THE BRYGGEN PAPERS
Main Series No. 11

STONEWARE IN NORWAY

FINDS FROM BERGEN AND VICINITY AD 1250–1700

VOLKER DEMUTH

UNIVERSITY OF BERGEN

THE BRYGGEN PAPERS

Main Series No. 11

The Bryggen Papers

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Publisher
The University Museum of Bergen & The Faculty of Humanities, University of Bergen, Norway
ISBN 978-82-93904-05-2 (print)
ISSN 0805-4487 (print)

ISBN 978-82-93904-06-9 (online)
ISSN 2704-0682 (online)
DOI 10.15845/bryggen.v11.2025

Published with grants from
Skolestyrer B. E. Bendixens Legat Til Fremme Av Arkeologisk Forskning
The CERAMICA Foundation, Basel, Switzerland

Inquiries about The Bryggen Papers can be directed to
Principal Contact https://boap.uib.no/index.php/bryggen/about/contact

Layout and production
Cover illustration: Dennis Gaijda, Braunschweig, Germany / G. Hansen / P. V. Bergsvik. Layout: Christian Bakke, Communication Division, University of Bergen. Photos by author except where otherwise credited. Print production: Merkur Grafisk AS. Paper: 130g coated. Typography: Main text: Adobe Garamond Pro 11,5pt/12pt. Headings: Myriad Pro

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Foreword

The editorial board of The Bryggen Papers is proud to present No. 11 of The Bryggen Papers Main Series. The monography is based on Dr. Volker Demuth's doctoral thesis in archaeology, submitted to the University of Halle-Wittenberg, Germany. It has been edited and updated after defense and peer-review and contains additional data sets. The volume is published in both printed and online formats. The online format is in Universal Design and available as open access. The printed and online versions are richly illustrated as the ideal book on pottery should be. In addition, comprehensive supplementary materials are published along with the online version of the book.

The Bryggen Papers was established during the 1970s as The University of Bergen's scientific, international book series presenting the archaeological finds from the pioneering medieval archaeological excavations at the German Wharf Bryggen in Bergen (1955-1979). The series had two strands: The Main Series for monographs, and The Supplementary Series for thematic anthologies. During the 1980s and 1990s, the series expanded its profile thematically and geographically. Today, The Bryggen Papers has merged The Main Series and The Supplementary Series into one expanded and flexible series and revised its focus and scope. The Bryggen Papers now aims to be the brand and name of a flexible non-commercial peer-reviewed book series for research on the Middle Ages. The profile is multi-disciplinary with focus on the Middle Ages in a broad sense. The Bryggen Papers publish full presentations of basic studies as well as general and interdisciplinary analyses, both monographs and anthologies.

The series is published by the University Museum of Bergen and the Faculty of Humanities, University of Bergen (UiB). The editorial board responsible for the publication of the series is appointed by the Faculty of Humanities, UiB, and consists of Professor Dr. Gitte Hansen, Department of Cultural History, University Museum of Bergen, UiB (Chief Editor); Researcher Dr. Irene Baug. The Medieval Research Cluster, Faculty of Humanities, UiB; Professor Dr. Visa Immonen and Professor Dr. Kirsi Salonen Department of Archaeology, History, Cultural Studies and Religion, UiB; Professor Dr. Henning Laugerud and Associate Professor Dr. Jens Eike Schnall, Department of Linguistic, Literary and Aesthetic Studies, UiB, and Senior Curator Dr. Sigrid Samset Mygland, Bryggens Museum / Bergen City Museum. PhD candidate MA Brita Hope Department of Cultural History, University Museum of Bergen, UiB acts as editorial Staff. Gitte Hansen has been the editorial board's primary rope holder for the current volume.

The publication of the present volume has been financed by grants from The CERAMICA Foundation, Basel Schwitzerland, and Skolestyrer B. E. Bendixens Legat Til Fremme Av Arkeologisk Forskning, Bergen, Norway.

Bergen October 2025
Gitte Hansen
Chief Editor

Acknowledgements

Although the Bryggen excavations were pioneering as one of the first major urban excavations in Europe, and the pottery recovered during the fieldwork is one of the largest groups of artefacts, this volume of the Main Series of the Bryggen Papers is the first to be devoted to ceramics from those excavations in Bergen. Several earlier volumes in the Supplementary Series of the Bryggen Papers contain important contributions on various types of pottery, as Asbjørn A. Herteig, the director of the Bryggen excavations, pointed out the importance of pottery for understanding the site.

My personal relationship with Bergen and its medieval and early modern archaeology and pottery began in the 1990s, when I had the opportunity to study material from the University Museum of Bergen's Medieval Collections. My Magister thesis at the University of Göttingen and my Doctoral thesis at the University of Halle-Wittenberg both dealt with pottery finds from Bergen. In the present book these results are revised and summarised in the light of new perceptions.

No scientific work is possible without the help and support of others. I am therefore deeply indebted to a large number of people, only a few of whom can be mentioned here by name. First of all, I would like to thank Gitte Hansen, both for her many years of collegiality and for giving me the opportunity and encouragement to write and complete this book. I am indebted to my university teacher Hans-Georg Stephan for my basic knowledge of pottery research and historical archaeology, as well as to my old field supervisor Andreas König for his solid introduction to archaeological field methodology. Many colleagues at the University Museum of Bergen UiB, Bryggens Museum and other archaeological institutions in Bergen have made the city my second academic home and enabled me to complete this book. Special mention should be made of A. Rory Dunlop from the Norwegian Institute for Cultural Heritage Research with his deep knowledge of Bergen pottery, which he was happy to share in long and refreshing discussions. Derek Hall, archaeologist and pottery specialist from Perth, Scotland, undertook the ungrateful task of reading through and correcting my English, which he did brilliantly, although there may have been a few mistakes left, which are of course all my own. My dear colleagues at the Museum of Archaeology, University of Stavanger, Norway, deserve special thanks for their encouragement and support throughout the writing and completion of this publication. Representing many colleagues, I would like to mention all the members and participants of the Baltic and North Atlantic Pottery Research Group (BNPG) and the Arbeitskreis Keramikforschung, who have inspired me deeply over the years. The CERAMICA Foundation in Basel, Switzerland and Skolebestyrer B.E. Bendixen legat in Bergen deserve many thanks for their generous support of this volume. Dennis Gaijda, Braunschweig, Germany, kindly helped me with the graphic representation of old maps and the cover illustration. Many other friends and family members supported me all the time I was busy with research. Finally, my wife Deniz deserves the greatest thanks for her understanding, interest and common sense, which enabled me to complete this book, which is therefore dedicated to her.

Stavanger October 2025
Volker Demuth

1. Introduction

In the city of Bergen on the west coast of Norway, substantial quantities of archaeological finds from the Middle Ages and Early Modern Period have been recovered and a multitude of different features have been documented. The largest group of finds is made up of pottery, most of which has been pre-sorted and categorized, but only part of which has been studied scientifically. Numerous ceramic groups and ware types have not yet been recognized as such, let alone published.

Outside the city of Bergen, which was the most populous and economically important city in Norway until the 19th century, ceramic finds from this period are known from only a handful of places in Norway. A scientific study of ceramic wares that have not yet been explicitly recognized as an important archaeological resource is therefore necessary to close existing research gaps and expand the empirical basis for historical archaeology in Northern Europe.

In the present work, various groups of stoneware and near-stoneware discovered in Bergen and southwest Norway are presented. Stoneware from the Weser Uplands, which has not yet been recognized as a separate product group in Norway, accounts for the largest proportion of the finds examined. However, the stoneware from southern Lower Saxony and Northern Hesse can be clearly distinguished from products from other regions by their specific technological and typological characteristics. This also applies to the Saxon stoneware from Waldenburg. Both types of wares are presented in detail, analysed and differentiated from similar wares from the Rhineland, with which the stoneware from the Lower Saxon quarter of the Hanseatic League was and still is often confused. The third group to be examined is the richly decorated stoneware of the Renaissance, which, with its complex relief ornaments, is to be classified as an archaeological resource of special quality. As with the other wares, relief-decorated stoneware has not yet been studied separately as an independent group of finds in Scandinavia. All the finds presented in the study are recorded in a catalogue comprising a total of 1780 entries and describing the objects with the respective find contexts. In addition to these primarily considered ceramic wares, individual other ceramic finds, such as the so-called Falke group and special forms of Siegburg stoneware, are also presented in the work. The Catalogue (Cat.), Drawings and Appendices are published digitally as supplementary material (see: Supplementary materials). Unless indicated otherwise, all illustrations in this volume were created by the author.

The processed finds date to the late Middle Ages and the Early Modern Period, which here means the period between around 1250 and 1700. They are analysed according to technological, typological and chronological criteria and evaluated in the context of the respective findings.

The processing of the Norwegian finds is intended to contribute to a better understanding of the complex networks of the late Middle Ages and Early Modern Period in the North Sea and Baltic region. The relationships between southwest Norway with Bergen and the Hanseatic hinterland of Lower Saxony can be divided into several sub-areas, which are intertwined in many ways.

To illuminate the cultural-historical background of the Norwegian finds, finds from Bremen and Gamla Lödöse in Sweden were also examined in the respective stores and treated cursorily as important reference materials (See: Appendices, Supplementary materials). The aim is to place the finds from Bergen in a supra-regional context. The detailed treatment of the pottery provides the basis for a more differentiated cultural-historical classification of the finds.

Trade and exchange in its various forms are central themes of the present work. The imported pottery tangibly illustrates the exchange of goods in Central and Northern Europe. Since the main trade goods that can be deduced from the written sources consisted largely of organic material, which in most cases has passed without trace, preserved ceramic objects are of particular importance. Due

to their relatively large number and often easily identifiable provenance, ceramic wares provide good evidence for the exchange of goods. The archaeological ceramic finds can therefore provide an important supplement and corrective to the known written sources. Questions about trade routes and the mechanisms of pottery distribution are therefore the focus of this study.

Another aspect that becomes tangible with the pottery finds are certain consumer habits, in particular drinking and dining habits. These are documented indirectly by the stoneware on display, which can predominantly be regarded as drinking, serving and tableware. In this context, too, trade is partly involved, as the question of whether the imported vessels were imported as containers for other trade goods or as objects on their own must be discussed. In addition, the context in which the finds under investigation were used and the extent to which there may be connections with other, non-preserved trade goods must be discussed. The aim is to work out whether and to what extent the ceramic finds can be regarded as indicators of a wider cultural transfer.

Finally, the significance of the pottery as a medium will be discussed. Some of the finds presented here are richly decorated. In discussing these decorative elements, it is assumed that they were not purely decorative in character, but that the sometimes highly complex images conveyed thoughts and ideas. The analysis of the decorative motifs therefore provides an insight into the mentality and imagination of people in Central and Northern Europe in the late Middle Ages and Early Modern Period.

To place the interpretation of the finds in an appropriate historical framework, the results of historical research on relevant topics are discussed briefly. Works on trade, economic and social history in Northern and Central Europe provide an important basis for understanding the archaeological finds. The research history of medieval and modern archaeology in the area in question, with a focus on ceramic research, is also presented in summary form. A great deal of Scandinavian and English-language literature was used throughout the work. When Scandinavian quotations are cited literally, these were translated by the author.

Finally, based on the archaeological finds, a picture of the diverse relationships between western Norway and the Lower Saxon quarter of the Hanseatic League will be developed. In the field of tension between temporal depth and geographical space, continuity and change as well as differences and similarities will be made clear. In addition to gaining knowledge of verifiable facts about economic and social history, the aim is not to lose sight of the people who lived at the time. Ultimately, archaeology is not only about strengthening our understanding of historical processes, but also about trying to see past living environments through the eyes of the people of the time (Hedeager 1997: 11).

2. Methodological and theoretical foundations

This chapter contains some basic discussions and reflections on the scientific approach and the aim of the work. Questions about the 'how?' and the 'why?' of a book on archaeological pottery are central here. The 'how' concerns the methodology of the investigation, while the 'why' focuses on the cultural-historical meaning and purpose of the endeavour. The first section of this chapter therefore sets out the methodology used to process the pottery. This primarily concerns the procedure for identifying and classifying the material. In the second section, theoretical questions regarding the interpretation of the research object are discussed. These relate to the benefits of ceramic analyses for further knowledge growth regarding historical questions in the sense of material culture research.

2.1 Methodology

The starting point of the present work is the classification of ceramic finds that have not yet been processed and classified, or only to a limited extent. The examination of the presented pottery is primarily based on the macroscopic approach of the objects. The guiding criteria for this approach are technology, typology and chronology.

The generic term 'technology' covers all the primary characteristics of the objects examined, such as the degree of firing and hardness of the body as well as its colour and any leaching components and inclusions. However, this also includes the colour, treatment and appearance of the surfaces. These characteristics were examined and determined with the naked eye, if necessary, with a magnifying glass. The degree of sintering of the shard was assessed based on the appearance in the fracture. An elaborate determination of the water absorption capacity as a material science criterion for stoneware was not considered for reasons of practical feasibility (Bauer et. al. 1993: 98).

The generic term 'typology' refers to the shape of the finds examined. This includes all details that are recognizable on the respective object, as most of the finds presented are fragments. Particular attention is paid to characteristic formal elements of the base formation, the rim, any decorations and, as far as recognizable, the overall shape of the vessel.

Based on the technological and typological characteristics of the pottery examined, the ceramic wares presented in the treatise were defined and determined. The respective characteristics of the wares are described in detail in the relevant sections (Chapter 5). All finds were assigned to a production region after personal examination and based on experiences, descriptions and illustrations in the specialist literature. In the case of the stoneware from the Weser Uplands, which makes up most of the presented finds, the Norwegian finds were also subjected to a comparison with reference finds from the production sites. A strict procedure was followed when evaluating provenance, so that finds that could not be assigned to the presented production regions were not included in the catalogue in case of doubt.

In 2019, a selection of 83 fragments in total, corresponding to around 5% of the total number of presented finds, were examined for their chemical composition using X-ray fluorescence analysis and assigned to known places of production on this basis. The analysis was carried out in the laboratory of Detlef Wilke in Wennigsen, who has already published important findings on the scientific determination of the provenance of archaeological stoneware finds (Rauch, Rauch and Wilke, 2016 a, b). With one exception (Cat. 1300), the results of the scientific analysis confirm the provenance determination made based on the macroscopic anal-

ysis. X-ray fluorescence data and Wilke's evaluation of results of the X-ray fluorescence analysis is found in Appendices (See: Appendices, Supplementary materials).

The chronology of the presented finds is based on various factors. On the one hand, characteristic vessel types are chronologically classified on the basis of comparison with similar finds from known, securely dated find complexes. This methodology only provides limited indications for the dating of the Norwegian finds, as the durations of the different types can be quite long and the determination of these is one of the aims of the work presented. Another important point of reference for the chronology of the pottery studied is therefore the dating of the find context. Well-stratified finds from secure contexts of well-documented excavations can provide valuable information on the dating of the pottery. The excavation finds from the city of Bergen are characterized by a complex stratigraphy with numerous fire layers, which suggest a correlation with documented fires. The main features of this fire layer chronology have been extensively published by the excavator Asbjørn E. Herteig (Herteig 1985). Substantial objections and nuances to the chronology presented by Herteig were discussed extensively by various researchers a few years later (Øye 1998). The stratigraphy and chronology of the sites from which the finds presented in this work originate are critically examined in the respective sections of Chapter 6. A chronology of the finds presented is therefore best achieved through a combination of the archaeological find context and a comparative typology of the find material. The importance of correlating the dating of features with the dating of finds for the assessment of both the excavations and the finds was emphasized early on (Herteig 1969: 30).

Another methodological aspect concerns the quantitative and spatial analysis of the finds presented. When working with archaeological pottery, the question of the representativeness of the finds always arises. Often a single fragment can represent an entire vessel, so that a small sherd can sometimes be equated with an almost complete vessel in a quantitative analysis. The challenges of quantitative representativeness can be met with various methods, such as determining the minimum number of vessels based on 'vessel-equivalents' (Orton, Tyers and Vince 1993: 172). Due to the numerous imponderables of such methods and the considerable effort involved, which is disproportionate to the expected result, this method was not used in the present study. Only the number of fragments or catalogue entries was used as a counting variable in statistical considerations. An attempt was made to group fragments that certainly belong to one and the same vessel under one catalogue number. However, it cannot be ruled out that several fragments may nevertheless appear as separate catalogue numbers, even if they come from the same vessel.

It should be noted that the number of fragments remains the decisive factor in the quantitative evaluation of the find material. This is particularly true when quantitatively comparing different wares. For other ceramic wares, only the entries and classifications from various databases of the Bergen University Museum's Medieval Collection were used, as far as they were available and accessible. In the databases used, the number of fragments is the key factor.

The same applies to the spatial analysis of the finds presented regarding the determination of quantity, i.e. that, as a rule, a single fragment corresponds to one entry. In spatial analysis, the find situation is a factor that determines the representativeness of all statements. The scope and character of the respective investigation also play a role, as do excavation methods and local conditions. These circumstances must always be considered when evaluating the spatial distribution of finds and influence the comparability of different sites.

Overall, it should be noted that the macroscopic-descriptive presentation of the investigated finds forms the basis for a further cultural-historical interpretation of the pottery. The comprehensible and comparable description, classification and quantification allow the Norwegian material to be placed in an international context. The corpus of finds presented is thus also available as reference material for further studies of different issues.

2.2 Theoretical considerations

Beyond the pure material edition, the aim of this work is to gain further insights into questions of cultural history by examining the presented pottery. The fact that imported medieval and early modern pottery has considerable potential as a source, for example for trade connections and far-reaching contacts, was recognized and emphasized early on (Dunning 1968). However, a comprehensive interpretation of the find material requires a conscious handling of the pitfalls of hermeneutics, since a simplistic, positivistic interpretation rarely does justice to the complex character of archaeological finds and features (Verhaeghe 1992: 88). Despite all justified criticism of the normal scientific approach of processual archaeology (Moreland 1991: 9ff.), the tendency to adapt sociological or philosophical currents in archaeology, which has occasionally been observed in recent decades, particularly in Scandinavia and the Anglo-Saxon world, also appears to be only partially effective (Svestad 2004). A modern treatment of medieval pottery from Denmark illustrates the perspectives

that can be opened by taking sociological theories into account, but at the same time points to the problems of uncritically adopting theoretical approaches (Linaa 2006: 14). It should be noted that theoretical reflections in archaeology are important and should be pursued seriously.

One of the aims of this study is to use archaeological pottery finds to develop interpretative models that make it possible to approach past reality. In doing so, account must be taken of the fact that 'every object, every object of research is surrounded by a social context or that the objects must be interpreted as signs within social communication processes if they are not to lose part of their historical substance' (Seidenspinner 1986/87: 21). Medieval pottery finds are therefore also information carriers for several different cultural-historical aspects and can provide important information on various topics depending on the situation of the find and the find material (Moorhouse 1986). These interpretation models are often interdisciplinary in nature and operate in the field of tension between different disciplines such as archaeology, history, ethnology and ethnology (Lüdtke and Vossen 1991). The proverbial thinking outside the box of the respective research discipline promotes the complexity of the questions and the achievable results. An interdisciplinary approach is desirable in the sense of a histoire totale; in this way, archaeology is integrated into 'medieval studies as a comprehensive cultural history of the Middle Ages' (Steuer 1997/98: 20). However, this much vaunted interdisciplinarity is not without its pitfalls and the difficulties of understanding between research fields are considerable in places, as the peculiarities of the sources used in each case also mean that different questions are pursued at their core (Jenks 2019). This fact does not argue against an interdisciplinary approach, but it does highlight the need for a reflective approach to the discrepancies in sources and possible statements from the various disciplines.

Even if the theoretical perspective influences the problems and thus the possible answers of the scientific discourse, the material examined determines the further cultural-historical questions that can be traced based on the archaeological finds. Against the background of the self-image of medieval and modern archaeology that has grown over the years, it seems appropriate to use the archaeological sources that have now been discovered in considerable quantities in an offensive and self-confident manner - '...material remains now set the agenda and themes on their own terms,...' (Hansen, Ashby and Baug 2015: 2).

As already mentioned in the introduction, the broad field of the exchange of goods and cultural relations is an obvious thematic complex in the processing of imported ceramics. It is no coincidence that the cover illustrations of important publications on medieval trade in the Hanseatic region often show photographs of archaeological ceramic finds (e.g. Gläser 1999; Elvestad, Gardiner and Mehler 2019). The special situation of medieval pottery in Norway, which was all imported, was recognized and addressed early on in this context (Herteig 1969; Lüdtke 1989; 1991). When evaluating archaeological pottery finds as an indicator of trade relations, many aspects must be urgently considered.

As early as 1992, Frans Verhaeghe formulated a series of questions that provide a solid basis for the analysis of imported pottery:

- Does the pottery indicate trade or some other kind of contact, if trade: was it trade in pottery or / and in other goods?
- Do the finds indicate the extent of trade in pottery and/or other goods?
- Do the finds indicate the development of trade in pottery and/or other goods?
- Do the finds and their distribution give an indication of the character of the trade or other types of contact (different forms of exchange, different socio-economic systems)?
- Can information about the trade routes and other contact areas be derived from the find? (Verhaeghe 1992: 96)

Even if the study of archaeological pottery finds can provide important insights into trade and economic networks, it is always advisable not to overstretch the interpretation and not to underestimate the complexity of the historical processes (Verhaeghe 1999).

Taking this framework into account, ceramic research occupies a central position in the archaeological investigation of cultural and economic relationships in the Middle Ages and Early Modern Period (Gaimster 1999: 99). The contacts indicated by the ceramics are not to be regarded as purely economic, but factors such as migration and the use of characteristic tableware as socio-culturally charged symbols must be included in the evaluation of imported ceramics. Beyond trade relations, aspects of cultural identity also become tangible with the imported vessels (Linaa 2006: 168). To understand the complex network that connects the archaeological finds and the people associated with them and to classify them correctly in their respective historical context, terms such as networks and object biography are important to me.

Not least in historical research on trade in Bergen, Norway, important works have been published with a focus on the networks of the actors there (Burkhardt 2008; Wubs-Mrozewizc 2012).

These models can provide valuable templates for the interpretation of ceramic distribution. When using the network concept, it is important not to forget the people involved in the various stages of these networks and the specific historical situations in which they became part of the network of relationships (Hansen, Ashby and Baug 2015: 9).

In order to understand the significance of archaeological objects, in this case ceramics, more comprehensively, the concept of *object biography* can also be helpful (Appadurai 1986). An important aspect here is the tension between an object as a commodity, i.e. an arbitrarily interchangeable object of economic interaction, and a specific object as the bearer of a meaning or function (Kopytoff 1986). Through the *entanglement* of people, things and their respective identities, aspects of historical realities can be captured that are otherwise difficult to grasp in archaeological research (Hofmann 2015: 112). The macro-economic view of ceramics as a commodity reflects the development of economic relations and social structures. Viewed on an individual level, a single find object can provide insights into the mentality and identity of the object's historical users. Both perspectives are useful in the interpretation of archaeological pottery finds and should be considered, especially since the same object can be a commodity for one person but at the same time represent something completely different for another (Kopytoff 1986: 64). The reconstruction of the *biography* of an imported ceramic vessel based on the archaeologically ascertainable circumstances of the find allows far-reaching conclusions to be drawn both about the flow of goods and about the lifeworlds of the people who were involved with the object in question. In this context, it is also necessary to reflect on the functionality of the ceramic vessels. The tense relationship between classification and function was highlighted early on from a folkloristic perspective (Bauer 1991). A distinction can be made between use in the sense of utilization for a specific purpose and function in a superordinate cultural context (Bauer 1991: 407). These considerations are already of considerable importance for the naming of certain vessel types, which are traditionally often assigned terms for a specific purpose without this use being demonstrable or even probable for the specific object. For the forms of medieval and early modern ceramics, the question arises as to whether the vessels were designed in accordance with the guiding principle of modern industrial design *form follows function*. Or were the shapes of the ceramics largely determined by the technological possibilities of the potters, who produced objects that could be used for various applications? This question should be considered when addressing and interpreting the archaeological finds.

Another aspect of the previous considerations is the significance of objects as signs in the context of their social function (Bauer 1991: 408). This level of meaning must also be taken into consideration for ceramics in the Middle Ages and Early Modern Period. Stoneware has been convincingly interpreted as a utilitarian object with manifold social and cultural implications (Gaimster 1997: 115ff.). The depiction of stoneware vessels in Dutch genre painting of the Early Modern Period illustrates the multi-layered functions of ceramics for contemporary users. The use of ceramic vessels is closely linked to consumer habits and table manners. These in turn are inextricably linked to questions of status and aspects of cultural identity, which become tangible in the ceramic finds (Linaa 2006: 160ff.). As typical stoneware vessels in the late Middle Ages and Early Modern Period were predominantly found in regions in which the German Hanseatic League played an important economic and political role, this ceramic ware has already been described as the *type fossil* of a *Hanseatic culture* (Gaimster 2014: 65). Even if this view is not uncontested (Immonen 2007: 727ff.) and certainly requires differentiation in detail, access to historical mentalities and identities is possible via archaeological ceramic finds. Closely linked to these questions and always to be considered when evaluating the material culture of Northern Europe in this period are aspects of extensive migration and the associated cultural processes (Naum 2016). Consideration of written source research on this complex of topics is essential for the interpretation of archaeological finds and enables a comprehensive picture of social conditions and the integration of material culture into them to be obtained. This concerns aspects of economic activity and consumer habits, in particular the important Hanseatic trade in wine and beer, which could be of particular significance for the analysis of stoneware drinking vessels (von Blanckenburg 2001; Irsigler 1996; Wubs-Mrozewizc 2005).

In addition to the sometimes clearly definable content of the relief-decorated stoneware, there are also rather subtle and ambiguous images on the pottery studied, particularly in the form of the various anthropomorphic depictions, especially of bearded faces. Obviously, these face jugs have a symbolic character, the meaning of which can be discussed in many different and controversial ways (Green 2018; Grunwald 2015; Schwarzberg 2012; Stephan 1992b). With face jugs, archaeological material culture research is opening a group of finds that illuminate thematic complexes that are

otherwise primarily dealt with by historians and art historians (e.g. Husband 1980). By integrating the results of different fields of research into the interpretation of archaeological finds, the symbolic world of figuratively decorated ceramics can be interpreted in a well-founded manner and the imaginary world and mentality of the historical users can be explored.

