997a: 736; Hurley 1997b: 151; fig.44:2; Kykyri 1997: 19; Schäfer and Schäfer 1997; Schnack 1998; Wywrot-Wyszkowska 1998; 1999; Goubitz 2002: 149; Kablitz 2002: 179; Mould et al. 2003: 3387; Harjula 2005: 39; Bogdan et al. in prep.117–119).*

ration in the form of a decorative seam that is now mostly missing. The same could easily be the case for sheaths from other sites. The overall impression is that undecorated sheaths are common and often a dominating type in Scandinavia, but rarer in the western part of northern Europe (the British Isles, the Netherlands). The three sheaths found in York are referred to as "…an amorphous group of sheaths of crude design and construction sometimes found in urban deposits" (Cameron 2003: 3387).

In acknowledging the difficulties for comparison of this particular type on a subtype level, a closer search for parallel finds is presented.

Type A1

Most sheaths of type A1 belong to the subtype A1.1 documented from period 3 onwards to period 7 (1170/71–1476) in Bergen. The other subtypes A1.2–A1.9 are fewer in number, but seem to have a more limited chronological scope. Nine A1-sheaths are documented from Oslo. Two sheaths of type A1.1 and A1.4 found at Sørenga probably date to the fourteenth century, while the remaining seven from Gamlebyen are all of subtype A1.1. Five of these are dated within the period 1225–1325 (Bolstad 1991). The chronological range thus seems narrower for this type in Oslo than in Bergen. I know

of only two other parallels to this type, from Lund, Sweden and Kastelholm, Åland (Bolstad undated; Kykyri 1996: 12, 14, no. 556: 4719). The sheath from Lund is of type A1.1 and contains a wooden blade protection, also known from Bergen and Oslo.[57] The Kastelholm sheath seems to be of type A1. It has two protruding flaps, each with two holes for suspension. The tip is damaged, and whether this sheath should be assigned to one of the subtypes of A1 remains uncertain. Besides the Kastelholm sheath, type A1-sheaths seem to have been left out in the available literature, or are not represented. The possibility that such sheaths exist among the many undecorated specimens in e.g. Stockholm and Lund cannot be dismissed.

As the parallel finds are few, it is tempting to assume that type A1-sheaths, especially some of the subtypes only documented in Bergen, have in fact had a limited geographical distribution.

Type A2

Although similar to A1-sheaths, type A2 has a different chronological distribution in Bergen. Most sheaths are found in periods 3 and 4 (1170/71–1248), while only a single specimen is recorded in period 6 (1332–1413). The type has a provisory character, and the definition of a plain surfaced sheath with the mouth ending in suspension thongs opens for many parallels that may not be of distinctive similarity to the Bergen specimens. Parallels are found, however, in Turku (Harjula 2005: 35, cat. nos. 81 and 117) and Schleswig (Schnack 1998: 34, ill. 16.7).

Type A3

Most of the sheaths presented in Table 6.13 could probably best be categorised as type A3. But since this type is not as specified as type A1, the finds have less comparable value.

Summing up type A in broad terms, sheaths lacking decoration seem to be common in the Nordic countries but rare on the British Isles. Many such sheaths (of type A3) probably reflect unprofessional or provisory manufacture, and are expected to be found at most places. Other sheaths such as A1-sheaths can be of high quality, but have a limited geographical distribution. While the probability exists that these sheaths are found but not sufficiently documented and published, the preliminary hypothesis is that type A1 reflects a Nordic or Scandinavian tradition, best documented in Bergen. In Bergen type A1 is recorded from periods 3 to 7 (1170/71–1476), but the distribution of the material suggests a decline in extent from period 6 (1332–1413) at the same time as other types appear in larger numbers.

6.7.2 Type B1

Type B1-sheaths are most common in period 6 (1332–1413) in Bergen. While B1.1-sheaths also appear earlier (from between 1198–1248 onwards), the B1.2-sheaths also appear later (period 7, 1413–1476). A single B1.2-sheath disrupts this pattern, with an early appearance in period 3 (1170/71–1198) (Diagram 6.7). The comparative material may substantiate whether this single specimen indicates that the subtype was in use for a longer time, or the date is wrong.

While type B1-sheaths are not recorded in Oslo or Trondheim, they have a widespread distribution abroad and seem to have been common during the thirteenth and fourteenth centuries (Table 6.14). The Bergen material has, however, a wider date frame. In London, type B1.2-sheaths dominate in the beginning of the period of use, or the late thirteenth century, being almost replaced by B1.1-sheaths towards the end, or the late fourteenth century. This representation diverges from the chronological pattern from Bergen. Whereas the B1.2-sheaths in Bergen and London are very much alike, the English B1.1-sheaths tend to have much more impressed decoration surrounding the stamp motifs than the Bergen specimens. A tendency among the other published finds is that B1.2-sheaths dominate on the continent, while B1.1-sheaths dominate in England.

The possibly oldest B1.1-find I have been able to trace is a B1.1-sheath from Dublin, dated 1180–1250. Of similar date is a B1.1-sheath from Bergen, dated 1198–1248. Two B1.2 sheaths are remarkably early: A sheath from Lund is dated to the first half of the eleventh

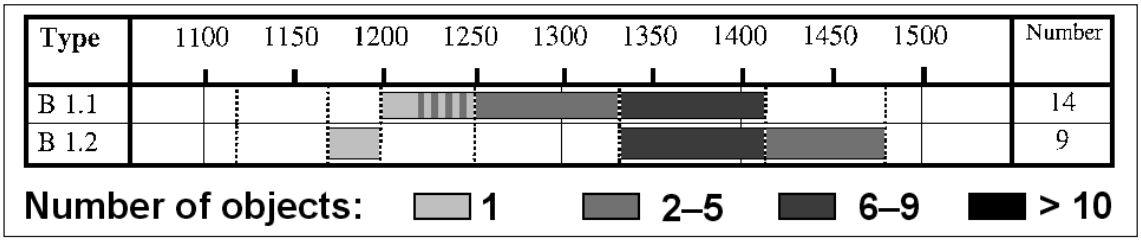


Diagram 6.7 *Chronological distribution of B1-sheaths in Bergen.*

		number	datable	date	% of sheaths in total	% of sheaths dated within period
Bergen	B1.1	14	13	1198–1413	10	
	B1.2	9	8	1170/71–1198, 1332–1476		
Dublin	B1.1	1	1	*c.*1180–1250		
Cork	B1.1	1				
	B1.2	1				
Perth	B1.2	2	1	E–M 14th C	13	
London	B1.1	27	14	L 13th – L 14th C	16	28
	B1.2	29	16	L 13th – L 14th C		
York	B1.1	2				
Hull	B1.1	4	2	L13th – E14th, E–M16th C		
King's Lynn	B1.1	1				
Southampton	B1.2	1	1	L 13th C		
Leiden	B1	10		14th C	28	28
Dordrecht	B1.1	several				
	B1.2	several				
Amsterdam	B1.2	1	1	L 14th–E 15th C		
Schleswig	B1	10	10	13th C		
Greifswald	B1.1	8	8	*c.*1253–1274	15	
	B1.2	2	2	*c.*1265, *c.* 1325/1380		
Konstanz	B1	10		13th–14th C	40	40
Svendborg	B1.1	1	1	14th C		
	B1.2	3	3	*c.*1270–1350		
Lund	B1.1	several		13th–14th C		
	B1.2	several		E–M11th, 13th–14th C		
Stockholm	B1.1	1	1	14th C	2	
Uppsala	B1.2	identified		14th–15th C		
Kołobrzeg	B1	several				
Riga	B1	several				

Table 6.14 *Spatial and chronological distribution of type B1 (Blomqvist 1938: 160; Richardson 1961: 103, fig. 29. 4; Bergman and Billberg 1976: fig. 348; Armstrong 1977: 56, fig. 24: 32; Clarke and Carter 1977: 365–366, fig.169. 89; Dahlbäck et al. 1982: 233; Ehn and Gustafsson 1984: 79, fig. 91; Jackson 1985: 14; Armstrong and Ayers 1987: fig. 131: 432; Groenman-van Waateringe 1988: 86, 92, 94, fig. 7. 2. 1: 1, 7. 2. 5: 13, 7. 2. 4: 6, 10; Van Driel-Murray 1990: 183, 196 –201; Schnack 1994: 39–40, fig.42: 14, 172, 592, 942, 1419, 1420, 2522; Hurley 1997b: 151-152; Schäfer and Schäfer 1997; Wywrot 1997: fig. 11: 1; Bebre 1998: fig. 3: 6; Schnack 1998; Wywrot 1999: fig. 42: 5; Goubitz 2002: 157, fig. 5: b, f, 7; Mould et al. 2003: 3385–3388, fig. 1710. 15655; Cameron 2007: cat. no 255; Bogdan et al. in press).*

century (Mårtensson 1976: 392), while a single B1.2-sheath is dated a century later in Bergen, 1170/71–1198, before a lacuna of more than 130 years when similar sheaths again appear. Typologically, the Bergen date can therefore be doubted. The Lund date also seems unreliable, with a late Viking Age date for sheaths that appear to be common in northern Europe from the late thirteenth century through the fourteenth century, and that are not documented earlier than the thirteenth century at other sites than in Bergen.

In London, type B-sheaths make up 16.6 per cent of the sheaths in total. If we limit this to the datable specimens from the period from late thirteenth to late fourteenth century, the type makes up 28 per cent. Type B1.1 also appears elsewhere on the British Isles, however not in material suited for comparison in percentages. The relative number of London equals that of Leiden, where the type also makes up 28 per cent of the sheaths from the thirteenth to the fourteenth century. In Greifswald, B1.1-sheaths constitute 12 per cent of the period 1280–1350. In Konstanz in southern Germany, however, the type dominates with 40 per cent. In Bergen, type B1-sheaths form 10 per cent of the total number of sheaths. In the period 1332–1413 when they are most common, type B1-sheaths constitute 15 per cent of the datable sheaths.

Stamped sheaths have earlier been assumed to be of English origin (Grieg 1933: 248; Blomquist 1938: 160; Ehn and Gustafson 1983: 79). More recent literature frequently refers to London finds for parallels (cf. Schnack 1998: 28–31; Schaefer and Schaefer 1996: 276; Goubitz 2002: 159). For a long time, the publications from Lund and London constituted the two standard reference works (Blomqvist 1938; Ward-Perkins 1940). As more material has been published, the time should be ripe for questioning some of the older assumptions about origins (van Driel-Murray 1990: 183). The stamp-decorated sheaths, or type B1, seem to be as common on the Continent as in England, with a high frequency of finds in England, the Netherlands and especially in southern Germany, where Konstanz only represents relatively small numbers. This even distribution makes it reasonable to question the hypothesis of English origin, and instead ask whether this type was not in production over wider areas. The use of stamps for decoration allows for mass-production of similar sheaths, not necessarily within a limited geographic area. The stamp motifs such as fleur-de-lis and lions would have been generally recognisable in large parts of thirteenth and fourteenth century Europe as basic heraldic elements.

To illuminate this question further, information can be obtained by evaluating the distribution of other B-type sheaths, also assumed to be of English origin, but also scabbards of type F1 where stamp-technique is used (cf. Chapter 6.7.8).

6.7.3 Type B2

Type B2, or sheaths with impressed surface decoration, forms a varied group in Bergen (Diagram 6.8). The different subtypes will now be presented separately.

Type B2.1

Only four sheaths of this subtype are recorded in Bergen, all from period 4 (1198–1248). They are distinct in both form and the decorative lattice pattern on both handle and blade parts. Three were found at site 10 (Rosenkrantzgaten), while only one at the Bryggen site.

Table 6.15 shows that the type is sparsely recorded outside the British Isles. In addition to the presented finds, the type is also documented at Cork and Gloucester (Cameron 2007: 28). Cameron also refers to two plain sheaths from Schleswig (van de Walle-van der Woude and Groenman-van Waateringe 2001: 37) as being of type B1.2, or Cameron's type B2. The German specimens lack, however, both decoration and the specific seam, kinked at the junction between blade and handle part, characterising this type (Cameron 2007: 27–28), and are therefore not included here.

More than half of these finds are from Dublin, where also the earliest specimens are recorded. A considerable number are represented in the London collections. These are generally

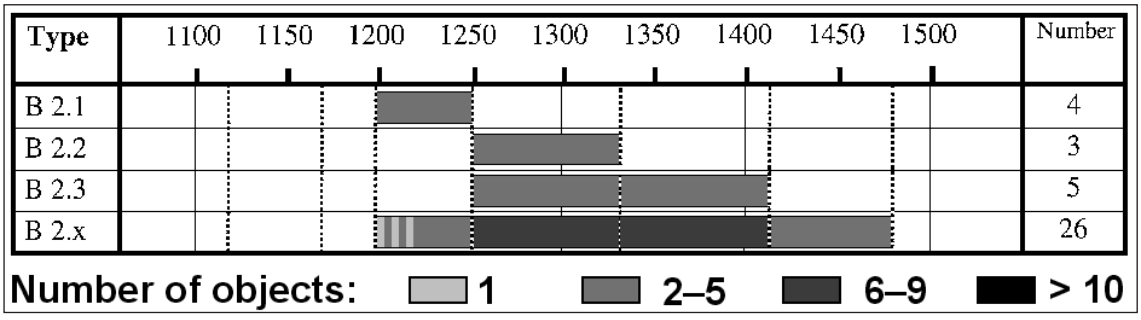


Diagram 6.8 *Chronological distribution of B2-sheaths in Bergen. Both subtypes B2.1 and B2.2 have a limited chronological distribution of one period each, periods 4 (1198–1248) and 5 (1248–1332), respectively. Type B2.3 covers two periods, 5 and 6 (1248–1332). The more vaguely defined type B2.x is documented from periods 3 to 7 (1198–1476).*

	Number	datable	date	% of sheaths in total	% of sheaths dated within period	Lattice pattern on both blade- and handle-parts
Bergen	4	4	1198–1248	1,7	12,5	4
Dublin[58]	137	most	*c.*1000–*c.*1250	51	> 51	2
Waterford	>7	>6	M12th–E13th C	>22		
Perth	≥4	≥3	13th C	≥25		1
London	50	21	L12th – *c.*1400	15	17,4	4
Hull	2	2	L13th–E14th C			
King's Lynn	≥1					
Lund	1		L13th–E14th C			

Table 6.15 *Spatial and chronological distribution of type B2.1 (Blomqvist 1938: 155–156, fig. 25; Clarke and Carter 1977: 365–366, fig. 169: 93; Armstrong and Ayers 1987: 219, fig. 131: 433, 435; Hurley1997a: 736–742, fig. 18: 12: 3, 18: 13: 1, 9, 18: 14: 2, 3, 5, 8; Cameron 2007; Bogdan et al. in prep: 117–123, fig. 41: 1224, 3047, 5868, 42: 1360).*

of later date, after the Dublin dating-frame has ended. Cameron assumes Dublin to be the origin of this type of sheath, a deliberate development from her E2- and B1-sheaths which are also known from Trondheim from the eleventh century (Cameron 2007: 21, 26–31), before the Bergen corpus dating-frame. The type has various decorative motifs and evolves from smaller sheaths decorated in an Insular style, to sturdier specimens of Gothic motifs in Dublin (Cameron 2007: 30), the latter forms being well known and developed in London. The four Bergen sheaths, however, are decorated by a framed lattice pattern on both handle- and blade-parts. The same pattern is found on two sheaths in Dublin (dated 1180–1250), four from London (one datable to the early to middle thirteenth century) and finally a sheath from Perth (dated to the second half of the thirteenth century).[59] In this way, the four Bergen type B2.1-sheaths not only represent most of the few finds of this type found outside the British Isles, but also seem to reflect a specific mode of this type that mainly appears in the first half of the thirteenth century.

Type B2.2

This type is constituted by the central slit of the handle-part, appearing on three Bergen sheaths from period 5 (1248–1332). It does not seem to be a common feature, although a type B1.2-sheath dated to the later medieval period from Waterford has a similar arrangement (Hurley 1997a: fig 18: 13: 1). Three sheaths from Turku have a slit handle-part, but these are slit at the side and not the front as in the Bergen material.

As Harjula comments, it might have been done accidentally by the knife-edge, which is less likely for the Bergen sheaths as the slit is placed in the front. Alternatively, the handle-parts are modified to better fit the knife-handle or a new knife (Harjula 2005: 36), an explanation I support. Only the three sheaths in Bergen, all from period 5 (1248–1332), show this adaption.

Type B2.3

The B2.3-sheaths in Bergen were recognised as a separate type because of the London specimens (Ward-Perkins 1940: 187; Richardson 1959: 152).

	number	datable	date	% of sheaths in total
Bergen	5	4	1248–1413	2
Oslo	1	1	*c.*1250–1325	1
Dublin	1			
London	25	13	14th C	7
York	3			
Hull	1			

Table 6.16 *Spatial and chronological distribution of type B2.3 (Richardson 1961: 102–103, fig. 29: 1; Jackson 1985: 14; Mould et al. 2003: 3387, fig. 1710: 15654, 15656; Cameron 2007: cat. no. 227).*

Type B2.3 seems to have a limited distribution both chronologically and spatially, but this type also seems to have the British Isles as a focal point and England in particular (Table 6.16). As mentioned earlier, another 13 A2.x sheaths from London are similar to the A2.3-sheaths. Although differing in design and technique, other similar sheaths are documented from fourteenth–fifteenth centuries Exeter (Allan et al. 1984: 333, fig.187: 67), Leiden (van Driel-Murray 1990: 198 fig. 18) and Sweden (Blomqvist 1938: 156–157, fig.26). The distribution pattern strengthens earlier assumptions that these sheaths are of English origin.

Type B2.x

The B2-subtypes presented above are specified by motif and construction and seem to have a limited distribution and period of use. The remaining B2-sheaths, however, form a more diverse group as they comprise the rest of the impressed sheaths (Table 6.17).

The mapping of this type has been somewhat difficult, and I have not been able to decide whether some of the sheaths at Kołobrzeg in Poland also had impressed decoration, or incised, based on depictions in the publication (Wywrot 1996; 1997; Wywrot-Wyszkowska 1998; 1999). For the case of type B2.x, the mapping illustrates the use of a certain technique rather than a specific type. The technique, however, seems most popular in the western part of northern Europe, and there is variety in motifs from west to east, with most figurative motifs in the west.

The distribution of types B2.1 and B2.3 may serve as an example of the surface decorated sheaths having regional significance, even though the technique (B2x) is spread over larger areas. The survey of type B also makes it clear that types documented in Bergen are not directly transferable to other areas. In several cases, foreign sheaths are decorated in a way that crosscut the Bergen classification.

6.7.4 Type B3

Type B3 is rare in Bergen, only found in the period between 1332–1476 and characterised by incising as decorative technique, usually with simple motifs (Diagram 6.9).

Although more difficult to ascertain in numbers, the technique of incising sheaths is more common other places than Bergen (Table 6.18). In Turku, it is referred to as the dominant technique for surface decoration (Harjula 2005: 40). In Kołobrzeg the technique also seems to have been used frequently to decorate sheaths. However, I have found it difficult to ascertain this from the illustrations (Wywrot 1997; 1998; Wywrot-Wyszkowska 1998; 1999).

Different flower-motifs done in this technique seem to be frequent in London and even more in the Low Countries, although numbers are hard to compare. Among these sheaths are some of the few finds that have traces of colour. Red-coloured sheaths are documented in London, Leicester, Dordrecht and Amsterdam (Mellor and Pearce 1982: 160; van Driel-Mur-

	number	datable	date	% of sheaths in total
Bergen	26	21	1198–1476	9
Dublin	>22	most	1180–1250	
Cork	1			
Waterford	≥8	most	12th–13th C	≥25
Perth	≥5	5	L 12th, E–M14th C	≥31
London	131	43	13th–14th C	39
York	7			
Hull	9	5	L13th–E14th, L15th C	
King's Lynn	Identified			
Leicester	1	1	13th C	
Leiden	Several		14th C	
Dordrecht	Several			
Amsterdam	1	1	L14th –15th C	
Schleswig	≥1	≥1	12th C	
Greifswald	4	4	*c.*1260–1380	6
Svendborg	Several			
Lund	Identified			
Stockholm	Several		14th C	
Uppsala	2			4
Riga	Identified			
Åland	1	1	E15th C	8
Turku	>17		L14th–16th C	>10

Table 6.17 *Spatial and chronological distribution of B2x-sheaths (Blomqvist 1938: 158, 160; Richardson 1961: 103, fig. 29: 2, 3; Armstrong 1977: fig. 20: 8, 9; Baart et al. 1977: 98, fig. 33; Clarke and Carter 1977; Ayers 1979: fig. 24: 54; Dahlbäck et al. 1982: 232; Mellor and Pearce 1982: fig. 61: 42; Allan 1984: cat. no. 18; Ehn and Gustafsson 1984: 79; Jackson 1985: 14; Armstrong and Ayers 1987: fig. 131: 434, 436; Groenman-van Waateringe 1988: 83; van Driel-Murray 1990: 183, 196–201; Kykyri 1996: fig. 2: 556: 4646; Hurley 1997a: 738; Hurley 1997b: 151; Schäfer and Schäfer 1997; Bebre 1998: fig. 3; Schnack 1998: 35, fig. 16: 6; Goubitz 2002; Mould et al. 2003: 3387, fig. 1170: 15657, 15886; Harjula 2005: fig. 17; Cameron 2007; Bogdan et al. in press).*

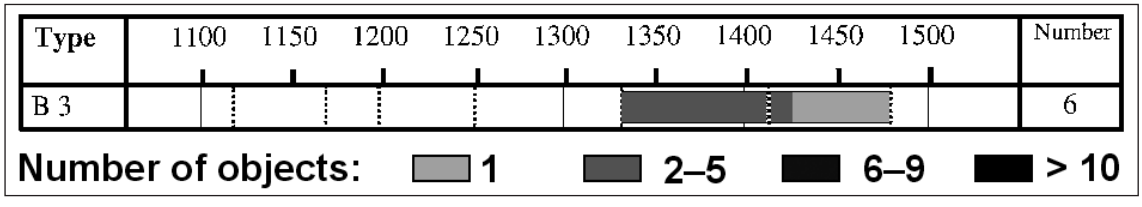


Diagram 6.9 *Chronological distribution of B3 sheaths in Bergen.*

ray 1990: 182; Goubitz 2002: 153). As the B2.x sheaths demonstrate, there seems to be a preference for figurative motifs in the west and geometric patterns in the east.