2.3 Summary methodology and theory

The basis for the present work is a thorough survey of the pottery examined, whereby the technology, typology and chronology of the finds are presented. On this basis, the finds of stoneware not yet defined as a separate product group in Norway are presented in their respective contexts. Due to the current state of research, the empirical presentation of the material is already an important objective of the research. However, the pottery is also a source for further considerations on economic, cultural and social history. As utilitarian objects, stoneware vessels are an expression of social processes and, as imported goods, direct evidence of far-reaching economic connections. The decorations on the ceramic vessels reflect the imagination and mentality of producers and consumers. The depictions are to be interpreted and understood against the background of contemporary intellectual currents and attitudes. The ceramics presented can therefore be seen both figuratively and explicitly as a medium and marker of socio-cultural aspects of the late Middle Ages and Early Modern Period. The distribution of the various ceramic goods allows conclusions to be drawn about the contemporary economic networks and the actors involved. The biographies of individual objects allow a differentiated view of historical matters. The imagery of the relief-decorated stoneware provides direct content carriers that can be assigned to the former consumers and producers of the vessels.

In consideration of the results of related disciplines such as history, cultural history and folklore, archaeological material culture research can make an important contribution to the study of the Middle Ages and the Early Modern Period through the investigation of ceramic finds.

3. The historical background

For a better understanding of the archaeological finds and features, the following chapter will briefly outline the historical context. The remarks on the historical tradition are based exclusively on the literature used. This work cannot provide a comprehensive assessment of the extensive research on the topics outlined here. Rather, published research results that are important for the evaluation of the archaeological finds presented here will be discussed. Primarily, subject areas and questions are of relevance that are also touched upon in the analysis and interpretation of the pottery finds. These include the following topics:

- The historical context in Norway and Northern Germany.
- The trading activities: Trade routes, trade goods, flows of goods, organizational forms of trade.
- The socio-economic structure of the city of Bergen: key data on the city's history, population groups, economy and trade.
- The relationship between Germans and Scandinavians in the late Middle Ages and early modern times.
- Drinking and dining culture in the Middle Ages and early modern times.
- Living environments, identity and mentality

3.1 The historical framework: Southern Scandinavia and Northern Germany between 1250-1700

3.1.1 Initial considerations concerning the use of the term Hansa

Research on historical events, trade and contact between Northern Germany and southern Scandinavia in the years between 1250 and 1700 will inevitably have to refer to the term *Hansa* or *Hanseatic League*. A brief discussion of this term is therefore necessary at this point, but against the background of the extensive historical literature on this subject, it is a rather pretentious undertaking. Especially since the Hanseatic League presents itself as a phenomenon that 'repeatedly eludes the historian's cognitive grasp' (Henn 1989: 15). Even if the term *Hanseatic League* evokes associations in many people today, it is much more difficult to find an unambiguous clarification of its historical meaning. Initially, the term itself simply refers to a flock or group (Jahnke 2014: 8).

The 'nebulousness of the Hanseatic League' (Henn 1989: 16) may be because the association of cities did not have a written 'constitution' or a founding treaty, even if some contemporary actors such as the English king seemed to believe this (Henn 1989: 19). The difficulties in clearly defining 'the Hanseatic League' are due to the fact that the phenomenon described by the term changed over time and was always filled with new meanings. This is already expressed in the early term *Hanseatic League* and the *Hanseatic* introduced centuries later (Nedkvitne 2013: 147).

There is no doubt that the Hanseatic League was linked to a certain geographical area, the boundaries of which were not clearly defined but rather vaguely outlined. The term *German Hanseatic League* used early in the sources shows a self-image as an organization belonging to the (Low) German-speaking area (Dollinger 1976: 479).

During its early phase, the *Hanseatic League* was understood as an association of individual merchants. These were initially supported in their trade by individual cities. From the middle of the 14th century, an overarching organization of numerous Low German cities developed to protect common interests (Dollinger 1976: 480). The Hanseatic League thus had a geographical aspect, which essentially referred to the southern North Sea and Baltic coastal area, including inland Lower Germany with Cologne, Westphalia and Lower Saxony. The approximately 60 to 200 cities that were members of the Hanseatic League at different times were located in this area (Henn 1989: 18). From the 15th century onwards, the territory of the

Hanseatic League was divided into four quarters, a Wendish-Lübish quarter with Lübeck, a Rhenish-Westphalian quarter with Cologne, a (Lower) Saxon quarter with Brunswick and a Livonian-Prussian quarter with Gdansk as the respective suburbs (Henn 1989: 20). Low German as the lingua franca of the Hanseatic League also played an important role in defining the Hanseatic region (Nedkvitne 2013: 147). Beyond this region, which can be described as the actual *Hanseatic core area*, the Hanseatic League can be seen as a formative factor in a larger area whose outer points are largely marked by the four Kontore in Bruges, London, Bergen and Novgorod and which can generally be understood as the *Hanseatic area* (Henn 1989: 21). This region is depicted very clearly in a contemporary map by the Dutch artist and cartographer Cornelis Antonisz from 1543 (Figure 1). For the emerging trading power of the Netherlands, the Hanseatic region around the North and Baltic Seas was an important target region for economic expansion in the 16th century (Wubs-Mrozewicz 2010: 341).

The decisive factor for the emergence and historical classification of the Hanseatic League is the politico-economic aspect of the formation of a 'special-purpose community of Low German long-distance traders to acquire and maintain trading privileges' (Selzer 2010: 6). By joining forces, the merchants and cities were able to significantly improve their negotiating position vis-à-vis various territorial rulers and assert their interests even against powerful players such as the Danish kings. It should not be underestimated that there were always considerable conflicts and clashes of interests between different cities within the Hanseatic League, which were often bitterly fought out and could lead to the temporary exclusion of individual cities (Dollinger 1976: 482). An important aspect of the economy of the Hanseatic League and its cities and merchants is the fact that a considerable proportion of Hanseatic trade involved foodstuffs, which were negotiated less as luxury products than as mass-produced goods (Henn 1996).

The period in which the Hanseatic League played an important role is as fluidly defined as its

Figure 1. *The 'Caerte van Oostlant' by the Dutch cartographer Cornelis Anthonisz from 1543 shows the geographical framework known as the 'Hanseraum' from the perspective of his contemporaries in the Netherlands. Map: Illustration from the Herzog August Bibliothek Wolfenbüttel. Map: Illustration from the Herzog August Bibliothek Wolfenbüttel.*

geographical expansion. The beginnings date back to the 13th century and the end of the Hanseatic League as a relevant political organization is to be noted in the second half of the 17th century at the latest (Dollinger 1976: 478). The actual heyday of the Hanseatic League, however, was in the late 14th and 15th centuries, whereby a decline, at least in political power, can already be observed in the 16th century, even if the volume of trade still increased significantly in some cases (Postel 1989).

3.1.2 Brief outline of the history of Norway with focus on the southwest

In Norway, a civil war lasting almost a hundred years ended around 1240 and stable rule was established under the regency of Håkon IV. Håkonsson (Helle 1974: 73). From the middle of the 13th century, the Norwegian kings ruled over the Shetland, Faroe and Orkney Islands and over large parts of the northern North Sea. In the 1260s, Iceland and Greenland were also subjugated to the Norwegian crown, making a huge sea area in the North Atlantic part of the Norwegian empire. With the counties of Härjedalen, Jämtland and Bohuslän, medieval Norway also included parts of present-day Sweden. Under Håkon Håkonsson and his successors, the Norwegian upper class was closely integrated into the network of European high nobility. At the court in Bergen, French chivalric romances and German heroic sagas were translated into Old Norse (Eriksen and Johansson 2012). An expression of this self-image is the Gothic palace built in the mid-13th century, the so-called *Håkonshallen* (Håkon's Hall) at the castle in the then capital of Bergen (Figure 2).

Figure 2. *'Håkon's Hall' from the 13th century at Bergen Castle, the largest secular medieval stone building in Norway, as it was in the 1950s. Photo: Bergen University Museum archive.*

This phase, often referred to in Norwegian historical research as the *Great Power period* (Norw. *storhetstid*), lasted until around the middle of the 14th century (Krag 1998: 257). In 1397, the three Nordic kingdoms (Norway, Sweden, Denmark) were united in a union under Queen Regent Margaret of Denmark. Sweden left the union in 1523 under King Gustav Wasa and was repeatedly embroiled in wars with the remaining 'dual monarchy of Denmark-Norway' until the end of the 17th century. Norway remained in the Union, which was strongly influenced by Denmark, until the 19th century. In the second half of the 13th century and the early 14th century, not only the economic but also the political focus of Norway was on the west with Bergen as the largest city and the king's seat (Helle 1995: 186). In the middle of the 13th century, a royal church dedicated to St Olav and a large, representative stone palace was built at the strategically important location of Avaldsnes, south of Bergen (Bauer 2018). This building activity illustrates the westward orientation of the Norwegian kings of this period towards the North Sea region. From 1319, Norway was ruled by King Magnus VII Eriksson, who was also King of Sweden. During this time, the administrative centre of Norway was increasingly moved to the east to Oslo with the fortress Akershus. In the 14th century and especially from 1397, during the Kalmar Union, the political centre of power shifted more and more to Denmark, while the west and north of Norway represented a peripheral region for the ruling kings (Nedkvitne 2013: 166; 2014: 582). The Norwegian nobility exercised their power and privileges in the late Middle Ages mainly in ecclesiastical and administrative positions, while a large part of the population consisted of free peasants (Bull 1968). With the introduction of the Reformation in 1536 by Christian III, the Norwegian nobility was largely disempowered, and the Danish kings consolidated their power. During the 16th and 17th centuries, a self-confident and educated bourgeoisie and a powerful civil service developed (Holmsen 1977: 440-445). Even though most of the population lived in the countryside as farmers and fishermen, the towns had been the administrative centres of the country since the High Middle Ages, with Bergen being the only town of great economic importance (Nedkvitne 1994: 16).

This special status of Bergen as Norway's most populous and economically important city remained until the 19th century (Holt 2007: 133). Throughout the whole of Norway, there were only 14 settlements described as towns in contemporary medieval sources, with 6 of them labelled as *civitates* (Helle 2006, 66). According to a comparative study that looks at Norway's medieval urbanization from a European perspective, most of the Norwegian towns functioned only to a limited extent

as regional supply hubs (Holt 2009: 240). Bergen however stands out as the main hub for trade from Norway to other countries (Helle 2006: 83).

After Bergen, other Norwegian medieval towns include Oslo and Tønsberg on the Oslofjord, as well as Trondheim, the seat of the Norwegian archbishop and the most important town in the agriculturally important central part of Norway. Stavanger, located in the southwest, was primarily important as a bishop's seat. Its function as the administrative centre of a bishopric that encompassed large parts of southwestern Norway led to the construction of the cathedral and the development of a town-like settlement (Ersland 2013: 34).

In general, the degree of urbanization in Norway was very low; it is estimated that only five percent of the total population in Norway in the 14th century lived in towns, of which almost half were in Bergen (Helle et al. 2006: 66, 110). These proportions did not change significantly until the 17th century. The outstanding importance of Bergen was primarily based on the fact that the city played a key role in the exchange of dried fish fished and produced in Northern Norway for grain products from central Europe, especially the landscapes on the southern Baltic coast (Burkhardt 2012: 216). This basic pattern of trade, which had developed by the 13th century at the latest and remained in place until the 16th century, was the basis for the development of the Hanseatic trading post in Bergen (Nedkvitne 2014: 587). Bergen was the most important staple place for stockfish, a sought-after bulk commodity in late medieval and early modern Europe, and as such an important economic hub (Wubs-Mrozewicz 2010: 342). Even though the exact quantities of fish exported fluctuated over the centuries and can often only be estimated, there is evidence of significant exports of stockfish from the early 14th century and into the 17th century (Nedkvitne 2013: 161).

3.1.3 The Hanseatic League and Norway

The German Hanseatic League and other German actors in Norway have been the subject of countless scholarly works, the focus of which have undergone various changes over the decades (Nedkvitne 1999). In the early 20th century, some Norwegian historians formulated a very critical view of Hanseatic involvement in Norway (Schreiner 1935). Later, this view was no longer pursued in the central Norwegian overviews of Bergen's urban history (Helle 1995; Fossen 1995). In recent decades, a number of international historians have studied different aspects of the Hanseatic Kontor in Bergen. There were also minor Hanseatic trading posts, called factories in Oslo and Tønsberg, but they never attained an economic and political significance comparable to that of Bergen (Müller-Boysen 1989).

Due to the outstanding importance of the city of Bergen and the relatively good availability of sources, various aspects of the city's history have been the subject of research. The economic mechanisms and implications of the Hanseatic League's trade with Norway have been published in a comprehensive monograph (Nedkvitne 2014). Other researchers have investigated aspects of the traders' networks in Bergen (Burkhardt 2009; Wubs-Mrozewizc 2008; 2010; 2011; 2012). A detailed study on prostitution in the Hanseatic region provides revealing insights into social life and mentalities in late medieval and early modern Bergen (Hemmie 2007). The research situation on the field of Hanseatic-Norwegian relations, especially in Bergen, is therefore quite good. These relations are of considerable importance for the development of the Hanseatic League as a prominent player in late medieval and early modern Europe (Dollinger 1976: 72). The negotiations of the Hanseatic League as a whole with the Scandinavian rulers were often conducted by merchants active in the Bergen trade, which illustrates the importance of the Bergen Kontor (Wubs-Mrozewicz 2010: 351). In the 16th century, however, the rights of the Hanseatic League in Norway were severely restricted, so from around 1560 the Kontor was only able to exert limited influence in Bergen, both economically and politically. At the same time, many of the Germans working in Bergen acquired Bergen citizenship, which led to a strong cultural influence of the ethnic Germans on the early modern bourgeoisie in Bergen (Nedkvitne 2013: 183). The tense relationship between elites and populations on the one hand and Hanseatic merchants and immigrants on the other was multifaceted and complex in large parts of Scandinavia (Opsahl 2013). The cultural and economic influence of the North Germans was considerable, but perhaps precisely for this reason it regularly led to conflict. Bergen was certainly in many ways a place where this tension accumulated, not least because of the large number of Germans living or sometimes residing there, estimated at around 1000 to 2000 in the 15th century (Helle 1995: 743). In the middle of the 15th century, these tensions erupted violently in the clashes between the royal governor Olav Nilsson and Hanseatic sailors in Bergen (Helle 1995: 766). In 1455, the conflict escalated to such an extent that Governor Nilsson and numerous other Norwegians were killed in the Munkeliv monastery in Bergen. As a result, a protracted feud developed between Nilsson's noble family and the Hanseatic League, in which also privateers from the Baltic Sea were involved (Burkhardt 2012: 219; Helle 1995: 767-

768). This episode illustrates the complex nature of the conflicts, in which different actors repeatedly found themselves on different sides.

3.1.4 Aspects of Bergen's urban history and social topography

As already mentioned, Bergen was by far the largest and most populous city in Norway during the Middle Ages and the Early Modern Period. The exact number of inhabitants is not known and is likely to have been subject to strong fluctuations due to events such as epidemics. According to various calculations, there were between 5,000 and 10,000 inhabitants between 1200 and 1650 (Helle 1995: 487-493). In 1349, the plague broke out in Bergen, the pathogens of which, according to tradition, entered the country from a ship arriving from England (Helle 1995: 674). As a result of this and other epidemics in the second half of the 14th century, the population of the whole of southwest Norway appears to have fallen by almost half (Helle 1995: 680). In the economic crisis that followed, the Hanseatic Kontor was established in Bergen, which contributed significantly to the economic consolidation of the city (Helle 1995: 688). Among the city's rapidly growing population in the 15th century were at least 500 and at times over 2000 German men, most of whom lived and worked in the Hanseatic Kontor on *Bryggen* (Helle 1995: 743). These also included German craftsmen in no small numbers, who were concentrated in the central *Vågsbunnen* district (Helle 1995: 717-718). The various ethnic groups mixed there, as the street name *Dutch Street*, which was presumably previously called *Englander Street*, clearly indicates. As late as the 16th century, around half of Bergen's estimated 7,000 inhabitants are said to have been of non-Norwegian origin (Fossen 1995: 94).

Apart from the craftsmen and members of the Hanseatic League, the majority of the town's population consisted of simple working people and house owners without any special status. The clergy with their servants and the men of the royal administration with their families made up the smallest proportion of the population (Helle 1995: 492). While the officials mainly lived in the area of the fortress and its surroundings, numerous churches and monasteries were scattered throughout the town. In the High Middle Ages, Bergen was an important centre of education and literature, as evidenced by numerous surviving literary works and fragments of vagrant poetry carved in runes on pieces of wood (Helle 1995: 624-648). In the 16th century, probably only about one tenth of the city's population was literate and only one percent of children received a higher education at the Latin school (Fossen 1995: 317).

In the late Middle Ages and increasingly in the 16th century, a Norwegian bourgeoisie developed in Bergen, which was mainly located in the *Stranden* district and consisted largely of German, Dutch, Danish and Scottish immigrants (Fossen 1995: 43-50). For the most part, they seem to have been integrated into the city's population without any problems. Accordingly, many of Bergen's wealthiest citizens in the Early Modern Period had an immigrant background. Many of the so-called *Bergenshumanists* were recruited from these circles in the 16th century, including Absalon Pederssøn Beyer, whose diaries and historical works provide important insights into everyday life and mentality in Bergen at the time (Fossen 1995: 113; Iversen 1963).

However, the conflicts between the Hanseatic League with its various players and the Danish Norwegian administration outlined in Chapter 3.1.3 presumably also had a recurring effect on the city's population. The tensions of the late Middle Ages manifested themselves several times in Bergen in the form of devastating raids by the Victual Brothers, which caused a major fire in the town in 1393 (Helle 1995: 698). This and other attacks by privateers on Bergen in the early 15th century were triggered by the complex economic and political conflicts in the North Sea and Baltic region (Clarus 2012: 182-227). In early Norwegian historiography and the increasingly self-confident bourgeoisie, with its economic interests opposed to the Hanseatic League, the Hanseatic Kontor was accordingly received rather negatively (Helle 1995: 762; Schubert 2002: 31). The urban society in Bergen in the 16th century was characterized by the heterogeneous composition of the population, into which the German inhabitants were increasingly integrated following the loss of power of the Hanseatic League (Fossen 1995: 99). However, the tense relationship between Norwegians and Germans can be sensed repeatedly and this has shaped the perception of Bergen's and Norway's history to some extent up to the recent past (Nedkvitne 1999: 27).

3.1.5 Taverns as meeting places for different segments of the population in Bergen

The many taverns in Bergen were undoubtedly an important point of contact between the various population groups (Helle 1995: 772). In the 16th century, there is evidence of numerous people in Bergen who were involved in serving beer. These included several women, who were considered by the authorities to be of bad repute (Helle 1995: 763). In other cities of the Danish realm, such as Elsinore, women who sold beer were also the target of massive state repression at this time, along

with prostitutes (Hemmie 2007: 294). In general, there was obviously a close connection between the serving of beer and prostitution in the opinion of contemporaries (Hemmie 2007: 70).

Beerhouses and pubs were located in different areas of Bergen, both in the craftsmen's district of Vågsbunnen and on Stranden, which was dominated by Norwegian merchants. In the Øvregate, which was located above the Hanseatic gate and must have had the character of a red-light district in the late Middle Ages, there were quite a few brothels that also functioned as taverns (Hemmie 2007: 141). However, some of the Hanseatic winter residents also ran pubs and beerhouses in Bryggen in the area of the Hanseatic Kontor. These were very popular with both the wintering Hanseatic sailors and the local population, possibly because of the German beer that was served there (Nedkvitne 2014: 346). But Hamburg beer was also served in the taverns on Stranden, which were run by Norwegians and probably frequented primarily by the non-Hanseatic population of Bergen (Nedkvitne 2014: 226).

One of the most important social institutions in Bergen was certainly the municipal wine cellar, which was set up in the basement of the town hall, following the continental model (Ekroll 1990: 75). This was the only place in Bergen where wine could be legally served. This monopoly of the town council was leased to the Hanseatic Kontor in the 15th century (Helle 1995: 319). The city's old town hall with its wine cellar was located in the middle of Bryggen, the area of the Hanseatic Kontor. This location alone makes it clear that the wine cellar was an important meeting place between the Hanseatic and the rest of Bergen's population.

Documentary evidence of encounters between different population groups, are especially reported when incidents occurred that had legal repercussions. For example, guards from the royal fortress Bergenhus appear to have frequented the Hanseatic pubs on Bryggen, as a Norwegian castle guard was attacked and injured by Hanseatic sailors on his way home from one such pub in 1521 (Nedkvitne 2014: 397). The fact that the town's wine cellar was frequented by sailors is illustrated by another episode from 1571, when an argument between drunken German sailors in the wine cellar escalated to such an extent that one cut off the other's head with an axe (Nedkvitne 2014: 392). A report from 1563, which describes the murder of a Hanseatic journeyman by a Norwegian Latin student, shows that such acts of violence were also committed by members of educated circles (Ekroll 1990: 83). The crime was preceded by a verbal dispute over a Sunday pint in the wine cellar, in which three pupils from the Latin school in Bergen clashed with Hanseatic merchants.

However, the examples of legal disputes listed here should not detract from the fact that the vast majority of contacts between the different population groups were peaceful. It is noteworthy that 'jugs and drinking glasses' are considered to be characteristic utensils of these meetings (Helle 1995: 772). It should be noted that Bergen was a very lively town in the Middle Ages and Early Modern Period, where Scandinavians and North Germans regularly came together over beer or wine.

3.2 Production and trade - economic frame conditions for the exchange of goods between Northern Germany and Norway

Trade between Northern Germany and Norway during the Middle Ages and the Early Modern Period was primarily characterized by the exchange of foodstuffs, i.e. goods of considerable volume and weight (Henn 1996: 23). For this reason, waterways were of outstanding importance, as ships were the easiest way to transport such goods. As the Norwegian towns and most rural settlements were located on the coast, trade to and from Norway took place entirely by sea.

As mentioned several times in the previous sections, this trade by sea in the North Sea and Baltic region was dominated by the Hanseatic League in the period between the 13th and 17th centuries. In competition with this were merchants from England and the Netherlands, with the latter increasingly challenging the supremacy of the Hanseatic League from the 15th century onwards (Wubs-Mrozewicz 2010). Until around 1300, England appears to have been the most important export market for Norwegian dried fish, although German merchants were already selling there to a considerable extent in the 13th century (Krag 1998: 164-166). English customs lists show that dried stockfish accounted for around 80% of imports from Norway around 1300, while other products such as fish oil, herring, wood and leather were only imported in small quantities (Nedkvitne 2014: 70). In contrast, there are few written sources for the export of stockfish from Bergen to the Baltic and the German and Dutch North Sea regions. However, the quantities involved were considerable, even if a certain decline can be assumed in the late Middle Ages (Nedkvitne 2014: 245-247).

On the other hand, grain, which was vital for Norway, was increasingly imported from the Baltic region via the Hanseatic cities, although in 1186 the Norwegian king Sverre praised the import of wheat by English merchants (Hodnebø and Magerøy 1979: 155). In the same source, the high medieval Sverre saga, German merchants, whose

most important commodity was wine, are mentioned negatively. The reason for this antipathy was their distribution of wine, which should have driven the king's men to all kinds of misdeeds, which is why the source was referred to as the 'oldest known example of abstainer agitation' in Norway (Krag 1998: 165). In English customs lists of the early 14th century, wool cloth is predominantly mentioned as an export commodity in the east English ports of Boston and King's Lynn, while malt, wheat and flour are listed in much smaller numbers (Nedkvitne 2014: 61). As domestic grain production was no longer sufficient to supply the population from the middle of the 13th century, the import of grain and grain products was essential. From the 14th century onwards, rye from the Baltic region increasingly dominated over English wheat and became the most important import in Norway, even if the exact quantity cannot be determined (Helle 1995: 314-317). Unfortunately, the source situation in the Baltic is not very good, but from the middle of the 16th century it improved considerably with the Danish Sounds Tolls lists. All trade through the Østersund strait between Elsinore and Scania was taxed from the 15th century on and the preserved sources provide evidence of an enormous and increasing volume of grain imports from the Baltic region to Bergen (Nedkvitne 2014: 253-258). It should be noted that up to a third of the Baltic grain imported into Bergen was imported by merchants from North Sea cities, above all Bremen (Nedkvitne 2014: 274). This illustrates that merchants and ships transported goods back and forth from different regions and that the origin of a merchant does not necessarily allow conclusions to be drawn about the origin of the traded goods.

3.2.1 The Hanseatic beer trade

Beer was an important grain product and one of the most important commodities traded by the Hanseatic cities in Norway from the 13th century onwards. Numerous scholarly works have been published on brewing and the beer trade in the Hanseatic region (Langer 1979; Plümer 1981; Irsligler 1996; Blanckenburg 2001; Wubs-Mrozewizc 2005). The importance of brewing and the beer trade for the Hanseatic cities lies not least in the fact that it was the most important commodity produced in the Hanseatic cities themselves (Blanckenburg 2001: 3, 223). The popularity of beer from the Hanseatic cities was probably due to its quality and shelf life, in which the use of hops played a decisive role (Irsligler 1996; Wubs-Mrozewizc 2005). As a result, brewing developed into a trade of outstanding economic relevance in some Hanseatic cities (Plümer 1987: 21). It is estimated that in the period around 1400 a total of up to one million hectolitres of beer were shipped from the Hanseatic cities every year (Blanckenburg 2001: 2). In the 17th century, the proportion of beer destined for export in the total production of individual maritime cities was one third in the case of Wismar, and from Hamburg, the 'brewery of the , as much as 2/5 of the beer was exported (Langner 1979: 68, 80).