However, B3-sheaths are generally younger than B2.x-sheaths, as type B3 with its incised decoration appears from the fourteenth century onwards. This coincides with the already mentioned late appearance of this type in Bergen. The more advanced designs, however, do not seem to have reached Bergen where the motifs on the B3-sheaths are best described as graffiti.

	number	datable	date	% of sheaths in total
Bergen	6	4	1332–1476	3
Oslo	6	6	14th C	7
London	31	2	14th C	9
Exeter	1	1	14th–15th C	
Leicester	5	5	14th C	
Leiden	Several		14th C	
Dordrecht	Several			
Amsterdam	5	5	14th C	
Hamburg	1			
Konstanz	6		14th–15th C	
Lund	Identified			
Svendborg	Several			
Stockholm	Several		14th C	
Riga	Identified			
Åland	2	2	L14th–E15th, L16th C	
Turku	>23		L14th–16th C	>14

Table 6.18 *Spatial and chronological distribution of B3 sheaths (Blomqvist 1938: 160, fig. 37; Baart et al. 1977: 96–97; Mellor and Pearce 1982: figs. 61: 41, 62: 44–47; Dahlbäck 1982: 232; Allan 1984: fig. 184: 10; Groenman-van Waateringe 1988: 83; van Driel-Murray 1990; 183, 196–20; Schnack 1994: 40; Kykyri 1996: fig. 2: 556: 4480, 3: 612: 1037; Bebre 1998: 205; Goubitz 2002: 159; Kablitz 2002: 179; Harjula 2005: 39–40).*

6.7.5 Type B4

Type B4 consists of sheaths decorated by embossing, which is probably more labour-demanding than many other methods of decoration. The type is not frequent in Bergen, with only six specimens represented (Diagram 6.10).

Except from the London finds, type-B4 sheaths are not published in large numbers (Table 6.19), although such sheaths tend to receive their fair share of attention due to the complicated decoration. The technique is also attested from the tenth century onwards in Dublin, but just on sheaths for seaxes and B2.1-sheaths which, as mentioned earlier, are numerous and of great variety there (Cameron 2007: 54).

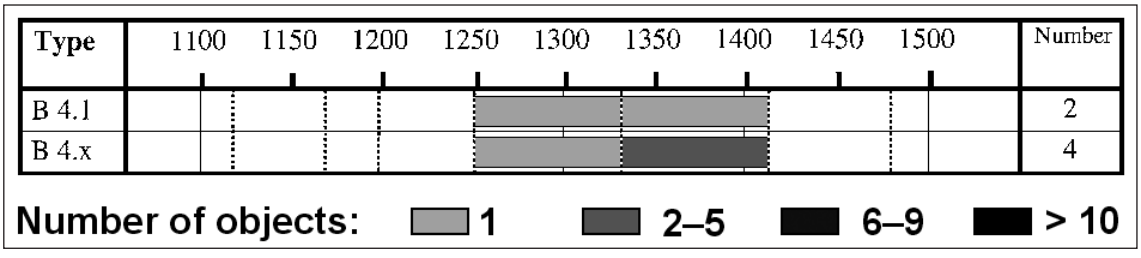


Diagram 6.10 *Chronological distribution of B4-sheaths in Bergen.*

	number	datable	date	% of sheaths in total
Bergen	6	6	1248–1413	3
Waterford	1		E–M13th	
London	28	9	13th–M15th C	8
York	1			
Svendborg	1	1	*c.* 1320–1350	4
Turku	1	1	Probably 14th C	0.5

Table 6.19 *Spatial and Chronological distribution of type B4 (Jackson 1985: 15; Groenman-van Waateringe 1988: 83, 94, fig. 7. 2. 5: 15; Hurley 1997a: 738, fig. 18: 12: 9; Harjula 2005: 40, 46, cat. no. 22).*

6.7.6 Type C

Type C-sheaths do not form a large group in the Bergen corpus (Diagram 6.11). Type C1 is documented from periods 4–5 (1198–1332), and the slightly more extravagant type C2 is recorded from the following period 6 (1332–1413). One of the C2-sheaths, however, has a wider date frame, from *c.* 1215/25 onwards.

The least decorated subtype, type C1 is the most common type C-sheath in Bergen but rare abroad. It is, however, also documented in Hamburg, Schleswig and Greifswald. Subtype B2 is documented over a larger but still limited area (Table 6.20). Bergen seems to represent a western limit for type C, while the other finds are documented along the southern coast of the Baltic Sea. Schleswig is the only place where they are found in considerable numbers. The classification by Schnack comprises both types C- and D-sheaths into her form 3 (Schnack 1998), but the type is also documented in Schleswig outside Schild (Van de Walle-van der Woude and Groenman-van Waateringe 2001). Although documented in small numbers, it seems likely that this type of sheath was used within a limited geographical area with an eastern orientation.

6.7.7 Type D

Type D comprises riveted sheaths. While type D1 consists of sheaths with a rim-ferrule replacing part of the seam, type D.x is more varied and comprises the remaining sheaths with rivets (Diagram 6.12).

As with type C, the D-sheaths also have an eastward orientation (Table 6.21). They are found over a larger area. In both Greifswald and Kołobrzeg further east, this sheath represents a dominating type. Further west it is found in smaller numbers. Three specimens of type D, probably subtype D1, are documented in Hull, but as far as I have been able to trace not elsewhere on the British Isles.

Some of the features noted for the Bergen D1-sheaths, such as fringes along the rims, also appear on sheaths without the rim-ferrule. These sheaths are not included here, but reflect that

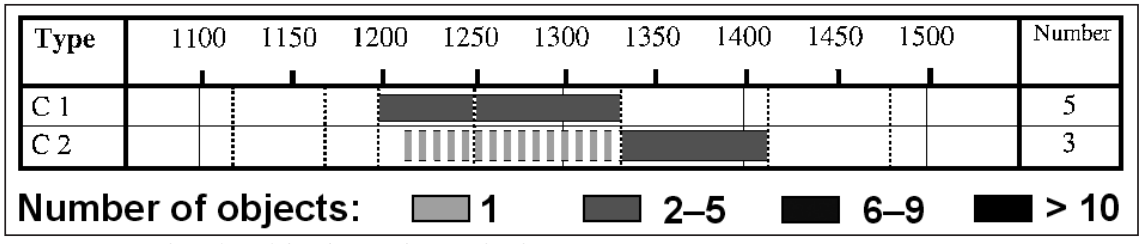


Diagram 6.11 *Chronological distribution of type C-sheaths in Bergen.*

		number	datable	date	% of sheaths in total
Bergen	C1	5	4	1198–1332	3
	C2	3	3	(1215–)1332–1413	
Schleswig	C1	2	2	11th, 14th C	
	C2	>14	several	13th–14th C	
Hamburg	C1	1			
Greifswald	C1	1	1	*c.*1250–60	5
	C2	2	2	*c.*1253–1280	
Lübeck	C2	4	3	13th–14th C	
Lödøse	C2	1			
Riga	C2	≥4		Late 12th C onwards	

Table 6.20 *Spatial and chronological distribution of type C-sheaths (Groenman-van Waateringe and Guiran 1978: 170, fig. 72: 1, plate 83: 1; Van der Berg and Groenman-van Waateringe 1992: 351, fig .8: 3, 4, 11, plate 11; Schäfer and Schäfer 1997: fig. 5: b, 19: b, 20: a; Bebre 1998: 205, fig.4; Schnack 1998: 20–28, fig. 8: 4, 9: 2, 6, 10: 2, 3, 4, 7, 11: 2, 3, 12: 1, 3, 5, 8, 9; Van de Walle-van der Woude and Groenman-van Waateringe 2001: 36, fig. 30; Kablitz 2002: 179; Knut Høyås; personal communication).*

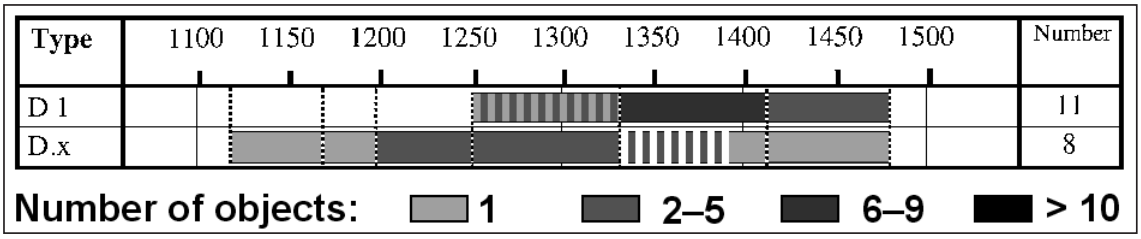


Diagram 6.12 *Chronological distribution of type D-sheaths in Bergen. Type D1 is documented from periods 5 to 7 (1248–1476) with a concentration in period 6 (1332–1413). Type D.x is not as defined a type, and is documented from periods 2 to 7 (1120s–1476), but in smaller numbers.*

the Bergen classification of type D, based on rather few specimens, is too coarse when applied to more numerous finds in North-east Europe.

Type D.x includes the remaining sheaths with riveted side-seams, the distribution illustrating the use of a technique rather than a specific type. Sheaths with riveted seams are documented throughout the medieval period, but in relatively small numbers.

6.7.8 Scabbards

Scabbards are represented in most of the Bergen corpus dating sequence, but with variation between the types and subtypes. Decorated scabbards (type F) appear before 1332, but only in small numbers (Diagram 6.13). Plain scabbards (type E) dominate earlier.

One of the objectives of comparing the Bergen corpus with other material is to investigate

		number	datable	date	% of total
Bergen	D1	11	9	1248–1476	5
	D.x	8	8	1120s–1476	3
Hull[60]	D1	3	1	E–M15th	
Leiden	D.x	1		14th C	
Dortrecht	D1	10		(12th) 13th–14th	4
Amsterdam	D1	2		L13th C	
Hamburg	D.x	3			
Schleswig	D1	> 7		13th–14th	
	D.x	> 3		13th–14th	
Lübeck	D1	2			
	D.x	2	1	14th C–1563	
Greifswald	D1	42		1260–1320	64
Konstanz	D.x	1		*c.* 1500	
Svendborg	D1	1		*c.* 1200	
	D.x	1		1320–1350	
Kołobrzeg	D1	> 30			
	D.x	> 8			
Gniew	D1	1			
	D.x	1			
Turku	D1	2	(1)1	(14th) L 14th	1
	D.x	8		Mostly 14th	5

Table 6.21 *Spatial and chronological distribution of type D-sheaths (Baart et al. 1977: 94–95, fig. 25, 26; Jackson 1985: 14, 15; Armstrong and Ayers 1987: 224, fig. 131: 437; Groenman-van Waateringe 1988: 90, 94 fig. 7. 2. 3: 3, 7. 2. 5: 20; Van Driel-Murray 1990: 196, fig. 1–p. 197; Van der Berg and Groenman-van Waateringe 1992: 351, fig. 8: 1, 15; Wiklak 1993: fig. 1: e, 2: b; Schnack 1994: 40, fig. 41: 353; Schäfer and Schäfer 1996; Wywrot 1996; 1997; Schnack 1998: 20–28, fig. 8: 1, 2, 5, 8, 9: 7, 8, 10: 8, 9, 10; Wyszkowska 1998; 1999; Goubitz 2002: 158–159, fig. 11; Kablitz 2002: 179; Volken and Volken 2002: 483, fig. 19: 3; Harjula 2005: 33–34, 49–50, cat. nos. 9–14, 32, 124, 125, 221).*

whether this is a common representation. Comparison of scabbards involves some methodological difficulties not encountered with the sheaths, as scabbards are generally more damaged when deposited and rarer in the archaeological record. More than 80 per cent of the scabbards from Leiden are denoted as undecorated by van-Driel Murray. However, the majority of these have impressed longitunal lines along the rims, which I consider as decoration, and are consequently classified as type F2 as regards the Bergen material. Schnack also regards these lines as decoration, and when she points out a similar percentage of decorated scabbards in Schleswig as Leiden, she uses other criteria than van-Driel Murray and the comparison falters. Regarding these impressed lines as being decorative, Harjula proposes that they could also have a function for bracing the leather around the wooden scabbard-plates and supporting the glue between the leather and the plates (Driel-Murray 1980: 38; 1990: 162; Schnack 1998: 43–44; Harjula 2005: 63–64).

As seen for the Bergen material, the scabbards have another distribution pattern than sheaths, and several authors, especially English, note that scabbards are not as common in medieval contexts (Mould et al. 2003: 3366). Of the 19 sites and corpora presented in Table 6.22, at least half of the sites have less than 20 finds, sometimes only one or a few fragments.

The proportion of decorated (type E) and undecorated (type F) scabbards strongly varies between the different sites and corpora. An almost 50–50 percent relationship is noted already for Bergen and Greifswald, but is probably also present in Turku. While the Bergen scabbards have an uneven chronological distribution (most type F-scabbards being deposited in period 6 (1332–1413)), the Greifswald and Turku corpora are deposited over shorter periods and thus probably reflect a coinciding use of the different types. The different preferences for decorated or undecorated scabbards shown in the table are probably due to biases in excavation activity and chronology, as undecorated scabbards

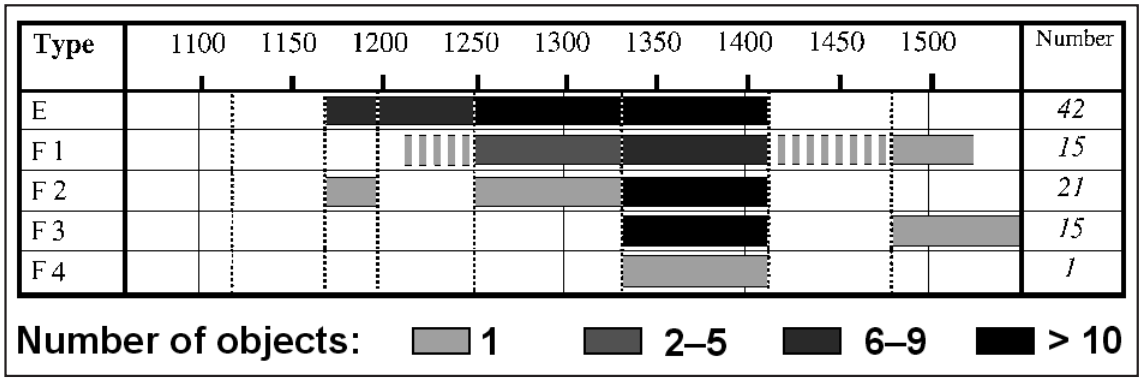


Diagram 6.13 *Chronological distribution of scabbards in Bergen. The undecorated scabbards are documented and numerous from periods 3 to 6 (1170/71–1413). The decorated scabbards, type F, are numerous in period 6 (1332–1413), but the different subtypes are documented occasionally both before and after this period. Regarding F2-scabbards, the two earlier representations have longitunal lines only.*

Nevertheless, this example illustrates a problem when comparing different sites and corpora based on publications, and this discrepancy in classification weakens the comparable possibilities if other authors consider these scabbards as undecorated.

seem to have been in use throughout the medieval period.

Decorated scabbards are easier to compare. Therefore I will present the similarities to Bergen forms here.

Type F1

Fifteen stamp-decorated scabbards are documented from Bergen. Their date range is from 1248 to the first quarter of the sixteenth century, but the majority are documented in period 6 (1332–1413) without being part of the earlier mentioned scabbard-assemblage from this period.

		number	datable	date	% of total number of scabbards
Bergen	E	42	41	1170/71–1413	45
	F	52	48	1170/71–1702 (Mainly 1332–1413)	55
Oslo	E	2	2	14th C	6
	F	32	32	14th C	94
Trondheim[61]	E	28	28	12th–14th C	100
	F	0			0
Dublin[62]	E	0			
	F	1	1	1180–1250	
Waterford	E	0			0
	F	2	2	L11th–E12th C	100
London	E	15	9	*c.* 1250–16th C	22
	F	54	15	*c.* 1200–1550	78
York	E	≥3		Probable 13th C	70
	F	1		E15th C	30
Leiden[63]	E	(109)		14th C	
	F	(28)		14th C	
Schleswig	E	125		11th–14th C (Mostly 13th–14th C)	81
	F	30		11th–14th C (Mostly 13th–14th C)	19
Lübeck	E	9	4	*c.* 1200–1250	90
	F	1	1	*c.* 1200–1260	10
Greifswald	E	7		1260–1320	39
	F	11		1256–1.Q14th C	61
Konstanz	E	4			
	F	0			
Svendborg	E	4		12th–14th C	29,4
	F	11			
Lund	E	Several			'predominant'
	F	Several			
Stockholm	E	8		Mainly 14th C	
	F	0			
Kołobrzeg	E	> 8			
	F	Several			
Riga	E	0			0
	F	32		L12th–E18th C	100
Åland	E	0			
	F	1		L14th–E15th C	
Turku	E	17		14th–16th (Mainly L14th–E15th C)	≤ 48
	F	19		14th–16th (Mainly L14th–E15th C)	≥ 52

Table 6.22 *Spatial and chronological distribution of scabbards, type E – undecorated and type F – decorated. (Blomqvist 1938: 160; Dahlbäck et al. 1982: 232, note 5; Groenman-van Waateringe 1988: 83–85, 96–101; Marstein 1989: 97, fig. 48; Driel-Murray 1990: 162, 164; Van der Berg and Groenman-van Waateringe 1992: 350; Schnack 1994: 39, fig. 41: 394, 395, 1677, 2593; Kykyri 1996: 14–17; Wywrot 1996; 1997; Hurley 1997a: 736, figs. 18: 13: 3, 6; Schäfer and Schäfer 1997: 278; Bebre 1998: 205; Schnack 1998: 38–44; Wywrot-Wyszkowska 1998; 1999; Mould et al. 2003: 3366–3369; Harjula 2005: 63–64).*

	Number	Datable	Date	% of total number of scabbards
Bergen	15	13	1215/25–1527	16
Oslo	19	19	14th C	56
London	21			30
Leiden	≥4			3
Svendborg	1	1	*c.* 1200	
Schleswig	2	2	13th C	
Greifswald	1	1	*c.* 1272–1280	
Lund	several			
Kołobrzeg	1			
Riga	several			

Table 6.23 *Spatial and chronological distribution of type F1, stamp decorated scabbards (Blomqvist 1938: 158–160, figs. 32–34; Groenman-van Waateringe 1988: fig. 7. 3. 3. 3; van-Driel Murray 1990: 164, fig. 6; Schäfer and Schäfer 1997: 278, fig. 14b; Bebre 1998: 205, fig. 2; Schnack 1998: 43, figs. 19. 3, 20. 2; Wywrot-Wyszkowska 1999: fig. 55: 2).*

Stamp-decorated scabbards decorated in the same manner as the Bergen scabbards are not very common in a wider North European perspective, although they are recorded several places (Table 6.23). They are generally found in larger numbers in Bergen, Oslo, Lund and London. Single or few specimens are found in Svendborg, Leiden, Kołobrzeg and Greifswald.

The type was labelled 'the heraldic type' by Blomqvist (1938) in his description of the Lund scabbards, which he assumed came from London. The London specimens, however, differ from the more uniform material of Bergen, Oslo and Lund. Most of the London specimens are decorated with small repetitive patterns, like the B1.2-sheaths, creating a background for impressed lined and floral motifs. Further, many of them are shorter, probably intended for short-swords or large daggers. Several have stamps similar to those on the glued sheaths found in London, which I assume to be of late medieval or Tudor date.

The Scandinavian finds are usually also decorated with larger stamps in vertical rows. The arrangement of stamps on a Lund scabbard illustrated by Blomqvist (1938: fig. 33) is also documented on Bergen and Oslo scabbards. The designs/stamps (1938: fig. 34) are also the same as on the Oslo and Bergen scabbards, although the Oslo scabbards lack the animal motifs. While several scabbards from Riga and a scabbard fragment from Kołobrzeg are similar to the Bergen/Oslo/Lund finds, the stamps on Leiden scabbards are mostly minor supplements in impressed decorations.

Altogether, there seems to be a Scandinavian preference for stamp-decorated scabbards, usually in vertical rows, unlike the London style. Other finds of F1-scabbards are few.

Type F2

The Bergen finds of F2-scabbards, including 21 specimens, are usually decorated in simple geometric patterns. Only one scabbard has a more complicated motif of dragons (figure 5.31). Seven of the scabbards have longitunal lines only.

	Number	Datable	Date	% of total number of scabbards
Bergen	21	18	1170 –1413 (Mostly 1332–1413)	22
Oslo	13	13	14th C	38
London	32	11	13th–E16th C	
York	1	1	E15th C	
Leiden[64]	dominating		14th C	Dominant
Svendborg	11	10	*c.*1170–1300	
Greifswald	7	7	*c.*1256–1.Q.14th C	38
Lund	several		14th – 157th C	
Kołobrzeg	Identified			
Schleswig	several			< 19.3
Turku	≥19		14th–16th (Mainly L14th–E15th C)	≥ 52
Åland	1	1	L14th–E15th C	
Riga	Several			

Table 6.24 *Spatial and chronological distribution of type F2, scabbards with impressed decoration (Blomqvist 1938: 160, figs. 38–43; Mårtensson et al. 1976: fig. 349; Groenman-van Waateringe 1988: 98–102; van-Driel Murray 1990: 162; Kykyri 1996: 17, fig. 3; Schäfer and Schäfer 1997; Schnack 1988: 43; Wywrot-Wyszkowska 1999: fig. 55: 1; Mould et al. 2003: 3367; Harjula 2007: 63–64).*

Impressing is the most common decoration technique on scabbards, and excluding Åland where only one scabbard is documented, all sites have documented finds of scabbards with impressed longitunal lines (Table 6.24). In Turku,

Leiden, Greifswald, Svendborg and Schleswig such scabbards dominate the type F2-scabbards. In Bergen, Oslo, London and probably also Lund it is common with simple geometric designs in addition to the longitunal lines. Designs similar to those documented in Bergen are found in Oslo, Lund, Riga, Åland, Turku and Svendborg. Leiden and London also have similar simple geometric patterns, but often supplemented with trifoliums or clovers.

Although differences can also be noted for F2-scabbards, such as the clover motif in London and Leiden, these scabbards are more evenly spread than the F1-scabbards, or at least not as easily discernable in separate styles.

Type F3

Fifteen scabbards with incised decoration are documented in Bergen. Although some are simple graffiti-like, others are more accurately done. This technique, however, seems less ordinary than others, as it is rarely attested elsewhere.

	Number	Datable	Date	% of total number of scabbards
Bergen	15	15	1332–1413, 1476–1702	16
London	1	1	Probably 14th C	
Leiden	Identified		14th C	
Schleswig	1	1	12th C	
Svendborg	1		c.1200	
Lübeck	1	1	1200–1265	
Greifswald	3	3	1260–1280	
Riga	2			

Table 6.25 *Spatial and chronological distribution of type F3, scabbards with incised decoration (van Driel-Murray 1980: fig. 6: 45; Groenman-van Waateringe 1988: fig. 7. 3. 3. 6; van den Berg and Groenman-van Waateringe 1992: 350, fig. 7. 10; Bebre 1998: 205, fig. 2. 3; Schnack 1998: 44, fig. 21. 6).*

As mentioned, most Bergen F3-scabbards are similar. However, four specimens stand out from the group; one with a graffiti decoration and another with incised vertical lines below the mouth, imitating slits for suspension. Parallels are found abroad for these two (Table 6.25). The two scabbards from London and Lübeck are best described as plain scabbards with simple graffiti decorations. The same can perhaps be said for the Schleswig specimen with an incised waleknot, though admittedly a more complex motif. Two scabbards from Svendborg and Riga show the same row of vertical lines just below the mouth, similar to the one Bergen specimen. A scabbard from Leiden has an incised clover-motif, but this motif commonly appears among the F2-scabbards from this town.

Thus the main part of the Bergen F3-scabbards with incised floral motifs and letters lacks published parallels from northern Europe. As mentioned earlier, incising may probably decrease the probability of preserving the leather in the ground, as the leather will delaminate more easily with cuts in the leather surface. On the other hand, incising was perhaps a less suitable technique for decorating scabbard leather. Scabbard leather is generally thin, in order to be folded around the wooden plates of the scabbard. Cuts in the leather surface will weaken the leather, probably making these coverings less durable than the ones decorated by stamps or impressing.

Type F4

A single scabbard fragment with an embossed ridge towards the tip is documented in Bergen, dating to period 6 (1332–1413).

	Number	Datable	Date	% of total	% of dated scabbards within period
Bergen	1	1	1332–1413	1	2
Dublin	1	1	M12th–E13th C		
Waterford	1	1	E12th C	50	

Table 6.26 *Spatial and chronological distribution of type F4-scabbards (Hurley 1997a: fig 18: 13. 6; Cameron 2007: DLS 318).*

This type is not common elsewhere either, with only two specimens from Dublin and Waterford, both which are more than 100 years earlier than the Bergen specimen (Table 6.26). From Dublin, however, another 14 specimens are documented in tenth and eleventh century contexts (Cameron 2007). The two medieval Irish specimens referred to may thus be late ex-

amples of a Viking Age tradition. From York, another two specimens are documented and denoted as Anglo-Scandinavian. However, a specimen not yet published is reported from Manchester, with a thirteenth to early fourteenth century date. This specimen is also decorated with some form of hatching, thus crosscutting my classification. Still, it is an example of an embossed scabbard, closer in date to the Bergen specimen (Mould et al. 2003: 3367).

6.8 Summary

The focus of this chapter has been the chronological and spatial distribution of the Bergen corpus. While the spatial distribution is rather biased in Bergen and mostly concentrated to the Bryggen site, the material shows significant changes through the medieval period with regard to both numbers and type distribution. This chronological development has been further explored by assessing the chronological and spatial distribution of the types known from Bergen in a wider North European perspective.

Only the Bryggen site has provided finds from the twelfth century in Bergen, and only a few from before period 3 (1170/71–1198). In this period, however, all types except types B and C are documented. The number of finds increases in the thirteenth century and is supplemented by finds from several other excavations, particularly in period 4 (1198–1248) when only half of the finds stems from the Bryggen site. By this period, all types are documented even though the subtype variety is still modest and the decorative characteristics within the types give a somewhat uniform impression. On the other hand, the variety is striking in the following period 5 (1248–1332), especially within type A1 with all subtypes represented. In period 6 (1332–1413) type A is less varied, but the three other sheath-types together almost equal type A in number and represent a continuing varied picture from the preceding period. Almost half of the scabbard-finds stem from this period, showing a subtype variety that is contrary to the uniform pattern from previous periods. The finds drop markedly in the following period 7 (1413–1476) and among the sheaths, type A no longer dominates. No scabbards are found from this period.

With regard to numbers, the material shows a continuous trend of doubling of finds from period 3 (1170/71–1198) through period 6 (1332–1413). This pattern is not coherent with the general chronological deposition of leather at the Bryggen site. And although several factors have been considered, we can assume that this picture to some extent reflects that the fourteenth century was a period of extended use of sheaths and scabbards in Bergen.

Spatially, there is a tendency for the scabbards having been deposited in fill-masses near the waterfront, in addition to a fill-layer from period 6 (1332–1413) containing a high number of finds. Finds of sheaths are more evenly distributed, especially type A, while type B, or the second most numerous group of sheaths, seems to be lacking in some areas at the Bryggen site in periods 5 and 6 (1248–1413). While the scabbards are generally worn and cut, sheaths might easily be relatively complete, reflecting a more deliberate disposal of the former as waste.

By the Bryggen excavation in particular and also due to other excavations, the Bryggen area is best documented in terms of sheaths and scabbards. Less than five per cent of the finds stem from the Vågsbunn area, while finds from Strandsiden and Holmen area are lacking.

Seen in a wider perspective, undecorated type A-sheaths are common in Scandinavia and north-eastern Europe but less common in the British Isles and barely found in London. While the wide distribution can be ascribed to sheaths of the widely-defined type A3, type A1-sheaths seem to have been documented within Scandinavia only. Several subtypes of A1 are only documented in Bergen. Surface-decorated type B-sheaths show another distribution pattern, varying between the subtypes. Type B1-sheaths with stamp-decorations are the most international type, although more common towards the west than the east in northern Europe. Type B3 sheaths with incised decoration also have a wide distribution, but with differences in motifs. Type B3 appears later than the other B-sheaths, from the fourteenth century onwards. Type

B2-sheaths with impressed decoration are most common on the British Isles, and some subtypes are rarely documented outside the area, such as the B2.1-sheaths of which four are found in Bergen. Also the embossed sheaths, type B4, seem concentrated to the British Isles but are less common. Type C on the other hand is not known on the British Isles; Bergen seems to represent the western limit of this type that seems regionally restricted to the coast of the southern Baltic Sea. Although documented in Britain, type D1 also has an eastward orientation.

Scabbards are documented in lower numbers, but the undecorated type E scabbards are common in northern Europe as are the F2-scabbards with the simplest form of decoration, longitunal impressed lines along the rims. Altogether, the F1-scabbards from Bergen seem to reflect a Scandinavian preference even though these are decorated in a technique also documented for scabbards in London. While incised sheaths are rare in Bergen, incised scabbards (F3) are documented in larger numbers, contradicting the pattern from most of northern Europe.

Seen in a North European perspective, the Bergen corpus follows certain common trends but also reveals some traits that are more unusual, such as the high number of type A1-sheaths of which few are found elsewhere than Oslo, and a relatively high number of incised scabbards (type F3). Some types seem to be clearly regionally restricted, with the few specimens documented outside a given area actually found in Bergen, as in the case of the sheaths of types B2.1 and C.

With the types, distribution and chronological pattern of the Bergen corpus presented and compared with material from northern Europe, the material can now serve as a basis for a more thorough discussion on production and possible import of these objects, and in a wide sense their uses and functions in the following two chapters.

7 Production – local crafts or foreign import?

Several characteristics of the Bergen corpus of sheaths and scabbards have become visible during the analysis, notably e.g. receptiveness towards foreign traits in this material and a higher find frequency of sheaths and scabbards from the fourteenth century. The results of the analyses in chapters 5 and 6 will form the basis for further discussion of these artefacts in their context of medieval Bergen, circling around two main themes: production and use. Here I will focus on production, preparing ground for discussing use of the artefacts in a wide sense in the following chapter.

A question to be posed is whether the production of sheaths and scabbards can be traced in the archaeological record and other contemporary sources. As demonstrated, the Bergen sheaths consist of several types of foreign style, alongside types lacking foreign parallels. This pattern in itself, however, does not give a satisfactory answer as to whether the artefacts were produced locally or imported. Furthermore, the pattern is not as clear with regard to scabbards. I will therefore discuss whether production of sheaths and scabbards can be documented in medieval Bergen. Furthermore, were such artefacts imported or did foreign craftsmen that settled in the town produce artefacts with foreign traits? Yet if foreign traits in the material are interpreted as import, what would be the nature of this import compared to other trade in Bergen? Both production and imports are relevant characteristics to explore here, as Bergen was the largest Scandinavian town in the high Middle Ages alongside Visby on Gotland, with a number of specialised crafts and workshops within the town and extensive trade activity. To decide within reasonable certainty whether sheaths should be regarded as 'Norwegian', 'English' or 'German', etc is not an important aim in itself, but will enable us to better assess the wider use and possible meanings of these artefacts.

7.1 Scabbard-makers in Bergen?

Both the state of preservation and the find conditions of the scabbard-fragments found in Bergen have shown several marked differences from those of sheaths. They tend to be more concentrated to certain areas close to the harbour and are generally more worn and often deliberately cut, apparently discarded as worn-out waste. How is this distribution to be interpreted related to the more even distribution of sheaths? The situation sketched above is similar to several sites in northern Europe: Sheaths are more commonly found and evenly spread within the settlement areas, and if scabbards are found in numbers, they are usually found in clusters and in more fragmented condition, often cut (van Driel-Murray 1980: 35; 1990: 162; Harjula 2005: 71–72; Cameron 2007: 2, table 1). The clustering of 137 scabbard fragments in Leiden is proposed to stem from a workshop in close vicinity, where the leather-coverings of scabbards were renewed (van Driel-Murray 1990: 162). Similarly, Harjula interprets concentrations of cut scabbard-fragments in Turku as indirect evidence of professional activity in the vicinity (Harjula 2005: 71–72). However, physical remains of the workshops are not found, although a sword-polisher is mentioned in written sources from Turku (Harjula 2005: 68, 72). As the Bergen scabbards show similar characteristics, it is relevant to ask whether the fragments stem from local production areas or workshops, and this may confirm the interpretations launched by van Driel-Murray and Harjula.

As we have seen, altogether 86 specimens of the 94 scabbard-fragments found in Bergen stem from the northern Bryggen area (82 of these from the Bryggen site). Six fragments are documented from the southern Bryggen area and only two from the Vågsbunnen area. At the Bryggen site on the other hand, scabbards constitute roughly one third of sheaths/scabbards documented in the periods 3–6 (Table 7.1)

Period	Finds (sheaths/ scabbards)	Percentage Scabbards
2 (1120s–1170/71)	4 (4/0)	0
3 (1170/71–1198)	15 (8/7)	46
4 (1198–1248)	15 (10/5)	33
5 (1248–1332)	63 (46/17)	27
6 (1332 –1413)	125 (78/47)	38
7 (1413–1476)	8 (8/0)	0

Table 7.1 *Numbers of sheaths and scabbards found at the Bryggen site (BRM 0), periods 2–7.*

The scabbard fragments are generally found in fillmasses near the waterfront, as shown in chapter 5. Scabbard fragments are also found randomly, but more rarely. A notable exception, however, is the concentration of 25 fragments in a fill-layer under building 433 in the northern part of the site in period 6 (1332–1413). The building was erected in phase 6.2, indicating that the fillmasses were deposited during the first phase of period 6 (1332–1413). There is no other description of the layer other than a mentioning in the excavation diaries of an unusual richness of leather waste from shoe production (Excavation diaries, grid N3, plan III). Assemblages with leather waste from shoe-production, however, are found several places in the Gullskoen area (Larsen 1992: 86). The fill-layer under building 433 is reported to contain 457 leather fragments, and unlike other assemblages this one contained a number of scabbards amidst mostly cut-outs. Another scabbard-related artefact was found in the layer as well, the single rain-guard documented in the Bergen material (Figure 7.1).[65]

One of the Bergen scabbard coverings is complete, but worn down to cracks along the rims at the lower part. Most fragments are deliberately cut before depositing. Cut-marks of scabbard leather-coverings are interpreted as stemming from the removal of the covering from the wooden plates before fitting them with a new covering (van Driel-Murray 1980: 39; 1990: 162; Cameron 2000: 59, 61; Mould et al. 2003: 3365; Harjula 2005: 72). At first thought, it might seem unlikely to reuse the wooden plates made by a material far less expensive and time-consuming to produce than the covering. However, as Cameron notes, the wooden plates were also lined with an inner lining of hairs or textile protecting the blade and probably fitting a specific blade, making it practical to reuse (Cam-

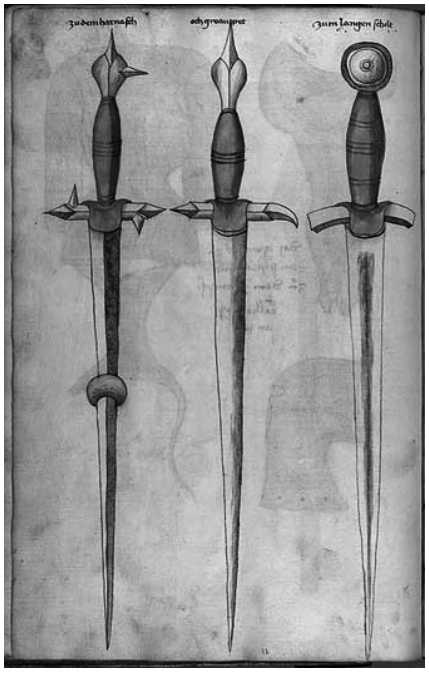


Figure 7.1 *A rain-guard for a sword, found with the scabbard-fragments under building 433 (BRM 0/48686). To the right, three swords, all with leather grip-coverings and rain-guards, from a version of Meister Hans Thalhoffer: Alte Armatur und Ringkunst, Bayern 1459 (Thott 290 2º 108r. Det kongelige Bibliotek, Copenhagen).*

eron 2000: 59). As the Bergen material shows, the scabbard leather did not necessarily need to be completely removed. Part of the leather could be cut away, and be replaced with a piece of fitting size sewn onto the original leather (cf. chapter 5.8).

As most of these fragments seem to derive from the activity of refurbishing scabbards with new leather coverings, the material corresponds to a specific task carried out by a group of craftsmen that is described in written sources from all Nordic countries; the sword-polishers, ON *slipari, sverðslipari* (KLNM XVII: 592–593; Harjula 2005: 68). In the case of Bergen, these sources prove particularly relevant. The Urban Code (1276) locates the sword-polishers, together with the armourers, ON *platomæistarar*, and chainmail-makes, ON *bryniu mæistarar*, to the western side of Øvrestretet (i.e. 'the Upper Street'), from the gate of St. Peter's churchyard north of the churchyard of St. Mary's (*Bl* VI, 8). With the shield-makers situated nearby, the written sources give evidence of a professional group of weaponry producing crafts in Bergen in the high Middle Ages that were perhaps not very extensive, but apparently had a certain specialisation.

A by-law from 1282, issued by King Erik Magnusson on trade and prices in Bergen, states that the sword-polisher is to take one *æyri* for a sword with new covering of bovine leather, and one *ertog* for polishing the sword.[66] As one *æyri* equals three *ertoger*, I assume the sum of one *æyri* includes polishing of the sword and

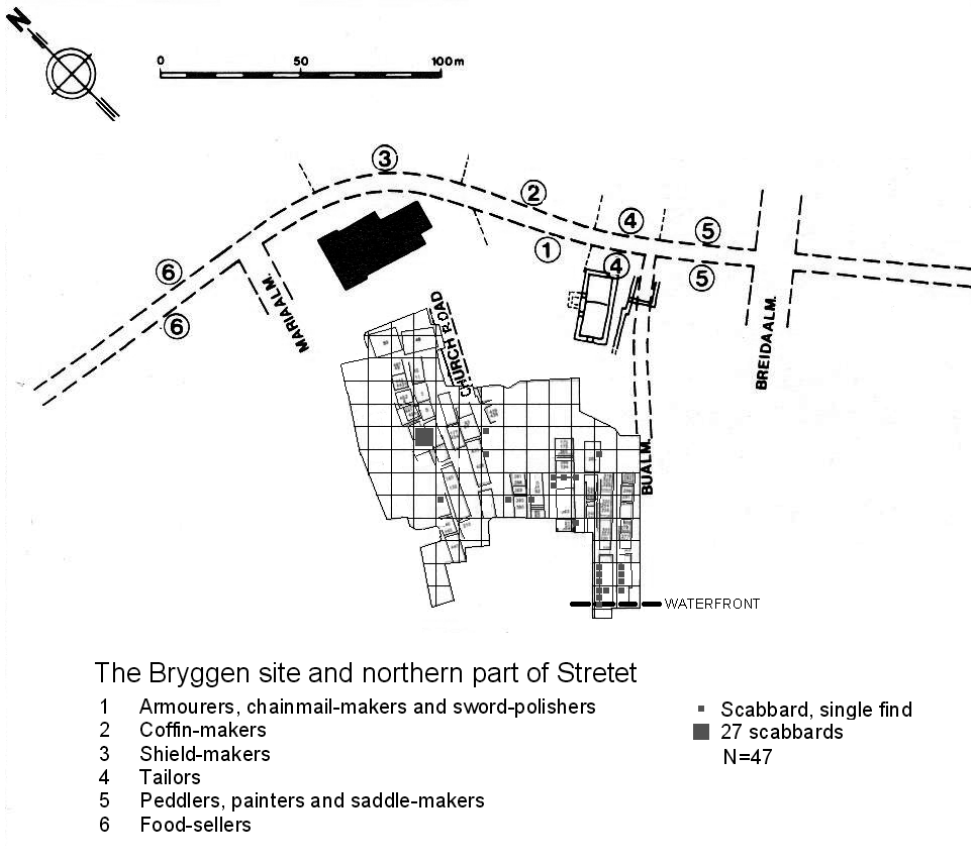


Figure 7.2 *The Bryggen site, period 6 (1332–1413) with finds of scabbards, and the northern part of Stretet, with different crafts situated according to the Urban Code (1276). Scabbard finds are marked (Based on Øye 1988: fig. 0. 4; Lüdtke 1989: fig. 2; Herteig 1990–91).*

a new or refitted scabbard. The regulation does not concern the price of a new sword, which must have been far higher.[67] To relate these prices with other examples from the same regulation, one *æyri* was also the price of a pair of female shoes of best quality, and a helmet of best quality was priced at five *æyri*. According to the regulation, the sword-polisher would wax the helmet and fit it with leather for one *ertog*. A new regulation issued by king Olav Håkonsson in 1384 is essentially the same, but with new prices.[68] The price of the scabbard is here reduced in relation to the cost of polishing. The sword-polisher's trade was to shaft and polish the blades and to provide them with scabbards. Maintenance of the sword, such as sharpening and polishing the blade and replacing worn parts like grip-coverings, rain-guards and scabbard-parts, would be part of the sword-polishers specialisation. It is, after all, the covering, or *umgerð*, that is specified in the 1282 by-law and not the scabbard itself, although we cannot exclude that the term is used here to denote the complete object.

Between St. Mary's and St. Peter's, Øvrestetet runs within a distance of *c.* 30 to 65 m east of the Bryggen site. According to the regulations, the sword polishers should be situated here along the western side of Øvrestretet. This area has not been excavated, but lies in close proximity to the Bryggen site (Figure 7.2). In period 6 (1332–1413), a work-shop placed here would be situated approximately 70, maximum 100 meters, from building 466 with the mentioned assemblage of deposited leather waste. Eleven fragments are found in the fill-masses for the extended waterfront, 100–130 meters from this area, in the same period. A further eleven fragments are scattered on the site, but three of these belong to the same scabbard.

The scabbard-fragments from Bergen constitute one third of the documented sheath/scabbard finds at the Bryggen site from periods 3 though 6 (1170/71–1413), but are rare in other parts of the town. A law-text, in this case the Urban Code, is not necessarily a factual description. Seen in connection with the assumed localisation of the sword-polishers' workshops according to the Urban Code, however, these finds support the normative regulation. The distribution and dating of the finds suggest that this specialised craft was established before the thirteenth century, although this interpretation may be stretching the data too far, as numbers of finds are low before period 5 (1248–1332). From periods 5 and 6 (1248–1413), however, the number and distribution of scabbard fragments support the existence of specialised scabbard-producing workshops in Bergen, as indicated in the written sources. The Bergen material thus also supports Harjula's suggestion that concentrations of scabbard fragments in the archaeological record indicate professional activities.

Whether the actual fragments of scabbards found in Bergen were produced here originally is another question. The fragments under building 433 are of types F2 and F3 in addition to two fragments of types E and F4. While F2-scabbards are known elsewhere on the site and from other periods, apart from two fragments, incised scabbards of type F3 are only found here.[69] As mentioned earlier, only one scabbard has been classified as F4. These items do not necessarily originate from the same workshop. However, they have most likely been removed from their scabbard-plates at one or another of the neighbouring workshops. The F3-scabbards are decorated by incising, which is rare in the comparative material abroad although the technique was frequently used on sheaths. That the deposited fragments are homogenous in type may indicate that they are from a limited number of workshops, perhaps even one of those located in Bergen. Other scabbards such as the single F4-scabbard or the single F2-scabbard with more figurative decorations are unusual in the Bergen corpus, and may have been produced elsewhere although foreign parallel finds are few.

Eleven of the 94 scabbard-fragments from Bergen are identified as ovri-caprine or probably ovri-caprine leather, which is uncommon and barely documented in other medieval corpora. Seven of 60 scabbards from York are reported as ovri-caprine, but most of these scabbards are from the tenth century, and only one of the seven medieval scabbards is made of sheep/goat. A general decline in use of goat leather in England from the early thirteenth century onwards

has been explained partly by guild restrictions and partly by reduced import of goatskin from Spain (Mould et al. 2003: 3265–3267, 3496). Ovri-caprine leather was, however, available in Bergen as both sheep and goats were commonly available here as in other Norwegian medieval towns, and goatskin was also a common means of payment (Øye 1998: 51). Ovri-caprine scabbard leathers are found from periods 4 (N=2), 5 (N=4) and 6 (N=5) (1198–1413). The two by-laws mentioned both state that the priced scabbards should be of bovine leather. With regard to shoes, the 1282 by-law states lower prices for wares made of inferior leather such is goatskin (*NgL III*: 13). Presumably, scabbards of ovri-caprine leather would also be cheaper. The fact that eight of the eleven ovri-caprine scabbards are of type E and thus undecorated strengthens this assumption.

Although not identified as to leather type, the scabbards from Oslo have certain similarities to those from Bergen. At least 34 of the 100 artefacts from the Sørenga excavation are scabbards, while no scabbards are found among the 18 fragments from the excavations in Gamlebyen.[70] Among the Sørenga finds, two probable grip-coverings were also identified, parts of the sword-grip that would tear and need replacement. Seen in light of the Bergen finds, it is likely that the scabbard-fragments from Oslo probably represent waste from a sword-polisher's workshop, dumped in the medieval Alna River. The fact that more than half of the Sørenga scabbards have stamp decoration with a limited range of motifs may also indicate that they originate from the same workshop or a small group of workshops. The finds were deposited on the seabed during an apparently relatively short period of time, probably during the fourteenth century. In this case, the material predates two sword-polishers known in Oslo from written sources, one Tideke Hansen mentioned in 1468, and one Marcus Sverdfeger ('Sword-polisher') mentioned in 1542 (Grieg 1933: 290).

7.2 Sheathers in Bergen?

Cutlers, or knife-makers, are frequently mentioned in written sources from England. The cutlers' guild was responsible for the finished products of sheathed knives, but within this large industry sheathers and blade-smiths also formed separate guilds that seem to have been controlled by the cutlers. The written sources from London indicate that cutlers also made sheaths (Cowgill 1987: 32–33). Unlike scabbards, the production of sheaths is not mentioned in the written sources from Norway until the end of the sixteenth century. Cutlers are mentioned, however, in other Scandinavian late medieval sources (KLNM VIII: 594–595). As for the scabbard-making and many other specialised crafts, it seems unlikely that there was no production of sheaths in a town the size of Bergen. Can the archaeological material provide information on this matter?