It is noteworthy that, in addition to the maritime cities, inland cities also exported beer, although transportation by land or river was more cost intensive. Beer from Einbeck in southern Lower Saxony is particularly worth mentioning in this context. This was first exported by wagons on country roads and then via the rivers Weser or Leine. In the 15th century, Einbeck beer was a well-known luxury item that was in high demand and very prestigious in bourgeois and aristocratic circles. The long-distance trade in Einbeck beer was very probably primarily conducted via Bremen. In the Baltic region, Einbeck beer is documented in cities such as Stockholm and Reval (Blanckenburg 2001: 158-159). There is also documentary evidence of regular exports to Denmark at the end of the 15th century (Plümer 1981: 21). The popularity of Einbeck beer, despite its high price due to the high transportation costs, is usually attributed to its special quality; in addition, the limited availability may have increased the status of the drink (Blanckenburg 2001: 159; Plümer 1981: 13).

In Norway, Hanseatic hop beer played a significant role in the late Middle Ages and the Early Modern Period; both import and consumption are frequently mentioned in written records, especially in Bergen (Helle 1995: 318). In the 13th century, Bremen seems to have been the most important producer of exported Hanseatic beer in Norway, but in the following centuries it came under increasing pressure from the Wendish Hanseatic cities (Blanckenburg 2001: 22). But as late as the 16th century, the delivery of Bremen beer to the royal fortresses in Bergen and Vardøhus in northernmost Norway is still attested (Nedkvitne 2014: 225). From the 15th century onwards, Hamburg beer can be traced as an import and in various taverns in Norway, and in the years 1519-1522 it was the top-selling product supplied by Hamburg merchants to the fortress in Bergen (Nedkvitne 2014: 225-226). However, the Scandinavian market was only of secondary importance for Hamburg, which exported large quantities of beer and was also known as the 'brewery of the Hanseatic League' (Blanckenburg 2001: 37).

That beer was a common cargo on Hanseatic ships and was strongly appreciated by Norwegians shows clearly by a letter that was sent by a coalition of Hanseatic cities to the Norwegian king Håkon VI. Magnusson. In the document that was writ-

ten during the negotiations towards a peace treaty in 1370, beer is mentioned as important cargo on Hanseatic ships several times. In detail the Hanseatic merchant Peder Voght, based in Bergen, was in February 1367 raided by vassals of the Norwegian king for '49 lest of beer worth 528 lybske mark', which was a solid cargo with a considerable value (RN 7: 43, 8). In the same year took Ogmund Finnsson, one of the highest ranked noblemen in Norway, '16 lest' beer from a ship belonging to the Hanseatic merchant Nicolaus Kropelin from Lübeck in the harbour of Egersund in southwestern Norway. Even though the exact amount of the beer cargo and its contemporary value cannot be determined here, the document shows both the ubiquity of beer trade to Norway by Hanseatic merchants and the high esteem of beer by Norwegians.

In the 16th century, Absalon Beyer describes numerous pubs run by Hanseatic merchants in the area of the Hanseatic Kontor, where the Hanseatic imported beers were served and which functioned as important social hubs (Nedkvitne 2014: 346). Evidently, the attempts by the authorities in the 15th century to prohibit the serving of drinks such as beer by Hanse merchants were not successful in the long term (Helle 1995: 784).

Such attempts to regulate the trade and turnover of various goods provide a glimpse into the mechanisms of trade that are otherwise rarely found in written sources. In the second half of the 15th century, the retail trade in 'general merchandise' in the area of the Hanseatic trading post in Bergen was obviously subject to administrative regulations (Helle 1995: 785). The merchants on Bryggen were not actually supposed to engage in such transactions, although reference was made to a customary right for such transactions. Exempt from the ban on retail trade were journeymen and apprentices, who were expressly granted the right to import goods up to the not insignificant value of '25 mark Lübsch' (Helle 1995: 785). Seamen could carry a certain amount of different goods on their ship for their own account in order to sell them on at a profit (Brück 1993). Even if very few sailors would have become rich from this, the share of such trade in the total exports of the city of Gdansk in the early 15th century is not to be underestimated at 5 to 10% (Brück 1993: 28). The boatman Hans Vieth from Stralsund, for example, sold beer for 200 guilders in Bergen in 1628 and delivered fish and other goods to customers in various Baltic cities (Brück 1993: 37). Such *junk trade* was practiced in Bergen to the displeasure of both the Norwegian citizens and the management of the Hanseatic Kontor, but in the early 15th century it was also practiced by merchants from Bremen and the Netherlands (Helle 1995: 814). Obviously, trade was highly differentiated and characterized by a large number of different market participants. In terms of trading volume and turnover, however, wholesale players such as the Lübeck *Bergenfahrerkompanie* or the numerous Bremen *Stuben* in the Kontor clearly dominated the economy in Bergen (Helle 1995: 792-793).

3.2.2 Wine trade

Another beverage that was an important commodity during the Middle Ages and the Early Modern Period was wine, which was exported north of the Alps, especially from various areas of France and the Rhineland. The aforementioned speech by the Norwegian King Sverre in Bergen in 1186 dealt with the import of wine, the main import of German merchants (Bagge 2000: 56). It can be assumed that both the wine and the merchants came from the Rhineland.

Cologne was the most important transshipment point for all wines produced on the Rhine and its tributaries and transported down the Rhine to the rich sales areas in the Netherlands and the North Sea (van Uytven 1965: 237). In the late Middle Ages, the city was regarded as the 'wine house' of the Hanseatic League (Dollinger 1976: 171), whose merchants controlled numerous wineries and made wine the most profitable commodity in Cologne's trade (van Uytven 1965: 239, 245). In the middle of the 15th century, sales in Cologne's wine trade fell sharply, whereby the increasing trade and sales of Hanseatic hop beer may have played a role alongside general economic and climatic causes (van Uytven 1965: 248, 251). In the 14th century, up to twelve million litres of wine were handled in Cologne each year, meaning that the economic importance of the wine trade for the city's economy was of great significance (Jahnke 2014: 88). Cologne merchants are documented as wine suppliers in Bergen, but also Lübeck and Bremen merchants appear to have traded wine (Hartmeyer 1905: 33).

3.2.3 Pottery trade

Written sources on ceramics as trade goods during the Middle Ages and Early Modern Period are rare and mostly published in works dealing with archaeological finds. There are written sources from northern Hesse from the late Middle Ages that document the regional sale and distribution of ceramics by the potters themselves or by itinerant small traders (Stephan 1982b: 78). In Heiligenstadt in northern Thuringia, on the other hand, Dutch merchants are explicitly mentioned at the end of the 16th century who bought their richly decorated Werraware vessels from the local potters to sell them in long-distance trade (Stephan 1990/91: 595, 598-599). The specialization in particular pottery as a commodity was not unusual in

the early modern Netherlands. Merchants trading in Rhenish stoneware are documented by name in Bergen op Zoom (Groeneweg and Vandenbulcke 1988). Rhine customs lists from the years 1306 to 1409 show that in half of all cases in which ceramic vessels are mentioned, these are the only goods transported. When stoneware was transported on the Rhine together with other goods, it was usually wine (Oosten 2019: 64). Purchase lists for residences of the Duke of Guelders regularly list large quantities of wine together with 'stone jugs and jugs', with 100 vessels amounting to around 500 to 750 litres of wine. In this wealthy, highly aristocratic household, simple stoneware was therefore a rather low-value commodity (Oosten 2019: 65). According to written sources, the trade in Siegburg stoneware was largely reserved for merchants from Cologne; any trade by the potters themselves was highly regulated (Roehmer 2014: 16). The specialized trade in stoneware on the Rhine was a special feature of river trade, as very mixed cargoes were typical in maritime trade in England and the Netherlands (Oosten 2019: 65).

There are several written records of imports of Rhenish stoneware to England, in which import quantities and prices are occasionally mentioned (Gaimster 1997: 79-81). Customs lists from Nya Lödöse, the predecessor settlement of Gothenburg on the Swedish west coast, were discovered quite early on. There, in the years 1546 and 1574-1576, the import of a number of c*lay pots* and *clay plates* is recorded among numerous *Kramwaren* (Strömbom 1924: 276). The import of pottery to Nya Lödöse in the second half of the 16th century is thus documented in writing, but it is not possible to determine where these vessels came from. In 1542, however, a potter from the nearby, then Danish town of Varberg had to pay ½ mark duty for the import of an unnamed number of vessels (Rosén 2017: 108). Recently the complex issue of trade and retail of pottery in the town of Nya Lödöse has been discussed on the basis of results from new and extensive archaeological excavations (Carlsson, Ljungdahl and Gustavsson 2018; Carlsson 2020).

Individual prices for ceramic vessels have survived from Denmark in 16th century account books, which clearly show that stoneware jugs were considerably more valuable than simple cooking vessels (Linaa 2006: 42). In general, however, ceramics are rarely mentioned in written sources, even in Denmark. It can be assumed that pottery products were among the wares often mentioned in summary form. The trade in ceramics is difficult to prove based on written sources, even though the Sound Tolls lists repeatedly mention products that could have been ceramic vessels (Linaa 2006: 43).

A study of archival records revealed a whole series of written sources for ceramic trade in the Baltic region from the 13th to the 17th century (Möller 2008). There are individual written references to the trade in stoneware to Scandinavia from the late Middle Ages and there are several references to the export of ceramic vessels to Norway from the Early Modern Period (Möller 2008: 543). Stoneware previously imported from the North Sea region will also have been sold by merchants from the Baltic cities. It can be assumed that pottery was just a subordinate commodity for wholesale merchants, whereas merchants trading on a smaller scale or seamen trading on their own account may have primarily traded in ceramics (Möller 2008: 546).

Even though limited in numbers, the accessible written sources on trade with ceramics in the Hanseatic region provide important insights into the mechanisms of pottery trade. However, it is not possible to attain a comprehensive impression of the distribution of ceramics based solely on written sources. Archaeological finds as material remains of those former trading processes are therefore of outstanding importance for a holistic view of pottery trade in the Hanseatic regions.

3.3 Reflections and research on food and table culture in the North and Baltic Sea region during the late Middle Ages and Early Modern Period

The basic need for food as an elementary component of every culture has also been the subject of repeated historical research from various perspectives in the North and Baltic Sea region (Mohrmann and Wiegelmann 1996). As already mentioned in Chapter 3.2, Northern European trade during the Middle Ages and Early Modern Period involved a considerable amount of food (Henn 1996), which suggests that the region's eating and drinking habits were also closely linked. Although the exchange of goods between Norway and continental Europe is well documented in written sources, detailed information on food is only partially available. In any case, the volume of this trade was very extensive: in the course of 1577/78, a total of around 1400 loads of flour and 1150 loads of beer were imported to Bergen, while dried fish weighing almost 2000 tons was exported during the same period (Fossen 1995: 228). It can be calculated that for one calorie exported in the form of dried fish, about 2-7 calories were paid in grain. Between a fifth and a third of the diet of the population on the Norwegian coast was based on Hanseatic grain (Nedkvitne 1999: 24). Portraits of presumably wealthy citizens in Bergen in the period around 1650 depict meals of bread, fish and beer, in one case supplemented by a ham (Fossen 1995: 297: 309). How the diet of broad sections of the pop-

ulation was organized in detail, however, can only be determined to a limited extent from historical sources alone. For example, there are two medieval cookbooks from Denmark and one from Iceland, whose recipes are obviously adaptations of Central European dishes for the upper classes (Vedeler 2017: 61). From Sweden, too, there are mainly recipe collections from the upper classes; from the 16th century there is a description of a peasant wedding from Scania, in which the importance of preserved food is emphasized (Valeri 1996: 329). Given the harsh climate and the limited availability of seasonal produce, most foods were preserved using methods such as smoking, salting and pickling. In the Middle Ages, butter was traditionally preserved by souring in Norway and Sweden, while the preservation of butter with salt gradually spread from Central Europe due to the influence of the Hanseatic League (Wiegelmann 1996: 472). The different ways of preserving butter can be used as an example to trace large-scale food traditions, including such basic foods as bread. For example, the loaf-shaped bread from Northern Central Europe, usually baked from rye, contrasts with the traditional thin, dry crispbread of Sweden and Norway (Wiegelmann 1996: 489-490). During the late Middle Ages and the Early Modern Period, the loaf-shaped bread of the North-central European style also became common in Norway, as the above-mentioned portraits of citizens in Bergen from the 17th century suggest (Fossen 1995: 297, 309). The report of the Venetian merchant Pietro Querini, who was shipwrecked off the Lofoten Islands in 1432, provides a very revealing insight into the way of life and diet of the population on the northern coast of Norway. The inhabitants of the island of Røst, who lived from fishing and farming, are described as healthy and well-fed, with fish and butter making up a significant part of their diet. Furthermore, they regularly ate hard bread baked from imported rye and sour milk, which the Venetian shipwrecked were less fond of (Schøning 1763: 125). It is noteworthy that the consumption of beer is also explicitly mentioned, which was likely to have been imported Hanseatic hop beer (Nedkvitne 2014: 548).

In the 13th century, however, grain often seems to have been rather scarce in Norway, even though it was the most important staple food and was consumed in the form of bread, porridge, groats and flour soup. However, the number of calories available per capita in this period was probably on the verge of malnutrition (Lunden 1976: 211, 222). Animal foods were more popular than cereals, but also more expensive, especially butter and meat (Lunden 1976: 239). Milk and sour milk were consumed quite a lot. Beer, however, was far more popular and was considered an appropriate drink, especially by men of a certain rank (Lunden 1976: 239). Beer was an expensive drink in the Norwegian High Middle Ages and could not be served every day, even in high-ranking households. Wine was even more expensive; according to a price list from Bergen in 1306, a cup of wine from France or Byzantium cost about as much as 10 to 20 litres of beer (Bagge 2000: 56). Rhenish wine, whose devastating effect on his men King Sverre was so enraged about in 1186, is said to have been sold just as cheaply as beer at that time, but this was certainly an exception.

As early as 1400, excessive alcohol consumption was described as 'a kind of national vice' for the Norwegians (Blanckenburg 2001: 240). They obviously had this in common with the Danes, where a bishop's complaint about the strong imported beer from Northern Germany is recorded from the early 13th century, after the consumption of which a farmer who was not used to drinking began to riot (Blanckenburg 2001: 225). French travellers were rather negatively impressed by the dining and drinking habits in Sweden in the 17th century, seeing the large amount of beer as a reaction to the salty and spicy food (Valeri 1996: 331). The fact that beer was considered an important part of the daily diet in Norway in the 13th century can also be seen from the fact that in hospitals in Bergen, even poor residents were served around 0.7 litres of beer per day, while wealthy women received around 2.3 litres per day (Wubs-Mrozewicz 2005: 157).

People in the German-speaking world in the 17th century are also described as being strongly inclined towards alcoholic beverages (Simon-Muscheid 2000: 37). In the late Middle Ages, beer was considered an important staple in the households of the Hanseatic cities (Langer 1979: 65, 69). From a register of accounts from 1448/49 for the catering costs of a Cologne mercenary troop in Westphalia, it can be deduced that an average of over 1500 litres of beer were brewed per week for the crew, which was probably up to 200 men strong (Bäumker 1996: 236). Beer was also a staple food in hospitals in northwest Germany in the 16th century, with up to three litres per person per day being consumed (Krug-Richter 1996: 199).

In Braunschweig's Marienhospital, the privileged residents regularly received North Atlantic stockfish during Lent, while the poorer inmates had to make do with herring (Krug-Richter 1996: 200). Stockfish, which was most likely imported from Norway, also played a significant role in supplying Cologne's mercenaries in the 15th century and was served as a substitute for meat on around a third of all fish days (Bäumker 196: 224-225). Grain, especially in the form of bread, was a staple food for the troops' rations, as was a lot of

meat, especially from cattle. The consumption of up to 1.8 kilograms of beef per person per day is mentioned (Bäumker 1996: 238). Sources from hospitals also show that meat consumption in the Hanseatic region during the late Middle Ages and the Early Modern Period could be very high, with their inhabitants consuming between 67 and 208 kilograms per person per year, depending on their wealth (Krug-Richter 1996: 187).

Overall, the historical sources reveal a number of similarities and close links between dietary habits and table culture in Scandinavia and the Low German-speaking area but also highlight regional differences.

3.4 Reflections and research on mentalities, identities and living environments in the Baltic and North Sea region during the late Middle Ages and Early Modern Period

Insights into aspects of the living environments, such as the mentality, self-image, values and norms of contemporaries, have repeatedly been the focus of holistic historical research with a socio-historical approach since the beginning of the 21st century (Schöttler 2015). In addition to written sources such as literary testimonies and legal texts, images on various materials also provide access to the imaginary world of people in the late Middle Ages and Early Modern Period. The pool of historical and art-historical literature is extensive. Of particular relevance here are works that can be useful for understanding the imported stoneware vessels in their respective environments. This includes the social role of beverages, the significance of ethnic or regional identities or the constituent elements of social networks. Important impulses and explanatory models for the interpretation of the decoration on richly decorated ceramics can also be gained from the reception of art historical works on the symbolic language of the late Middle Ages and the Early Modern Period.

One aspect that should not be underestimated when considering the living environments in Northern and Central Europe during the Middle Ages and Early Modern Period is the importance of alcoholic beverages. This is regularly very clear in Scandinavian sources, although it is obviously a phenomenon handed down from the Viking Age (Bagge 2000: 56-58). Despite the nutritionally important role of milk and dairy products, it was dishonourable to be called a milk drinker, whereas it was considered manly and honourable to drink beer (Lunden 1976: 239). In the high medieval saga about Egil Skallagrimsson, a 10th century poet and Viking, it is reported that Egil killed his host because he was served sour milk instead of beer, even though the latter was available (Schier 1996: 97-99).

Communal drinking was particularly important in connection with banquets (convivium) at which social networks were consolidated (Bagge 2000: 56-58). This cultural technique was used during the pagan 10th century as well as in the high medieval society of Norway in the 12th and 13th centuries. The importance and popularity of beer in medieval Norway can hardly be overestimated. In 1237, a letter from Pope Gregory IX to the Archbishop of Nidaros (Trondheim) pointed out that beer should never be used as a mass drink, as suggested by a Norwegian cleric (DN I no.16; Wubs-Mrozewicz 2005: 157). A few years later, Gregory IX emphasized to Archbishop Sigurd that baptism in beer, as was apparently occasionally practiced in Norway, could not be regarded as a sacrament according to Christian doctrine (DN I no. 26; Wubs-Mrozewicz 2005: 157).

In the German-speaking world, too, the communal consumption of alcohol was a constitutive element of various social networks in the Middle Ages, which was closely linked to ideas of male honour (Simon-Muscheid 2000: 54). The concepts of honourability and masculinity of groups sworn to each other, who sealed their bond through social drinking rituals, still shaped the society of early modern cities (Roper 1994: 110-112). In Flemish Bruges, merchants from different regions of Europe apparently confirmed their regional identity by consuming drinks imported from their respective homelands (Irsigler 1996: 383-384). At the Hanseatic Kontor in Bergen, too, regional identities were presumably linked to corresponding beverage preferences. In 1535, a complaint was made by guards who complained that they were served beer from Bremen and not from Lübeck - it can be assumed that these guards were from Lübeck (Nedkvitne 2014: 225). In general, the people at the Hanseatic Kontor were characterized by a strong sense of honour, which referred to a bourgeois self-image, a *Hanseatic* origin and their Low German language (Nedkvitne 2014: 225). Differentiation from the *others*, be they Norwegians, Dutch or English, was obviously a constitutive element of the Hanseatic identity in Bergen (Wubs-Mrozewicz 2012). In contrast, merchants of German descent in Stockholm, which was also strongly influenced by the Hanseatic League, appear to have been integrated into Swedish society to a greater extent as early as the late Middle Ages, resulting in the development of a multi-layered and thoroughly fluid identity (Wubs-Mrozewicz 2004: 67).

From the 16th century onwards - in the course of the Reformation movement - a movement against excessive drinking increased gradually, which manifested itself in intellectual treatises and

administrative repression (Simon-Muscheid 2000: 42-43). This did little to change the identity-forming effect of social carousing. Instead, certain stereotypes were reinforced, such as that of the 'coarse' drinking behaviour of Germans compared to the civilized drinking of their compatriots by a French writer of the 16th century (Simon-Muscheid 2000: 37). Animosities and antipathies, including open hostility based on national identity, were obviously not unknown phenomena during the late Middle Ages and the Early Modern Period. These were also widespread in Norway and occasionally even surpassed the thirst for Hanseatic beer. This is manifested in a statement by a Norwegian nobleman from Oslo from the middle of the 15th century that he wanted to chase away the German merchants, even if it meant he would have to drink water for the rest of his life (Opsahl 2013: 74). Numerous sources from the late Middle Ages reveal hostile tendencies in Norway, particularly against Danes and Germans (Opsahl 2013: 81). One example is an incident from the late 15th century, in which a fatal dispute arose at a banquet in the rural region of Telemark due to the use of a Low German blessing formula (DN I no. 961 after Opsahl 2013: 85). A guest named Lidvard, a name which is typical of this rural region, drank to the host using the Low German blessing *Got synth jw* (God bless you). The host, Arne, objected to the use of such foreign language and countered it with pride in the rural Norwegian heritage. Remarkably, the latter was linked not least to the consumption of dairy products. The guest, Lidvard, obviously offended in his honour, then attacks the host with his poleaxe, a typical peasant status weapon, and ultimately kills Arne in the resulting knife fight (Opsahl 2013: 84).

This episode combines several elements of the mentality of the late Middle Ages and the Early Modern Period. It illustrates the influence of Low German on the Norwegian language and the anti-German attitudes in parts of the Norwegian population in the late Middle Ages (Opsahl 2013: 81, 84). The importance of drinking to excess and the banquets that often ended in violence are also typical of the time and not limited to Scandinavia but are also characteristic of the German-speaking world (Simon-Muscheid 2000: 55). The tendency to take up arms and fight bloody battles in the event of disagreements can certainly be seen as characteristic of the male mentality of the late Middle Ages and Early Modern Period (Roper 1994: 113-115). That such behaviour was not limited to peasant circles is shown by the already mentioned incident in Bergen in 1563, when three Norwegian Latin students got into an argument with some German merchants after an extensive *tavern round* in the town's wine cellar, which ended in a fight outside the door, in which one of the Latin students named Jens killed one of the Germans with a tool (Iversen 1963: 25-26). These exemplary episodes underline an aspect of the contemporary mentality that the Australian historian Lyndal Roper aptly described in her examination of the society of early modern towns in Germany: 'Masculinity and its routine expressions were a serious danger to civic peace (...)' (Roper 1994: 107). The young unmarried journeymen at the Hanseatic Kontor in particular had a reputation in Norway and the Hanseatic cities for *being* 'rebellious and disobedient' (Nedkvitne 2014: 348). Against this background, it can probably be seen as a success of the internal disciplinary measures at the Kontor that knife fights were only recorded within a household about once every ten years (Nedkvitne 2014: 250). The pronounced notions of honour of the late Middle Ages and Early Modern Period were thus not only enforced with a tendency towards violence, but also through rigid mechanisms of social control. The important role of communal alcohol consumption in this finely woven social fabric is also occasionally reflected in the sanctions handed down for breaches of the rules. For example, members of the Hanseatic Kontor in Bergen who fathered a child despite the ban on relationships with women in Bergen were fined a ton of beer, which they then drank together (Hemmie 2007: 183).

The public consumption of alcohol by women, especially at night, was apparently subject to considerable moral reservations and drinking women were regarded as dishonourable (Hemmie 2007: 70-71; Simon-Muscheid 2000: 57-58). In Bergen in particular, however, many taverns were run by women, who were often morally stigmatized as a result. The women referred to as *ølkoner* (beer women) were located in the 16th century in the transitional area to prostitution, whether in view of the often desolate conditions in the taverns or because of the prostitution that actually took place there remains to be seen (Hemmie 2007: 70). In any case, alcohol intoxication, which was obviously common for men and largely socially accepted, was considered socially inappropriate behaviour for women (Hemmie 2007: 71). The view that the consumption of alcohol by women was particularly reprehensible was not limited to the North but was also found in Germany and France at the same time (Simon-Muscheid 2000: 45). Indirectly, this attitude again confirms the close contemporary as-

sociation of alcohol consumption with masculinity and confirms the assessment that it was seen as a characteristic expression of masculinity.

3.5 The mentality during the late Middle Ages and Early Modern Period as reflected in contemporary images

Contemporary works of art provide a special kind of insight into intellectual ideas during the late Middle Ages and Early Modern Period. Art-historical interpretation models can help to better understand and interpret the rich relief decorations on stoneware from the 15th to 17th centuries. According to the concept of the German art historian Aby Warburg, the often symbolically charged images can be understood as *Bilderfahrzeuge* (pictorial vehicles) whose meaning varies depending on time and context, but which nevertheless convey overarching content (Krispinsson 2015). In this sense, for example, depictions of peasants and peasant life on tapestries from Burgundy can be interpreted as a deliberate idealization of rural life in the refined world of the late medieval high nobility (Warburg 1907). Peasants were also very present figures in prints from Germany from the mid-15th century and into the 16th century, which can be interpreted in various, sometimes contradictory ways (Moxley 1989: 35-36). Woodcuts and other prints of this period were media that conveyed the Reformist views of the middle and upper classes to the masses (Moxley 1989: 3). A number of images of peasants can be interpreted in the early Reformation sense as the incarnation of an important social class, *the common man*, in contrast to the decadent church (Moxley 1989: 36, 58). This model of interpretation is countered by numerous prints with celebrating peasants, some with corresponding texts, which depict peasants as satirically exaggerated figures with markedly wild, uncivilized and coarse behaviour (Moxey 1989: 38-39, 44-48). These depictions are probably to be seen as a contrast to the emphatically civilized and well-regulated world of the artists, who came from bourgeois circles. The large-format prints adorned the parlours of the upper classes, presumably for the edification of the uncouth, uneducated peasants and to confirm their own bourgeois identity (Moxey 1989: 66). At the same time, however, there may also have been a longing for a life less regimented by restrictive social constraints.