While a domestic production of sheaths is not as archaeologically evident as for the scabbard-production in connection to the sword-polisher, there are, however, indications. The Bergen corpus contains several unique sheaths that are not recorded at other sites. The A1-sheaths are only documented in Scandinavia and most of these 73 specimens are found in Bergen, while several subtypes are only recorded here. There is a risk in assigning origin of specific artefacts to where they are found in largest numbers. But among the published North European sites with sheaths and scabbards, there are no other towns standing out as likely providers of these sheaths as Bergen. Nine A1-sheaths are known from Oslo, one of subtype A1.4 and the remaining of A1.1. This subtype is also documented in Lund, and an A1-sheath that could be of any sub-type is found on Åland. It is possible that the type is also to be found among cursory described sheaths from Tønsberg, Stockholm and Lund. As the parallel finds are few, it is tempting to assume that type A1-sheaths, especially some of the subtypes that only occur in Bergen, in fact have had a limited geographical distribution. Seventy-three A1-sheaths are recorded in Bergen, of which 60 could be identified positively or probably to leather type (cf. Diagram 5.1). Of these, 42 specimens were of ovri-caprine leather, while less than half as many, only 18, were made of bovine leather. As shown earlier (cf. Diagram 5.4), this distribution is in contrast to the general preference for bo-

vine leather for sheaths. In addition to Bergen, ovri-caprine leather only used for sheaths in any number in Schleswig. Even though ovri-caprine leather is described as less valuable in the 1282 bylaw on trade and prices in Bergen, it seems to have been the preferred leather for this type of sheath. These sheaths do not necessarily appear as low-price products despite the leather, as they could be equipped with decorative tails cut in delicate detail, as subtype A1.7, or have decorative seams along the tip or mouth, e.g. of silk thread. The archaeological material itself then, although partly based on negative evidence, seems to suggest a domestic production of sheaths in medieval Bergen, characterised by a local style and ovri-caprine leather.

The material also suggests imitations that could have been made in Bergen as well as elsewhere. One sheath of type B3 has repetitive incised notches, giving a texture reminiscent of the stamped surfaces of type B1.2-sheaths (cat. no. 196). B2-sheaths with heraldic shields are by far best represented from London, but a B2.x-sheath decorated with a heraldic 'a fess between two chevrons' (cf. chapter 5.3.2) made of probable ovri-caprine leather (at least not bovine leather) is found in Bergen (cat. no. 185). While this material was common in Bergen, it was barely used for sheaths in London where calf leather was mandatory by law for sheath-making (Cowgill 1987: 34–35). Thus, several options can be regarded concerning the sheaths with foreign features. We cannot exclude the possibility that such sheaths may have been produced in Bergen by foreign craftsmen, e.g. German leather-workers, but the possibility also exists that Norwegian craftsmen copied foreign sheaths.

Even though cutlers are not mentioned, more than 30 different crafts are documented in Bergen in the high Middle Ages, more than any other Norwegian town at the time (Helle 1982: 427). Even though several crafts were in need of leather or skin for their products, tanners are not mentioned as a separate group of craftsmen although specialised professions of skin and hide manufacture are known from other European towns as regulated and mandatory. To avoid unfair competition and to monitor the quality of the products, single craftsmen were prevented from having control over the whole production process from raw skin to finished products (Thomson 1991: 13; 2006: 71). In Bergen on the other hand, sources inform us that the important and dominant group of shoemakers tanned the leather themselves (*NgL III*: 13). In addition, the skinners had privileges to tan or taw (*NgL III*: 14; Grieg 1936: 258–259). I assume other craftsmen such as the sword-polishers could prepare leather themselves as the shoemakers did, although this is not as evident from the written sources. Goatskin used for sheaths could also have been prepared in less labour-demanding ways than was needed for calf hide (Thomson 2006: 71–73). However, the 1282 by-law on trade and taxes in Bergen prohibited the shoemakers from acquiring more skin and hide than they needed for production, and perhaps this indicates that they also made leather for sale (*NgL III*: 13). Nevertheless, more than any other foreigners, Germans established themselves as craftsmen in Bergen during the thirteenth century. In 1330, a group of at least 44 German shoemakers were granted monopoly on the production of new shoes in Bergen. In addition, foreigners from other parts settled in Bergen, such as Gotlanders and Englishmen (Helle 1982: 473–474; 1994: 16). An international milieu of craftsmen clearly could have introduced foreign traits and styles on a number of wares produced in Bergen.

Nevertheless, the question to be posed is whether sheath-making can be ascribed to any specific group of craftsmen in Bergen. As already mentioned, a specialised weaponry-producing milieu is attributed to the vicinity of the Church of St. Mary. The smiths would naturally be associated to these crafts, but because of the risk of fire were assigned to areas outside the habituated town area (*Bl VI*, 10). The by-law of 1282 on trade and prices in Bergen mentions several products from the smith, such as helmets, spears, axes and knife-blades (*NgL III*: 14; Grieg 1936: 232–233; Helle 1982: 433). The smiths probably sold several semi-fabricated products such as knife-blades, both to private persons and more specialized craftsmen, among these the group specialising in arms and armour around the church of St. Mary's. While the

smiths cannot be excluded as cutlers as well, it is as probable that others fitted the knife (-blade) with shaft and sheath, i.e. the actual cutlery. Several groups of craftsmen may be possible alternative producers, such as the sword-polishers, shoemakers and perhaps the skinners. Here sword-polishers represent a likely option, as they assembled swords and must have supplied them with leather parts such as grip-coverings and rain-guards. They made scabbards and repaired them when worn. They also supplied other items with leather, such as mail-coifs (*NgL III*: 15). As specialized leather-workers within a group of professions that clearly cooperated in Bergen, sword-polishers stand out as possible candidates for making sheaths and assembling knives, i.e. cutlery. Shoe-makery is another specialised branch, large and resourceful in Bergen and with a special German dominance. As shown, several sheaths in the Bergen corpus are of types common in German towns along the South Baltic coast. Although they produced leather, the shoe-making specialisation was not 'knife related' as it was for the sword-polishers. Skinners prepared pelts and worked furs and according to Grieg also made pouches, leather thongs, and other specialised products (Grieg 1936: 259). Thus they are as likely to have functioned as sheathers as well. Cobblers were leather workers repairing and reusing leather items. Cameron also suggests that deliberate cutting of old scabbards but also sheaths was done by other professionals to prevent cobbling, and to protect their own interests (Cameron 2007: 52). A number of Bergen sheaths are repaired, but several represent reuse of other leather artefacts. While non-professionals may have done such work themselves, the cobblers may have modified several of the artefacts found in Bergen.

Neither sheathery nor cutlery is mentioned in the written sources, nor are they ascribable with certainty to known professions in medieval Bergen. However, recognised by a number of sheaths that lack foreign parallels and an extensive use of ovri-caprine leather for sheaths, I consider it most likely that sheaths were produced in Bergen. Not regulated as far as we know from the written sources, cutlery and sheathery may have been an additional activity for several groups of crafts.

7.3 Import of sheaths and scabbard

Although sheaths and scabbards were produced in Bergen, as argued above, a number of sheaths in the Bergen corpus show foreign traits and several specimens have close parallels to foreign finds. Based on the few specimens available by the early twentieth century (B-types), both Koren-Wiberg and Grieg assumed the Bergen sheaths to be of English origin based on similarity to London finds (Koren-Wiberg 1908: 151; Grieg 1933: 248). Herteig repeats the assumption during the Bryggen excavations, that "… most probably a great deal was imported from England, where parallels can be found for almost every detail in shapes, patterns and composition" (Herteig 1960: 184). These B-type sheaths are, however, the ones with most conspicuous appearance in archaeological contexts, due to surface-decoration by impressing and similar techniques. Other sheaths, decorated by e.g. embroidery or fastened along the rim by a now-corroded ferrule, have now lost much of their once striking appearance. As shown in the previous chapter, later identification of the artefacts has demonstrated that many such sheaths show German/Baltic influence. How likely is it then to regard these artefacts as trade commodities? Alternatively, should they be regarded as personal items that foreigners visiting or residing in the town brought with them as personal belongings? Before assessing how such objects were brought to Bergen, some degree of certainty should be established that these may have been produced elsewhere.

7.3.1 The question about foreign types and influences in the Bergen corpus

Four sheaths of type B2.1 are documented from Bergen from period 4 (1198–1248). Besides a single sheath from Lund, these four are the only B2.1-sheaths found outside the British Isles, judging by the published literature. Furthermore, the four Bergen sheaths are all decorated with a lattice pattern on both blade- and handle-parts. The earliest documentation of B2.1-sheaths is from Dublin around year 1000. In

the period *c.* 1000–1250, 137 type B2.1-sheaths outnumber all other sheaths from the town put together. Cameron assumes Dublin to be the origin of this type of sheath which she labels 'B2, winged', and by the late twelfth/early thirteenth century they are recorded from several other towns on the British Isles (Table 6.15) (Cameron 2007: 28, 61–64). From London, 50 sheaths of this type are documented from the late twelfth century onwards, constituting a substantial part of the large London corpus, or *c.* 15 per cent of the sheaths.[71]

bution. Notable here are sheaths of types B2.3 and B4 which strongly point towards England, and type C that points towards the southern Baltic coast. Types B2.x and D1 have wider distribution, but the former generally points westwards while the latter points eastwards. While some of these sheaths and even types most certainly were produced outside Bergen, there is a possibility that some were actually made in Bergen, e.g. by foreign craftsmen or perhaps native craftsmen receptive to foreign impulses. Anyhow, these different types can be regarded

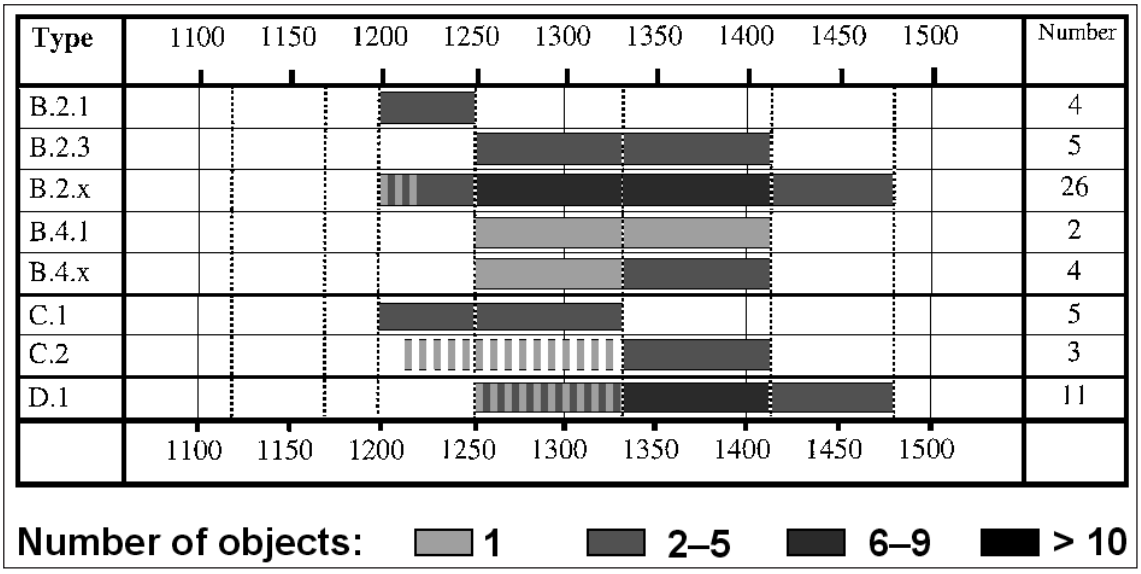


Diagram 7.1 *Chronological distribution of types B2, B4, C and D1 in Bergen. The B-types are most commonly found on the British Isles, types C and D1 in German/Baltic areas.*

B2-sheaths, with lattice pattern on both blade- and handle-part like the Bergen specimens, are documented from Dublin, London and Perth. The datable specimens have approximately the same dates as from Bergen, but from Perth slightly younger (cf. chapter 6.7.3). I find it highly unlikely that the four Bergen B2.1-sheaths were produced in Bergen as a sudden contemporary trend, as the type seems otherwise unknown outside the British Isles.

The spatial and chronological patterns of other types are not as clear as for the B2.1-sheaths. As shown in chapter 6, however, several types show patterns that place Bergen in the outskirts rather than at the centre of the distri-

collectively as 'western' and 'eastern' influences in the Bergen corpus. The 'western group' consists of 41 sheaths while the 'eastern group' comprises 19 specimens. How do these two groups fit the general development of the Bergen corpus through the medieval period from *c.* 1200 to 1500?

Both groups are documented from period 4 (1198–1248), with some types that seem to have a restricted distribution, i.e. types B2.1 and C (Diagram 7.1). The early B2.x sheaths (N=3) have rather simple decorations and lack the unambiguous 'English' character of many later specimens of this type. The foreign influence is more marked in the following period 5

(1248–1332). As shown in Chapter 6, types B2.3 and B4 are all most commonly found on the British Isles, and the B2.x-sheaths now have a more 'English' touch to them, with floral patterns and dragons. The German/Baltic traits are documented in fewer specimens, but by now types C2 and D1 are also represented and are both common types along the southern Baltic coast. The distribution is similar in period 6 (1332–1413). Regarding the B2.x-type, several sheaths have impressed heraldic shields well-known from London. Type C1 is not identified, unlike type C2 which is more common along the southern Baltic coast. More prominent is type D1, known from a wider geographical area but still dominant in the same towns as type C. Following the general tendency of the Bergen corpus, few sheaths are documented from period 7 (1413–1476). The remaining B2.x–sheaths lack the strictly 'English' character from the two previous periods, and the 'German/Baltic' influence is marked by type D1.

Summing up, the Bergen corpus comprises a number of sheaths that is a result of foreign influence. Although the possibility of foreign artisans producing sheaths in Bergen cannot be ruled out, many of these sheaths are most likely produced elsewhere.

7.3.2 Sheaths as a trade commodity

As a number of foreign sheaths are identified in the Bergen corpus, one should ask whether such artefacts were common trade commodities. In describing the English sheaths, Cowgill asserts that over-sea trade of such objects was almost non-existent (Cowgill 1987: 34). As shown in chapter 5, foreign traits are rare among the London sheaths except perhaps for some incised sheaths (B3) that appear to be as common in the Low Countries (Goubitz 2002: 159). Still, there was apparently some import. In 1463, King Edward IV forbade the import of wares 'ready wrought' into England, among which sheaths were also specified (Cowgill 1987: 34). The prohibition may indicate that such trade in fact represented a problem. Among the Hull sheaths, three are of type D1, a type common in the Hanse towns but not documented elsewhere in England according to my study. An exclusive market was also in the interest of the strong London guilds that shared the tasks of producing the different parts of knives and sheaths, before assembling the items together for sale.

Before looking at trade in Bergen in general, I shall go deeper into a specific group of sheaths to assess sheaths as a trade commodity. Seven B2.x-sheaths found in Bergen have heraldic shields as decoration. The heraldic significance of sheaths and scabbards will be further discussed in the next chapter. I will confine myself here and refer to the impressed arms on London finds of leather sheaths that have been discussed by Tony Wilmott (1981; 1987). He has identified several possible families to whom different arms and consequently sheaths can be connected. The most common shield in the Bergen corpus is 'A fess between two chevrons', which is visible on five of the sheaths. It is also the most popular in London, where the shield is documented on 15 sheaths. Willmott identifies it as representing the FitzWalter family, a family of considerable importance and influence in medieval London so that their arms were probably well known and easily recognisable (Figure 7.3).[72]

Not disputing the identification of 'A fess between two chevrons' to the FitzWalters, historian Derek Keene suggests an interesting interpretation for these sheaths. The town of Thaxted, situated 60 km north of London, developed a flourishing and strongly specialised knife industry during the Middle Ages.[73] Whether or not instigated and partly controlled by London cutlers, Thaxted produced knives for the London market, making use of resources nearby such as tannery villages and woods. Keene suggests that impressed heraldic arms may have been used as a brand to stimulate the sale of sheaths and scabbards in London where they were well known as a sign of 'Thaxted quality'. Although he does not elaborate further upon this interesting hypothesis, he mentions that the FitzWalters had their rural base in the area of Essex where Thaxted is situated (Keene 1995: 234–235, note 55).

Can this hypothesis be further supported? Branding is not a new phenomenon in archaeological interpretations, and a well-known albeit earlier example is the Ulfberth- and Ingelfrii-

swords from the Viking Age and early medieval period. Originally produced at Frankish workshops, these swords were copied for centuries far beyond the Frankish kingdom. The inscriptions 'Ulfberth' and 'Ingelfrii' developed from brands of specific workshops, to a general sign of quality used by a number of different workshops. The inscriptions were deranged to the unrecognisable. Swords are found containing both brands, and even wooden toy-swords would have the inscriptions imitated. The earliest Ulfberth swords were produced around AD 800, and Ingelfrii swords probably around AD 950. Some are found, however, with twelfth century grips (Oakeshott 1991: 5; Sindbæk 2005: 50–52).

Several similarities can be documented for the sheaths with heraldic arms. While the FitzWalters' rural base was situated in Essex close to Thaxted, the town itself was under the lordship of the powerful de Clare family up to the early fourteenth century (Keene 1995, note 55). The coat of arms of de Clare is 'or three chevrons gules'. The design 'three chevrons' was used by at least ten different families (Wilmott 1987: 49), and thus not identifiable without correct colours. This emblem is found, however, on twelve sheaths among the London corpus. Six of these are listed in *Knives and Scabbards*, making it the second most popular arms on the London sheaths (Wilmott 1987: fig.13). If we assume the 'three chevrons' design represents the de Clare family, the two most common shield motifs found in London actually correspond to the two families controlling perhaps the largest cutlery enterprise in medieval England, that of Thaxted.

That the two most commonly appearing arms on sheaths in London can both be con-

Figure 7.3 *The seal of Robert FitzWalter († 1231). The inscription reads + SIGILLVM: ROBERTI: FILII: WALTERI. FitzWalter is depicted on horseback, both his shield and the horse's trappings decorated with the arms 'A fess between two chevrons'. The arms in front of the horse represent FitzWalter's close ally, Saher de Quincy (Reproduced with permission, © Trustees of the British Museum).*

nected to Thaxted and Essex strengthens the hypothesis that these arms functioned as quality marks or brands, referring to who controlled the resources and production of the artefacts. Several other arms are documented on the London sheaths and may signify other workshops, or perhaps a form of imitation.[74]

The FitzWalter shield is also documented on five sheaths from Bergen, and the possible de Clare arms on two. In my opinion, the objects themselves support the hypothesis of branding. On many sheaths, the arms do not take a major decorative place. On several sheaths, the arms are on the backside and were not visible to anyone when the sheaths were carried (cf. Figure 5.41). Furthermore, several sheaths have a number of different arms depicted. They could hardly all signify heraldic allegiance. As a brand, howerver, the arms had a function, visible or not. As a sign of quality, the arms could easily have been copied as was the case with the Ulfberth swords. One of the Bergen sheaths stands out in this regard. Almost all English sheaths are made of calf leather, as this was mandatory by law (Cowgill 1987: 34–35). However, one Bergen sheath with the FitzWalter arms is not made of bovine leather but instead most likely of goatskin (cat. no. 185). If the shield was a quality mark, then the sheath can hardly be from Thaxted and perhaps not England at all. It might even be a copy made in Bergen, where goatskin was frequently used for sheaths. Such copying might reflect a wish to imitate a certain style. If the style, or in this case the arms, was associated with quality, such items could be sold for a better price.

To sum up this small excurse on leather sheaths with impressed heraldic arms, there is strong indication that the knife and sheath industry in England at least, extended further than merely its surrounding market. The possibility exists that some of the Bergen sheaths were actually produced in Thaxted. Yet how these ended up in Bergen and whether the sheaths were personal items or trade commodities remains an open question.

7.3.3 Trade in Bergen

One question to also consider is whether the sheaths from Bergen with foreign traits should be interpreted as trade commodities or personal objects brought along by foreign visitors.

Before assessing the nature of this influence as trade, I shall briefly look at other archaeological evidence that reflects shifting trade contacts with Bergen, in order to assess the material in a wider archaeological context. Here, pottery is probably the best indicator. Lacking a domestic pottery production in Norway in the medieval period, the finds of ceramics and stoneware found at the Bryggen site clearly represent imported wares. The more than 160,000 shards from more than 70 different production centres in northern and western Europe, but also the western Mediterranean, reflects wide trade contacts (Blackmore and Wince 1994: 13; Øye 1997: 450). Syntheses on the Bryggen material especially relevant here are carried out by Hartwig Lüdtke (1989), Lyn Blackmore and Alan Vince (1994).

Up to *c.* 1250, German wares dominate the material and constitute almost 60 per cent of the pottery from the Bryggen site while English wares represent almost 25 per cent. The situation is reversed from *c.* 1250 to *c.* 1400, when English wares constitute more than 60 per cent. German wares comprise the second largest group, with *c.* 15 per cent. This period is the most varied, with substantial imports also from Denmark, France and the Low Countries, although relatively small compared to the English material. After *c.* 1400, German and Dutch wares are found almost exclusively, the former dominating with almost 80 per cent. Regarding English wares, it can be added that while London wares make a substantial share in the period 1120s to *c.* 1250, the English material is totally dominated by other production centres in the period *c.* 1250 to *c.* 1400, most notably Grimston and Scarborough ware. Even though this distribution pattern is based on estimates and incomplete stratigraphic and ceramic data, it suffices to give an overview of the main tendencies in the Bryggen site pottery material (Lüdtke 1989: 21–27; Blackmore and Vince 1994: 31–32) (Figure 7.4).

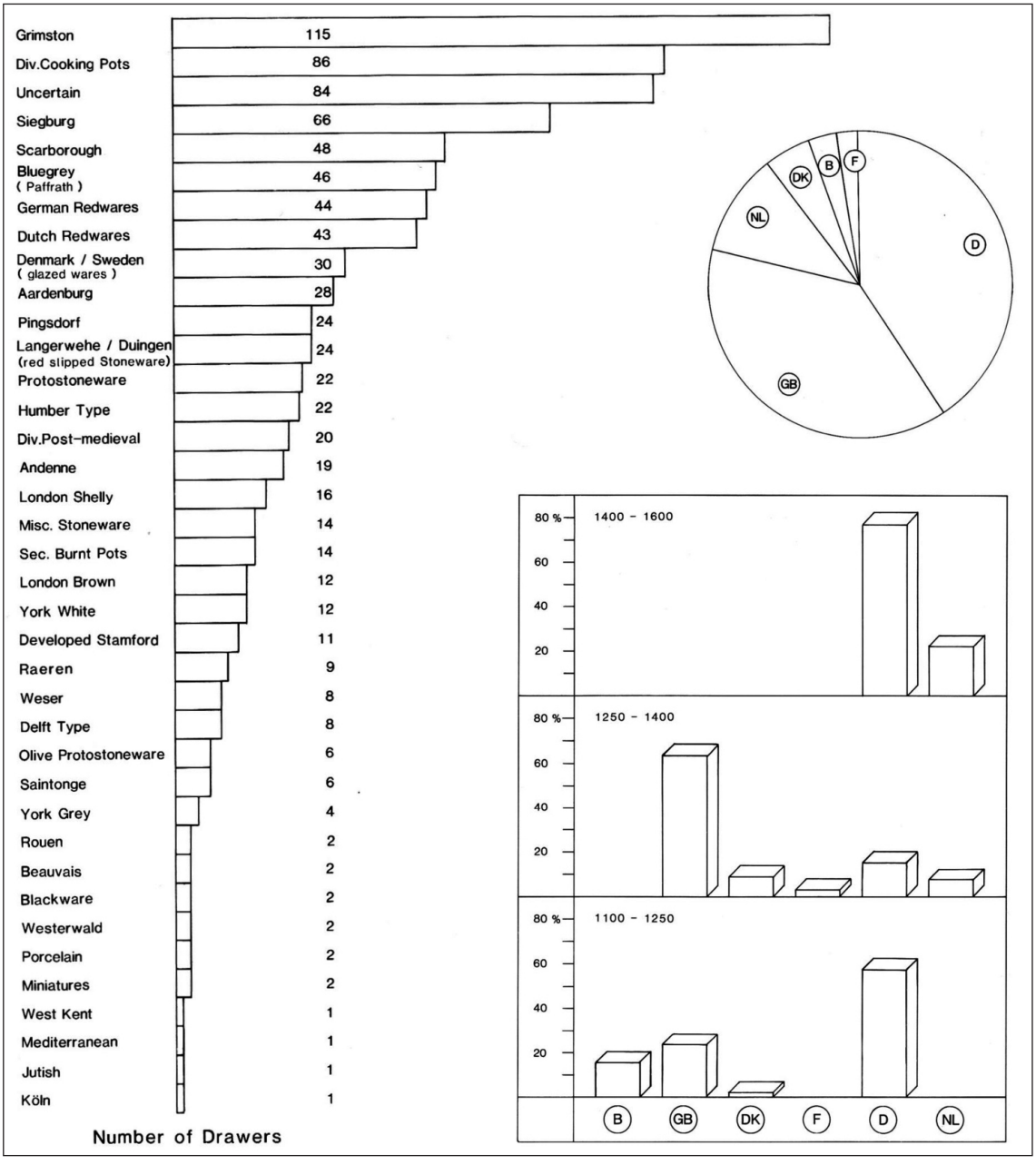


Figure 7.4 *Graphic presentation of some main features of the pottery from the Bryggen site. The graph to the left illustrates number of storage trays collected of different wares. Although stemming from more than 70 different centres of production, the majority of finds originate from Germany (D) and England (GB), as illustrated in the circle diagram. Temporarily, German wares dominate the periods 1120s to c. 1250 and c. 1400–1600, interrupted by an English dominance in the period c. 1250–1400 (After Lüdtke 1989: 21–27, figs. 4, 5, 6).*

The datable quanta of pottery do not, of course, directly reflect the trading relationship between Bergen and the production centre for the excavated wares.

Both German/Baltic and British influence is documented in the corpus of Bergen sheaths. This is coherent with the ceramic distribution as presented by Lüdtke, with Germany and England as the two major countries of origin for ceramics found in Bergen. Furthermore, the numerical dominance of 'English' sheaths in periods 5 and 6 (1248–1413) is in accordance with a dominance of English pottery from 1250 to 1400. That sheaths were part of this trade, either as commodities or as personal belongings, is therefore also a reasonable assumption.

In addition, literary sources describe a flourishing and wide-reaching trade in Bergen during the twelfth century, such as the *Orkney Saga*, *Historia de profectione Danorum in Hierosolymam*, chronicling a group of Danish crusaders and *Sverris saga*. Sources of a more quantitative character, such as customs accounts, are more frequent from the late thirteenth century onwards, and are e.g. used by the historians Knut Helle (1968; 1982) and Arnved Nedkvitne (1977). Used as indicators of trade, the ceramic evidence is in accordance with the written sources, giving England the role as the leading trade partner during the thirteenth and fourteenth centuries (Lüdke 1989: 23). During this period, however, the Hanse merchants increasingly dominated the transactions in this contact (Helle 1968: 34).

Guilds of cutlers and sheathers are unknown in Bergen, and neither sheaths nor scabbards are mentioned among the trade commodities in the Norwegian sources. During the tensions between the Scandinavian countries and the Hanse League in 1367, the League forbade its towns to export iron, steel and weapons to Denmark and Norway (*DD 3rk VIII* nos. 31 and 37). Swords with scabbards may easily have been included among these weapons, but perhaps only swords and those half-fabricated. Sheaths, on the other hand, were probably not exported in large quantities, and should probably be looked for among unspecified retailing. Retailing or small trade was regulated in Bergen, but foreign merchants and craftsmen would often try to establish themselves in this market. The written contemporary sources tell about an English ship that sold trinkets or finery in the bay, Vågen, and Norwegian ships exported retail commodities from King's Lynn in the 1320s (Helle 1982: 321–322, 420, 779, 785). It is not unlikely that a number of English and German sheaths from different areas may have found their way to Bergen in such a manner. As demonstrated, the composition of the Bergen corpus has a far larger type variety than that of London.

Several interpretations, then, are at hand for the Bergen sheaths with foreign traits, and many of these have close parallel finds in the British Isles and the German/Baltic area. As Bergen had strong trading contacts with these areas, it is not unlikely that sheaths were part of a semi-private retail trading alongside the bulk-trade, rather than an ordinary trade commodity. With foreign craftsmen established in Bergen, sheaths with foreign traits may have also been produced in Bergen, although sheathers and cutlers are not directly mentioned in the written sources. Native craftsmen may have also been receptive to foreign traits and trends. However, as David Gaimster has pointed out, e.g. German stoneware should be interpreted as culturally and socially significant as well as trade indicators (Gaimster 1997: 51). Similarly, sheaths might have been part of several different social practises, and the foreign input in the corpus of sheaths in Bergen might thus have several different and overlapping explanations, such as markers of ethnicity, status, allegiance, etc. along with being import objects, gifts, copies, or brought along as souvenirs or personal belongings. This topic will be further discussed in chapter 8.

7.4 Summary

The sheaths and scabbards contribute to a varied picture of medieval Bergen. The scabbard remains are usually cut and worn and mostly found in clusters at the Bryggen site. The distribution and state of the fragments indicate that they are most likely the remains from refurbishing scabbards with new leather coverings. As a

specialised task carried out by sword-polishers, these finds support the regulation given in the Urban Code of 1276, stating that the sword-polishers should be situated in the area by the church of St. Mary, not far from the Bryggen site.

Sheaths are more evenly distributed in the town, but a domestic production is not mentioned in written sources. However, domestic production is highly likely as several Bergen subtypes and specimens of sheaths lack foreign parallels and knives are at least confirmed produced in the town. The production may have been another task for the sword-polisher, while other craftsmen may have produced the sheaths as well; we do not know for certain whether the artisans also copied foreign sheaths and styles. Yet sheaths were also imported, most likely as either personal items or retail commodities in smaller quanta. Retailing was regulated in Bergen, but protective measures seem to have been more successful in London than Bergen regarding sheaths.

Regarding domestic production and foreign impulses, the development of the Bergen corpus can be summarised as follows: The Bergen sheaths and scabbards before 1200 make a rather plain impression, without clear foreign parallels, and hardly reflect the same variety in imported pottery and commerce referred to in contemporary written sources.[75] Many sheaths might have been homemade. However, the presence of scabbards at the Bryggen site indicates professional artisans as early as towards the end of the twelfth century.

In period 4 (1198–1248), the sheaths show a marked difference and become more diverse. A number of types of foreign origin appear in the record. The influence from both the British Isles and the Baltic region is clear, and as these particular types (B2.1 and C1) have a restricted distribution, it is tempting to see them as imported objects, probably brought along by their owners. However, foreign craftsmen, possibly mobile, are also a possibility. The sheaths with foreign traits are slightly outnumbered by what appear to be locally made products. Several of these (A1) seem to reflect an increasingly varied local production. The scabbards, on the other hand, remain plain.

During the eight decades following the middle of the thirteenth century (period 5: 1248–1332), the deposition rate of sheaths and scabbards is doubled. The international influences become more evident, with an increase in numbers and types that are common in both the British Isles and the Baltic Area. However, the sheaths that seem to be local products outnumber the foreign types, and are also at their most diverse. A vague spatial pattern is detectable, with the B-types concentrated to the south of the Bryggen site, closer to the area of the Wine Cellar and Town Hall in the centre of the town. Scabbards still make a uniform impression, although some decorated specimens are documented.

The finds of sheaths and scabbards from period 6 (1332–1413) far outnumber any other period, both in number and deposition rate. Significant changes in the material are also apparent. The subtype variety among the A1-sheaths is less than in the previous period, although the finds are more numerous. The spatial pattern from the previous period, with the B-types concentrated to the south of the Bryggen site, is still detectable. The peak of stamped sheaths (type B1) is perhaps indicative of a trend of over-regional fashions, and the type is not as geographically limited as e.g. type B2.1 from period 4 (1198–1248). In this period, scabbards are also far more numerous and for the first time display significant type variety and mark a break with the uniformity in the preceding periods. With the numbers, the type variety of both sheaths and scabbards and strong foreign input alongside local products, period 6 stands out in clear contrast to period 3 which ended 130 years earlier.

8 Use – style, identity and agency

Returning to some of the theoretical perspectives outlined in chapter 3, I will now discuss the sheaths and scabbards related to their use and usage. Is style a relevant term when discussing sheaths and scabbards as elements in communication and as signs of identity? Here, style will be seen from a regional, or emblemic, perspective, which is often implicit in style interpretations, but also alternative views will be discussed, based on the sheaths with heraldic motifs.

Furthermore, the approach of seeing sheaths and scabbards as extended artefacts opens for questions related to such topics as status and gender.

When approaching the users of these artefacts, it is also relevant to consider the wider archaeological and historical context. Such a contextualisation will have to be on a macro-level, mostly related to the town as a whole, and on a meso-level for the Bryggen site.

8.1 A town in change

The analysis has shown that the Bergen corpus changed from periods 3 to 6 (1170/71–1413), with increasing numbers and an increasing share of foreign products or traits of foreign influence. The relation between the number of A1-sheaths and several foreign types in periods 5–6 (1248–1413) is interpreted as local products giving space to foreign products during this timespan. As the urban environment also changed during this period, I will relate the distribution of the sheaths and scabbards to other find groups studied in Bergen that reflect societal aspects, in order to assess the Bergen corpus within its broader archaeological context. How does this material relate to other artefact groups that can give information about the population of the medieval town and urban structure?

One such group is fishing-tackle, which shows a peak in period 3 (1170/71–1198) and relatively high representation also in the following period 4 (1198–1248) before it declines. Ole Mikal Olsen has studied this material (Olsen 2004) and interprets it to reflect a high degree of self-supply of marine resources in the early phases of the town. He regards this equipment as a rural trait characterising the town in a transition phase, partly based on subsistence economy before developing into a more urban community after *c.* 1250, with established provision of primary products from the hinterland. From period 5 (1248–1332) onwards fishing equipment is rare, and although the inhabitants of Bergen continued fishing, self-supply of marine resources was no longer a characteristic for Bergen (Olsen 2004: 93, 98–100).

Two other studies illustrate the change in age and sex among the population, based on studies of textile-production equipment seen as signs of female activities (Øye 1988), and child-related artefacts (Mygland 2007). Period 3 (1170/71–1198) shows the widest range and deposition rate of toys and small soles, reflecting a relatively high proportion of children in the town, while larger soles for adolescent individuals and other toys indicating older boys have replaced this diversity in period 6 (1332–1413) (Mygland 2007: 99).[76] The deposition rate of textile equipment also summits in period 3 and reflects the presence of women, if textile equipment can be used as an indicator of female activities at Bryggen. There is, however, an increasing number of buildings at the Bryggen site where this activity was carried on until period 5 (1248–1332), but these activities appear to decrease within period 6 (1332–1413) (Øye 1988: 142–145).

These three studies show urban changes from the early to the late Middle Ages, where the Bryggen material indicates that the early town had a more rural character and a population of males and females, children and adults, changing to a more urban society dominated by a male population. These changes are also reflected in the written sources (Øye 1988: 144–146; Olsen 2004: 88; Mygland 2007: 99), where German merchants are mentioned in increasing numbers by the end of the twelfth century and from the latter part of the thirteenth century. At this time Germans rented space in the Bryggen tenements and stayed over winter, and by *c.* 1360 the Hanse League had established the Kontor at Bryggen. While the diploma from the

first half of the fourteenth century frequently refers to Norwegians living in the Bryggen tenements, such information is less frequent after the middle of the century. In the early fifteenth century, the Norwegian settlement at Bryggen had more or less terminated. Norwegians owned the ground, but German merchants owned the houses (Helle 1982: 722–723). The Hanse Kontor formed a separate community within the town. With their separate jurisdiction and regulations for contact with the local society, e.g. against marriage and citizenship, the German merchants formed a semi-independent colony in Bergen. Although Germans came to possess a dominant role during the late Middle Ages, a number of foreigners from other nationalities were also part of this development.

During this period, sheaths and scabbards are increasingly visible in the material, doubling in numbers per period. Several scholars have pointed out that women also used sheaths, without further discussion (Marstein 1989: 97; Schnack 1998: 18; Goubitz 2002: 50; Harjula 2005: 18). In the Bergen material, we see that an increasing deposition rate of sheaths coincides with an increasingly larger share of the population being male, visible in both archaeological and written sources.

Early views on the medieval society regarded the inhabitants as spontaneous, violent and self-aware of being part of a family or group rather than individuals (cf. chapter 3.3.1). A large number of sheaths and scabbards, i.e. swords and knives, fit very well into this picture. However, these views have been challenged partly dismissed as elements of a rather chauvinistic aspect of modernity. I will therefore take a closer look at specific aspects of the artefacts related to use in a wider sense, based on style and as extended artefacts.

8.2 Style

By focusing on technical features when classifying the sheaths and scabbards, I have kept in line with an understanding of style close to that of James Sackett: style is seen as a result of how things have always been done, in choice of material, decoration, etc. (Sackett 1977; 1982). In this, I am not necessarily agreeing that style is unintentional. My classification also has spatial relevance, as the analysis has revealed regional differences where the types are identified. There seem to have been different regional styles for sheaths. What exactly constitutes the different styles varies but usually embraces several traits such as form, material, decoration technique and decoration motifs. Style is, however, elusive. Still, as the classification and distribution has grasped some tendencies, these can be assessed from a style perspective. The question then is essentially the same as within the wider style debate: What did this matter to the people who wore these artefacts in general and in medieval Bergen in particular? As Bergen contained a conglomerate of regional, local and foreign identities, sheaths would have been useful artefacts for transmitting 'stylistic messages' about the origin and affinities of the wearer. Is such a hypothesis possible to substantiate in the archaeological record?

8.2.1 Sheaths as emblemic signifiers?

As shown in the previous chapters, the period from 1200 displays a sudden variety of sheaths in Bergen, of which many are also common in other parts of northern Europe. Both an English and a German/Baltic influence as well as a Scandinavian style, of which several subtypes are documented in Bergen only, can be observed in the material from period 4 (1198–1248) onwards. That individuals or groups of people may thus have expressed regional identities through such artefacts is therefore theoretically possible.

The foreign sheaths that are identified in Bergen in period 4 (1198–1248) are relatively homogenous with types of a restricted distribution. The four B2.1-sheaths that have been discussed earlier, in addition to one sheath from Lund, are the only B2.1-sheaths documented outside the British Isles. Regarding the B2.1-sheaths, Cameron's study of the Dublin sheaths is of special relevance.

Cameron regards the appearance of her B2-type winged sheaths (B2.1 in the Bergen corpus) as a deliberate and abrupt change, introducing a new type that totally came to dominate the material. This new type combines traits from several older Viking Age types, but stands out

as a new product that she suggests was part of a Dublin identity from the eleventh century onwards, as this type alone outnumbers all other sheaths of the Dublin corpus (Cameron 2007: 28, 62–64). By including intent and identity, Cameron implies an emblemic style as described by Wiessner (1983) and opposes Sackett's view where the sheaths would be regarded more as passive representations (1977; 1982). By the thirteenth century, these sheaths had spread over the British Isles. By this time, I suspect, an emblemic style is no longer entirely connected to Dublin, as *c.* 15 per cent of the London sheaths are of this type.[77] That the type had changed the emblemic significance as suggested by Cameron, is indicated in two sheaths found in London and Hull, both decorated with the arms of the FitzWalter family.[78] The type is barely identified, however, outside the British Isles, except for four of five finds from Bergen in period 4 (1198–1248). All are decorated with a lattice pattern, like contemporary specimens from London and Dublin. As mentioned in the previous chapter, foreign sheaths might have found their way to Bergen in different ways as trade commodities alongside other goods of the increasing trade, perhaps as mere fashion statements, also by other town's people. However, this type that seems popular on the British Isles does not seem to have been attractive in other parts of northern Europe, and is therefore less likely as a trade commodity. Appearing in Bergen at the time when English trade was strong and growing, it seems plausible to interpret this type as an expression of 'British' identity, easily recognisable in Bergen since these sheaths differ from others in shape, decoration and also in the way they were suspended by holes on the extended flap on the right side. As the type no doubt was common on the British Isles, people who had been there would also recognise this type as 'British'. In a manuscript from this period, Matthew Paris depicts a sheath that seems to be of type B2.1 (Figure 8.1).

Similarly, the C1-sheaths, also documented from period 4 (1198–1248) onwards, might have signalled origin or belonging to the North German area, as they are found only in Schleswig and Greifswald besides Bergen. The sheaths were hardly made to express origin or regional belonging, but situated outside the area they were mainly used, as in Bergen, it is possible that they have been attributed such significance.

A century later or so, sheaths of both English and German/Baltic origin or influence were even more common in Bergen. It is quite pos-

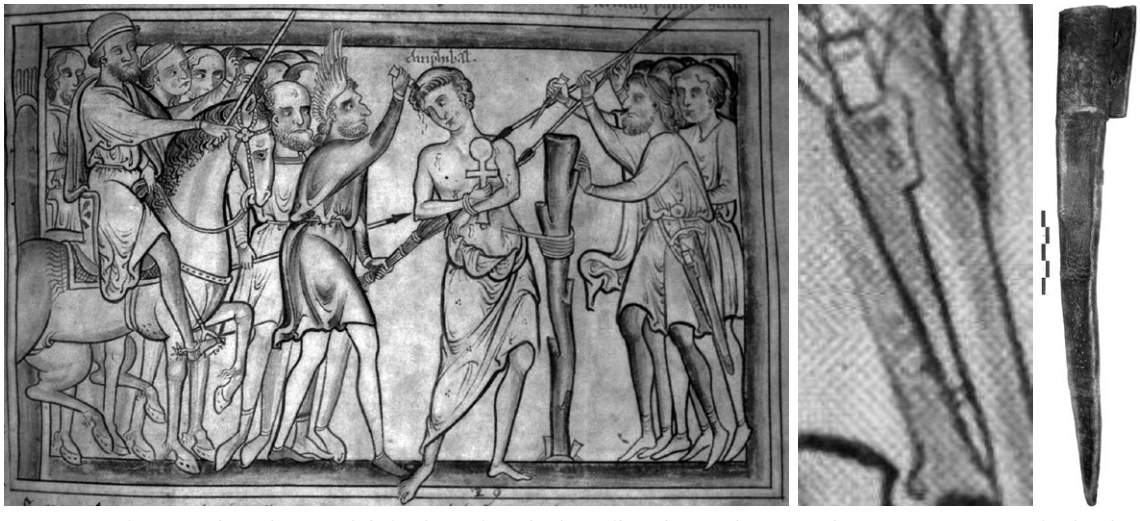


Figure 8.1 *The martyrdom of St. Amphibalus from The Life of St. Alban, by Matthew Paris, between 1230–1250. The sheath carried by one of the persons to the right is shown enlarged, together with one of the Bergen B2.1-sheaths from the same time (cat. no. 157). The depicted sheath is fastened to a sword, however, not carried by a loop through the suspension holes that are visible (Dublin Trinity College Library, MS E. I. 40, folio 45r).*

sible that sheaths still signalled regional origin or belonging. Similarly, it is tempting to regard several subtypes of A1 as expressing a Bergen identity. As suggested in chapter 7, the increase in type A1-sheaths may be seen as a protective response by Bergen craftsmen towards imported products. From an information-exchange-perspective, however, signalling regional identity might have been an important aspect of this response. Still, some of the types used in the later periods, i.e. in period 6 (1332–1413), are less regionally restricted. Some types, like type B1, stamped sheaths, have an almost over-regional character and alternative interpretations should be sought.

The style debate does not give definitive answers on how to interpret medieval sheaths and scabbards, but opens several perspectives and should therefore be further considered. The sheaths analyzed in this study are made in different ways with diverse visual appearances, both factors coinciding with their geographical distribution. It is evident that some types are preferred or more commonly used in the west or the east of northern Europe. Several corpora are quite homogenous with regard to sheath types, e.g. the London corpus which contains mostly B-sheaths. The Bergen corpus, on the other hand, is more diverse and the style variety continues for at least two centuries. A sheath from around 1200 appeared in another context than it did 200 years later. If a sheath signified some kind of ethnicity or identity at one point, this may not necessarily have been an inherent function of a sheath a century later. A central issue related to the theory of style information exchange as used in ethno-archaeology, is that it is involved in social processes between individuals or groups. As the relations between these actors change, the processes will probably also change and should thus be regarded in a short-term perspective. Although recognisable in ethno-archaeology, this is harder to reveal in archaeological contexts in longer term perspectives, due to the fluctuating nature of social relationships and the scanty and indirect documentation. However, some tendencies may be traced. During the 200 years from *c.* 1200 onwards, knives (and daggers) in Bergen were carried in sheaths with styles so different that it is unlikely that the town-dwellers were not aware of them, and consequently their possible inherent meanings. It is best illustrated perhaps by the differences between B-sheaths, which are easily recognisable as sheaths today, and C-sheaths which perhaps many people today would not actually recognise as a sheath. Their different geographical distribution indicates that the differences were not only connected to the items they carried, but also to different ways and styles of carrying them.

As a preliminary conclusion, I therefore find it fruitful to assess the Bergen corpus from an information-exchange perspective. This presupposes, however, that one interprets the act of getting hands on and using a certain sheath of a specific style related to certain geographic areas, also as a deliberate statement expressing cultural belonging or a wish to be associated to a specific area or group of people. As such, the sheaths would probably have been of a larger package of artefacts and customs that signified such an affinity. David Gaimster suggests the use and distribution of German stoneware to have emblemic significance as much as reflecting trade and transport (Gaimster 1997: 51). I would argue that a similar perspective is also relevant for corpora of sheaths as diverse as the Bergen corpus.

Meaning that sheaths in some cases do reflect different cultural affinities in Bergen, one should also look for other meanings attributed to carrying certain sheaths or scabbards with more specific attributes, like the specimens decorated with heraldic elements.