A widespread figure in iconography during the late Middle Ages and Early Modern Period is the so-called *wild Man*, which has been explored in various art historical works (Bernheimer 1952; Dudley and Novak 1972; Husband 1980). The idea of an uncivilized, hairy creature of unbridled, wild power functioned in the Early Modern Period as an alternative concept to contemporary man, who was considered corrupt (White 1972: 3). This multi-layered figure, whose roots go back to classical antiquity and the Old Testament, and which was characterized by the uninhibited indulgence of bodily desires, represented an antithesis to the Christian model of society in the Middle Ages (White 1972: 21). These aspects are partly reminiscent of the imaginations mentioned above, which were linked to depictions of peasants during the Middle Ages and the Early Modern Period. Analogous to the Burgundian tapestries with peasants mentioned above, a Swiss tapestry of the 15th century depicts wild men leading an apparently simple but free and happy life (Husband 1980: 125-127, Fig. 77).

Portraits of *wild men* can be found widely both on craft objects and in church art of the 15th and 16th centuries (Husband 1980: 6-7, Figs. 6, 7). The ambivalent nature of the topos becomes clear not least in a print with Protestant propaganda from 1547, which depicts the pope as a wild man (Husband 1980: 15, Fig. 14). In the North, two *wild men* can be found as shield holders in the coat of arms seal of the Danish King Christian I from 1449 (Heimbürger 2014: 305, Fig. 2). The symbolic meaning of this depiction is difficult to clarify conclusively, as there are different levels of meaning for the symbol. In addition to the popular notion of supernatural beings of the wilderness, there is the literary and highly cultural interpretation of the *wild man* as an allegorical figure (Heimbürger 2014: 312). The interpretation of the wild man as an allegory of the strong, unbridled, archaic man is particularly widespread in high circles of the late Middle Ages and the Renaissance (Heimbürger 2014: 313). In this sense, the *wild men* on the coat of arms of Christian I of Oldenburg may symbolize a direct lineage of the noble family back to distant pagan times (Heimbürger 2014: 316).

The symbolism and iconography during the late Middle Ages and Early Modern Period obviously convey a multi-layered and multi-faceted picture of the lives of contemporary people. These often defy unambiguous interpretation, although it is precisely this diversity that may sometimes come closer to the former understanding than an overly one-dimensional interpretation. Overall, the historical, written and pictorial sources provide a good background for placing the archaeological material in a contemporary context and making it accessible as source material.

4. Medieval and early modern archaeology in the hanseatic region - selected aspects of research history

This chapter provides an overview of relevant aspects of the history of research, mainly relating to works that are relevant to the evaluation of the material presented. The explanations are intended to provide an insight into the state of research and various research approaches. Two areas of research are given particular attention, urban and settlement archaeology and archaeological pottery research. In accordance with the subject matter of the study, the regional focus is on Norway, with a focus on the southwest with Bergen and on Northern Germany, with particular attention to the region of the former Hanseatic district of Lower Saxony.

As the pottery finds presented were predominantly recovered as elements of everyday material culture, the overview of the history of research also focuses on urban and settlement archaeology. The aim is to briefly outline the current state of research in order to be able to appropriately classify the representativeness of the finds. For more detailed explanations, please refer to the extensive published literature on this topic.

4.1 Medieval and early modern archaeology in Northern Germany

Archaeological research into medieval relics in the Lower German region has mostly concentrated on the cities, as this is where the greatest need for archaeological excavations prior to or accompanying construction has existed since the second half of the 20th century due to the economic dynamics. As urban archaeology was understandably not a priority during the reconstruction of the war-damaged cities, it was not until around the 1970s that systematic archaeological preservation began in individual cities in the former Hanseatic region. The vast majority of excavations were carried out as rescue excavations in connection with construction work. Where the results of these investigations could be published, the high quality and the inestimable scientific value of the work of archaeologists was regularly demonstrated.

Lübeck, the largest medieval city in the North and Baltic Sea region, which has been the subject of urban archaeological research since the 1970s, is particularly noteworthy as a 'beacon' in the German-speaking world. The publication series *Lübecker Schriften für Archäologie und Kulturgeschichte*, which has been appearing since 1978, presents the scientific results of the excavations in a manner appropriate to a world cultural heritage site. The town of Schleswig, which belonged to Denmark in the High and late Middle Ages as the successor to Viking Age Haithabu, has also been extensively researched archaeologically and the results are available in the monographic publication series *Excavations in Schleswig - Reports and Studies*. Excavations at the Franciscan monastery in Flensburg (Witte 2003) are an example of further settlement archaeology research in the federal state of Schleswig-Holstein.

In contrast, the archaeological sources for the two large Hanseatic cities on the North Sea, Hamburg and Bremen, are rather limited. In Bremen, however, there is a fairly long tradition of urban monument preservation, and Bremen's medieval archaeology is also described in a comprehensive monograph (Rech 2004). Some of the rescue excavations in Bremen's old town, which were repeatedly carried out under sometimes precarious conditions, were presented as preliminary reports in the series *Bremer Archäologische Blätter*. Hamburg's urban archaeology appears to be characterized to a large extent by the search for remains of the city's eponymous nucleus (Klammt and Weiss 2014). Excavations with results from the late medieval and Early Modern Periods have been presented several times in recent years in the journal *Hammaburg N.F.*

The development of urban archaeology in large parts of the historical *Wendish Hanseatic Quarter* can be observed almost in fast motion, where in

the many important Hanseatic towns on the territory of the GDR, the preservation of archaeological monuments waged a tough - and often futile - battle for the archaeological heritage in the town centres (Hoppe 1990). Despite the difficult overall situation, the reorganization of monument preservation after the political change in 1989 led to considerable gains in material and knowledge in medieval and modern archaeology (Jöns and Lüth 2005). Finds and features from the numerous excavations are regularly published in the series *Bodendenkmalpflege in Mecklenburg-Vorpommern. Jahrbuch* and *Archäologische Berichte aus Mecklenburg-Vorpommern*.

Early examples from inland Eastern Germany include investigations in Magdeburg (Nickel 1964) and Halberstadt (Siebrecht 1992). Since 1990, a large number of town core excavations have been carried out in the federal state of Saxony-Anhalt, some of which have been published in the publication series *Archäologie in Sachsen-Anhalt*, the *Jahresschrift für mitteldeutsche Vorgeschichte*, but also in the series *Kleine Hefte zur Archäologie in Sachsen-Anhalt* and in various monographs.

Inland Hanseatic towns in Lower Saxony and North Rhine-Westphalia are also the subject of varying degrees of archaeological research and monument preservation. In this brief overview, neither the Rhineland, with Cologne as a suburb of the Hanseatic quarter there, nor Westphalia, with important towns such as Duisburg or Soest, can be considered further. As the focus of this study is primarily on the Hanseatic district of Lower Saxony and its Northern connections, more attention will be paid to urban archaeology in Lower Saxony. Brunswick, one of the largest Hanseatic cities in northern Germany after Lübeck and a former suburb of the Saxon Hanseatic district, has been archaeologically investigated in many places and published in working reports (Rieger 2009; Rötting 1997). The results of a number of excavations have been extensively processed and are available in detail in several monographs (Bruckschen 2004; Kablitz 1992, 2005; Lungershausen 2004; Rieber 2010). In the Weser Upland region, archaeological sites have been regularly investigated through the work of the respective city archaeology departments in smaller towns of the Hanseatic district of Lower Saxony such as Göttingen (Arndt 2005; Arndt and Ströbl 2005; Schütte 1984), Einbeck (Heege 2002) and Höxter (König et. al. 2003, 2015). Excavations have also been carried out repeatedly and to very different extents in other cities and towns in the federal state of Lower Saxony, for example in the old episcopal and Hanseatic city of Hildesheim (Kruse 1990).

In addition to the archaeological preservation of existing towns in Lower Saxony and neighbouring landscapes, some deserted settlements have also been archaeologically investigated to varying degrees, for example Altencelle near Celle (Küntzel 2011; Lohwasser 2017), Nienover near Uslar in the Weser Uplands (König 2009: Küntzel 2010) or the deserted town of Corvey near the former imperial monastery of Corvey on the Weser in today's state of North Rhine-Westphalia (Stephan 2010).

The vast majority of the population in northern Germany lived in the countryside during the period under investigation, but archaeological work on medieval settlements in rural areas is outnumbered by investigations of town centres. In recent decades, however, a number of archaeological investigations of deserted rural settlements have been published (e.g. Gärtner 2004; 2006; 2009; 2010; Hesse 2003; König, S. 2007). In addition, research on deserted production sites of the glassmaking and pottery trades is also of considerable importance (Stephan 1981, 1990). For parts of the Weser and Leinebergland, there is also a summarizing archaeological study of the complex economic and settlement history of this region (Stephan 2010). In addition to pure research projects, many new findings on medieval settlements have also been uncovered by rescue excavations carried out by archaeologists in rural areas (e.g. Gärtner 2004; Peters 2006; Selent 2018; Wozniak 2006).

Only cursory reference should be made to research on castles, aristocratic residences and palaces, which investigate very specific forms of medieval and early modern living environments (e.g. Blaich and Geschwinde 2012; Grote 2003; Heine 1995). The insights gained there, including the recovered remains of material culture, presumably relate to groups of people that can be classified quite well historically and socially and therefore represent important socio-economic reference material (cf. e.g. Krüger 1981; Moritz 2001).

This brief and excerpt-like overview of some aspects of medieval and early modern archaeology in northern Germany shows that this discipline has developed a considerable number of sources in recent decades and that many research results have been presented comprehensively. The conditions for a supra-regional and international linking of local and regional findings can therefore be described as favourable.

4.2 Medieval and early modern archaeology in Norway

As in all Nordic countries, archaeological research in Norway was met with considerable interest and administrative benevolence as early as the 19th century. Particularly against the backdrop of efforts to achieve complete national independence, reference was often made to the Viking Age and

the High Middle Ages, with the result that the first law to protect archaeological finds and monuments was enacted as early as 1905 following the country's secession from Sweden. However, this cultural heritage law primarily covers relics from the period before 1536, the year the Reformation was introduced in Norway. The central government's administrative authority *Riksantikvaren* recently published a comprehensive document summarizing the history and principles of administration and research into medieval archaeology in Norway (Eriksson and Johanessen 2015). Due to the limitation of archaeological heritage protection to the period before 1537, which is also much discussed in Norway, the overall situation for early modern archaeology in Norway is quite precarious, even though various dedicated researchers are constantly trying to draw attention to the prospects of this discipline (McLees 2019).

As a very large country that has always been sparsely populated and characterized by vast mountain wilderness, Norway has always offered particularly challenging conditions for human settlements. Only a very limited number of towns developed in Norway. In contrast, the population was mainly spread out in small and tiny settlements along the extensive coastline, and the vast high mountain areas were also used as hunting grounds and pastures. In a number of research projects, the agricultural use of this highly specific economic and living space was made the target of archaeological research (Øye 2004a). For this study, the role of northern Norwegian fisheries for Hanseatic trade should not be underestimated (Bertelsen 2018). The results of the investigations carried out there provide important contributions to the archaeology of the Hanseatic League, as they mark the beginning and end points of the Hanseatic economic cycle.

The natural harbours along Norway's long coastline represent a group of medieval monuments and archaeological sites that have only been partially recorded to date. Given the importance of the sea routes in this mountainous country with few overland connections, the potential of these hitherto little-studied sites is considerable (Falk et. al. 2013). The preliminary investigation at an important port on the sea route to Bergen yielded important results for medieval trade networks (Elvestad and Opedal 2019). Other harbour sites in southern Norway also clearly show the complex and often violent aspects of late medieval shipping (Stylegar, Nymoen and Eikli 2019).

Construction activities in the country's medieval towns were occasionally monitored archaeologically even before the Second World War, and the finds recovered were presented in a monograph remarkably early (Grieg 1933). Occasional excavations before 1950 were almost exclusively devoted to outstanding architectural monuments such as churches and royal residences. A key event for urban core archaeology in Norway and throughout Europe was the 1955 fire disaster in the historic wooden buildings of *Bryggen* in Bergen, the oldest part of the city and site of the former Hanseatic trading post in Bergen (Figure 3). Large-scale excavations were subsequently carried out here, which were amongst the earliest measures of this kind in Europe and thus represent a pioneering act in urban archaeology (Clarke 1989). As there was no experience to fall back on, the entire methodology was largely developed on site (Herteig 1969; 1985). The Bryggen project inspired and engaged numerous Norwegian and international researchers who were involved in the excavations to varying degrees (Tempel 2011: 42, 50). One of the *forefathers* of modern archaeological stratigraphy, Edward C. Harris, was also involved early on with the Bryggen findings in Bergen (Harris 1973). The many years of research at Bryggen yielded a vast number of finds and features that impressively illustrated the great potential of archaeological research into medieval cities and which, despite numerous publications, have not yet been fully processed (Figure 4).

Figure 3. *Asbjørn E. Herteig supervising the removal of the fire debris and the upper layers of the Bryggen excavation. Photo: Bergen University Museum archive.*

Figure 4. *Photo of the profile of a quadrant of the Bryggen excavation with impressive stratigraphy. Photo: Bergen University Museum archive.*

From the late 1960s and increasingly in the 1970s, excavation activity and interest in urban archaeology also increased in other cities in Norway (Erikson and Johanessen 2015: 24). In particular, numerous excavations were carried out in the country's two other major cities, Oslo (Schia 1989) and Trondheim (Christophersen and Nordeide 1994). However, archaeological investigations were also carried out in smaller towns, with excavations in Stavanger (Lillehammer 1972) being of particular relevance to the present book.

In parallel with the increase in archaeological material and the complexity of archaeological management, research into Norwegian medieval archaeology also developed. The results of urban archaeology in various cities have been comprehensively evaluated by the Norwegian Institute for Cultural Heritage Research (NIKU), which is responsible for the research (Molaug 2001). The development of Norwegian medieval archaeology has also been addressed and discussed several times in academic theses (Brun 2001; Petersen 2017). The important material collection of the University Museum in Bergen, which contains the most comprehensive number of medieval artifacts in Norway, has been recorded in a modern database over many years and made more easily accessible for research (Hansen and Hope 2017). In addition to urban archaeology, some attention has also been paid to archaeological relics from the Middle Ages in rural areas, although unfortunately the situation with regard to monument preservation is often difficult (Martens, Martens and Stene 2009). Research into overarching questions of medieval archaeology, such as aspects of regional structuring, is often pursued in consideration of current trends in scientific theory, such as network theory (Baug 2016). Rural settlement patterns of the Middle Ages in particular have been studied intensively in Norway in recent decades (Øye 2009: 38-41). In the field of urban archaeology, processes of the formation and early development of towns have repeatedly been the focus of academic research (Hansen 2005; Sørheim 2015). The late Middle Ages and the Early Modern Period, on the other hand, are rarely the subject of archaeological work, which may also be related to the peculiarity of the Norwegian Heritage Act mentioned at the beginning, which does not cover early modern relics. This makes it all the more important to value individual studies that are dedicated to the interdisciplinary research of individual sites from a long-term perspective (Eliassen, Johansson and Aasheim 2017). Several studies are also dedicated to questions about children and gender relations in the Middle Ages and the verifiability of these in archaeological finds and features (Hansen 2006; Mygland 2008, 2015; Nøttveit 2007).

In comparison to works with an overarching social focus, in-depth material studies on specific groups of finds in Norway are rarer and often somewhat older. These include classics of European archaeology, such as the treatise by the former museum director in Stavanger on weapons from the Viking Age and the Middle Ages (Petersen 1919), which is still widely used today. However, cursory finds from the city cores were also processed and presented in remarkable quality in the early 20th century (Grieg 1933). Finds from Bergen in particular have been published extensively in recent decades, for example tools for textile processing (Øye 1988), shoes (Larsen 1992), fishing gear (Øye 2004b) or leather sheaths from knives and swords (Nøttveit 2010). In this context, reference can also be made to several works on artifacts made of various types of stone, such as soapstone and mica schist, which have been intensively used and also negotiated in Norway and beyond since the early Middle Ages (Baug 2015; Hansen and Storemyr 2017).

As can be seen from the above, the archaeology of the Middle Ages in Norway can point to a remarkable breadth of research results, which provide a good basis for the presentation of the pottery examined.

4.3 Archaeological pottery research in the Hanseatic region

Pottery is often the dominant find group in terms of quantity in archaeological investigations of sites from the Middle Ages and Early Modern Period. Pottery products were obviously common utensils during this period. The material properties of fired clay mean that ceramics are extremely durable, while at the same time the reuse or recycling of broken ceramic objects is only possible to a very limited extent.

For this reason, more ceramic finds than finds made of other materials are likely to have been archaeologically preserved. This omnipresence of ceramic fragments in the archaeological record predestines ceramics as a central field of investigation in the study of the material culture of the Middle Ages and Early Modern Period. Partly due to the fragility and the resulting replacement frequency of ceramic vessels, the chronological sensitivity of individual ceramic forms is quite high, which makes ceramics an important tool in the chronological determination of archaeological features. The differentiability of regional product groups on the basis of technological and typological characteristics opens up further perspectives for ceramic research with regard to the exchange of and trade in ceramics. The introductory considerations on the history of research take into account, in accordance with the topic of this treatise, in particular works with a corresponding regional reference, studies with a special focus on stoneware, as well as research on the distribution and trade in ceramics. Due to the omnipresence of ceramics in archaeological contexts, however, the total number of ceramic works is so large that the present remarks only cover a limited section of the literature on the subject.

An antiquarian interest in European ceramics from the Middle Ages and Early Modern Period manifested itself as early as the 19th century in the form of collecting Rhenish stoneware, especially the richly decorated vessels of the Renaissance (Roehmer 2014: 12). In Germany, this phenomenon was obviously closely linked to the national romantic tendencies of the *Gründerzeit* and in England it was strongly influenced by the Victorian Romantic movement (Gaimster 1997: 15). The passion for collecting richly decorated Renaissance stoneware also spread to Norway in the 19th century, as evidenced by the extensive collection of the Museum of Art Industry in Oslo and its collection history (Grosch 1887). In order to meet the demand on the antiques market, sites in the places of production were plundered as early as the 19th century (Gaimster 1997: 15; Roehmer 2014: 12).

From the early 20th century and with the emergence of an awareness of the importance of archaeological finds, medieval and Early Modern pottery finds were also increasingly recognized and published. Remarkably early is the already mentioned monograph from Norway, which includes ceramic finds from Bergen and Oslo alongside other artifacts (Grieg 1933). In Bremen, too, ground finds of medieval and Early Modern pottery were already scientifically processed and presented in the 1st half of the 20th century, with stoneware from Duingen being recognized among the stoneware finds in addition to the Rhenish vessels (Grohne 1940: 90-105). The importance of medieval and Early Modern pottery in the Weser Uplands was also recognized by individual researchers in the production region itself at this time and some of their findings were published (Fahlbusch 1941; Sauermilch 1940/1941; Sauermilch 1951). An early and highly regarded work on medieval pottery in the Harz region was published as early as 1933 (Grimm 1933).

With the increase in archaeological finds and the reorganization of monument preservation after the devastation of the Second World War, modern archaeological ceramic research slowly began. Examples of the processing of ceramic finds recovered during the reconstruction of war-damaged cities are available from Hanover (Plath 1959) and Magdeburg (Stoll 1971), among others. However, pioneers in both urban archaeology and the scientific processing of ceramic finds were to be found in other European countries, such as Great Britain, where the presentation of ceramics was an important part of the publication of excavations early on in the comprehensive publication of city core excavations in places such as King's Lynn in Norfolk (Clarke and Carter: 1977). The founding of the *Medieval Pottery Research Group* in 1975, which has published the journal *Medieval ceramics* since 1977, consolidated ceramic research as an important element of medieval and modern archaeology. Important impulses for the interpretation of medieval ceramics as an indicator of far-reaching trade relations also came from England (Dunning 1968). An anthology from England attempted to provide a supra-regional overview of the phenomenon of imported pottery in Europe (Davey and Hodges 1983). Primarily on the basis of museum ceramics without a find context, John Hurst presented a comprehensive insight into a considerable proportion of the ceramic wares distributed in the North Sea region in the late medieval and Early Modern Periods (Hurst 1986). In the decades that followed, English historical archaeology continued to make significant contributions to various aspects of ceramic research. In addition to the presentation of wares and excavation findings, a wide range of interpretations were developed. It is no coincidence

that the most recent 'standard work on all German stoneware' (Unger 2007: 18) was written by David Gaimster from England. Gaimster not only comprehensively presented stoneware from various periods and production sites, but also convincingly demonstrated the far-reaching potential of the cultural-historical interpretation of ceramics (Gaimster 1997). The theoretical approaches of ceramic research were subsequently further developed in numerous works by Ben Jervis, among others, who interpreted the social significance of ceramics as identity markers and within the framework of a*ctor-network theory* (Jervis 2014; 2017). The Grimston type ware from the area around King's Lynn in eastern England, which is frequently found in Norway, was examined by Kelly Green as part of a dissertation with a particular focus on the masculine symbolism of the anthropomorphically decorated jugs (Green 2015; 2018).

In Denmark, imported ceramics in the Middle Ages were addressed as a field of research at an early stage (Bencard 1972). A broad overview of coin hoard vessels from Denmark shows an impressive cross-section of different types of wares common in Denmark and contains valuable information on the absolute dating of these wares and forms (Liebgott 1978). In addition, pottery of supra-regional importance has been repeatedly investigated archaeologically since the 1950s (Liebgott 2001). The pottery recovered during excavations in Ribe, Denmark's oldest city, was presented in 1999 (Madsen 1999). In 2001, a volume of the journal 'Hikuin' was published which summarized numerous finds and findings of medieval pottery from all over Denmark in a series of short articles (Kock 2001). The late medieval and early modern pottery from Jutland was presented in 2006 and analysed in detail with regard to its social and symbolic aspects (Linaa 2006).

Modern archaeological research into medieval pottery in Sweden began with Dagmar Selling and her presentation of Viking Age and early medieval pottery, which set standards for decades and strongly influenced Scandinavian pottery research (Selling 1955). In the 1970s, an overview of the broad spectrum of pottery from the Middle Ages and Early Modern Period in Sweden was published in an exhibition catalogue (Wahlöö 1976).

Later, both complete sequences of finds from individual towns (Augustsson 1985) and specific groups of finds such as the imported pottery from Gamla Lödöse, the only town in medieval Sweden with access to the North Sea, were presented comprehensively (Carlsson 1982a; 1982b). Since then, pottery has always been part of the presentation and discussion in papers and reports on archaeological excavations of medieval and modern sites in Sweden. In recent decades, important studies on complex socio-historical aspects have been published on the basis of early medieval *Baltic ware*, which impressively demonstrate the possibilities of further interpretations of archaeological pottery finds (Roslund 2001, 2006).

A very important work on the study of the distribution of pottery in the Middle Ages is based on the work of maritime heritage conservation in Finland, with the submission of a large complex of south Baltic stoneware from a wreck in the southern Finnish archipelago (Tevali 2010; 2019; 2023). There is also a lively medieval archaeology in Estonia and a monograph published on the imported pottery there (Russow 2006).

Iceland in the North Atlantic was not settled until the 9th century, mainly from Norway. As no pottery was produced by the settlers, the emergence of pottery in Iceland in the Middle Ages and into the Early Modern Period is very small, but the finds that were all imported are of great interest for this very reason (Sveinbjarnardottir 1996; Mehler 2004).

In the Netherlands, important medieval centres of pottery production were archaeologically investigated as early as the 1950s and 1960s (Bruijn 1959; 1962/63). A comprehensive presentation of pottery from well-dated contexts in several Dutch cities, summarizing important findings of Dutch ceramic research, was presented in 1999 (Bartels 1999).

Remains of medieval pottery were also occasionally recovered and presented early on in Thuringia (Stoll 1961) but finds and findings on medieval pottery production were also presented elsewhere in the former GDR (Mechelk 1965; 1981). Very important and still of great value today for the dating of ceramic types is a comprehensive presentation of ceramic coin hoard vessels from the entire territory of the GDR (Stoll 1985). Pottery from the important Saxon pottery centre of Waldenburg was studied and published in detail in 1995 and 2005 (Hoffmann 1995; Scheidemantel 2005). Previously unknown medieval stoneware production has been documented in Bad Schmiedeberg on the Elbe in central Germany in recent years (Rode, Schwedt and Mommsen 2004; Rode 2005). However, more detailed research and findings on the pottery products from this site have not yet been published. Stoneware finds from archaeological investigations in Rostock were carefully analysed as part of an unfortunately unpublished diploma thesis (Schäfer 1991). On the basis of the numerous old town excavations in Mecklenburg-Vorpommern after 1990, the same author compiled a ceramic chronology for the late Middle Ages in the region based on combinations

of finds (Schäfer 1997). As already mentioned, Schleswig-Holstein with Lübeck is one of the focal points of the development of German medieval archaeology. Accordingly, pottery finds from the numerous old town excavations in Lübeck were regularly recovered and published as part of excavation reports. A recently published complete treatment of the pottery finds from Lübeck summarizes the results of several decades of urban archaeology and represents an important reference for the chronology of pottery from the largest medieval city in the Baltic Sea region (Drenckhahn 2015). The pottery recovered during excavations in Schleswig, the successor to Haithabu, in the 1970s was already presented in 1985 and also represents an important reference point for pottery in the southern Scandinavian region before 1400 (Lüdtke 1985).

It would go far beyond the scope of these remarks to attempt to describe the history of research into the pottery of the Rhineland, one of the most important pottery regions in Europe since Roman times. The literature on the subject is correspondingly extensive and has been dealt with in numerous detailed and overview studies (e.g. Göbel 1971; Höltken 2000; Heege 1995).