8.2.2 Style expressing fealty …

As pointed out in chapters 5 and 7, heraldic decoration is quite common in the Bergen material. It is documented as actual arms on several B2.x-sheaths, interpreted as possible 'trademarks' in the previous chapter, but more commonly as heraldic elements on both sheaths and scabbards of different types. De Neergaard claims that sheaths are unsuited for display of livery, given their small size, crudity of much of the work and the fact that the wearers' garments would hide the sheath. She sees heraldry as more than just decoration, however; it is "…

reflecting the extent and influence of heraldry as a social phenomenon" (de Neergaard 1987a: 43; 1987b: 61). To assess the Bergen material in this respect, I will look for the use of heraldry on comparative materialAs signs of certain persons and families, heraldic symbols could be used to signal alliance, fealty or livery that a person was in the service of, or a certain person to whom allegiance had been sworn. An example regarding scabbards is the Constable Sword, the badge of office given to the appointed Constable of France exemplified in Figure 8.2 by Bertrand du Guesclin who held this office from 1370–1390. In this illustration, the sword is sheathed in a scabbard decorated by fleur-de-lis, symbolising allegiance to the French King.

Figure 8.2 *King Charles V presenting Bertrand du Guesclin the Constable Sword as he steps into office as Constable of France (Jean Fouquet – fourteenth century © Bibliothèque Nationale de France).*

Sheaths that display heraldic arms known from contemporary sources are also known from archaeological finds. In the nineteenth century, a farmer found a silver sheath containing a kidney dagger in the swamp Borremose in Roholte at Zeeland, Denmark (Figure 8.3). Three small arms on the sheath and one on the dagger depict a couple of shears. Shears were used as heraldic emblems by several Danish families, and with some reservations the Danish archaeologist Nils-Knud Liebgott proposes that the sheath might have belonged to the nobleman Saxe Pedersen who was knighted in 1330 (Liebgott 1976: 51–52).[79] As noted earlier, sheaths of such quality and value are rare among archaeological finds, and this one is assumed to be of Danish or North German craftsmanship (Engberg 1996). Parallels are known from English iconographic sources (Bruhn 1950: 26). Most likely, such a high-quality work has been commissioned. Supporting Liebgott, I think such an item was probably carried by a person for whom the arms depicted on the sheath and the dagger was a distinctive mark. A heraldic emblem had several symbolic meanings of status, class, family, etc.

However, heraldic arms are more commonly found on leather sheaths with impressed decoration of inferior value and craftsmanship compared to the Danish silver sheath. They are most common in London and seven such sheaths are recorded in Bergen (cf. Figure 5.15). Impressed arms have earlier been discussed by Tony Wilmott (1981; 1987), who identifies several possible families to whom different arms and consequently sheaths can be connected. He states, however, that affirmative affiliation to a family would require that the sheaths were coloured, as several arms had the same arrangement. One shield frequently documented in London is 'a fess between two chevrons', the design used for the arms of the FitzWalter family (cf. p. 160). The family held lordship of the Baynard's Castle, centrally located in London, from 1111 until 1275. They also held the title of hereditary standard bearer to the City of London militia from the twelfth century until 1437. The family has been of considerable importance and influence in medieval London, and their arms were probably well known and easily recognisable. Among the London corpus, the arms can be seen on 15 sheaths. Seven of these are previously published among the 120 sheaths in *Sheaths and Scabbards*, and thus the most commonly used of 33 different arms documented there (Wilmott 1987: fig. 13). Two of the sheaths are found in the dumping predating Baynard Castle's dock, which was built in the early fourteenth century (Wilmott 1984; 1987: 45). Wilmott's argumen-

Figure 8.3 *Kidney dagger with silver-sheath found in Borremose, Roholte in Denmark in the nineteenth century. Detail of the upper shield to the left (National Museum of Denmark 20255).*

tation is convincing, and he attributes other sheaths to specific families (Wilmott 1987: 47–49). However, unlike Wilmott, I do not find it likely that a person carrying such a sheath necessarily signalled fealty or some relationship to the family whose emblem he carried. On several sheaths, the heraldic shields are impressed on the backside and are not visible when worn. Other sheaths have a number of different shields depicted, and the wearer could hardly be related to or in service of all the families these represented. As discussed in chapter 7, the arms could just as well have signified the production of the sheaths and have functioned as brands or trademarks.

Sheaths and scabbards with heraldic elements are known from Cork in the west to Riga in the east (Hurley 1997b: 151, fig. 44; Bebre 1998: fig. 2: 6, 3: 6). The use of the lily-motif, especially stamped, is so widespread and common that a heraldic affiliation can hardly be attached to it; the same probably goes for the lion. Another popular motif is the castle-triple-towered. Goubitz regards heraldic decoration on sheaths and scabbards as suitable for signalling who is a friend and who is not, but as noted by de Neergaard, the decoration on the sheaths is not that visible. Goubitz continues, however, by assuming that motifs, including the heraldic ones, diluted over time and a number of symbols were reduced to simple decorative elements available for fashion whims especially in urban societies (de Neergaard 1987a: 43; 1987b: 61; Goubitz 2002: 150).

While opinions differ on this matter, I widely conclude that heraldry on sheaths and scabbards was indeed many-facetted. Heraldic motifs actually signalling a family affiliation as intended by heraldic shields were perhaps reserved for sheaths and scabbards of high and specific quality. Equipping ordinary sheaths with heraldic shields made them more exquisite, but the heraldic meaning would be changed, perhaps into trademarks. The general use of detached heraldic elements such as fleur-de-lis and lions on sheaths and scabbards was widespread and might just have been a simple way to make products appear more exquisite. Whether the symbols were reduced to decorative elements without meaning, or people still felt they were significant is hard to clarify and has probably varied between different regions and over time.

8.2.3 Summing up style of medieval sheaths

By using a selection of the Bergen corpus together with relevant finds from other regions, I find it likely that sheaths were used in a communicative manner as suggested by the information-exchange theory of style. Such a communicative manner is implicit when Cameron refers to the B2.1-sheaths (Her B2, winged) as part of a Dublin identity. Similarly, types only documented in Bergen, alongside sheaths with foreign traits, could be interpreted as part of a Bergen and perhaps Norwegian or Scandinavian identity. There is a danger assigning sheaths to certain geographical areas due to lack of comparable finds and negative representation. But based on the geographical representation outlined in chapter 6, different types of sheaths appear to be regional and may thus reflect some kind of regionality. Such processes are, however, not static and types would change their meaning and significance over time.

A specific style element that is highly signifying is that of heraldry. When found on a high-status costly sheath like the one from Borremose, Denmark, it would likely signify the wearer. Often when it comes to ordinary leather sheaths, heraldic arms may perhaps also be interpreted as a brand. It is evident from the archaeological material that heraldic elements were copied and used widely. Heraldry thus offers several interpretations and should be interpreted contextually. From the archaeological material, both explanations that the arms signify specific families and brands are probable. The common appearance of heraldic elements on sheaths and scabbards might reflect a common wish to be associated with certain elements of society, or elite features have inspired copying.

The information-exchange theory of style is safely situated within a materialist perspective, implying that individuals use material culture expressively in a conscious manner. Turning to a materiality perspective opens for a mutually influencing relationship between subject and object, and I will try to do so by approaching the sheaths and scabbards as extended artefacts, together with the objects they carried and their users.

8.3 Extended artefacts

Not daring to break down the Cartesian divide as suggested by Boast (1997), I would assume, however, that the relationship between subject and object was different in medieval Bergen than in the present-day western world. The objects were used and functioned in a context where its meaning will remain somewhat diffuse to a modern observer, even though we might be able to find reasonable parallels closer to our own time. I will therefore look closer upon the 'agency' of sheaths and scabbards, in the sense that artefacts influence their surroundings, as discussed in chapter 3.2. As Robb notes, the effective agency of objects is not the artefacts' 'magic' power controlling the individuals who use them. However, as artefacts are given meaning and institutionalised through practices, they also dictate behaviour and social relations (Robb 2004). Thus, the artefacts influence and have impact beyond the intentions of their users. By examining the 'effective agency' of sheaths and scabbards through their extensions that are reflected in other sources, the understanding of sheaths and scabbards can be broadened.

As for the British material, surface decoration (type B) is also a predominant feature of sheaths from the Netherlands. The Dutch archaeologist Olaf Goubitz finds the lack of violent and erotic images on the sheaths remarkable, as knives are usable for violent purposes and along with the sheaths, also have potential for sexual symbolism (Goubitz 2002: 150). Nevertheless, are sheaths and scabbards particularly violently or sexually loaded? If so, this would also be part of these artefacts' extensions and might have a role in how they worked in their effective agency. By using several medieval sources in combination, I will discuss whether violence and sexuality may be seen as indirect elements of these objects together with power and status.

8.3.1 Artefacts of power, rank and status

The power of a weapon does not only depend on its quality and its user's ability to handle it. On the contrary, some people were distinguished by being able or allowed to carry specific weapons.

The Norwegian medieval laws ordered a general arming of free men according to social and economic status as part of the regional/national defence system, the *leidang*.[80] The organisation implied an annual inspection, where each man was to be in possession of the described weaponry. In this case, the swords are of special interest. The provincial law for western Norway, Gulathing Law, codified in its preserved condition around 1160 and representative in its existing form of the twelfth century, prescribed weaponry for free men: Each man was to own a broadaxe or a sword, in addition to shield and spear (*G* 309). In the later Land Law codified in 1274, the prescriptions of weaponry are more detailed according to income. Richer men were expected to own more and better equipment. The basic demand was, however, the same: Sword or axe, with shield and spear. However, young men who had just started working for wages should obtain an axe the first year, a shield the next year, and a spear the third year, indicating the economic and social difference between sword and axe

(*L III*, 10–12). It is suggested that many preferred the axe because it was less expensive and applicable for other uses, and (modified) tool-axes were sometimes presented for inspection as weapon-axes. (*F* I, 21; Nøttveit 2000: 114). It thus seems that swords were less common than axes and were considered to be of higher status and value. Certain groups of society and especially the *hirð* (the military corps, the men who had sworn fealty to the King) were obliged to possess far better equipment.

Sumptuary laws regulated access to clothes and commodities based on people's social status and income, and were more detailed in England than Norway. An English law of 1402 prohibited people of landed income of less than 20£ a year to carry certain weapons, and in 1420 it was forbidden to guild sheaths (Philips 2007: 34–35). Thus, the sale-value of an artefact has different meaning in western consumer society than in a pre-modern estate society where sumptuary laws regulated whether a person was allowed to purchase or use certain types of cloth or accommodation based on his/her social status. Although not representing the highest echelons of society, several sheaths in the Bergen material were probably relatively high quality items in their time, like the B4-sheaths and the finer B1.1-sheaths, similarly silk-embroided A1-sheaths, etc. They must have represented a value based on material and work-hours used for making the material. Furthermore, a number of sheaths and scabbards have been taken care of and have not been deposited archaeologically at all, due to their value. They are, however, known from other sources and preserved in upper-class weapon collections.

The importance of the sword as a symbol of honour in the sense of power, often royal, is widely attested in the Viking Period and medieval Norway, but also in the rest of Scandinavia and many other parts of Europe far back in time. Examples are regalia, swords used in ceremonies, heirlooms, swords with names, swords with supernatural powers, etc. (Oakeshott 1991: 16; Idsøe 2004). The importance of swords as symbols of power was especially evident in higher strata of society, but often descended, especially within warrior classes and societies with strata of free men. In this symbolism, the scabbard is an intergrated part of the sword and the sword is part of the extended artefact of the scabbard.

8.3.2 Artefacts of violence

The primary functions of daggers and swords are killing and injuring. This automatically implies several presumptions about the users of these objects from our present day point of view, while also in the medieval society where these weapons were carried and protected in their sheaths and scabbards. Carrying a weapon gives the owner power and possibility not only to act physically by using it, but also to execute symbolic coercion. The presence of the weapon is enough, and it need not necessarily to be used. As weapons were an integral part of medieval society, so were the 'hidden' aspects of them. The threat of the weapon is partly concealed by its natural presence, but is encompassed in a 'collective expectation' of how people with weapons and people without weapons act. According to Pierre Bordieu, 'collective expectations' and 'symbolic coercion' are especially evident in the relationship between the sexes and may exemplify these threatening but 'natural' aspects of weapons. Society has a number of unwritten rules for how women and men interact, without the persons being aware of their actions reinforcing these 'rules' and structures of society, thus making the rules invisible and natural (Bordieu 2000: 65–77).

This symbolic power of the weapons can be enhanced by giving the sheaths and scabbards a visually striking appearance. As shown earlier, scabbards and swords that have been preserved but have not found their way into the archaeological record could be highly elaborated and valuable. It is also apparent in the excavated finds that several of the types found in Bergen are sophisticated with embroidery, fringes and surface decoration. Surface decoration is perhaps especially suitable for displaying power and is associated to the elite by heraldry, both actual arms and heraldic elements, but also animals. Some sheaths have inscriptions. The archaeologist John Moreland proposes to analyse text and writing in (semi-) alliterate societies as a technology of power, where the people who control this

technology have large impact on those who do not master it (Moreland 2001: 89). Writing on sheaths and scabbards would symbolise power over this technology, independent of whether the owner could actually read it himself. Sheaths and scabbards with runic inscriptions are found in Oslo, Trondheim and Lund with references to magically enhancing the artefact (Brink and Strid 1983; Marstein 1989; Bolstad 1991: 135), but none from Bergen.

These objects were made to be seen. Knife-sheaths are also heavily decorated, and although the knife is primarily a tool, the inherent violent aspects are evident. Two studies of crime in late medieval and early modern periods of Norway show that violent acts, often resulting in injury or death, were the most common type of crime, constituting nearly 50 percent of the cases reflected in the written sources in the sixteenth century.[81] This opposes the results from similar surveys abroad, where theft and property crime are the most common offences. The two studies point towards some recurring themes in cases of homicide: alcohol, honour and the knife stand central (Sandnes 1990: 58, 80–84; Wåge 1990: 93–94). The knife was an all-purpose tool and was probably carried by most people. The detailed specifications against drawing a knife and stabbing found in the laws, together with documents concerning offences of violence indicate that the knife was frequently used as a weapon (*L IV,* 14; *B IV,* 15). To some degree then, the knife together with the sheath had similar connotations of violence as the dagger and the sword in the medieval society.

The laws regulating use are especially interesting in a society where free men were required by law to own arms. When Cardinal Nicholas Breakspear[82] visited Norway in 1152 to establish the Archbiscopical see of Trondheim, he won acceptance for a resolution that it should be punishable to carry weapons in towns, except for the king's men (Inges saga 23). Whether it originated from the cardinal or not, this rule is referred to several times and is ratified in two by-laws for Bergen in 1293/94 and 1304. The ones allowed to carry arms in the town are the town officials with their men, the King's men and men in danger of hostile acts of revenge. The latter, however, could carry arms only by special permission from the town officials (*NgL III*: 25, 68–69). A similar by-law for Oslo is known from 1358, specifying that visitors to the town are allowed to carry their weapons only until they have found a place to stay (*NgL III*: 177). Knives and daggers are also mentioned in the written sources; both the Land Law (1274) and the Urban Code (1276) forbid the carrying of a dagger (*L IV,* 14; *B IV,* 15). Similarly, the law by King Magnus Eriksson forbids foreigners and vagrants to carry weapon-knives or daggers by the middle of the fourteenth century (Hellner, KLNM VIII: 587). However, knives as multi-purpose tools were seen in a different light. The Gulathing Law states that slaves are not allowed to buy anything except a knife (*G* 56). The Land Law and Urban Code demonstrates that knives were also used for violent purposes, as reflected in the passage that prohibits carrying a dagger or weapon-knife, and countenance strong penalties for drawing a knife against someone and for stabbing.[83]

Both the prescriptions and prohibitions in the laws are relevant for interpreting the archaeological deposition of the sheaths and scabbards. The scabbard fragments found in Bergen then are remains of artefacts that were generally prohibited to use or carry in this town except by certain groups, at least during parts of the Middle Ages. As shown earlier, the fragments found are waste after the refitting of scabbards, thus reflecting the activities of the sword-polisher and only secondarily reflecting the actual use of scabbards for carrying and using swords in the town. According to the laws at least, the sword and scabbard should usually be left at home (Figure 8.4).

The Bergen sheaths have a far more even distribution pattern than the scabbard-fragments. It is not unreasonable to assume that this reflects the laws. Knives were all-around instruments and used for a number of purposes from eating to working and could be carried around freely. Clear dagger-sheaths, on the other hand, are rare in the Bergen corpus, but their use was regulated as with the swords. However, a number of possible dagger sheaths are documented but not affirmative.

Figure 8.4 *A number of scabbards are depicted in the Manesse Codex (1305–1340), some in wear, and several when not in use. These are often depicted hanging from a hook on the wall. The scabbards are suspended after the Naumberg mode, which is documented in the Bergen material (© Copyright Universitätsbibliothek Heidelberg).*

While knives, swords and scabbards are part of sheaths and scabbards as extended artefacts and implicate aspects of status and violence, the artefacts become more integrated parts of symbolism if we also view them from a gender perspective.

8.3.3 Gendered artefacts

As mentioned earlier (cf. page 191), several authors state that women used knives, but this has not been discussed further except in a short article from 2006 (Nøttveit 2006b) (Figure 8.5).

The number of sheaths and scabbards in Bergen increased during the medieval period, coinciding in time with a larger share of the population being male. By their association to artefacts such as swords and daggers and consequently 'manly' aspects like war and violence, I suspect sheaths and scabbards have today acquired an intrinsic maleness about them, leading us to ignore the gendered aspects of these artefacts. I will here pose the general question on whether sheaths and scabbards are gendered, and furthermore were there specific sheaths that women used, and are such sheaths discernable in the Bergen material?

The Norwegian priest and folklorist Nielz Hertzberg (1759–1841) depicts a so-called bridal sheath from the farm Trones in Hardanger, western Norway (Figure 8.6). He also describes the traditions of bridal sheaths in detail, as told to him by the local old people. The custom is based on simple symbolism, where a woman would carry an empty sheath in public and her suitor would slip a knife into the sheath. This would symbolise engagement and would be repeated at the wedding. Similarly, an unwedded woman would be labelled as 'knife-less' or 'emp-

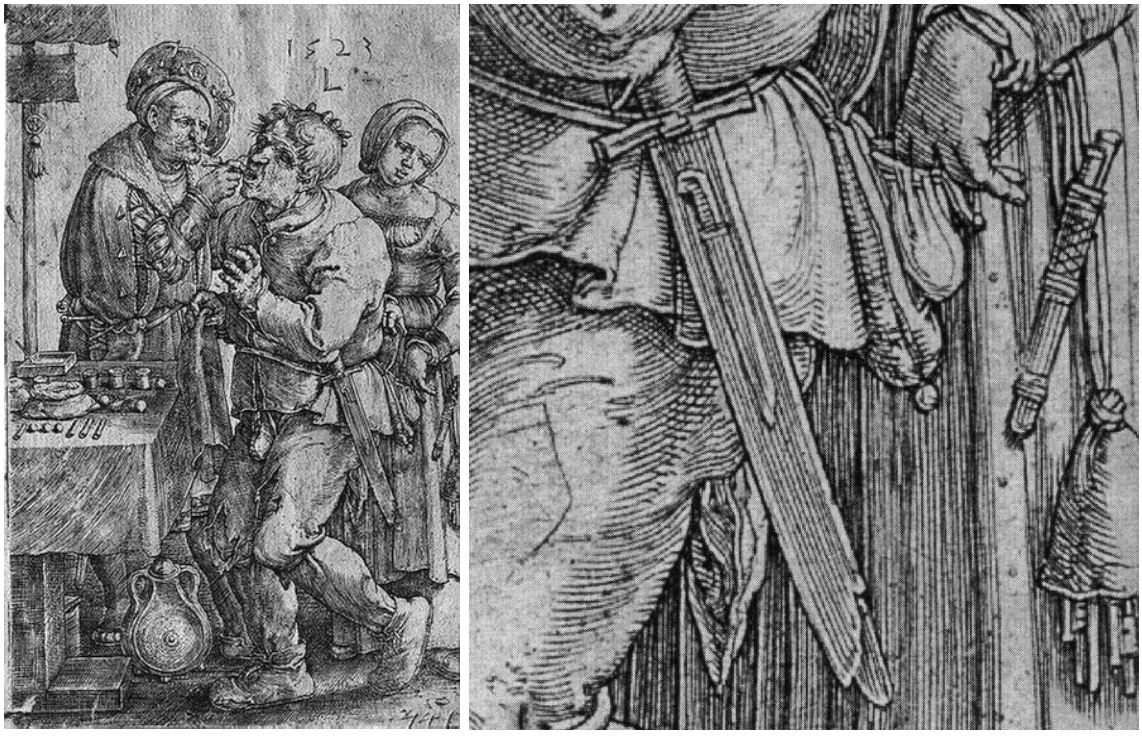


Figure 8.5 *The dentist, by Lucas van Leyden, 1523. The woman carries a sheath with two knives while lifting the unfortunate patient who carries a short worn scabbard with a by-sheath for an additional knife. (Copyright ©2003 State Hermitage Museum, © 2006 Fine Arts Museums of San Francisco).*

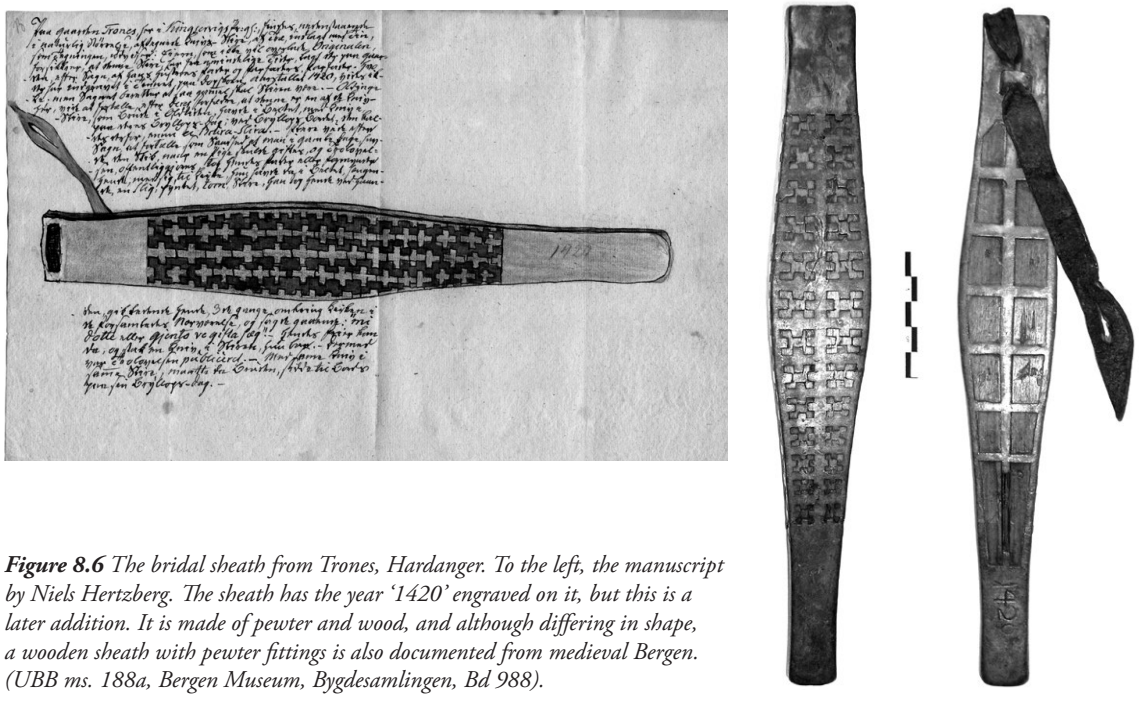


Figure 8.6 *The bridal sheath from Trones, Hardanger. To the left, the manuscript by Niels Hertzberg. The sheath has the year '1420' engraved on it, but this is a later addition. It is made of pewter and wood, and although differing in shape, a wooden sheath with pewter fittings is also documented from medieval Bergen. (UBB ms. 188a, Bergen Museum, Bygdesamlingen, Bd 988).*

ty-sheathed'. Although there are local variations, the tradition of bridal sheaths is documented several places in Norway and similar customs are known from Sweden and Finland (Breivik 1988: 25; Hodne 2002: 97). Described as tradition by old people during late eighteenth or early nineteenth century, the custom might easily have had medieval roots. The sheath from Trones, at least, is of a medieval shape (Breivik 1988: 25). From sixteenth and seventeenth century England, another custom of bridal knives is documented, where the bride was to carry a pair of knives in one sheath as a symbol of married status (Cunnington and Lucas 1978: 71–72).