In the most important site for the production of medieval stoneware, Siegburg in North Rhine-Westphalia, the remains of the last surviving dump of stoneware production in the town were documented and the results published a few years later (Beckmann 1975). Further traces of pottery production in Siegburg were subject of rescue excavations and presented in an exhibition catalogue (Korte-Böger and Hellenkemper Salies 1991). The extensive holdings of Siegburg stoneware in the Rheinisches Freilichtmuseum Kommern / Landesmuseum für Volkskunde were processed by Elsa Hähnel and presented in two volumes (Hähnel 1987; 1992). The presentation of the equally comprehensive collection of Siegburg stoneware in the Hetjens Museum was the occasion for a work that summarizes the state of research on Siegburg stoneware and highlights new aspects (Roehmer 2014). This work was followed up by the same researcher with a comprehensive study of the entanglement of the Siegburg stoneware in contemporary art, giving deep insights in late medieval and early modern mentality (Roehmer 2022).

In addition to Siegburg, Cologne and nearby Frechen were also important production centres for Renaissance stoneware. The Cologne City Museum's holdings of Cologne and Frechen stoneware have been published in detail in a modern monograph (Unger: 2007). Raeren, located in the German-speaking part of Belgium, was also a pottery centre of European importance, whose production in the late Middle Ages and Early Modern Period has been presented monographically (Mennicken 2013). A great deal of stoneware from Langerwehe was exported to the Netherlands and England in particular and was initially brought to the attention of archaeological research by an English scholar (Hurst 1977; 1986: 184-192). Together with pottery from Raeren and Aachen, products from Langerwehe have also recently been published extensively, with finds from well-dated complexes in the consumer environment being presented in particular, which is invaluable for research (Höltken and Steinbring 2017).

The first modern attempts to systematize medieval pottery from southern Lower Saxony were made with a Göttingen dissertation in the mid-1960s (Janssen 1966). The production of pottery in the Weser Uplands initially received little attention compared to the larger centres in the Rhineland, even though stoneware from the Weser Uplands was the subject of a major exhibition with an accompanying small catalogue as early as 1975 (Busch 1975). The early modern stoneware in Duingen and its relationship to other pottery centres was also subsequently studied and presented (Löbert 1977). At almost the same time, finds from the medieval pottery site of Bengerode near Fredelsloh, mostly from unsystematic excavations and collections, were processed (Grote 1976). From the late 1970s and early 1980s, a number of other production sites in the Weser and Leinebergland were archaeologically investigated and published (Stephan 1981, 1982b, 1991). In addition to the well-known sites in Coppengrave, Duingen and Bengerode in southern Lower Saxony, the potteries in Reinhardswald and Habichtswald in the state of Hesse also belong to the historical and geographical area of the Weser Uplands in southern Lower Saxony. Although these sites have unfortunately only been partially researched to date and important features have been destroyed unobserved, fundamental findings on the production spectrum there have been published (Stephan 1982b; 1986; 2005). In Gottsbüren (Ldkr. Kassel) in the northern Reinhardswald, which was not insignificant as a place of pilgrimage in the late Middle Ages, stoneware was potted that is very similar in form to the products of southern Lower Saxony and, like these, probably primarily reached the long-distance trade via the Weser (Stephan 1982b: 78). The Bengerode deserted settlement in Lower Saxony has recently been the subject of exploratory excavations by the district archaeology department, which have yielded revealing results (Lönne et. al 2004; Römer-Strehl et. al. 2005). In nearby Fredelsloh, traces of late medieval pottery have also been discovered and documented several times in recent years during building site observations (Krabath

1999). Products from the potteries of the Lower Saxon Pottland around Duingen and Coppengrave were extensively published as part of a large exhibition (Stephan 2012). In addition to stoneware, earthenware was also produced in the same region, which is also one of the most important ceramic centres in Europe (Stephan 1992a).

Ceramics of the Middle Ages and Early Modern Period from the consumer milieu in northern Germany have been presented and published to varying degrees in large numbers in recent decades. Apart from an early overview in connection with an exhibition (Stephan 1982a), these are often academic theses. Various ceramic wares from Lüneburg have been treated and published (Büttner 1997; Kühlborn 1995; Kröll 2012). Ceramics from the old town of Hannover, which had already been presented for the first time by Plath (1959), were reworked and published as part of a dissertation (Büscher 1996). An extensive complex from the consumer milieu is available from Hildesheim and has been published monographically (Brandorff 2010). Pottery also occupies an important place among the material from the medieval deserted town of Nienover, where it has been presented and evaluated as an example (König 2009). Two works on medieval and early modern pottery finds in the North Sea coastal area should also be mentioned here (Thier 1993; Stümpel 2002).

For over 50 years now, the *Internationaler Arbeitskreis Keramikforschung* (International Working Group for Ceramic Research) has been dedicated to the many aspects of ceramic research in German-speaking countries, and its conference papers have been published in 27 volumes to date, providing a diverse insight into a wide range of topics. The three-volume work 'Handbuch zur mittelalterlichen Keramik in Nordeuropa' (Lüdtke and Schietzel 2001) offers a very thorough and comprehensive overview of ceramics in the Middle Ages, in which the ceramic wares common in the North Sea and Baltic Sea regions are presented in detail. Most of these works emphasize the eminent significance of ceramic technology while dealing with archaeological pottery. Hence, technological aspects of stoneware are most important for the present study.

Due to the high temperatures required for the sintering of the body during firing, stoneware and fast stoneware can only be produced from suitable tertiary clays, which for geological reasons are only accessible close to the surface in certain regions. As a result, watertight stoneware was only produced in a few areas, mostly in German-speaking countries, and was traded in large quantities and sometimes very widely. For these reasons, stoneware and stoneware are of great value for international research. An important basis for this was, in particular, a uniform definition of stoneware that was accessible to wide academic circles and the establishment of basic technological, typological and chronological framework data (Stephan 1988). As mentioned above, from an interdisciplinary point of view, stoneware is an outstanding source genre for far-reaching cultural-historical interpretations (Gaimster 1997). In this context, only cursory reference should be made, for example, to the widespread anthropomorphically decorated vessels of different provenance and date, which inspire a broad spectrum of in-depth interpretations (Green 2018; Grunwald 2015; Orser 2019; Schwarzberg 2012; Stephan 1992b).

In contrast to all the countries and regions mentioned so far, with the exception of Iceland, there is no evidence of indigenous pottery making in Norway in the Middle Ages. The reasons for this remarkable situation of the complete disappearance of a craft tradition in the 7th-10th centuries remain unexplained to this day and are rarely the subject of academic discussion (Rødsrud 2016). Nevertheless, excavations on medieval sites, especially in historic inner-city areas in Norway, have revealed and continue to reveal considerable quantities of imported pottery, the cultural-historical potential of which was recognized early on by individual excavators (Herteig 1969: 57). However, medieval and early modern pottery has received only limited attention from Norwegian researchers in international comparison, possibly due to the lack of domestic production (Molaug 1975: 7). However, some finds from Oslo and other sites, primarily in eastern Norway, have been processed and presented (Molaug 1975; 1977; 1980; 1987; 1989). The pottery from excavations in Trondheim has been processed and cursorily presented by Ian Reed (Reed 1990; 1994). The same British researcher, together with the Scottish Norwegian archaeologist Rory Dunlop, was also involved in the preliminary sorting of the ceramic finds from the large Bryggen excavations in Bergen. In connection with the presentation of the Pingsdorf wares from Bryggen, a first overview of the finds there was published on the basis of this pre-sorting (Lüdtke 1989). Further ceramic wares from Bergen were subsequently processed and published by researchers from France (Deroeux, Dufournier, and Herteig 1994), England (Blackmore and Vince 1994) and Germany (Demuth 2001a). Some of the Bryggen pottery were also included in broader attempts to investigate medieval fishing in the North Sea (Hall 2013). Archaeological pottery finds have also been discussed in a number of academic theses, most of which are unfortunately unpublished. In the 1990s, German and Norwegian master's theses

dealt with pottery finds from northern Norway (Brun 1996; Pöchl 1997), while in Oslo a research history paper on the processing of archaeological pottery finds was submitted (Traaholt 1996). Ceramic finds primarily from the 12th and 13th centuries from two plots in the old town of Oslo were mainly examined with regard to the functional and social implications of the spatial distribution of the finds (Bueklev 2006). Another study focused on the occurrence and use patterns of pottery from the 15th to 18th centuries from northern Norway and is one of the rare examples of the processing of early modern finds (Karoliussen 2008). Drinking and pouring vessels made of stoneware and glass, which were excavated in the former council and wine cellar in Bergen, have been treated and published in a thesis (Tøssebro 2010; 2011; 2012). As part of a dissertation on early modern archaeology in Trondheim, an overview of 17th to 19th century ceramic finds from Trondheim has also been presented (McLees 2019: 191-228, 262-263). The oldest known ceramic production in modern Norway, the *Trønder ceramics* produced since around 1700, has been published monographically (Reed 2009). Most recently medieval pottery from excavations in Oslo was analysed in a doctoral degree that focused on consumption patterns (Fuglevik 2024). The author of the present book has also discussed various aspects of different ceramic finds from Norway in several articles (Demuth 2015a; 2015b; 2018; 2019a; 2019b; 2019c; 2021) and in his dissertation (Demuth 2023).

5. The archaeological material: stoneware from the Weser Uplands, Saxony and relief-decorated Renaissance stoneware

The following sections present the ceramic finds from Bergen and other sites in southwestern Norway that form the empirical backbone of the work. The pottery catalogue (Cat.), which is often referred to as numbers, is easily accessible in the online version of the book (Supplementary materials).

As an introduction, the term stoneware is briefly discussed. Stoneware is generally understood to be a ceramic product that is largely impermeable to water due to the sintering of the body at a high firing temperature (Roehmer 2001: 468). In addition to the application of modern standards with regard to the definition of stoneware, the intention of potters and the perception of consumers to produce or acquire watertight vessels must also be taken into account in the historical context (Stephan 1988: 94). Vessels that were not fully sintered in terms of their technological properties, but were largely waterproof due to their dense, engobed surfaces and corresponding shapes and could be used in the same way as real stoneware, are commonly referred to as near stoneware (Bauer et. al. 1993: 100).

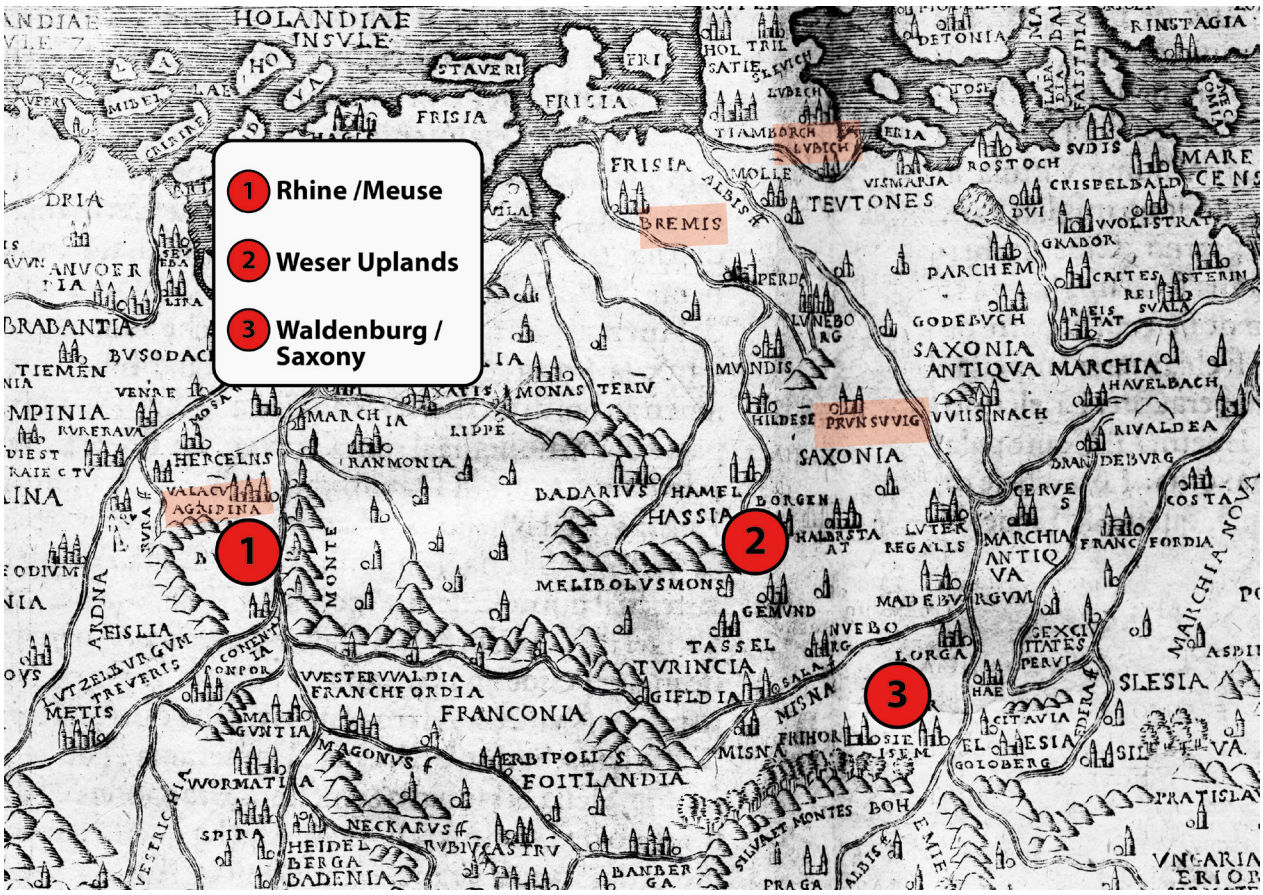


Figure 5. Extract from the Germania Nova tabula by Claudius Ptolemy, Venice 1548, showing the most important stoneware centres of the late Middle Ages. The important Hanseatic cities of Lübeck, Cologne, Bremen and Brunswick are highlighted in red. Map source: David Rumsey Map Collection, David Rumsey Map Center, Stanford Libraries

In general, all ceramic wares presented in the present work are summarized as stoneware, even if individual wares are technologically correct to be regarded as near stoneware and are also referred to as such in the detailed address. Near stoneware is thus regarded as a subspecies of stoneware; an exact differentiation according to modern technological criteria is not sought and appears to be of little use when addressing archaeological finds: 'In my opinion, the intention of the potters to produce vessels with the functional properties of stoneware is more important than absolute conformity with modern standards.' (Stephan 1988: 94).

Clays with special properties are necessary to produce stoneware and near stoneware. Therefore, could this specific pottery in the Middle Ages and Early Modern Period only be produced in specific regions in Central Europe where the corresponding clay deposits were accessible close to the surface due to the regional geology. These places were mainly located in regions of Central Europe that belonged to the German-speaking area and to the medieval Holy Roman Empire. Particularly noteworthy are the production centres for stoneware in the Rhineland, as well as other centres in the Weser Uplands and in Saxony (Figure 5).

The book presents five types of stoneware, each of which is treated individually but according to the same scheme: slip glazed near stoneware from the Weser Uplands, other stoneware from the Weser Uplands, Saxon stoneware, Siegburg drinking bowls and the richly decorated stoneware of the Renaissance (Figure 6). Chapters 5.1 to 5.5 describe these wares in detail and discuss the respective finds from Bergen and other south-western Norwegian sites. The wares from the Weser Uplands produced in various pottery sites in what is now southern Lower Saxony and northern Hesse are summarized in this work as *stoneware from the Weser Uplands*. The various sites and the respective occurrences of the pottery studied are presented in detail in Chapter 6.

As part of the material survey, the author inspected various museum storerooms in southwest Norway and catalogued finds of stoneware. These include the archaeological museum of the University of Stavanger, where in 2019 the finds from the only major city core excavation on the *Skagen 3* site in Stavanger (Lillehammer 1972), as well as finds from the area of Utstein Monastery, Stavanger municipality, were examined. Seventeen pottery fragments from Stavanger and three finds from Utstein Monastery were included in the present catalogue. As early as 2000, a larger find complex from an underwater archaeological survey by the Museum of Stavanger (MUST) in the harbour area of Avaldsnes, Karmøy municipality, was examined and catalogued (Demuth 2001b). Two of the finds described there have been included in the present work. Further collections from the Museum of Stavanger were examined in 2018 and 2019 and two finds from shipwrecks in the bay of Tau, Strand municipality and off the island of Kvitsøy were recorded. Last but not least, a piece from the collection of the Stavanger Museum that has been preserved in use was also included in the catalogue (Cat. 1773). A total of 25 finds from the Rogaland landscape south of Bergen were included in the present work.

By far the largest number of finds presented in this work are part of the Medieval Archaeological Collections of the University Museum of Bergen. In 2024, the official name of this collection is: *Universitetet i Bergen* > *Universitetsmuseet* > *Avdeling for kulturhistorie* > *De arkeologiske samlinger* > *middelaldersamlingen*. A total of 1755 finds from the museum in Bergen are catalogued in the present work (Figure 7).

The primary material survey was carried out between fall 1999 and summer 2000. A final review of the finds, including some newly discovered objects, took place at the beginning of March 2020. The finds come from numerous excavations and excavations in the old town of Bergen. They also include some *old finds* that were added to the collection of the former Bergens Museum at the beginning of the 20th century.

Only one find from the University Museum of Bergen's collections, which was not discovered in the Bergen city area, was included in the corpus of material in this work: Cat. 1747 from Osen farm in Sunnfjord, Gaular municipality. Finds from the following sites are included in the catalogue of this work:

Old finds from the holdings of the former Bergens Museum: a total of 14 objects from the following sites: Tyskebryggen m.a. 449; B6029, B6389; Øvregaten B6417; Kjöbmannsstuens tomt B6583; Vågsalmenningen B6758; Nedre korskirkealmenningen B6849; Brattens tomt (Bryggen) B6879; Murehjørnet (Strandgaten) B8975; and one object with no known location (Cat. 1745).

The finds from modern excavations or site monitoring in Bergen are as following:

- BRM 0 / Bryggen: 1262 catalogue entries
- BRM 39 / Bergenhus Fortress: 1 catalogue entry
- BRM 76 / Rosenkrantzgate (wine cellar): 265 catalogue entries
- BRM 172 / Kong Oscars gate 14-18: 1 catalogue entry
- BRM 223 / Kroken: 46 catalogue entries
- BRM 236 / Strandgaten 55-57: 127 catalogue entries

- BRM 402 / N.N. unknown provenance: 1 catalogue entry
- BRM 465 / Lille Øvregate: 6 catalogue entries
- BRM 544 / Vågsalmenningen: 3 catalogue entries
- BRM 707 / Osen gård, municipality Gaular; Vestland fylke: 1 catalogue entry
- BRM 1126 / Kong Oscars gate: 15 catalogue entries
- BRM 1127 / Nedre Korskirkealmenningen: 1 catalogue entry
- BRM 1148 / Kong Oscars gate: 2 catalogue entries
- BRM 1154 / Domkirkegaten: 5 catalogue entries
- BRM 1157 / Korskirkeallmenningen: 6 catalogue entries

The findings from the various sites are described in detail in Chapters 6.1-6.15. As can be clearly seen from the above overview, the finds from the excavations on Bryggen represent more than two thirds of the objects presented in this work. This is not surprising, as the Bryggen excavation was, as described in Chapter 4.1.2, by far the most comprehensive archaeological investigation of a town centre ever carried out in Norway. The pottery fragments recovered during the excavations on the *German wharf* - Bryggen are roughly pre-sorted in the magazine. This sorting was carried out by the two British medieval archaeologists Ian Reed and Rory Dunlop in the 1980s within a tight time frame. Due to the state of research at the time and the limited time available, stoneware from the Weser Uplands was not identified as a separate ware type. A significant proportion of the finds presented here were therefore classified as Langerwehe / Duingen. In addition, the author also examined the magazine drawers with Siegburg, Raeren and Other stoneware for finds that could be referred to as products from the Weser Uplands. All pieces that can be identified as having been produced in the Weser Uplands region on the basis of macroscopic technological or typological characteristics were catalogued. Pieces for which an attribution seemed doubtful were not included. However, even in the case of pieces classified as products of the Weser Uplands, a certain residual uncertainty regarding provenance must always be taken into account, particularly in the case of smaller fragments. For this reason, 83 finds from Bergen and Stavanger were selected for X-ray fluorescence analysis. The results of this XRF analysis are included as a table and in an English summary as an appendix that is

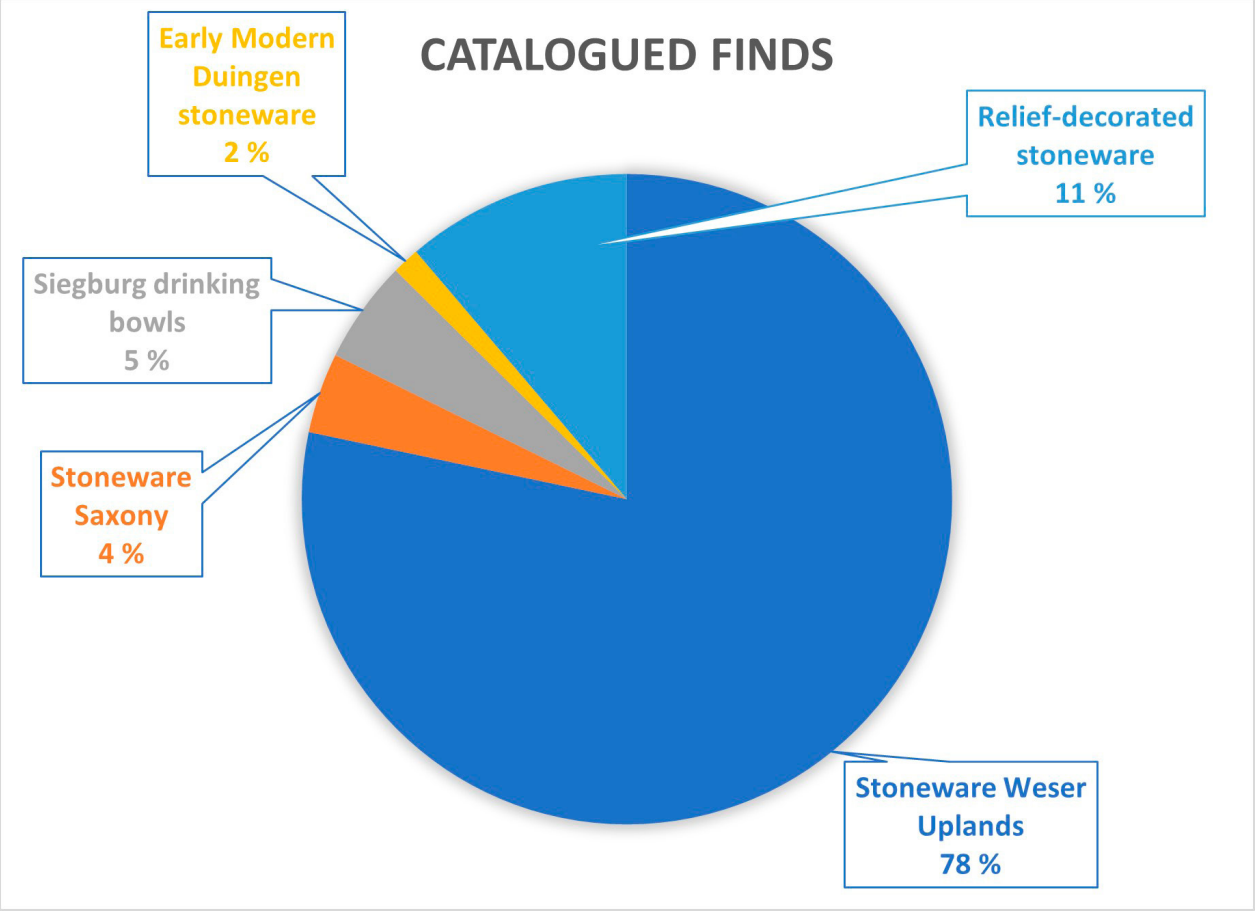


Figure 6. *Pie chart showing the percentage of different wares in the recorded material.*

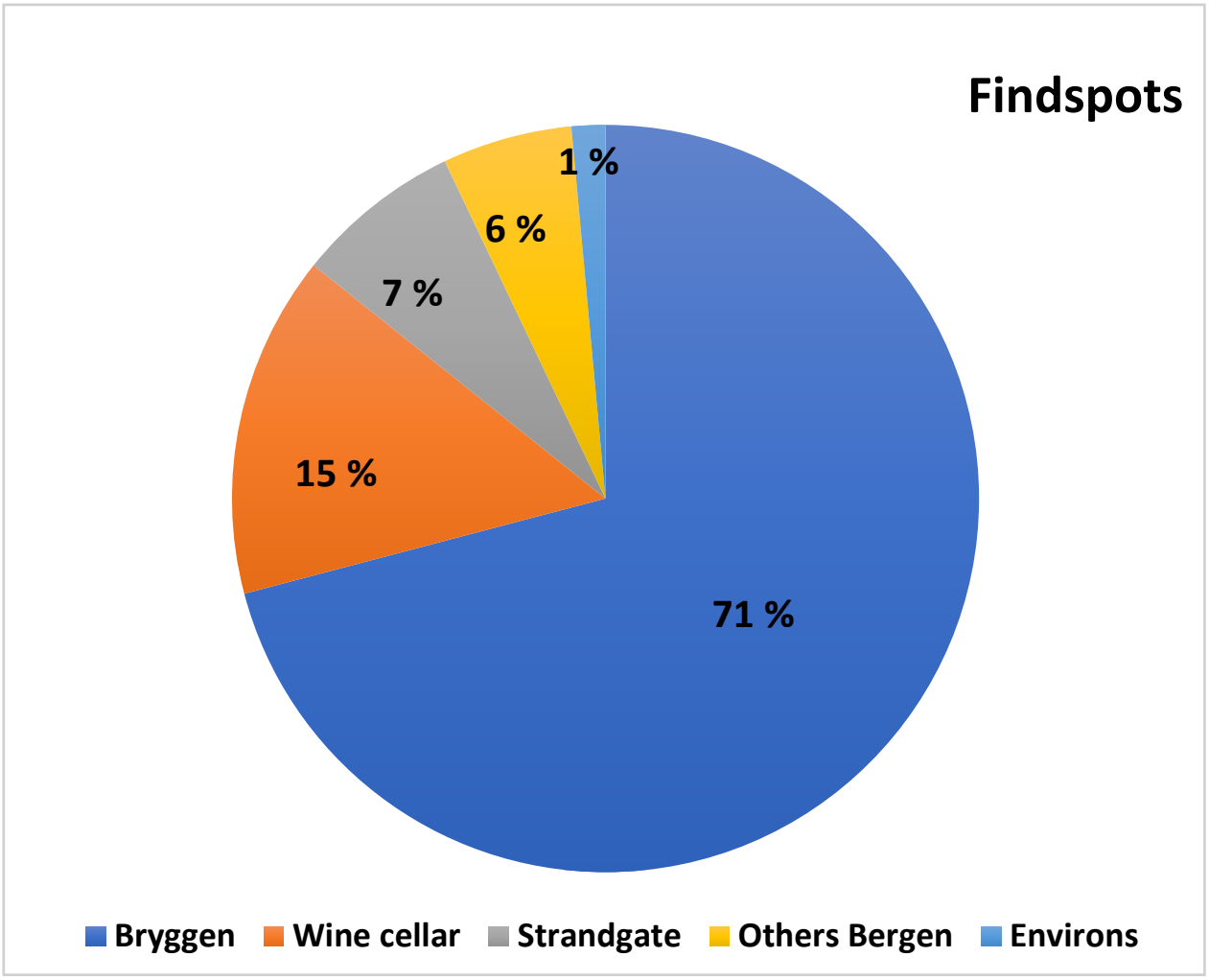


Figure 7. Pie chart showing the percentage of material from different sites.

available in the online version of this book (Appendices, Supplementary materials). In the catalogue, sample numbers and provenance determination are given for the corresponding finds. It should be noted that the X-ray fluorescence analysis largely confirmed the author's macroscopic assessment of the finds. Only in the case of one find (Cat. 1300), which was identified as a product from Brühl in the Rhineland after the scientific analysis, did the macroscopic approach have to be revised.