The gender aspect of the sheath and its content is also apparent etymologically. 'Knife' was an expression for the male member in Old Norse and Danish (Falk and Torp 1991: 391), and similarly phallus could denote a sword in old Latin (Goatly 2006: 29). The term *vagina* denoted sheath in Latin, and although the term earned its modern medical meaning during the development of the medical discipline in the Renaissance, it is documented as a humorous euphemism during the Middle Ages (Onions 1966: 967; Bjorvand and Lindeman 2000: 799). A parallel development is found in Scandinavian languages, where the medieval term for scabbard, *skjede (No)* or *skede (Da)*, is now also an anatomical term. That this aspect is alive today is attested in the English use of the word sheath as denoting a condom (the Oxford English Dictionary), or as slang in Norway denoting a women with several (loose) sexual relations (Natland 2006: 190).

This understanding is also expressed in some written sources from the Middle Ages, such as the German fifteenth century manuscript, *Der Kurz Hannentanz*, where the maiden tells the young man: "I am the sheath, you are the sword" (Jones 2004: 258). In the romance *Partanope of Blois*, a husband is convinced of his wife's adultery when he dreams that his neighbour pisses in his scabbard (Ibid; British Museum MS. 35,288, in Bödtker 1912: 49). In the *Laxdøla saga*, the theft of a scabbard from its sword stands as an allegory over the ruined relationship between two of the main protagonists, Gudrun and Kjartan (Dolen 2004: 19). A well-known example, also comprising the violent aspect of these artefacts, is the suicide by Shakespeare' Juliet, declaring her body the sheath for Romeo's 'happy dagger' (MacKensie 2007: 23).

In material culture, a gendered aspect is clearly expressed in the kidney-daggers (Laking 1920: 34; Dean 1929: 51; Blair 1962: 13; Liebgott 1977: 257; Nyberg 1979; Wahlöö 1982, Jones 2004: 257–258). The term is a Victorian euphemism and from medieval English and French sources at least, the dagger's shape is also expressed by its denotation as *ballock dagger* or *Dague à couilettes* (Blair 1962: 13; Jones 2002: 258). Worn at the girdle, the phallic appearance is apparent in numerous medieval depictions (Dean 1929: 50) and might be interpreted as a symbol of ability to act manly in a medieval Scandinavian society with rigid gender roles, where the legal and societal status of a man depended greatly upon manliness opposed to unmanliness (Nøttveit 2006a).

The gendered aspect is not apparent from the sheaths themselves, although Volker Demuth points towards a bird-sexuality symbolism when discussing early modern ceramics found in Bergen (Demuth 2001: 125–127). Bird-motifs appear on sheaths, but not in large numbers and often of an ambiguous character, a more dragon-like appearance.

Combining the different sources to include traditional, etymological, historical and material illuminates an aspect of the medieval sheaths and scabbards which is not detectable through the archaeological context. I am by no means stating that the gendered character of these objects was a central element. On the other hand, though, there seems to have been awareness of these objects as carriers of meaning, and gender was one of those. That the artefacts were gendered might also have had implications for the people carrying them. Although difficult (if not impossible) to verify, it is not unlikely that certain types of sheaths have been reserved for women and others for men. If we were to look for sheaths for women, these are likely to be of types used as all-purpose knives, and probably not among types that foreigners brought with them as personal possessions.

Although not provable, I will point out a tendency in the type distribution at the Bryggen site. While the Bryggen area was an area of long-distance trade, it was also an area for textile production evidently performed by women (Øye 1988: 145–146). Judging by *in situ* finds in buildings and not deposition rate, textile production seems to increase with a peak in period 5 (1248–1332), especially in the Gullskoen area of the Bryggen site. These activities appear to decrease within period 6 (1332–1413), but the archaeological evidence points towards textile-production and the presence of women further up in time than previously assumed (Øye 1988: 142–146). Burnt in the fires, sheaths are not *in situ* finds in buildings. But as mentioned earlier, A-sheaths are found over the whole Bryggen site in periods 5 and 6 (1248–1413), while the B-sheaths tend to be found in the south-western part of the site. Only type A-sheaths are found in the area with strongest evidence of textile-production, Gullskoen, in period 5 (1248–1332). In the following period 6, type B-sheaths are found, but the A-sheaths still dominate. The A-sheaths and especially A1-sheaths are earlier proposed to be of domestic production in Bergen, at least representing a Scandinavian style. Although stretching the archaeological data, I would cautiously propose that sheaths possibly used by women (if such sheaths are discernible at all) should be looked for among type A.

On such meagre evidence, specific sheaths for women must so far remain speculation. However, the gendered aspects of sheaths and scabbards are indicated in numerous other sources and may perhaps also be traceable archaeologically.

8.3.4 Summing up extended artefacts

This analysis then substantiates that sheaths and scabbards were given meaning in the Middle Ages, or were parts of 'sets of tools' that carried meanings and brought forth certain connotations. Hypothetically, these meanings could encompass much more than regional identity, gender, honour, class, wealth and power as discussed above. Age and beliefs (the term superstition would probably be anachronistic in this regard) are perhaps likely aspects. The central point is that the sheaths and scabbards were more than simply carriers of implements; their connotations may have been institutionalised over time, and although only mere lifeless objects, they would therefore trigger and dictate actions under certain circumstances. This agency of the sheaths and scabbards is not directly reflected in the archaeological sources. But through other sources from the period, the context and understanding of these objects are enriched. The sheaths and scabbards of medieval Bergen were clearly objects of practical use, but were also used as artefacts by people interacting with each other on individual and group levels, so that the sheaths and scabbards were themselves enmeshed in social relations. Beside their practical use, they could be gifts, fashion statements or indicators of regional identity. The most obvious is perhaps sheaths and scabbards being part of symbols of power, carrying with them potential threats and thus 'dictating' social interaction. The gendered aspects of these artefacts are less obvious, but, I suggest, have been widely recognised both geographically and over time.

9 Summary and conclusions

I will now collect my thoughts from this analysis and present an overall assessment of the results and experiences from my work. I have analysed the medieval sheaths and scabbards found in Bergen, within a North European frame of reference. Which types were used, were they of local or foreign production and how did these artefacts develop through the medieval period? Furthermore, did these artefacts mean anything? People use material culture expressively, but does material culture influence people in a manner beyond human intention? Exploring such questions further, I have studied the use and influence of a particular category of artefacts within material culture of the medieval period. By their practical function as containers for knives, swords and daggers, sheaths and scabbards form an apparently simple artefact category. Still, they can be used to illuminate questions on several levels, from the plain to the more complex, related to the contexts in which material culture is included. By carrying out an artefact analysis of a find category that is relatively unexplored but frequently appearing, especially from the medieval towns, I have wanted to investigate and reflect upon the material's source potential and limitations. This concerns both the physical properties of the material, and its immaterial aspects, as to how people use relatively simple artefacts to express more subtle messages, through the communicative aspects of the objects.

The sheaths and scabbards are chosen for several reasons. There is a comprehensive material of sheaths and scabbards from Bergen that has not been previously analysed. Earlier studies of sheaths and scabbards in Norwegian archaeology are dispersed and carried out in a relatively summarily manner. Also within a larger geographical perspective there is a rather descriptive tradition, although some synthesising works stand out. By an in-depth analysis of the Bergen corpus and comparison with similar material from selected areas within the contact sphere of medieval Bergen, the aim has been to see the material within a contextual frame. This has formed a basis for exploring the possibilities within the material to shed light on more far-reaching questions than just the purely descriptive presentations of shape, size and other physical properties. Such questions relate to cultural contact, cultural influence and the communicative aspects of the material – meanings and symbolic functions as parts of situations and relations between individuals, groups and artefacts in the medieval society. At the same time, it has been a methodological challenge to find a way to do this empirically. Here I have found inspiration in archaeology's theoretical discussions of style.

The Bergen corpus of medieval sheaths and scabbards is comprehensive and diverse, by both Norwegian and North European standards. The analysed material from Bergen comprises 341 sheaths and scabbards or parts thereof. This material is assessed against a wider comparative material, from Oslo, London and Greifswald in particular, comprising 118, 456 and 84 artefacts, respectively. Of these I have studied the Oslo and London material myself, using the classification designed for this study and adding to what has earlier been published. Counting the other published material from northern Europe, a material of some thousand sheaths and scabbards is included for comparison on a less detailed level. A comparison of this size has not been applied earlier for sheaths or scabbards, but formed the empirical basis necessary for discussing my research questions.

The research questions posed span from the practical descriptive to the rather interpretive and more complex level. Empirically, the aims have been to identify the medieval sheaths and scabbards from Bergen, map their archaeological context and thus get a chronological and spatial overview of this material. Classification has been an important element in this analysis, also for comparing the Bergen corpus to foreign finds. The element of comparison is not prominent or even considered in earlier classifications of sheaths and scabbards, as the general aim is usually to describe a given corpus. Comparing and assessing the Bergen corpus in a wider geographical perspective made it possible to pose questions regarding local production, import

and foreign influence. An overall question has been to evaluate and illuminate how these artefacts were used and functioned in their contemporary setting, and how and why this changed over time. As holsters for knives, swords and daggers, sheaths and scabbards were undoubtedly practical implements, but also elements in different situations and shifting relations between individuals, groups and artefacts. By what, by whom, where and how were these artefacts made? What were their usages, also in a wider immaterial sense? In what ways were these artefacts linked to social aspects of the medieval society and its individuals? Such questions relate to topics such as status, power and gender. To assess such questions, I have leaned on perspectives launched by scholars from the previous 30 years of archaeological discourse, starting with the style debate of the 1980s. Originating in processual archaeology, the perspectives in the style debate were largely materialist, and modernist in the sense that humans use materiality expressively in a very conscious manner to articulate group affiliations or personal identity. A key issue in the debate was to which degree this expressivity was intentional, as accentuated by Poly Wiessner, while James Sackett represented a more reserved position. Recently, views that can be characterised as materiality perspectives (as opposed to materialist perspectives) have entered the archaeological debate. Questions have been posed on how materiality influences people, where the relationship between human and artefact, subject and object, mind and matter is questioned. Such perspectives have inspired me to find other areas of use for these artefacts, as I have left out some of the more practical usages by not including the knives, swords and daggers found in Bergen (and northern Europe) in the analysis. One way to assess the influence of materiality is to see the artefacts as extended, as suggested by archaeologist John Robb. The influence of materiality is consolidated through its extensions into different contexts, social space and time, such as language, customs and traditions. I have found it fruitful to combine both materialist and materiality perspectives, and apply these to a concrete artefact analysis that forms the empirical framework as basis for more complex questions of use, function and influence of the artefacts, also regarding their communicative aspects.

The analysis of the Bergen corpus has included an identification and compilation of sheaths and scabbards from a large collection of archaeological finds, where many artefacts are not yet identified as to type or function. The intension has been that the classification should have a spatial as well as chronological function, and this has served a two-fold aim: It empirically and methodologically organises the Bergen corpus into manageable groups of both spatial and chronological relevance. However, since a comparison with material from larger areas had not been carried out before, a consideration of which features to classify by had to be considered to be able to identify broader regional distribution patterns instead of identifying single parallel finds in different towns, as has been done in earlier studies. Inspired by some of the more reserved arguments from the style debate, such as by archaeologist James Sackett, I chose to focus on selected technical traits, based on the premise that these artefacts were made as a result of socialisation, in different manners within different traditions related to different areas. My focus is also in line with the recently expressed view by archaeologist Chris Gosden, that artefacts themselves have a conservative impact on people producing new artefacts. This premise was tested out by comparing the four corpora of Bergen, Oslo, London and Greifswald, and allowed for the material to also be compared in a North European perspective. By focusing on selected technical traits that result in visual (decorative) differences, such as stamp-decoration, or rim-ferrule, the classification can be considered as coarse-meshed but useful for recognising broader tendencies. Another advantage has been that such relatively broad type-groups can also include material that is not published in accurate detail, or not preserved as complete objects.

The classification and comparison include three different levels of analysis:

1 On the local level, the Bergen corpus is assessed by an in-depth analysis.
2 For the three other selected corpora – Oslo, London and Greifswald – classifi-

cation and comparison have been carried out based on the same criteria as used in the Bergen corpus. Although less detailed, the composition or type frequency of the corpora could thus be compared to that of Bergen.

3 In a wider North European perspective, my classification is applied to published material of northern Europe, in order to map the distribution of types known from Bergen.

While several earlier classifications have been carried out for single corpora, as for level 1, levels 2 and 3 present an approach that has not earlier been applied for sheaths and scabbards. One aim has been to map out the material from Bergen in a wider perspective, and examine the variation of form and style spatially and chronologically. Through the in-depth analysis of the Bergen corpus, I have identified four distinctive types of sheaths, denoted types A–D, and two types of scabbards, denoted types E–F. Shortly characterised, type A-sheaths have undecorated surfaces and rims and are subtyped according to shape of mouth and tip. Type B-sheaths have surfaces decorated by non-protruding techniques, and are subtyped according to decoration technique. Four main surface decoration techniques have been demonstrated in the Bergen corpus: stamping, impressing, incising and moulding. Type C-sheaths are folded and partly cut and resewn along the folded rim, so that the seam partly frames the sheath. These sheaths are also decorated at the sides with techniques that protrude the leather, such as embroidery and fretting. The type D-sheaths are characterised by riveting and ferrules. As for the scabbards, type E encompass the plain scabbards, while type F is constituted by surface-decorated scabbards, further subtyped according to the same techniques as type B for sheaths. Most types consist of several subtypes with their own distinct characteristics that apparently have chronological and spatial significance.

Seventy-four per cent of the Bergen sheaths and scabbards stem from the extensive Bryggen excavation (1955–1968), which by its fire-layer chronology offers a dating frame that can be characterised as accurate, with nine fire interval periods documented at the site. Almost all sheaths and scabbards are found in layers dating from the 300-year span from the last quarter of the twelfth century to the third quarter of the fifteenth century, divided into five periods varying from 28 to 84 years of length. A majority of the artefacts found during other smaller scale excavations in the town were of more or less compatible dates. The sheaths and scabbards have been described individually within classified groups, including an analysis of leather type. The artefacts are dated and their distribution mapped according to grids, structures and layers.

Based on the Bryggen chronology, it was possible to substantiate that the sheaths and scabbards from Bergen reflect noticeable changes through the medieval period, both in numbers and type variety. The number of sheaths and scabbards found from each period increases from rather few finds and a low deposition rate in the early period, from the last quarter of the twelfth century, to significant numbers in the 81-year span between the fires that ravaged Bergen in 1332 and 1413, that constitute almost half of the Bergen corpus. Additionally, factors related to archaeological deposition such as the general deposition rate of leather, representative excavation and medieval attitudes towards handling of waste are taken into account. This marked increase in number of finds has been interpreted as a reflection of an actual increase in use of these objects during the period. A marked increase in the type variation starts already in the first half of the thirteenth century, after a relatively even representation of unsophisticated artefacts in the twelfth century. The type variation of sheaths increases during the later half of the thirteenth century and the first half of the fourteenth century. In the following years the numbers still increase, but not the variety. However, the scabbards now also display a varied type pattern, as opposed to earlier periods when scabbards have kept a uniform impression. The display of swords by a variety of scabbards thus seems to have been important first from the fourteenth century in Bergen. The display of knives by varied sheaths was also significant in

the preceding century. To see if this impression had similarities to other areas, it was important to carry out comparisons in order to understand this development.

As already mentioned, the comparison of the Bergen material with other North European material of sheaths and scabbards has been carried out on two different levels. The three different corpora that have been drawn in for comparison have several parallel finds to that of Bergen, and more importantly, most finds had concurrent characteristics to the Bergen finds. Thus they also confirm that the criteria used in the comparison were relevant for comparing foreign finds. Only few finds had characteristics that did not fit broader frames of my classification, and few finds showed traits that crosscut these frames. However, the type composition is markedly different in all these corpora, including Bergen, showing different type preferences that indicate that the types have regional significance. The London corpus consists mainly of B-types, sheaths with decorated surfaces, of which some subtypes occur in Greifswald. Half of the Greifswald finds, however, consists of type D1, sheaths with plain surfaces and a rim-ferrule, often with decorative fringes, and not documented in London at all. The Oslo material is the least preserved, but shows similarity to the Bergen corpus by a relative high frequency of undecorated sheaths, type A.

The comparison thus indicates that the Bergen corpus has been receptive for types from different areas, unlike the London corpus that has a more restricted type register, despite large variation within certain types. Although my methods of classification are based on the Bergen material and thus best suited to this particular corpus, this tendency also becomes clear in a comparative perspective. Consequently, it has been possible to confirm that the Bergen corpus is varied, also seen in a European perspective.

The comparison and mapping of material of the wider North European type distribution also confirm the impression that different types are concentrated to different regions. The A-types, sheaths with undecorated surfaces, have a northern, mainly Scandinavian distribution, especially the A1-sheaths, of which several subtypes are so far only documented in Bergen. The A3-sheaths, as a more loosely defined type of undecorated sheath, are found over most of northern Europe. However, while common in Scandinavia, they are rarer towards the west, on the British Isles. Type B, sheaths with decorated surfaces, are preferred on the British Isles, and some subtypes, such as B2.1, B2.3 and B4, have a limited distribution outside this area. Other B-types, such as B1-sheaths and B3-sheaths, are more widespread, and the B1-sheaths, with stamped decoration, seem to have been the most international type in the late thirteenth and the fourteenth centuries. The C-sheaths reflect a very different style of sheaths, not strictly shaped after the objects they contained and decorated by embroidery and fretting. This type is mainly found along the southern Baltic coast, the finds from Bergen making a western limit for this type. Similarly, type D1 has mainly a German/Baltic distribution, although more frequently found in the west than type C. On the British Isles, however, the type is only represented by a few finds, judging by the published material. Finds of scabbards are less common than finds of sheaths, and are usually in a more fragmented condition. Plain, undecorated leather coverings, type D, are known, however, from all over northern Europe. Of stamp-decorated scabbards, type F1, there seems to have been a Scandinavian preference for these in the fourteenth century, although similar scabbards are documented further south and from London during the following centuries, with other stamp-motifs and designs. More common and widespread are scabbards with impressed decoration, type F2, usually with simple geometric designs, or simply longitunal impressed lines. Incised decoration on scabbards, type F3, is less common, although several are found in Bergen. Moulded decoration on scabbards, type F4, is rare, and only documented sporadically.

The classification and comparison clearly show that different types are more common in different areas, and that the different types have different geographical distribution. By comparing the material from Bergen on such a broad basis, it has been possible not only to assess the significance of the Bergen material from a wider

perspective, but also to illuminate variation and representation in a wide geographical perspective in a manner more systematic than has previously been done.

An important aspect of my analysis has been to assess the material's sustainability for shedding light on questions that go beyond the physical observable, connected to domestic or foreign production, producers, users and social status and also to the symbolic value of the artefacts. Here I have used different methods and approaches, and I have tried to anchor the interpretations to the empirical material, including written sources. When considering the question on use and production, this also affects the objects covered. As containers for knives, daggers and swords, sheaths and scabbards were commonly used in medieval Bergen. However, the town authorities restricted the use of swords, and indirectly scabbards, and the scabbard fragments excavated in Bergen only secondarily reflect the use of these objects. The fragments found are usually waste from the process of refurbishing scabbards with new leather coverings, a professional activity usually assumed to have been carried out by the sword-polisher. The distribution of the material from the years around the second half of the fourteenth century at the Bryggen site supports this hypothesis, with a cluster of scabbard leather waste in a fill-layer and several remains in the fillings along the waterfront, within short distance from the alleged premises of the sword-polisher's workshop by St Mary's, according to written sources. The find frequency of scabbard fragments at the Bryggen site compared to the rest of the town indicates that this activity may have been carried out here over a long period, from the last quarter of the twelfth century, and best substantiated from the second half of the thirteenth century throughout the fourteenth century. Sheaths on the other hand were commonly worn, and while several specimens are found in fill-masses, others are probably lost, which is also indicated by a generally better find-condition of the sheaths than of the scabbards. Sheaths were also produced in the town, although by who still remains uncertain. The A1-sheaths should probably be regarded as domestic, as several subtypes are unique to Bergen. Furthermore, the type is mostly made of goatskin, sometimes sheepskin, a rather unusual choice of leather in other parts of northern Europe, where most sheaths and scabbards were made of calf leather. Sheaths were also imported to Bergen, although the nature of this import remains somewhat vague and uncertain. Several sheaths are clearly made in Britain, while others stem from German/Baltic areas. However, as several foreign artisans established themselves in Bergen according to written sources, it is also possible that some of the sheaths with foreign traits were produced here. Nevertheless, the fact that the majority of the foreign craftsmen came from German areas, while the English influence in the analysed material seems stronger than the German/Baltic, indicates that sheaths were also imported or otherwise brought into the town.

A foreign influence can be recognised from the first half of the thirteenth century, and an increased number and subtype frequency of the domestic type A1 from the second half of the century may be seen as a reaction to this foreign influence. However, during the fourteenth century, the sheaths interpreted as local products are less varied and foreign types almost as numerous. For a town heavily based on trade, this increased foreign influence in Bergen may be seen as rather expected. To see the distribution patterns of artefacts as reflecting physical transfer and habits has been a common frame of interpretation within archaeology. However, other possibilities of interpretation are also at hand.