A total of 1418 finds from Bergen and 17 finds from other sites were identified as stoneware from the Weser Uplands. 67 finds, all from Bergen, were classified as stoneware from Waldenburg in Saxony, plus 4 fragments from the Falke group, which is also of Saxon provenance. In addition, a small, almost complete jug made of glazed red earthenware was included as a special form, which is a very rare and noteworthy copy of a Waldenburg Bartmann jug (Cat. 1746) and is therefore discussed together with it.

A total of 88 drinking bowls or fragments of drinking bowls from Siegburg were catalogued as a form that is noteworthy from a cultural history perspective in the present context and can also be easily identified in the mass material, as well as three fragments of Siegburg vessels with a secondarily applied green glaze. Finally, 200 vessels made of richly decorated Renaissance stoneware from various sites were also identified and recorded in the catalogue. These different groups of objects are presented in the following sections, and the technological characteristics, the find situation and the chronological aspects are discussed.

5.1 Slip glazed near stoneware from the Weser Uplands

5.1.1 Introduction and distinction criteria for near stoneware from Langerwehe and Bad Schmiedeberg

Slip glazed near stoneware is the most characteristic, widespread and best-known ceramic product from the Weser Uplands in the late Middle Ages. Chapter 4.2 gave a cursory description of the various known production sites and their research history. The most important technological and ty-

pological characteristics are known from the finds from production sites and the consumer milieu in places in the surrounding area, which make it possible to distinguish the stoneware from this pottery region from that of other provenances (e.g. in the Rhineland: Brühl, Siegburg, Langerwehe; in Saxony-Anhalt: Bad Schmiedeberg, see below). The author's long experience with finds from the production area formed the basis for the identification of finds from the Weser Uplands in Norway. In addition to the study of literature, the direct exchange with researchers who have worked on the near stoneware of this region for many years was very important. I owe Hans-Georg Stephan the opportunity to study finds from the most important production sites of slip glazed near stoneware in the Weser Uplands (Coppengrave / Duingen, Bengerode / Fredelsloh, Gottsbüren) before and during the initial phase of material collection for the present work. A stay of several weeks in Fredelsloh (Northeim County) also provided important impulses for the understanding of the ceramic-technical peculiarities of the stoneware and near stoneware from the Weser Uplands. There the author had the opportunity to accompany the potter Johannes Klett-Drechsel in the production of exact copies of medieval vessel forms, which were subsequently fired in a kiln reconstructed true to the original according to excavation findings from Fredelsloh.

Figure 8. *Johannes Klett-Drechsel at the potter's wheel in Fredelsloh shaping a copy of a medieval jug.*

Observing the production process of the vessels made from the same clay as the medieval originals and discussing the technological and typological characteristics with the proven and experienced practitioner Klett-Drechsel provided important insights for recognizing and evaluating various peculiarities of the archaeological find material (Figure 8). These observations therefore serve as an important reference when addressing and assessing formal and technical details.

It is also essential for the processing of ceramic finds from the consumer environment to take into account the findings from the production sites. The history of research into slip glazed near stoneware from the Weser Uplands, as briefly outlined in Chapter 4.2, dates back to the first half of the 20th century when late medieval stoneware from Coppengrave (Holzminden County) was published for the first time (Sauermilch 1940/41: 72). At the same time, the first views of the pottery in Bengerode / Fredelsloh were also published (Fahlbusch 1941: 220). The first modern scientific work on medieval pottery in southern Lower Saxony led, among other things, to the excavation of several trial trenches in the deserted village of Bengerode near Fredelsloh (Northeim county), through which the pottery in Bengerode mentioned in written sources was also proven in the field (Janssen 1966: 18). In addition to presenting some forms of slip glazed near stoneware made in Bengerode, Janssen also discussed source-critical aspects regarding the different spectrum of finds from the consumer environment compared to find complexes from production sites (Janssen 1966: 20). The deserted settlement of Bengerode was seen in close connection with the still existing pottery village of Fredelsloh and the importance of the transport links to the Weser and Leine for the economic development of the trade was emphasized (Janssen 1966: 138). Another work on the stoneware and other pottery products from Bengerode is based largely on finds from various private collections and irregular finds (Grothe 1976). Grothe's focus was on presenting a comprehensive overview of the various ceramic wares, forms and types that occur in the Bengerode find material. More than 40 years after its publication, this work is still the most comprehensive account of vessels made in Bengerode and an important reference for near stoneware from southern Lower Saxony. As a result of several building projects in the centre of Fredelsloh, the remains of several pottery kilns and misfires were discovered during emergency excavations, thus proving that the production of medieval stoneware, which had already been suspected several times, also took place in the present-day village of Fredelsloh (Krabath 1999; Lönne 2007). Both the range of shapes and the clays used are identical in the two villages, which are only 1500 meters apart, so that it seems appropriate to regard the stoneware from Ben-

gerode / Fredelsloh as a single unit. The exact processes of the foundation, abandonment and relocation of the settlement and production in Bengerode are probably closely linked to regional settlement development and supra-regional economic trends (Stephan 2010: 133). In any case, ferruginous clay from a geological rift valley close to the surface was used at both sites. It was extracted directly from the deserted village of Bengerode.

The villages of Coppengrave and Duingen in the present-day district of Hildesheim are just under 30 kilometers north of Bengerode / Fredelsloh. These are located on the southern edge of a region characterized by numerous historical pottery towns, traditionally referred to as 'Pottland' (Leiber 2012). A comprehensive publication on the medieval and early modern pottery from Coppengrave, in particular the near stoneware and painted earthenware, drew the attention of international scholars to this important European pottery region at a very early stage (Stephan 1981). Until then, nearby Duingen was primarily known for its early modern stoneware production. However, archaeological finds in the town centre show that stoneware was also produced in Duingen as early as the Middle Ages (Stephan 2012: 22). The basis for the development of the pottery industry in the Duingen / Coppengrave area were the near-surface deposits of tertiary clays suitable for stoneware production (Stephan 2012: 11).

While the two pottery sites mentioned above are located east of the Weser in the federal state of Lower Saxony, Gottsbüren, also known as a production site for medieval near stoneware, is located in the Reinhardswald, in today's federal state of Hesse, about 25 kilometres southwest of Fredelsloh and 50 kilometres south of Coppengrave / Duingen. Archival sources, looted excavations and the destruction of archaeological features were the first steps towards researching the medieval pottery. These led to the uncovering of pottery kilns and the recovery of pottery (Desel 1969). The stoneware produced in Gottsbüren shows such strong formal and technological similarities with the products of the pottery towns in southern Lower Saxony (Stephan1982: 79) that it seems appropriate to speak of a pottery region called the *Weser Uplands* (Figure 9). This production area is often summarized as *southern Lower Saxony / Northern Hesse* (Gaimster 1997: 300-301). Unfortunately, most traces of the medieval pottery trade in the Reinhardswald have been largely destroyed without documentation and knowledge of this production centre is limited (Stephan 2005: 188). When evaluating find complexes from the milieu of consumers in nearby Höxter, it is noticeable that in the 13th century a much smaller proportion of near stoneware came from the potteries of the Reinhardswald, whereas the production sites in southern Lower Saxony dominated (König 2009: 153).

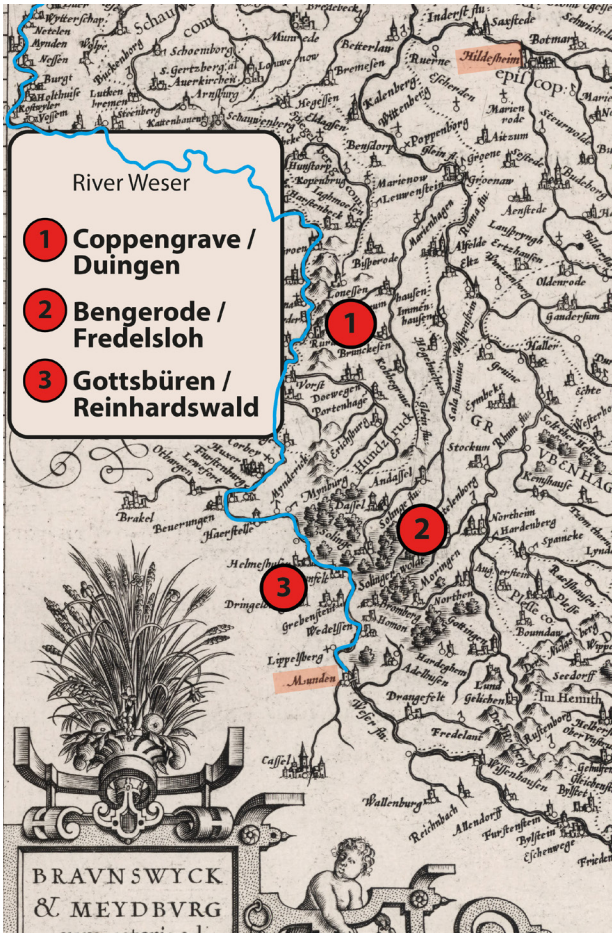


Figure 9. *Detail from a map of the Duchy of Brunswick Lüneburg by Gerhard Mercator from 1585 with the locations of the historic stoneware potteries in the Weser Uplands. The towns of Hildesheim and Hann. Münden are highlighted in red. Map source: David Rumsey Map Collection, David Rumsey Map Center, Stanford Libraries*

As already mentioned in the introduction to Chapter 5, a total of 1418 pieces were identified as stoneware from the Weser Uplands in the investigated find material from southern Norway, of which 1285 pieces can be attributed to slip glazed near stoneware. The above-mentioned villages in the mountain ranges on both sides of the upper Weser are assumed to be the production sites for these pieces. It was not possible to distinguish the individual production sites macroscopically from the find material. However, an examination of the chemical signature of individual finds using X-ray fluorescence analysis was able to provide clear indications of the exact production sites of the analysed finds. The exact evaluation of the analysed samples can be found in the appendices of this publication (Supplementary material).

From the excavations in Bryggen, which yielded the vast majority of all pottery and other finds in Bergen, there are a total of 2071 fragments of slip glazed near stoneware. During the sorting of the finds by Reed and Dunlop, these fragments were filed under the name Langerwehe-Duingen. After a detailed examination of these finds, a total of 1063 objects, i.e. a good half of the slip glazed wares, were assigned to the Weser Uplands production region. Due to technological and typological peculiarities, 431 fragments could be assigned to the production site Langerwehe in the Rhineland, 130 others were only generally referred to as Rhineland and the provenance of 427 fragments of slip glazed stoneware remained unclear.

In order to better understand the criteria for determining the slip glazed near stoneware from the Weser Uplands and to distinguish it from the products from Langerwehe and the rest of the Rhineland, the Langerwehe near stoneware is briefly described here. After the slip glazed near stoneware from the Weser Uplands, the finds classified as Langerwehe form the largest group of slip glazed near stoneware in Bergen. In my identification of the corresponding fragments, I have relied on the description of the Langerwehe products by Hurst (1977) and Roehmer (2001: 493ff.). In a final review of the material, the comments by Höltken and Steinbring (2017) on this topic were also taken into account. My comments relate primarily to the finds in Bergen, while the range of features in the aforementioned works on finds from production and nearby consumption regions is more extensive. It cannot be ruled out that finds referred to as Langerwehe may also originate from other Rhenish production sites such as Brühl. The slip glazed near stoneware there was occasionally exported as far as Scandinavia (Roehmer 2001: 492).

The body of the Langerwehe near stoneware is usually quite dark grey, occasionally streaked with orange spots or streaks. The latter is probably due to a greater supply of oxygen during firing. Macroscopically, open pores can often be seen in the slip glazed near stoneware from Langerwehe, especially in the pieces with lighter, orange-reddish oxidized shards. The often relatively low degree of sintering of the Langerwehe vessels can also be observed in the production area (Höltken and Steinbring 2017: 715; Roehmer 2001: 495). Tempering components can regularly be seen in the body, in particular rounded white quartz sand grains. In some cases, this tempering results in a rough-looking surface. The surface of the slip glazed near stoneware from Langerwehe is covered on the outside by an engobe, which is often shiny and sintered and appears in reddish and brown shades that occasionally change to purple or wine red. It is assumed that these highly lustrous engobes belong to an advanced production period (Roehmer 2001: 495). The insides of the Langerweher vessels made of near stoneware are generally not slip glazed, but there are often individual patches of run-off engobe on the inside (Figures 10 and 11). The surface on the inside of the vessels is usually grey, with the above-mentioned tempering particles being particularly visible on the non-engobed inside. A grey and orange 'spotted' surface on the inside is also relatively common.

Figure 10. *Rim fragment (inv. no. BRM 0 / 47446) of a jug from Langerwehe from the Bryggen excavation.*

Figure 11. *Interior view of a rim fragment (inv. no. BRM 0 / 47446) of a jug from Langerwehe from the Bryggen excavation.*

The fragments of Langerwehe near stoneware from Bergen probably come primarily from jugs. These have a characteristically pronounced wavy foot on a thick, rounded base. Investigations in the production region show that the base was occasionally used separately (Höltken and Steinbring 2017: 716). The formation of the wavy base is a good distinguishing feature of Langerweher near stoneware (Roehmer 2001: 497). The rims are usually triangular in shape as hollow or collar rims. Occasionally there is scroll stamp decoration in a Roman numeral pattern, mostly on the rim, but in individual cases also on the shoulder of the vessel. Roll-stamp decoration is often found on jugs from the first half of the 14th century (Höltken and Steinbring 2017: 718-719, Fig. 5; 722, Fig. 9). In general, the Langerweher near stoneware is thicker walled than the products of the Weser Uplands and the handles are also considerably more massive.

A particular 'problem case' in the identification of slip glazed near stoneware is the ware from Bad Schmiedeberg on the middle Elbe, which is technologically almost identical to the products from the Weser Uplands (Stephan 2011: 294). The products there can hardly be distinguished macroscopically from the products of the Weser Uplands, especially when they are very small fragments. It is very likely that production in Bad Schmiedeberg near to the river Elbe was strongly influenced technologically and typologically by the Lower Saxon pottery tradition, migration of potters should also be considered (Stephan 2012: 24).

Decorative elements such as notched trims and incised decoration are characteristic of Bad Schmiedeberg stoneware. Even if these do not appear on all the vessels, one would still expect that such features would at least occasionally be observed in the Bergen finds, should material from the Middle Elbe region be present in significant quantities in Bergen. This is not the case, even among the pieces from Norway examined by X-ray fluorescence analysis there were none with a chemical signature from the Middle Elbe region. It is possible that Schmiedeberg stoneware only had a limited regional distribution, as Schmiedeberg stoneware is only found in small quantities in the nearby royal seat of Wittenberg (Kluttig-Altmann 2015: 261). Schmiedeberg stoneware was also found in the monastery Seehausen, approximately 250 kilometres northeast of the production site (Biermann and Schifer 2020). The provenance of 70 fragments of stoneware from that site was determined by Neutron Activation Analysis (NAA), which showed that up to 12% of the analysed finds were produced in Bad Schmiedeberg. Rhenish stoneware dominated the analysed material with almost half of the analysed finds, whereas stoneware from the Weser Uplands and Waldenburg in Saxony made up approximately a quarter each (Bierman and Schifer 2020: 97).

In Bergen however, no Schmiedeberg stoneware could be identified. In the present book it is therefore assumed that all the pieces of slip glazed stoneware presented here were actually produced in the Weser Uplands and that products from Bad Schmiedeberg did not reach Norway.

5.1.2 Technological characteristics of the slip glazed near stoneware from the Weser Uplands

The term slip glazed near stoneware is used to describe a ceramic ware that has been given a sintered surface in various shades of red and brown by the application of a thin engobe but otherwise exhibits a certain range of variation in technological criteria, especially with regard to the degree of sintering. Around 90% of the sherds are almost completely sintered, but macroscopically still show individual open pores; 10% of the finds show a completely sintered, sealing wax-like sherd. To distinguish the not always completely sintered wares from the fully sintered stoneware, terms such as proto-stoneware or near stoneware were established in research (Stephan 1988: 82).

According to modern technological criteria, water absorption capacity (WAF) is the defining factor for classifying a ceramic as stoneware or near stoneware. According to this material definition, real stoneware may not absorb more than 2% (Stephan 1988: 82) or 1% (Schäfer 1991: 13) of its volume in water. However, this limit can also be 6% WAF for coarser goods (Bauer et. al. 1993: 98). In any case, the decisive factor is the porosity of the body, which can be quite variable in handmade ceramics due to various factors. Complex tests are necessary to determine the exact WAF, which were not possible in the course of the present work. Schäfer (1991: 11f.) describes in detail the procedure and results for investigating the WAF of finds from Rostock. The results should be transferable to corresponding finds of different wares. In the analysis, Rostock finds of near stoneware, to which the presented finds from Bergen should largely correspond, showed a WAF of 0.11 to 6.6% (Schäfer 1991: 64, 74). The analysis of fragments of slip glazed near stoneware of the late Middle Ages from the Coppengrave production site in the Weser Uplands revealed a WAF of 2.6 to 4.5% (Stephan 1988: 86). Ultimately, the modern definition of stoneware for a large group of ceramic vessels from the Middle Ages, for which a watertight stoneware was obviously aimed at, is as already mentioned of little use in the processing of archaeological pottery.

As the WAF of the finds presented in this thesis could not be determined by means of macroscopic analysis, a large group of finds was summarized as

near stoneware due to the slip glazed surface. These include pieces that are more likely to be stoneware in terms of water absorption, others that are probably more likely to be very hard-fired earthenware. However, all of the finds grouped here as 'slip glazed near stoneware' were produced in the same shapes and with the same surface treatment. It therefore makes sense, in my opinion, to treat these wares as belonging to the same group, as they will have been perceived as similar by their former users in terms of their external appearance. For this reason, I will refer to all slip glazed pieces as near stoneware in this work, regardless of the macroscopically recorded degree of sintering and the associated water absorption. The macroscopically determined properties of the individual fragments are described in the catalogue.

As the name suggests, the presence of a surface treatment through the application of an engobe is characteristic of *slip glazed near stoneware*. This engobe consists of a very fine clay slurry with varying degrees of iron content that is produced during clay preparation, i.e. a mixture of water with clay particles of the finest grain size. During firing, this engobe layer largely melts and develops different shades of colour ranging from violet-red to dark brown.

In addition to the porosity, the colour of the body also varies in the presented finds due to the changing pottery kiln atmosphere. However, a further subdivision resulting from this is not made, as the focus of the present work is on the cultural-historical evaluation and interpretation of finds of specific provenance. It is assumed that formally and technologically similar vessels were also perceived as uniform by the former consumers, especially as the sherd core was normally hidden from the user.

In order to ensure the comparability of the presented finds with other works, the most important terms used so far to designate comparable finds elsewhere are listed below.

Stephan (1988: 108-111) defined several wares in his numerical coded system within the spectrum of which the finds presented here fall. These are Grey protostoneware with red engobe / 5300; Grey red-slipped near stoneware / 5500; Brown near stoneware / 5600; and yellow red-slipped near stoneware / 5700.

Schäfer (1991: 62-76) differentiates the following ware types in the Rostock find material, some of which correspond to the above-mentioned wares: Red-slipped Grey Near Stoneware; Red-brown-glazed Grey Near Stoneware; Red-slipped Yellow Near Stoneware; Brown-glazed Yellow Near Stoneware; Tempered Red-brown glazed Gay Stoneware.

Ring (1991: 23), on the other hand, distinguishes among the finds from the Pfalz Werla (district of Goslar) red-slipped near stoneware (5100); brown-slipped near stoneware (5200) and a group of near stoneware (5300); each with further subdivisions.

Lüdtke, on the other hand, only refers to finds from Schleswig as *Rotengobiertes Faststeinzeug* (Lüdtke 1985: 68-70), but this may well also include some wares that have been subdivided more finely by other processors.

For this reason, only the generic term *slip glazed near stoneware* is used in the present work, as the colour values of the body and surface often show only very gradual differences, which can also be influenced by the eye of the beholder, the incidence of light and, finally, the conditions of deposition in the soil. In addition, there are fluctuations in the firing temperature inherent in handcrafted production, and thus in the colour appearance and degree of sintering of the ceramic. This can lead, for example, to vessels made in a workshop from identical clay by the same potter exhibiting different colourations and porosities due to different placement in the kiln and imponderables in the firing process. Especially in the horizontal pottery kilns common in the Weser Uplands in the Middle Ages, the firing temperature and thus the degree of sintering of the vessels varied greatly depending on the distance from the firing chamber. It therefore seems sensible to me to use only a fairly broad definition when subdividing the finds presented.

The vast majority of the slip glazed near stoneware shows a sherd that is almost completely sintered, but small cavities can still be seen with the naked eye. The fracture is usually more structured than smooth. Occasionally (in about 10% of finds) the sherd is sintered to such an extent that the smooth fracture gives a shiny, sealing wax-like impression. In about 40% of all fragments, small black particles in varying numbers are visible in the sherd, which are fused mineral components such as iron oxide. Larger reddish temper components are rarely visible to the naked eye, and small whitish rounded grains of sand are only occasionally found.

The sherds of approx. 90% of the finds from Bergen are grey with darker and lighter variants. It is not uncommon to see a lighter core. About 10% of the fragments show a beige body. In the latter, the degree of sintering is noticeably higher, about half of the fragments with beige shards show a sealing wax-like matrix. Only very rarely could a yellowish to orange sherd of slip glazed near stoneware from the Weser Uplands be observed in Bergen. Only 20 such fragments were identified, which is about 2% of this ware. The greyish-brown ware largely corresponds to ware type 5500, the hard-fired beige ware to ware type 5600 and the few yellow-orange fragments correspond to ware type 5700 according to Stephan (1988: 109-111).

Figure 12. *Potter Johannes Klett casting the replica of a medieval jug with engobe made of clay slip.*

The surface of slip glazed near stoneware is covered with an engobe, i.e. a thin coating of clay slip. This very fine-grained clay suspension was applied to the vessels by dipping or casting (Figure 12). During firing, the surface sintered, which increased the watertightness even with more porous shards. Due to the mineral components, primarily the characteristic iron oxides, the engobe produced a typical and certainly also decorative colouration in various shades from red to dark brown. In most cases (about ¾ of all slip glazed fragments in the mountains), this sintered engobe fused to such an extent that the surface appeared glossy. On the outside, the entire surface was slip glazed, but there are several pieces (approx. 100 fragments) in which the brown engobe is missing in places and the grey body is exposed (Figure 13). This phenomenon is known from the production area and is characteristic of products from the Weser Uplands. The engobe may have flaked off due to poor surface adhesion (Stephan 1988: 110). However, it is also possible that a particularly high firing temperature led to the partial burning off of the engobe and thus to a blotchy exterior (Roehmer, 2001: 520).

Figure 13. *Body fragment Cat. 264 with stained brown engobe and dark iron precipitates.*

Only around half of all fragments from Bergen have an engobed surface on the inside, which is also much rarer, only around 20% of the internally engobed pieces have a shiny surface. In the pieces that are not slip glazed on the inside, the mostly grey body is visible. Occasionally, the non-engobed body also appears orange to orange-grey striped on the inside, as can often be observed in finds from Duingen and Coppengrave, but also in finds from Bengerode / Fredelsloh.

As mentioned, the colour variants of the slip glazed vessel surfaces are all in shades of different red or brown tones. Around 1/3 of all finds from Bergen show a strong reddish brown, while the others have a smaller proportion of red or no red at all. The brown varies from a deep dark chocolate brown to the most common medium brown to very light beige-brown. It is not uncommon for larger fragments to show clear colour variations (Figure 14). The fact that the colour depends considerably on the kiln atmosphere and certainly also on the placement of the vessel in the kiln is exemplified by a find from Bergen (Cat. 413; Figure 15). The shiny sinter engobe on the surface of this piece is a rich, quite light brown, even on the underside of the base. On the bottom, however, there is a circular spot 6 centimetres in diameter that is a dull wine red. This is also a technically interesting detail, as it is an indication that several jugs were stacked on top of each other during firing, as is also documented by misfires from Bengerode

(Grote 1976: 291, Fig. 23.6). The present fragment also makes it clear how strongly the colour values of the slip glazed near stoneware can vary in vessels from the same kiln or even in individual vessels. The different colour variations described can be observed in finds from production sites in Bengerode / Fredelsloh and Coppengrave / Duingen.

Figure 14. *During kiln firing, vessels stacked on top of each other show clear differences in colour at the contact points. In the covered area, the engobe is hardly sintered and of a significantly lighter colour.*

Figure 15. *On the bottom of Cat. 413, the impression of another vessel can be seen. Due to the different temperatures, the engobe is red in the area of the impression, while the vessel otherwise shows a brown surface.*

Black, molten iron precipitates, which can be observed on many, but not all, pieces, are very characteristic of the slip glazed near stoneware of the Weser Uplands, especially for the products of the Bengerode pottery. These precipitates occur in Bergen on the surface of approx. 25% of all finds recorded. Occasionally (in Bergen approx. 12% of all finds) similar stains are also found in reddish shades, which are also melted mineral precipitates. In over 40% of all finds recorded, black iron concretions of varying quantity and size were found in the fabric. Only 11 finds, i.e. less than one percent, show reddish particles or lean components; these only occur very rarely in yellowish-orange or beige fabrics.

5.1.3 Typological elements of the slip-glazed near stoneware from the Weser uplands

The range of forms of slip glazed near stoneware from the Weser Uplands is limited in Bergen to types that can be addressed as drinking and pouring vessels. The functions of the various ceramic vessels are discussed in detail in Chapter 7, but it seems to me to be reasonable to assume that most of the vessels discussed here had a 'primary function' (Gaimster 1998: 115-117) as drinking and serving vessels, even though other uses may well have occurred (Schäfer 1991: 99f.). Due to the highly fragmented condition of the finds, the description of the vessel form is only possible to a limited extent. Of the 1268 finds of slip glazed near stoneware from the Weser Uplands recorded in Bergen, the vessel form could only be determined for 148, i.e. about 12%. Accordingly, characteristic details of the shape of the slip glazed near stoneware from the Weser Uplands are discussed first. These are organized according to the different zones of the vessels, such as base, body and rim. The identifiable vessel forms in the Bergen find material are then presented.

5.1.3.1 Forms of the base

As already mentioned, the shape of certain elements of the vessels is an important criterion for determining provenance. This applies in particular to the formation of the base, which differs significantly in the pottery of the Weser Uplands from that of the Rhine-Meuse region. Characteristic for the near stoneware of the Weser Uplands is a base formation in which a frilled foot was pinched out of the base plate after it was cut off with a wire from the potter's wheel using various handles (Roehmer 2001: 523). This frilled foot of stoneware from the Weser uplands is usually not a particularly pronounced standing ring but is often quite flat. The corrugation caused by finger impressions was probably primarily decorative, but the vessels did not stand on the base plate but on the undulating footring. Occasionally, double rows of finger impressions can be found on the foot (Cat. 117 or Cat. 942), which can also be observed on finds from pottery vestiges in the Reinhardswald (Stephan 1982b: 97, Fig. 20.81). Such a development of the frilled foot has also been demonstrated several times on imports of southern Lower Saxon near stoneware in Rostock (Schäfer 1991: 155, Fig. 12.a, c). In general, the base is quite thin, the base plate relatively straight and the frilled foot rather

delicate, compared to the often massive, claw-shaped frilled feet of Rhenish products. As the vessels had to dry somewhat before the frilled feet were formed, the variations in the frilled feet observed on the near stoneware from the Weser Uplands can be explained both by the potter's individual hand position during production and by the degree of drying of the vessels at the time of processing (Figure 16).

Figure 16. *Johannes Klett-Drechsel forms a frilled foot with finger pinches.*

Figure 17. *Cat. 294 with characteristic frilled foot.*

In Bergen, almost all of the recorded fragments of slip glazed near stoneware show a frilled foot (Fig 17). Only Cat. 705 has a standing base without visible finger marks. In just under a quarter of the base pieces, traces of cutting from the potter's wheel can be seen on the base plate. On the remaining pieces, these traces have been obliterated by handling the still-wet clay when shaping the frilled feet.

In Bergen, the base diameter of the finds of slip glazed near stoneware varies between 50 and 140 mm (Figure 18). Only 12 of 168 measurable base pieces are smaller than 76 mm. Most of the base pieces (97 specimens) measure between 76 and 100 mm, while 46 pieces have a diameter of 101 to 120 mm. Only 13 pieces are larger than 120 mm, with 140 mm being the largest diameter measured.

Base diameter	50-75 mm	76-100 mm	101-120 mm	< 120 mm	Sum
Fragments	12	97	46	13	168

Figure 18. *Table over base diameters of slip-glazed near stoneware vessels from the Weser uplands in Bergen.*

5.1.3.2 Rim types

There are around 205 rim pieces of slip glazed near stoneware from Bergen. By far the most common rim shape is the collared rim in a wide variety of forms, which was documented on 107 rim pieces. This occurs both on small jugs (Drawings Nos. 8-11, 13) and on large or medium-sized jugs (Drawings Nos. 26; 29-35). In eight cases, a strip lying quite low on the neck can be observed on a simple upright rim; these pieces are described in the catalogue as 'upright rim with neck strip' (Drawing 27; Cat. 1139). 46 rim fragments show a simple upright rim (Drawings 14, 15, 28), which is occasionally covered with turning grooves and in individual cases slightly bent out, which may represent a transitional form to the funnel neck jug (Cat. 186; Drawing 28). Funnel-like flared rims can be found in 4 cases (e.g. Cat. 639; Drawing 7). Further variants of rim formation were observed in individual cases. The most common variant of the collared rim is the cornice rim, which was found in 9 specimens (Cats. 521, 249; Drawing 12, 35).

Figure 19. *Forming a collared rim on the potter's wheel by holding certain finger positions.*

This work deliberately refrains from a detailed division of the rim forms into numerous variants of the basic forms. Even more than in the shaping of the foot area, the respective hand position of the potter produces variants of the rim shape (Figure 19). This means that in the same workshop, the same potter may produce rims with sig-

nificantly different details on similar vessels if the finger position is varied during the working day. In the case of mass production, as was the case with stoneware, a considerable 'type variance' from the hand of one and the same potter can therefore be assumed (Figure 20).

Figure 20. *Cat. 707 with characteristically pronounced collared rim.*

The rim diameters show moderate variations, whereby exact specifications are hardly possible, as the measurement of the diameter of rims that are only partially present always causes uncertainties, especially in the case of handcrafted vessels, the mouths of which are rarely completely circular. Of the 177 measurable rim pieces, 86 had a diameter of approx. 56 to 75 mm and a rim diameter of approx. 80 mm was reconstructed for 71 pieces. Only 12 pieces were smaller than 55 mm. The rim diameter was also only larger than 80 mm in very few pieces, 3 rim pieces showed a rim diameter of 90 mm, 4 rim pieces had a rim diameter of about 100 mm and 1 fragment showed a rim diameter of 120 mm (Figure 21).

Rim diameter	30-55 mm	56-75 mm	80 mm	90-120 mm	Sum
Fragments	12	86	71	8	177

Figure 21. *Table over the rim diameters of the slip glazed near stoneware in Bergen.*

It is difficult to draw conclusions about the size or shape of the vessels from the rim diameter, the completely reconstructable vessels Cats. 1144 and 1148 (Drawings 8 and 25) each have a rim diameter of around 60 mm with a rather small volume. The base piece Cat. 413 with a base diameter of 105 mm and very probably a larger volume than the previously mentioned vessels, shows the impression of a rim with a diameter of 60 mm on the base. It can be assumed that vessels of the same type were primarily stacked on top of each other, which can also be deduced from misfiring in the production region (Grote 1976: 291, Fig. 23.6). It follows from this that vessels with the same rim diameter can obviously have very different dimensions. The rim diameter is therefore not a reliable indicator of the original height, the shape of the vessel body or the base size of the vessels. Rather, a rim diameter of between 56 and 80 mm, as found in the vast majority of finds from Bergen, is likely to represent a format that could be reasonably produced in artisanal pottery and most closely corresponded to the intended form (as a drinking or serving vessel).

5.1.3.3 Handles

The handles of the vessels are almost exclusively strap handles, which are usually quite flat in cross-section and often slightly curved at the edges. Somewhat thicker, grooved handles are found less frequently. The strap handles were made separately from clay coils and attached to the finished, leather-hard vessel. The thin design of the strap handles, due to the special clay qualities of the production sites, distinguishes the Weser Uplands stoneware from the Rhenish products (Figures 22-23).

Figure 22. *'Stretching' of an applied flat strap handle during the production of a jug.*

Figure 23. *Cat. 53 with a characteristic flat strap handle.*

5.1.3.4 Wall thickness

A typical characteristic of wares from the Weser Uplands is their relatively thin walls (Figure 24). In Bergen, wall thicknesses of 2 to 7 mm were measured for slip glazed near stoneware, with wall thicknesses of 3 to 4 mm being the most common, accounting for over 50%. It should be noted that the wall thickness varies in different parts of the vessel. Wall thicknesses of 6 to 7 mm, for example, were predominantly measured on base fragments with only sparsely preserved walls, as the wall is always thicker towards the base at ceramic vessels produced on a potter's wheel. In general, a thin wall is characteristic of the slip glazed near stoneware from the Weser Uplands. This was mainly made possible by the special qualities of the clays used. Therefore, over 95% of all catalogued pieces show wall thicknesses between 2 and 4.9 mm. Like the thin strap handles described above, the thinner walls are also a feature that distinguishes the near stoneware from the Weser Uplands from Rhenish products.

Wall thickness	2-2,9 mm	3-3,9 mm	4-4,9 mm	5-5,5 mm	6-7 mm	Sum
Fragments	168	666	255	42	9	1140

Figure 24. *Table over wall thickness of slip-glazed near stoneware vessels from the Weser Uplands in Bergen.*

5.1.3.5 Details on the vessels body

The walls of the vessels are quite frequently furnished with horizontal rilling (Figures 19, 23). One 15th century depiction shows a potter using a device to apply horizontal corrugations to a jug rotating on the potter's wheel (Gaimster 1997: Col. Pl. 1, Fig. 2.1). However, the horizontal corrugations on the archaeological finds were most likely not applied with objects such as moulded wood, but with the fingers during pottery making. The walls of the vessels show clear traces of human fingers, which is also confirmed by the experimental pottery of such vessels (Figure 25). According to convincing information from the practicing potter Johannes Klett-Drechsel from Fredelsloh (Northeim County), these horizontal corrugations are particularly necessary for thinly turned walls in order to create a torsional stress in the clay, which means that the vessel retains its shape even when still wet immediately after turning. Contrary to widespread assumptions, these horizontal rillings are therefore not primarily decorative elements, but rather technologically conditioned elements that nevertheless have a certain decorative effect and make it clear that these are solid pottery vessels.

Figure 25. *Johannes Klett-Drechsel creates horizontal corrugations and strips while throwing a jug.*

Figure 26. *Cat. 752 with horizontal corrugations and articulated strips.*

On earthenware vessels, such wavy strips can occasionally be found in other pottery regions of northern Germany, for example on products from Boberg near Hamburg (Stephan 1982a: 90, Fig. 20). This may indicate the influence of the stoneware potteries of southern Lower Saxony, which presumably was formative for the style of a larger region.

In over a fifth of all fragments of slip glazed near stoneware in Bergen, strips can be observed that enclose and structure the vessel body hori-

zontally (Figure 26). The cross-section of these decorative strips varies from tapered to almost rectangular. It is not uncommon for such strips to be arranged in pairs, especially in the area of the body of the vessel. The distance between the two strips corresponds roughly to a finger, so that these double strips can be easily explained by the use of three fingers when turning the vessel. The strips are usually located in the area of breaks in the body of the vessel, such as at the transition from the foot to the abdomen, in the area of the largest diameter of the vessel or at the transition between the body and neck. Although these strips are undoubtedly decorative, they also have an important technical function. The 'decorative strips' reinforce the stability of the thin-walled vessels at critical points where the still moist clay in particular is exposed to increased stress. To put it simply, these strips could be seen as the pottery equivalent of Gothic relief arches, which allow the walls to be worked out in a filigree manner.

Particularly characteristic of Weser Uplands products are circumferential decorative strips, which are shaped like waves by finger impressions and give the vessels a striking exterior with circumferential wavy strips (Figures 27-28, e.g. Cats. 639, 1126, 1150, 54). This decorative technique is known for stoneware pottery mainly from potteries in the Weser Uplands. Numerous vessels decorated in this way have been documented in Bengerode (Grote 1976) as well as in Coppengrave and Duingen (Stephan 1981: 39; 2012: 26).

Figure 27. *Creating wavy strips with fingers.*

Figure 28. *Cat. 1135 with wavy strip.*

On earthenware vessels, such wavy strips can occasionally be found in other pottery regions of northern Germany, for example on products from Boberg near Hamburg (Stephan 1982a: 90, Fig. 20). This may indicate the influence of the stoneware potteries of southern Lower Saxony, which presumably was formative for the style of a larger region.

5.1.4 Vessel types

5.1.4.1 Jugs

The most common vessel forms are jugs in various designs, the exact appearance of which can unfortunately only be reconstructed to a limited extent due to the strong fragmentation of what was found. Of the 142 formally identifiable vessels of slip glazed near stoneware in Bergen, 99 can be identified as jugs. The rim shape can be determined for 59 of these jugs. Of the identifiable jug rims, collared rims clearly dominate with 42 specimens (cf. Chapter 5.1.3.2). In contrast, only 12 pieces with a simple upright rim or a simple upright rim with a decorative strip around the neck can be identified.

On the basis of larger fragments, bulbous jug shapes can often be identified, as they also occur regularly in the production areas (Stephan 1981: Fig. 19.1,6; Grote 1976: Fig. 14.6.) and occur with both steep and collared rims (e.g. Cat. 1139, Drawing 27; Cat. 1126, Drawing 26). The large bulbous steep-rimmed jugs Cat. 544 and Cat. 1139 find good correspondences in a large bulbous steep-sided jug with four shoulder strips from Coppengrave (Stephan 1981: Pl. 37.2) and resemble the jugs of type 'A 7' from Bengerode (Grote 1976: 284, Fig. 20.7). The red-slipped, bulbous spike-rim jug with wavy decorative strips Cat. 1126 (Figure 29) has parallels in the jugs of type 'A 1' from Bengerode (Grote 1976: 264, Figs. 8, 1, 2).

In addition to the large bulbous jugs, however, there are also some jug fragments with a less bulbous, rather slender body (Figure 30), which pre-

sumably had quite large volumes in view of a larger base diameter (e.g. Cats. 41, 471, 1168).

Figure 29. *Cat. 1126, several fragments of a large jug with reddish wash, collared rim and wavy strip from Bryggen.*

Figure 30. *Cat. 1168, several fragments of a large, brown-slipped jug from the ruins of the wine cellar.*

Based on the measured base diameters, it can probably be assumed that a larger proportion of the jug fragments made of slip glazed near stoneware in Bergen are smaller or medium-sized jugs. These include, for example, a 'stocky' looking, presumably originally 'pear-shaped' jug with strong strips and a strongly sloping neck (Cat. 1129; Figure 31), which corresponds to type 'A2' from Bengerode (Grote 1976, 282, Figs. 2-3). Some other base pieces from Bergen probably belong to small pear-shaped jugs, which may also be made without strips, such as Cat. 997; Figure 32.

Figure 31. *Cat. 1129, a small bulbous jug, profiled with strips and horizontal corrugations.*

Figure 32. *Cat. 997, a small bulbous jug with smooth walls.*

One of the few almost complete slip glazed near stoneware vessels in Bergen is a 'barrel-shaped', bulbous jug with collared rim (Cat. 1144, Drawing 8). The brown engobed vessel stands on a frilled foot, the body shows horizontal corrugations. The vessel is also divided by two decorative strips around the belly and one on the shoulder.

The flat strap handle is applied slightly below the rim at the 'spike' of the collared rim and at the base of the shoulder. Jugs from Bengerode regularly feature such a striking articulation of the body. The jug can be identified as an almost 'classic' product of the potteries of the Weser Uplands due to further technological and typological features, such as the rim, handle and base formation (Figure 33). Remarkably, a completely preserved jug of very similar shape and dimensions was discovered as a parallel to this vessel in the natural harbour *Martnasund* on the island of Nærøy in northern Norway (Nymoen 1994: 26). The formal appearance of the vessels is so similar that one is tempted to speculate that both objects are from the same workshop (cf. Chapter 7.1.2; Figure 261).

In general, jugs with collared rims are probably the most common form of slip glazed near stoneware in Norway. In addition to their frequent occurrence in Bergen, their regular appearance at other sites, such as the small episcopal town of Stavanger (Cat. 1758) or the farmstead *Osen* on Sunnfjord, north of Bergen (Cat. 1747), also supports this.

Figure 33. *Cat. 1144, an almost complete barrel-shaped jug, was presumably made in Bengerode, found at the Bryggen excavation in context dating to c. 1400.*

Figure 34. *Cat. 1148, fragmentary slender jug, presumably made in Coppengrave, found on the Bryggen excavation in context 'around 1400'.*

A common form in the late Middle Ages were small, slender steep-rimmed jugs with frilled feet and a necked handle. Such slender vessels with a simple upright rim were very popular and were produced over a long period of time, especially in Siegburg, and are often referred to as *Jacoba jugs*.

Roehmer (2014: 42) restricts this term to slender jugs with a snout and folded wall. Occasionally, the term is generally used for small, slender cylinder-necked jugs with frilled foot. Comparable vessels were also produced remotely in the Weser Uplands (Stephan 1981: Pl. 44, 2) and Waldenburg in western Saxony (Scheidemantel 2005: 89), presumably as an adoption of a popular form from the Rhineland.

Several fragments of such a slender, slightly bulbous steep-sided jug were recovered in Bergen, from which a complete profile of the vessel could be reconstructed by its illustration (Figure 34; Cat. 1148; Drawing 25). The jug, made of grey stoneware and about 20 cm high, has a necked, fluted beaded handle and a flat base from which a light frilled foot with double finger impressions was formed. Due to these formal details, the black iron particles in the grey fabric and the stained brown engobe, the piece can certainly be considered a product of the Weser Uplands. Very similar vessels have been documented in Coppengrave, for example (Stephan 1981: Figs. 21,8-21,9).

Due to the fragmented condition, the volume of the jars cannot be determined precisely. The large, brown-slipped jug from the site of the wine cellar in Bergen (Cat. 1168; Fig. 30) with a base diameter of approx. 12 cm probably held about 1.5-2 litres. The volume of the vessels with similar base diameters is likely to have been comparable. Since, for obvious reasons, it is not possible to investigate the capacity of the vessels in the fragmented material from Bergen, we can only speculate as to whether the volume was standardized to a certain extent. Roehmer (2014: 47) was able to demonstrate that the contents of large cylinder-necked jugs from Siegburg corresponded to a Cologne quart = 1.5 litres, which makes perfect sense given the proximity of Cologne and Siegburg. However, it has not yet been possible to determine a corresponding standardization of the capacity of the vessels from the Weser Uplands.

5.1.4.2 Beakers

As the second most common vessel form after the jugs, smaller, cup-like vessel forms also occur regularly. It was possible to identify 17 different beakers in Bergen, which correspond to around 12% of the slip glazed near stoneware vessels found.

The most frequently identified beaker shapes are bulbous beakers with a fluted collared rim and a quatrefoil-shaped mouth (see Drawings 1-3; Figures 35-36). The phenomenon of vessels with multifoil mouth is obviously a special feature of late medieval pottery in an area that can be roughly delimited by the Weser and Elbe, as well as the Harz and Lüneburg Heath (König 2001: 171). The beakers are a form typical of the southern Lower Saxony region, frequently documented in Bengerode / Fredelsloh and Coppengrave / Duingen (Stephan 1981: Figs. 19, 14; Stephan 1982a: 95; Grote 1976: Fig. 14, 10-13; Funke and Kröll 2012: 202, Cats. 14-15), which do not occur in other production regions of near stoneware or stoneware such as the Rhineland or west Saxony.

Fragments of six spherical quatrefoil beakers made of slip glazed near stoneware were identified in Bergen (Cats. 327, 334, 357, 437, 1132, 1280), but a fragment of such a beaker was also discovered in the Avaldsnes harbour basin (Cat. 1749). The pieces are characterized by a strongly flared collared rim. The mouth diameter is approx. 90 mm. The mouth is depressed with the fingers in four places, resulting in a quatrefoil opening. There are usually two circumferential decorative strips on the shoulder of the beaker fragments, giving the upper part of the vessel a strongly profiled appearance. The body of the beakers has a regular spherical shape and is covered with faint horizontal corrugations.

Figure 35. *Cat. 334, rim fragment of a quatrefoil beaker, recovered from the Bryggen excavation in early 14th century features; produced at Coppengrave according to XRF analysis.*

Figure 36. *Cat. 1132, larger fragment of a quatrefoil beaker, recovered from the Bryggen excavation in 15th century find context.*

Another cup shape that has been identified several times based on fragments of slip glazed near stoneware in Bergen are small bulbous or pear-shaped cups with a simple upright rim. A total of three examples of this form have been identified (Cats. 388, 423, 635). A further beaker form, which was identified on the basis of a rim fragment, is a globular beaker with a short-flared rim (Cat. 967; Drawing 6) as it also occurs in the type stock of the potteries in Coppengrave (Stephan 1981: Figs. 19, 15).

In one case, a rim fragment of a funnel beaker in Bergen can apparently also be identified (Cat. 639; Drawing 7). Due to the characteristic grey fabric, the red engobe and the wavy decorative strip running below the neck, it is clearly a product of the potteries of the Weser Uplands. This beaker shape is quite typical in the production region and is documented both from Coppengrave (Stephan 1981: 38-41, Figs. 19-21) and from Bengerode

(Grote 1976: 275; Fig. 14, 7.8). However, the rim fragment can possibly also be reconstructed as a small cylinder-neck jug with a bent neck. A similar piece with a scalloped rim running around the neck is known from Coppengrave (Funke and Kröll 2012: 203, Cat. 18).

5.1.4.3 Costrels

A total of 10 examples of narrow-necked costrels with two strap handles were found in Bergen based on rim fragments. These are bulbous vessels of various sizes. This type of vessel is characterized by a narrow neck and a small rim diameter, usually between 30 and 40 mm (e.g., Cat. 458; Drawing 43). Only in one case (Cat. 76) was a rim diameter of 60 mm measured in Bergen. As far as can be verified, the rim is always extended to form a spout and is accompanied by two rimmed strap handles. In the type spectrum of Weser Uplands potteries such as Bengerode (Grothe 1976: 267, Cat. 83, Fig. 10.5) and Coppengrave (Stephan 1981: 41, Fig. 21.16), as well as Reinhardswald (Stephan 1982b: 87, Figs. 15, 42-32), costrels with two strap handles are known both as bulbous forms and as rather flat pilgrim bottles. In Waldenburg in western Saxony, too, such costrels with two strap handles were made (Scheidemantel 2005: 120f.). However, these can be clearly distinguished from the products of the Weser Uplands on the basis of the fabric and surface. This also applies to the Rhineland, where costrels with two strap handles are known from Siegburg (Roehmer 2014: 30; Hähnel 1987: 167) as well as from the Langerwehe area (Höltken and Steinbring 2017: 732-734), although these differ significantly in both form and technology from the presented finds.

5.1.4.4 Spouted pitchers

Spouted pitchers, which in the Weser Uplands are often made of slip glazed near stoneware (Stephan 1982a: 95), are a common type of vessel in northern Germany, often made of grey earthenware. In Bergen, however, such vessels appear to have been rather rare. Only one fragment could be unequivocally identified as a fragment of a spout (Cat. 1026). However, as spouted pitchers are only recognizable by their namesake spout when broken, it is problematic to deduce the former rare use of these vessels in Bergen due to the lack of evidence of spout fragments.

5.1.4.5 Jugs with spout (pouring jars)

Jugs with spouts, which belong to the typical spectrum of stoneware production in the Weser Uplands, can only be detected in fragmentary condition if typologically identifiable fragments are present. The closely related form of the jug with spout differs from the ordinary jugs as it has a spout and, in the case of the forms presented, an inwardly overhanging collared rim with a smooth top, which allows the use of a matching lid with a bayonet catch. Two such rim fragments were identified in Bergen, Cat. 54 (Figure 37; Drawing 41) and Cat. 1167 (cf. Figure 164). The chemical signature of these vessels, obtained by XRF analysis, indicates production in Coppengrave or Duingen. However, a similar jug with rich decoration in the form of wavy strips has also been published from Bengerode / Fredelsloh (Grote 1976: 272 / 275, Cat. 122, Fig. 14.6), which clearly resembles the rim pieces found in Bergen.

Figure 37. *Cat. 54, rim fragment of a jug with spout and strap handle; recovered from the Bryggen excavation, produced at Coppengrave after XRF analysis.*

Figure 38. *Cat. 1149, lid glued together from two fragments; recovered from the Bryggen excavation.*

5.1.4.6 Lids

Lids are a rare form in Norway and only documented in one case. There is a complete example from Bergen (Cat. 1149; Figure 38; Drawing 42). The lid is flat-conical and has a knob. The top is covered with turning rills. As the lower end of the lid is partially chipped, it is no longer clear whether the piece originally had a bayonet catch. Lids with bayonet catches were regularly made in Coppengrave (Stephan 1981: 41, Fig. 121.15; Pl. 51.9),

but were also part of the range of wares in other production sites in the Weser Uplands, for example in Bengerode (Grothe 1976: 255; Fig. 2.29). There they regularly appear in the finds during field surveys. Among the finds from potteries in the Reinhardswald near Gottsbüren are lids of various shapes, including bayonet lids (Stephan 1982b: 84-85; Cats. 34 and 35). These lids were probably used to close jugs with spouts, the bayonet lids fitting perfectly on their overhanging rims, which were smooth at the top. As two rim pieces of such jugs were discovered in Bergen, the combination of jug with spout and lid must also have occurred occasionally in Bergen.