Another aim of this study has been to assess the artefacts' potential and discuss their possibilities for shedding light on more complex issues connected to social identity and regionality. Here I have found it especially interesting to assess the material in relation to theories of style, as the sheaths and scabbards were obviously closely associated to strongly symbolic loaded artefacts – weapons. They had a social meaning and were meant to be seen. The appearance of foreign sheaths in the first half of the thirteenth century is limited to easily distinguishable types with an apparently restricted regional distribution, type B2.1 to the British Isles and type C to the southern Baltic coast. It is possible that such sheaths

signified some kind of regional identity, at least in their new context in Bergen as a town where foreign merchants constituted a steadily growing group at this time. Such an interpretation is in line with the main theme within the information exchange theory of style of the 1980s, where stylistic differences are interpreted to signify some kind of identity, in this case a regional belonging. From this perspective, the increase in number and variety of the probably locally produced A1-sheaths in the following period may be seen as a stylistic response, a marker of local identity. Most likely, the sheaths were parts of a cultural package, as one of several signs that showed a regional affinity or origin. From the materialist perspectives implicit in the style debate, these artefacts should be seen as deliberate statements of regional identity. From a materiality perspective, however, one would question the intentionality and instead ask whether materiality influences humans and in this case preserved and enhanced differences between groups of people. Although foreign sheaths with limited regional distribution appear in Bergen also from the middle of the thirteenth century and throughout the fourteenth century, they are supplemented with subtypes of a more general distribution, such as the B1-sheaths with stamped decoration, indicating a decrease in the possible function of sheaths as perhaps ethnic or at least regional markers. Seen in light of the style debate, there is a danger for assigning differences in material culture to have ethnical significance, as perhaps the users of the artefacts did not intend this at all. This would be a problem with the Bergen sheaths especially, as they form a varied corpus. However, the classification and broader comparison have shown that some types are more regionally restricted than others, and I find an interpretation of such sheaths as emblemic markers in thirteenth century Bergen a likely option, as some of the sheaths found in Bergen are clearly outside the region where they were commonly used. They can be interpreted as ethnic markers because of their unusual context. The information-exchange theory of style has thus been of use regarding this material, but a thorough work of classifying and mapping distribution has been necessary to substantiate such an interpretation.

Another aspect where style as symbolic expression is relevant, is the significance of material culture when it comes to expressing social identity. Do simple utility articles such as sheaths and scabbards have a potential here as well? My study confirms this. High-status sheaths and scabbards are documented in written and iconographic sources, but rarely found in archaeological contexts, and not in Bergen. However, a social difference is clearly indicated in the material between e.g. many of the crudely made A3-sheahts and the carefully decorated B4-sheaths that must have been far more time-consuming and artistically demanding to produce. Some high-status sheaths had heraldic emblems, probably referring to the owners' hereditary status. Both heraldic shields and heraldic elements are common in the Bergen corpus, but should probably be interpreted otherwise here. Heraldic shields of types known from London are documented in Bergen and are probably attributable to high-ranking English nobility. Rather than signifying fealty, I find it likely that the heraldic shields on such sheaths should instead be interpreted as brands, representing the nobility as being in control of the raw materials and facilities related to the production of the sheaths. More common heraldic representations are heraldic elements such as fleur-de-lis, which are not attributable to any specific families. These artefacts can be seen as a general wish to copy nobility. However, such motifs are common on the stamped sheaths and scabbards, and the technique of stamping is suited for mass-producing images. The stamp-decorated sheaths, type B1, are common in most of northern Europe, and the stamp-decorated scabbards, type F1, in Scandinavia. As a trend or fashion reaching large parts of northern Europe, the artefacts may have been assigned different meanings in different areas, and perhaps the motifs were of minor importance

In studying artefacts I have found it rewarding to include a materialist perspective but also a materiality perspective, in the sense that the object world is not controlled by the subject, or human intention, alone. From a materiality view, humans not only use materiality expressively, but are also influenced by it. The decora-

tions, very differently applied on the different types, indicate that these artefacts were made to be seen. Sheaths of type A1 and type C must sometimes have been colourfully embroidered, while the D1-sheaths had fringes that must have given life and movement to the artefact. The surface-decorated motifs of type B-sheaths must similarly have attracted attention. Sheaths and scabbards were decorated, increasing their 'visibility' and thus their influential potential. In some contexts and situations materiality dictates human behaviour, beyond human intention. The violent aspects of these artefacts are what immediately leap to mind, and the written sources comprise official restrictions of the use of swords and sometimes also daggers. However restricted, scabbards were made for public display, at least in the fourteenth century when they were varied with a number of different decoration techniques applied. Knives were carried in highly visible sheaths during the whole period, and although the knives' primary functions are those of all-around tools, their sheaths have attracted attention, reminding the surroundings of a potentially dangerous materiality. A better example though is the gendered aspect of sheaths and scabbards, and examples are given from different sources as to how materiality plays the parts of sheaths and scabbards in symbolic actions, dreams and customs, and influences the language, in fact 'giving' names to parts of the human body. As sheaths are 'gendered', one could perhaps expect certain sheaths to be reserved for women. This is, however, not possible to substantiate in the archaeological data, but some of the type A-sheaths might be possible candidates. In a pre-modern society we can assume that the borders between human and materiality, subject and object, differed from our own. If this is true only to a small degree for the medieval society, it still opens for exciting new perspectives, and new understanding of both materiality and humanity. Although the notion of extended artefacts has been difficult to apply directly on specific Bergen finds, this perspective broadens our understanding of the artefacts, and the different extensions of sheaths and scabbards show them to include violent and sexual aspects. In my opinion, such extensions have been institutionalised and over time become dictating for human behaviour in social relations.

In many ways this study may be seen as an exploration of a limited archaeological material's potential to shed light on aspects beyond description, classification and dating. By studying a relatively unknown and partly difficult accessible category of material, I have wanted to combine an empirically solid analysis on several comparable levels to illuminate questions of both material and immaterial character. Thus the study has offered both methodological and theoretical challenges. Often, the theoretical reflections where I have found inspiration seem to lack a close connection to empirical analyses. This has been a main challenge, and has partly influenced the methodological arrangement, the classification of this material, where I had to consider the comparative aspects. While I have used analytical approaches that have long traditions within archaeology, the overall research questions and theoretical perspectives have made it possible to assess the Bergen material in a wider perspective than earlier applied on sheaths and scabbards. Thus the study of the Bergen corpus has also supplied new elements to the material from other geographical areas. Even though artefact studies are time demanding, they still provide basis knowledge within archaeology and represent a potential for research and new knowledge. The largest limitations are perhaps which questions we choose or choose not to pose on the material.

Notes

1 A similar etymology is to be found for Norw. *slire*, the most commonly used word denoting a sheath in the modern Norwegian language. Old Norse *slíðr* denotes a "long and narrow piece of wood for covering or attaching" (Falk and Torp 1991: 764, authors trans.). In meaning sheath for knife or sword, only the plural form is being used – *sliðrar, sliðrir, sliðrum* – in the medieval written evidence, referring to the two long pieces of wood protecting the blade of a knife or sword (Fritzner III: 430).

2 The use is confused also in the Norwegian language. The term *slire* is used for knives, daggers and swords alike, but most commonly for knives. The same can be said of the term *skjede*, although this term is more commonly used on swords. The term *balg* (from belch) is more modern and generally used for swords, but also bayonets.

3 The German Kontor increased power and dominance and owned most of the buildings (not the properties themselves) of the whole Bryggen area from the early decades of the fifteenth century. From the mid-1400s, the Hanseatic League gradually lost its position in Northern Europe, but kept a strong dominance in Bergen. The Kontor was disbanded in 1754, but during the last century also included Norwegian firms. The last German firm at Bryggen was sold in 1766 (Helle 1994; Fossen 1994).

4 The Hanseatic League established Kontore in four towns that were central to the trading network of the Hanseatic League. The Bergen Kontor was the largest, and crucial to the stockfish trade. Other kontore were established in Novgorod, Bruges and London, the latter being of special importance in the wool trade.

5 Regarding leather material.

6 The excavated area is not, at least not entirely, identical with the medieval property of Gullskoen, which can be traced back to 1305–08 (Helle 1982: 236, 706; Larsen 1992: 11; Moldung 2000: 2–4).

7 In Turku, Finland, 88 per cent of the excavated leather is remains of footwear (Harjula 2004: 7). 91 per cent of the 12,600 leather objects uncovered at the Schild excavations in Schleswig, Germany is remains of shoes and boots (Schnack 1998: 9). In Svendborg, Denmark, the footwear comprises 95 per cent of the leather items (Groenman-van Waateringe 1988: 124).

8 The region of Scandinavia embraces Norway, Sweden and Denmark. For this study Finland is also included, corresponding to the label "Greater Scandinavia". Historically, Finland formed part of Sweden from the middle of the twelfth century and up until it was incorporated into Russia in 1808 and gained independence in 1918.

9 Both Koren-Wiberg and Grieg base their opinions on examples found in London.

10 Here, a sheath from Bergen serves as reference (Blomqvist 1938: 157–160) (B6237 – cat. no. 167).

11 Not regarding scabbards for swords though, with reference to the brasses of the period (de Neergaard 1986: 61).

12 Cuir boulli: literally "boiled leather", but "hardened leather" may be as meaningful a translation. The name probably refers to a moulding and hardening process of leather that maybe included boiling in wax or similar liquids. The method, or more likely methods, has been used since antiquity for armour, vessels, costrels and other objects of leather. Only a few objects are preserved today, and the technology itself is not known in detail.

13 During the medieval period, the town and dukedom of Schleswig were Danish but with close political and economic ties to the neighbouring Dukedom of Holstein, mainly subordinated the German emperor.

14 Style is defined in many, often very differing, ways (cf. Gamble 2000: 108–109). Related to the information-exchange theory of style only, we find everything from narrow to extensive definitions, from artefact to structure, from passively reflecting to actively signalling, from meaningless expression to norm and "way of doing", from part of formal variability in material culture to isocrestic, almost all consuming in relation to material culture.

15 The more fluid term ethnicity in many ways replaced earlier notions of cultural groups or race (Jones 1997: 51–55).

16 Originally, the paper was delivered as part of a course at the University of Michigan in 1969.

17 Emblemic; of emblem/flag.

18 The article discusses relations of the style concept to design and recent debate on technology, also within the disciplines of anthropology and art history. This article is 13 pages and has a bibliography of 185 works by 149 indigenous researchers or collaborations of researchers. Many of these have written several related pieces that are not used in the article. This illustrates how I myself have only touched upon some of the central aspects of the debate.

19 The distinction between materiality and materialist approaches is, however, diffuse, and the "language, mind and human bodies" (Olsen 2003: 100) might well be of a materiality approach character.

20 Robb introduces his article with an illustrating quote, the slogan of the National Rifle Association in USA: "Guns don't kill people – people with guns kill people!" A basic topic in the American debate is whether accessibility to firearms contributes to people shooting each other, or whether people are in control of the material world and motivated by free will alone.

21 This aim separates ethno-archaeology from anthropology and ethnography, even though the division is sometimes blurred.

22 A line can be drawn between the first and second half of

the European medieval period, the first period being the most traditional in the sense of Elias and Burckhardt.

23 While slavery was prohibited from the early medieval period, the concept was well known.

24 Written sources are missing in the specific case of the kidney dagger, but such use of materiality/artefacts related to the role of (or lack of) masculinity are documented in the sagas e.g. the Laxdæla saga. Here, two different examples concerning swords are found, one of them including the scabbard (Mundal 1997: 63; Dolen 2004: 19), but also a kerchief is used (Mundal 1997: 59). Defamation symbolised by wooden statues is forbidden in the Gulaþing Law (*G*138), and exemplified in the Gisla saga (Clover 1993: 8; Mundal 1997: 58).

25 A complete sheath with fittings was found with a kidney dagger in Hameln Germany (Teegen 1993). It quite resembles the sheath depicted on the Emmauz Crucifixion, 1365 (National Gallery, Prague, NG O 1252).

26 Many decorated sheaths have panels on the handle part, indicating the asymmetric handle of a knife (de Neergaard 1987: 40).

27 Goubitz (2002) presents several discernable traits in sheath construction and a number of different decorative motifs in his article, but these are not collected in any analysis or classification of the larger number of sheaths found in Dordrecht.

28 Every presentation of a group of archaeological material will be arranged in some way or another by context, age, even 'form' or 'type'. Still, without a formulated set of criteria, it will not qualify as a classification. The sheaths in Cowgill et al. (1987) are presented chronologically, but grouped according to decoration technique and motif within each period.

29 Both the prepositions 'in' and 'about' are used in the field documentation of the Bryggen excavation. The preposition "about" is not precise and may indicate that the artefact was in fact found above the fire-layer. Nine artefacts are recorded 'about' a fire-layer, and dated to the preceding period. One artefact is found "on level" with a fire. But since this is the local fire IIIb (1397), the sheath belongs anyhow to period 6 (1332–1413). Artefacts found as close as 0–5 cm over the fire-layer are considered to belong to the preceding period as well (cf. Øye 1988: 119), to be consistent with the use of the 'about' preposition. Four sheaths are found 0–5 cm over the layer of fire IV (1332) and date to the period 1248–1332.

30 This concerns artefacts that are found as deep as nearly 2 m below a caisson or bulwark, but documented in relation to the structure.

31 For example the sheaths found in chaisson 104, that perhaps belong to chaisson 102 and consequently the preceding period.

32 A number of sheaths and scabbards are sketched, though (Topografisk arkiv. Bergen, Hordaland. Bergen Museum, Bergen).

33 For the analysis, I have used a Zeiss binocular microscope with 16–100x magnification. For comparison, both present-day samples and previously identified archaeological leather are used. An introductory training course to this method was kindly given to me by René Larsen and Dorte Vestergaard Poulsen at Kunstakademiets Konservatorskole, Copenhagen, 2005.

34 Most leather items are freeze-dried, making grain-pattern analysis a suitable form for analysis.

35 Through the tanning process, the basis for bacterial degradation has been removed from the leather (Harjula 2002: 11).

36 According to technical conservator at University of Oslo, Vegard Vike who has reconstructed a similar sheath found in Oslo (Vike undated; personal communication).

37 The *guardant* posture is alternatively called *leopard*.

38 I have labelled the designs following the terminology used by Wilmott (1987). Thank you to John Clark, Museum of London, for corrections.

39 Rim ferrule. I use this term in lack of a better alternative. The term chape is normally associated with the tip of the sheath/scabbard and is not suitable. The rim ferrule consists of a thin, long metal plate folded at the tip of the sheath and keeps the blade part of the sheath together by pressure, fastened at the upper ends of the ferrule.

40 See also chapter 6.1.8.

41 One F3-scabbard is earlier referred to as unusual for the type. The incised lines below the mouth actually imitate suspension slits as seen on other scabbards, in addition to its actual slits for suspension (cat. no. 310).

42 As shown in chapter 4.1.3, this is not certified criteria. Type A1-sheaths are relatively symmetric and lack a clearly defined handlepart. Still, the blade-protection found in several of them indicates single-edged blades.

43 I have excluded a few artefacts that I interpreted as having had other functions, such as two probable grip-coverings for swords (C55186: 1129 and C55189:3236), belts or similar. I have also excluded several artefacts that I found so fragmented that they could have been parts of other kinds of objects. Finally, a few artefacts that were not available for study were also excluded.

44 Sheaths and scabbards dated before 1100 are not included. Neither are the two artefacts that I could not inspect myself, of which Bolstad refers to one as a probable scabbard (Bolstad 1991: 140-141). The two other sheaths are included, as they are described in detail in a report of conservation (Vike 2003a; 2003b; undated).

45 The excavation PCD59 is one of these, but is presented with the newer finds, as done in *Knives and Scabbards* (Vince 1987: 5).

46 Cuir Bouilli: 'boiled leather', technique for hardening leather. The process and definition is discussed (Cameron 2000), but misguiding regarding these objects.

47 Sheep or goatskin is used on one actual sheath, although it is documented as lining in some cases (Cowgill 1987: 34-35).

48 One of the B2x-sheaths (Clarke and Carter 1977: fig.169, no 91) is probably a B2.1-sheath, but cannot be classified as such as only the lower part of the artefact is preserved. The decoration, however, is the same as on the four B2.1-sheaths from Bergen.

49 Eighty-eight artefacts are catalogued, but four objects (Schäfer and Schäfer 1997: catalogue 62-65) are presented as pieces of leather and are not included here. The four pieces have stamped decoration, and two of these could possibly stem from sheaths or scabbards (Schäfer and Schäfer 1997: 276), that is, of type B1.1 or F1 according to my classification.

50 Similar sheaths found in Trondheim and Dublin and other eleventh century contexts (Marstein 1989; Cameron 2007).

51 The grid-system used at the Bryggen site does not coincide with the compass directions, but diverges in an angle of app. 45 degrees. The north of the grid-net is to the left, thus following a local convention often used in Bergen, according to which the bay, Vågen, faces north.

52 While English wares comprise 65 per-cent of the pottery found at Bryggen between 1250 and 1400, the picture is totally dominated by other wares after c. 1400 (German wares 78 percent, the remaining of Dutch origin). English wares are absent after 1400 (Lüdke 1989: 21–12, fig. 6; Blackmore and Vince 1994: 32).

53 From period 3, 359 entries lack number of items. For the periods 4, 5, 6 ,7 and 8, the respective number of entries are 596, 666, 753, 129 and 66. From period 9, 22 entries lack number of items, and 179 entries lack date. Based on the average number of items per entry containing several items of leather, I consider eight items per entry a cautious estimate; the actual number may be higher.

54 Period 3: 462 shoes, period 6: 384 shoes. Regarding the soles, the picture is not quite as clear, but still displays a markedly higher deposition rate in period 3 compared to period 6 (Larsen 1992: 36–40).

55 These two elaborate B-sheaths are perhaps not representative, as probably only the well-preserved and high-quality items were collected at that time.

56 B10266e: "piece of scabbard or similar of wood: thin, flat at one side, curved on the other, tapering towards one end cut straight, broken in the other. The curved side has a longitunal pattern of deeply engraved straight lines and shallow engraved wider lines in between. On the flat side, similar lines can be seen" (Fett 1952: 45) (Authors translation). Based on the description, lacking the width of the object, it fits better as part of a laminated bow. More than 40 such fragments are found in Bergen (Nøttveit 2000: 66; Malde 2008).

57 KM 57382:100,6

58 Type B2.1-sheaths from Dublin are not directly comparable. Thirteen of the 137 sheaths have stamped decoration, four embossed. Several have rivets like type D, but these are the earlier specimens, dated earlier than the Bergen corpus.

59 Several sheaths with lattice-pattern combined with other motifs are documented at Dublin and London.

60 The three sheaths probably all had rim-ferrule originally, though this is not indicated in the text.

61 I include only the confirmed scabbards in Trondheim (30 of 38), and further exclude the two of eleventh century date, one with runic inscription.

62 Another 52 scabbards are found in Dublin, but none of these dated after c. 1100.

63 For Leiden, most scabbards are documented as undecorated. However, most of these do have longitunal impressed lines, which qualify for type F2 (Driel-Murray 1990: 162).

64 Most of the scabbards denoted as undecorated from Leiden have impressed lines (van-Driel Murray 1990: 162).

65 Previously not identified, this is the first rain-guard documented among the Bergen material (BRM 0/48686). A rain-guard was sewn around the cross of the sword, forming a hood that covered the mouth of the scabbard when the sword was sheathed.

66 Sliparar æyri fyrir suerð en han byr með allri nyri umgerð af nautskinni. Ertogh en hann ger reint att eins. Ærtog ef han leðrar stalhufu ok verir. Half ærtog fyrir hialm en hann skyggir (*NgL III*: 15).

67 It has been proposed that the sword-polishers produced the blades themselves (Grieg 1933: 289–290; 1936: 230), but I find it strange that such a specialised and important craft is not mentioned in the sources, while other presumably less important aspects are mentioned in detail. More likely, most blades were imported from the Continent (*NgL III*: 14–15; Grieg 1936: 232–233; Helle 1982: 433).

68 Item skulu swerdsliparar taka firer hwert swerdh med ollum nyium umbunadhe af godho nautskinne halfua mork peninga. Twa aura peninga firir hwert swerdh sem han gerer reint (*NgL III*: 220).

69 These two are mentioned in chapter 5.7.3 as diverging from most specimens of the type; the one is a mouth-part with engraved lines, the other is one of two scabbards of smaller dimensions.

70 The four scabbard fragments from Gamlebyen described by Bolstad are found in layers predating the Bergen corpus, and are not included in my study (Bolstad 1991: 135) (cf. chapter 5.13).

71 Not including the glued sheaths (probably later), cf. Table 5.3.

72 A correct description of the FitzWalter arms includes the colours: "Or, a fess between two chevron gules".

73 Of 130 residents listed by trade in 1381, 79 were cutlers, 11 were smiths and four were sheath-makers, making the town more specialised in the craft than any other town in England. Thaxted might have contained more cutlers than London itself (Keene 1995: 234).

74 The publication *Sheaths and Scabbards* (Cowgill et al. 1987) represents 120 sheaths, slightly more than one third of the total number of medieval sheaths from London. The hypothesis that the arms depicted on a number of these sheaths refer to production areas rather than showing allegiance is a topic for further exploration, but is beyond the scope of this thesis.

75 The dating of a B1.2-sheath to this period is doubtful.

76 The shoe soles are from the Gullskoen area of the Bryggen site (Mygland 2007: 99).

77 Not including the glued sheaths (probably later), cf. Table 5.3.

78 Mol 95.258, undated, Armstrong and Ayers 1987: fig.131: 433, dated late thirteenth–early fourteenth century.

79 The sheath seems younger, yet late fourteenth to fifteenth century is as probable (Bruhn 1950: 26; Nøttveit 2006: note 5).

80 This system which could also be used offensively had a strong basis in naval warfare, where the citizens were also expected to provide and maintain ships. The use of the system varied through the medieval period, and the authorities often saw it fit to demand economic compensation in the form of taxes rather than to make use of this perhaps uneven military force.

81 A number of precautions are taken regarding representativity of sources, etc. The numbers are, however, also thought to reflect the fifteenth century, when the sources are fewer (Sandnes 1990: 45–50; Wåge 1990:144).

82 Later pope Hadrian IV.

83 The duality towards knives as tools, but also weapons is acknowledged by referring to shots by spear or arrow in the same passage. Although weapons, these implements are also tools for hunting.

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FAGBOKFORLAGET

The Bryggen Papers present investigations of the archaeological material from the excavations at Bryggen and other medieval and early sites in the town of Bergen. Known as an Episcopal see and a regional royal administrative and residential centre, Bergen developed in the twelfth and thirteenth centuries into the first truly international trading centre of Scandinavia and one of the most important ports of northern Europe, at the same time becoming the first capital of the Norwegian kingdom. The Hanseatic League established one of its four main trading stations or *Kontore* in Bergen around 1360, lasting into the latter part of the eighteenth century.

This volume of the Main Series of the Bryggen Papers contains an in depth analysis of a hitherto rather neglected category of artefacts among the comprehensive archaeological finds uncovered in Bergen – sheaths and scabbards. The medieval sheaths and scabbards from Bergen represent one of the larger accumulations of this category in northern Europe, and the present work is the first scholarly analysis of this assemblage. The author also compares the sheaths and scabbards from Bergen with similar finds from other medieval towns in Norway, England and German areas in order to gain insight into specific aspects of medieval life and society, as well as cultural contacts and social identities.

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