5.1.4.7 Miniature vessels

Only one miniature vessel made of slip glazed near stoneware was identified in the entire find material examined. It is a completely preserved vessel from the magazine of the archaeological museum in Stavanger (Cat. 1750; Figure 39). The small bulbous jug is 5.2 cm high. It has a base diameter of about 3 cm and a flat base with cut-off marks. The simple upright rim is straight and slightly flared, with an oval mouth. One handle is slightly applied below the rim. The grey, almost sintered fabric is covered with a light brown engobe, which shows a shiny glaze in some places. The colour of the body and the dark iron deposits in the engobe clearly indicate that the piece was produced in the Weser Uplands, which was also confirmed by X-ray fluorescence analysis. The piece shows the chemical signature of Coppengrave / Duingen. The piece was discovered in the 1930s during excavations at Utstein Monastery, about 30 kilometres north of Stavanger, which were carried out by the then director of the Stavanger Museum, Harald Hals. The vessel was first published shortly after its discovery in an essay on various miniature vessels in the Norwegian province of Rogaland (Petersen 1941: 113, Fig. 2). Unfortunately, it is no longer possible to reconstruct the exact context of the find, as no documents relating to these excavations can be found.

Miniature vessels that are very similar to the one presented are frequently documented in Coppengrave (Stephan 1981: 44, Pl. 59-61). However, parallels can also be found in numerous other places in northern Germany and southern Scandinavia. Four miniature vessels made of near stoneware similar to the one presented were discovered in the fill of a well in Lübeck's Johanniskloster monastery (Oltmanns 2018: 19; Cats. 28-33, Figs. 2.5-12). The findings suggest that these vessels date to the 14th/15th century. A comparable stoneware vessel was buried as a coin hoard on the former farm of a parish priest in the Danish town of Lynge in the municipality of Sorø on Zealand and dated to the third quarter of the 14th century based on the coins that it contained (Liebgott 1978: 72). Another comparable miniature vessel was also recovered from a fire layer in a cellar in the deserted village of Marsleben near Quedlinburg (Harz County) and dated there to the time when the village became deserted shortly before 1400 (Demuth 2012: 358). A date in the late 14th or early 15th century can therefore also be assumed for the vessel from Utstein Abbey near Stavanger.

Figure 39. *Cat. 1750, a complete miniature vessel, found in Utstein Monastery near Stavanger. According to the XRF analysis, produced in Coppengrave.*

5.1.4.8 Summary typology

In summary, the more than 1200 fragments of slip glazed near stoneware from the Weser Uplands in Bergen and southwest Norway provide a good but rather selective insight into the production range of this pottery region. Jugs of various sizes are by far the most common type of vessel. There are also a relevant number of mugs, while jugs with spouts, lids and miniature vessels have only rarely been documented. Spouted pitchers, a typical form of the Weser Uplands, are almost non-existent. Due to the strong fragmentation of the material, it is not possible to determine how many different vessels the present finds come from. In individual cases, several fragments belong to the same vessel, but this seems to be rather rare; many smaller fragments are therefore representative of a complete object. Ultimately, it can be assumed that the approximately 170 base fragments recovered, all of which

belong to different vessels, represent a corresponding minimum number. This number also corresponds to the recovered rim fragments, of which around 190 were found. However, the number of vessels made of slip glazed near stoneware from the Weser Uplands that once existed in Bergen will of course have been much higher. It should be noted that, apart from the miniature vessel, these were exclusively serving and drinking vessels. Chronologically determined stylistic developments can hardly be read from the material from Bergen and are not to be expected. Rather, it confirms the fact, already established based on finds from the production areas, that the collection of forms developed in the late 13th century persisted into the 15th century (Stephan 1982b: 68).

5.2 Other stoneware from the Weser Uplands

The term 'other stoneware' is used here to refer in particular to finds that are typologically very similar to the pieces described in the previous chapter, but differ in their surface treatment, as no wash was observed. These are primarily largely sintered near stoneware / stoneware, including some with a shiny, mostly light brown surface. Of the pieces from the Weser Uplands recorded in the catalogue of this work, 133 fragments show no slip. The proportion of non-engobed variants in the near stoneware finds is therefore rather low and can be estimated at around 10%. It should be noted that most of the recorded finds are often small fragments. In the case of vessels that had a spotty engobe, individual fragments are therefore without a detectable engobe and were catalogued accordingly. The proportion of non-engobed vessels in the total amount of near stoneware from the Weser Uplands was therefore probably originally somewhat lower.

The finds discussed below are considered to be products of the Weser Uplands due to their technological and formal characteristics, which in some cases could also be verified by analysing the chemical signature using X-ray fluorescence analysis. A total of 9 of the 154 non-slipped pieces were analysed by Detlef Wilke (Wennigsen) and assigned to different pottery sites in the Weser Uplands based on the chemical signature.

The author's macroscopic identification of the present finds was based on the examination of production waste, particularly from Coppengrave and Duingen, where this ware was produced in the 14th and 15th centuries (Stephan 2012: 25, Fig. 5.2). Coppengrave, for example, produced a light grey stoneware that is sometimes difficult to distinguish formally from Rhenish vessels (Stephan 1981: 31). Bengerode also produced a small amount of non-slipped near stoneware (Grote 1976: 254). Individual pieces in the storerooms of the Fredelsloh Ceramics Museum show that this ware was also produced in Fredelsloh (Figure 40).

Figure 40. *Small globular steep-rimmed jug, made of unglazed stoneware. Archaeological find from Fredelsloh (Northeim County). Find and photo: Pottery Museum 'KeramikUm', Fredelsloh.*

The chemical signature of four finds from Bergen (Figures 41-42 and 42; Cats. 595, 598, 614 and 1770) determined by XRF analysis indicates that near stoneware without engobe was also made in Gottsbüren in the Reinhardswald (Kassel County) and was traded long-distance from there. These are new aspects for the near stoneware of the Reinhardswald, whose international distribution could previously only be assumed (Stephan 1982b: 78).

Figure 41. *Cat. 595, base fragment of a non-slipped stoneware jug, recovered from the Bryggen excavation in find contexts c. 1400. According to the XRF analysis, produced in Gottsbüren in Reinhardswald (Kassel County).*

Figure 42. *Cat. 598, two matching fragments of a non-slipped stoneware jug, recovered from the Bryggen excavation in find contexts c. 1400. According to the XRF analysis, produced in Gottsbüren in Reinhardswald (Kassel County).*

One of the main tasks of the present work is to distinguish near stoneware from the Weser Uplands from products from the Rhineland. The fact that this can sometimes be problematic, especially in the case of non-slipped pieces, is illustrated by the example of a small globular jug with a simple upright rim decorated with twisted grooves from the Bergen wine cellar (Cat. 1300; Figure 43). A faint strip marks the widest part of the vessel's belly. This form is typical for products from Rhenish potteries such as Siegburg (Hähnel 1987: 144). However, the form was also copied in the Weser Uplands and produced in Coppengrave, for example (Stephan 1981: Fig. 21.3). The thin base plate, from which the weakly pronounced frilled foot was pressed out, corresponds to the base formation of similar vessels from the Weser Uplands.

Figure 43. *Cat. 1300, an almost complete steep-sided jug, found during excavations in the wine cellar in Bergen. According to the XRF analysis, produced in Brühl in the Rhineland.*

A comparative find for the piece exists, for example, in the form of a misfired piece from Duingen (Busch 1975: Cat. 16). The olive grey surface and the grey fabric have a rather high sand content and therefore a grainy texture, which is again a characteristic of Rhineland products. X-ray fluorescence analysis clearly showed that this piece has the same chemical signature as reference finds from the potteries in Brühl, where stoneware was produced in large quantities (Roehmer 2001: 484). The vessel is therefore evidence for the distribution of this ware to Norway and at the same time illustrates the complex challenges involved in determining the provenance of medieval stoneware and near stoneware from Norwegian sites.

5.2.1 Technological characteristics of the non-slipped stoneware from the Weser Uplands

5.2.1.1 Fabric

The fabric of the non-glazed stoneware from the Weser Uplands largely corresponds to the slip glazed near stoneware (Chapter 5.1.2). The fabric of the non-slipped pieces is also predominantly grey in colour (115 pieces), occasionally with a lighter core (15 pieces). Occasionally a beige fabric occurs, which was found in 30 of the catalogued finds. About half of this beige variant shows a completely sintered fabric. The remaining pieces with beige fabric, as well as almost all finds with grey fabric, are almost sintered, but show some open pores, which justifies a classification as near stoneware.

Typical of the clays found in the Weser Uplands are iron minerals, which appear after firing as small black spots, both in the fracture and as melting on the surface. Such black particles can be observed in Bergen in about half of the non-slipped stoneware from the Weser Uplands.

5.2.1.2 Surface

The decisive difference to slip glazed near stoneware is the lack of a ferrous wash. About half of the non-slipped pieces show a grey fabric, often with brownish, sometimes shiny spots, which are probably mainly a glaze. As the finds are mainly fragments, it cannot be ruled out that some of the pieces with a grey surface actually come from vessels in which the wash has burned off or flaked off in places in the kiln.

In 43 fragments from Bergen, a homogeneous light brown surface without wash was found, some of which had a light glaze (e.g. Cat. 980, Figure 44). On the piece made in Gottsbüren, according to the chemical signature Cat. 1770, it can be clearly seen how the grey fabric has acquired a light brown, shiny surface due to the higher temperature and the kiln gases, while the area 'protected' by the jug underneath appears as a round, grey impression (Figure 45).

Figure 44. *Cat. 980, base fragment of a non-slipped jug with a light brown surface and light glaze; found during the Bryggen excavations in find context dated to 'around 1400'.*

Figure 45. *Cat. 1770, base fragment of a non-slipped jug with impression of stacking in the kiln. Recovered during the Bryggen excavations. Produced in Gottsbüren according to XRF analysis. Photo: Angela Weigand, University Museum of Bergen.*

5.2.2 Vessel types of non-slipped stoneware from the Weser Uplands

The vessel forms of the non-slipped stoneware do not differ significantly from those of the slip glazed near stoneware, which were presented in detail in Chapter 5.1.3. Not least due to the smaller number of finds, the range of vessel types identified is narrower. In the finds examined, non-slipped stoneware is found almost exclusively in the form of jugs. These largely correspond to the jugs made of slip glazed near stoneware. It is striking that simple upright rims predominate in the rim forms and collared rims are rare. As far as the vessel shape of the fragments could be determined, they appear to be predominantly smaller, globular jugs with simple upright rims.

The rim fragment of a large globular jug with a simple upright rim, a stable strap handle and a pronounced, tapering decorative strip at the base of the neck (Cat. 791; Figure 46) is somewhat different and unique in its kind in the material from Bergen. The fabric of this vessel is grey, as is the smooth surface. The overall impression suggests production in the Weser Uplands.

As already mentioned several times, the forming of the base is a clear formal characteristic of the potteries of the Weser Uplands. Accordingly, there are also numerous base fragments among the non-slipped near stoneware from this region that show the characteristic frilled foot pinched out of a base plate. It is not uncommon for traces of cutting from the disk to be visible on the base plate.

Figure 46. *Cat. 791, a rim piece of a large jug with a simple upright rim and a pronounced strip around the neck. Found at Bryggen.*

Decorative elements were only rarely observed on the non-slipped stoneware in Bergen. Circumferential strips occur regularly, but as explained in Chapter 5.1.3.5, they are not primarily decorative, but mainly technological. Accordingly, these strips are often found in the area of vessel breaks, double strips can be observed above all on the belly of the vessel (e.g. Cat. 598; cf. Figure 42). Decoration of these strips by finger dents, as is typical of Weser Uplands pottery, was only observed in two cases (Cats. 62 and 999). A rim fragment with the base of the handle (Cat. 13; Figure 47) shows a slightly under-rimmed, strong strap handle that was profiled with finger dents. This type of handle decoration can also occasionally be observed on vessels found in the Weser Uplands.

Figure 47. *Cat. 13, a rim fragment with strap handle made of grey, non-slipped stoneware with a light brown surface. The strap handle shows thumbed decoration.*

5.2.3 Early modern stoneware from the Weser Uplands

Only a rough and summary overview can be given of the occurrence of Early Modern stoneware from the Weser Uplands in Bergen. Due to the state of excavation and documentation, early modern finds are only rarely available from secure find contexts, as the Norwegian Monument Protection Act only protects archaeological finds and features dating older than 1537. Accordingly, complexes from the 16th and 17th centuries are usually ignored during excavations. However, a few stoneware finds from the 16th and 17th centuries that can be clearly identified as products of the Weser Uplands were included in this study. The few pieces of richly decorated Renaissance stoneware from Duingen are presented separately in Chapter 5.5.6; the following remarks refer to fragments of simple, undecorated stoneware.

As briefly mentioned in Chapter 4.2, potteries with significant stoneware production existed in the Early Modern Period in Duingen in southern Lower Saxony and in Großalmerode in northern Hesse (Stephan 1992a: 92f.).

Technologically, the early modern stoneware of the Weser Uplands is characterized by a mostly grey fabric, which is not always completely sintered through. The surface is almost always salt-glazed on the outside and covered with a wash in various shades of brown. Like the medieval slip glazed stoneware, the early modern vessels often have small black spots on the shiny surface. The surface on the inside predominantly shows the untreated fabric, which sometimes appears orange to reddish in colour.

Typical and widespread products are pharmacy dispensing vessels or ointment pots, which were already discovered several times in Bergen at the beginning of the 20th century (Grieg 1933: Figs. 156-159). Unfortunately, they could not be found again for this work in the stores in Bergen. The complete specimen of a small ointment pot which was excavated in the ruins of the Bergen wine cellar (Cat. 1177; Figure 48) has a direct equivalent in a published find from Duingen (Busch 1975: Cat. 58). The production of the Bergen find in Duingen could also be verified by X-ray fluorescence analysis.

Among the finds in the catalogue there are about 20 pieces for which an early modern date is assumed to be probable. As far as the shape of the vessels can be determined, they must have been simple storage vessels. Examples of this are a rim piece of a pot whose brown surface and characteristic grey fabric with a lighter core indicate a Duingen product (Cat. 416; Figure 49). A wall piece with a strap handle (Cat. 52) is also likely to be from an early modern Duingen vessel. However, due to the unsatisfactory documentation of features and finds from this period, it is not possible to make any reliable statements regarding the presence of Early Modern finds.

Figure 48. *Cat. 1177, small ointment jar, produced in Duingen, found in the area of the wine cellar in Bergen.*

Figure 49. Cat. 416, rim fragment of a storage jar, made in Duingen, recovered during the Bryggen excavations.

5.3 Stoneware from Saxony

Stoneware production in central Germany (the federal states of Saxony, Thuringia and Saxony-Anhalt) was still little known and researched until the 1990s, with the exception of the overview by Horschik (1978). With the increasing activities of archaeologists in Central Germany following German reunification, more attention was paid to specific finds from this region. As a result, numerous finds of stoneware vessels, both in the production and sales areas, which had previously been identified as Rhenish products, were identified as Central German stoneware (Schäfer 1993). In Norway, no finds of Saxon stoneware were known to date (Gaimster 1997: 66), which is why one of the aims of this study was to identify such objects in Bergen.

5.3.1 Waldenburg stoneware: technology and typology

The most important pottery centre for medieval stoneware in central Germany was located near Waldenburg, south of Leipzig in the present-day state of Saxony. The products made there are very similar in fabric to those from Siegburg, so that they were often not recognized as a separate ware, although Horschik (1978: 45-60) had already described the technological characteristics and historical significance of this site. Yves Hoffmann (1995) worked out the main features of the technology, typology and chronology of several Waldenburg workshops on the basis of archaeological excavations in the town of Waldenburg. Based on finds from the Hanseatic towns on the Baltic coast, Heiko Schäfer (1993) presented the occurrence of Waldenburg stoneware in Mecklenburg-Western Pomerania and pointed out its similarity to and distinction from Siegburg stoneware. In a project of the State Office for Archaeology of the Free State of Saxony, Waldenburg stoneware was researched on an interdisciplinary basis from around 2000 and the results presented and published as part of archaeological and archaeometric dissertations (Schifer 2003; Scheidemantel 2005).

The fabric of Waldenburg stoneware is usually very light, grey in colour, sometimes with a yellowish tinge (Hoffmann 1995: 54-55; Scheidemantel 2005: 40). It is untempered, completely sintered stoneware, which usually has a sealing wax-like sheen when broken. While the vessels show the (light) grey fabric on the inside, they often have a wash on the outside, which, together with an ash glaze, results in a characteristic orange to brown surface. Some pieces, however, have no surface treatment at all and show the light-coloured, sometimes almost white fabric (e.g. Cat. 1314; Figure 50).

In Bergen and Norway in general, Waldenburg stoneware was largely unknown and has not yet been described or accessioned as a separate ware. The pieces described in the present work were predominantly classified as Siegburg stoneware and were identified by the researcher when looking through the store inventory. Due to the great similarity of some of the fabrics, it is often difficult to distinguish Siegburg stoneware from highly fragmented material. Scientific examination methods can help here but were only possible to a limited extent for the present work. The provenance of a fragment macroscopically identified as Waldenburg was verified by means of X-ray fluorescence analysis (Cat. 1354). However, there are also some formal and macroscopically identifiable features that can be used to distinguish Waldenburg stoneware vessels from Rhenish products. As with the stoneware from the Weser Uplands, the forming of the base is of particular importance. The Saxon vessels always have a thin base plate that was separated from the running disk with a wire, which often left characteristic marks on the base. The protruding edge of the base plate was usually reshaped from above into the shape of a frilled foot using finger impressions. However, this is less pronounced than on the Rhenish wares. While the Siegburg jugs have a bulky frilled foot and a thick, rounded base that curves outwards, the thin base of the Waldenburg jugs is slightly curved inwards (see Figure 51).

Figure 50. *Cat. 1314, base fragment of a Waldenburg jug, view from below. The cut marks from the potter's wheel and the very light, whitish-grey colouration of the fabric is clearly visible. Recovered during the Bryggen excavations.*

Figure 51. *Cat. 1338, Interior view of a Waldenburg jug. The thin, slightly curved base is clearly recognizable. Recovered during the Bryggen excavations in a late 14th century find context.*

In addition to the frilled foot, another form of base decoration occasionally appears on Saxon stoneware, in which the slightly protruding base plate was notched with a coarse rouletting stamp 'pinion gear-like' (cf. Figure 52). Such roll-stamped decorated bases appear to occur mainly on Waldenburg funnel beakers (Scheidemantel 2005: 126), but such a base form can also be observed on a complete face jug from Bremen (Stephan 1982a: 82, Fig. 15.4). Occasionally the slightly protruding base plate is also completely undecorated (Cat. 1309). An unusual, flat frilled foot, slightly indicated from above, shows a circumferential rouletting decoration directly at the transition from foot to wall (Figure 53). Comparable, weakly executed frilled feet are occasionally found on pieces from Waldenburg (Scheidemantel 2005: 100, Fig. 87). However, the brown wash of the present piece is also reminiscent of the stoneware of the *Falke group* (see below, Chapter 5.3.2). A goblet from the Cathedral Island in Wroclaw, has a flat frilled foot and rouletting decoration on the transition from foot to wall that is very comparable to the fragment Cat. 1309 (Holl 1990: 213, Fig. 3).

Figure 52. *Cat. 1317 (left), 1316 (centre) and 1345 (right). Base fragments of Waldenburg stoneware with 'pinion gear-like' notch rouletting. Recovered at Bryggen, in 15th century find contexts.*

Figure 53. *Cat. 1347, base fragment with brown wash, finger impressions on the base plate and rouletting decoration. Recovered at Bryggen.*

In addition to the forming of the base, the surface treatment of individual pieces can also be used as a criterion for distinguishing Siegburg stoneware. This includes, above all, a shiny, yellowish, orange or reddish-brown wash applied to the fully sintered, light grey fabric. The rich colour and the uniformly shiny surface do not occur in this form on Rhenish products.

Figure 54. *Cat. 1332: Almost complete Waldenburg jug found during the Bryggen excavations.*

Another clear distinguishing feature that clearly sets Waldenburg stoneware vessels apart from products from Siegburg is the application of hand-moulded, anthropomorphic beard masks (cf. Figures 53 and 54). The proportion of such vessels in the total production in Waldenburg is uncertain, but face jugs were evidently highly valued on the export markets and are particularly widespread in the Baltic region (Scheidemantel 2005: 107). The faces are all freehand moulded. Details of the facial depiction were either carved with a tool or moulded out of the existing clay mass of the vessel. In some cases, additional clay was applied and shaped. The beards of the faces, which were either fully sculpted or made from flat clay relief with notches, are characteristic. In Waldenburg, face masks were predominantly applied to slender tall jugs. It should be noted that the forming of the base, shiny orange-brown wash and freehand-formed face masks on slender jugs are reliable features that can be used to clearly distinguish certain fragments of Waldenburg stoneware from stoneware of other provenances. In the Early Modern Period, however, a formal similarity between small vessels and beehive jugs from Waldenburg and products from the Weser Uplands and northern Hesse (Grossalmerode) can be observed (Scheidemantel 2005: 171).

Figure 55. *Cat. 1772: Almost complete Waldenburg jug, old find from 1911 from the area of the wine cellar.*

Based on the aforementioned criteria, 67 fragments of Waldenburg stoneware were identified in Bergen (Cats. 1309-1369, 1569, 1690, 1691, 1698, 1772). 48 fragments were identified among the finds from Bryggen, 16 more among finds from excavations in the area of the wine cellar in Rosenkrantzgate. Two and one fragment respectively were also identified in the finds from the excavations at Lille Øvregate (Cat. 1698) and Kroken 3 (Cats. 1690-1691). It is possible that further fragments of Waldenburg stoneware are hidden among the 14472 fragments of Siegburg stoneware found in Bergen according to the database. These could only be examined cursorily during the material survey for the present work. However, the obvious, macroscopically clear-

ly identifiable pieces should have been recorded with the photograph presented.

As far as can be reconstructed from the fragments, the vessels found in Bergen are almost exclusively tall, slender jugs. Some of these are clearly bulging in the middle (Cats. 1332, 1772; Figures 54-55), which can also be observed in finds from Waldenburg (Schifer 2003: 21, Fig. 31.14, DD248 and DD093). Formally, the slender Waldenburg jugs are reminiscent of the Rhenish Jacoba jugs; on four examples from Bergen, a vertically depressed wall could also be observed, which is often found on jugs with spouts made of Waldenburg stoneware (Scheidemantel 2005: 90). Similar vessels were excavated, for example, in the area of the castle at the herring market on the Skanör peninsula in the then Danish Scania (Gaimster 1998: Fig. 3.33) or in Rostock (Schäfer 1991: Fig. 21, b-e). The generally very thin walls often have pronounced and narrow horizontal corrugations.

Figure 56. *Cat. 1353, body fragment with hand-moulded beard mask, found during the excavations of Bryggen, in find contexts c. 1400.*

In addition to the characteristic light brown glaze, four other Waldenburg body fragments also feature sculptural decoration in the form of freehand beard masks (Cats. 1313, 1334, 1353, 1690). Jugs decorated in this way are typical products of the Waldenburg potteries. Almost complete vessels with similar beard masks are available, for example, from the castles of Skanör in Scania (Gaimster 1998: Fig. 3.33) and Rosborg near Vejle in Jutland (Linaa 2006: 118; Fig. 45). The faces are plastically shaped and show a distinctive goatee (Figure 56). In addition to this type of anthropomorphic decoration, there is also a fragment of the wall of an ash glazed vessel with, on which part of a flat beard mask can be seen, which has been outlined with incisions (Cat. 1315, Figure 57). Applications remotely similar to this are also occasionally found on Siegburg wares (Hähnel 1987: Cat. 314). The best comparison to the present Bergen piece, however, is offered by a complete jug from Erfurt (Stephan 1996: 114, Fig. 10 below) and an almost complete vessel from Stakhaven near Copenhagen (Gaimster 1997: 69, Fig. 3.3.), which can clearly be regarded as Saxon products.

Figure 57. *Cat. 1315, body fragment with flat, hand-moulded beard mask, found during the excavations of Bryggen, in find contexts c. 1400*

The popularity of the Waldenburg face jugs, particularly in the Baltic region, is also evident in exact copies of such vessels made of red, lead-glazed earthenware (Russow 2004). An almost complete jug made of red earthenware with a clear lead glaze was also recovered in Bergen (Cat. 1746; Figure 58), which imitates the shapes of Waldenburg stoneware vessels with its frilled foot, incised *fir branch* beard and plastically modelled facial features. Due to the striking similarity, which suggests that contemporary consumers perceived this piece in the same way as corresponding jugs from Waldenburg, the vessel has been included in the material corpus of the present work. The piece was recovered during an archaeological excavation

at Kong Oscars Gate 14-18 in Bergen from a layer that is stratigraphically dated to the period between 1476 and 1582. Due to the red fabric, the clear lead glaze and the parallel finds from Tallinn in Estonia and Helsingborg in southern Sweden (Russow 2004: 9, Fig. 3), production in the southern Baltic Sea area seems very likely.

Figure 58. *Cat. 1746, an almost complete copy of a Waldenburg face jug in red, lead-glazed earthenware. Recovered during a rescue excavation in the centre of the old town of Bergen.*

In addition to the predominant slender jugs, a base fragment of a small vessel could also be identified in Bergen, whose fabric, surface and forming of the base strongly point to Waldenburg as the place of production (Cat. 1698). Miniature vessels of this form are also known from Waldenburg itself, where they are described as 'pressed-bag-shaped beakers', which is an unusual terminology for these vessels (Scheidemantel 2005: 150, Fig. 144). Due to their small volume (usually around 0.1 litres) and the bulging rim, these vessels are probably pharmacy dispensing vessels or ointment pots and no beakers.

A single rim and body fragment of a large cylindrical vessel with a simple laminar rouletting decoration and a thickened, stepped rim can probably also be regarded as a Waldenburg product on the basis of its fabric and surface (Cat. 1596; Figure 59). Although published finds from Waldenburg usually show a Roman numeral pattern rather than notch rouletting decoration, this vessel from the Early Modern layers of Bryggen resembles a wide-mouthed pot from Waldenburg (Scheidemantel 2005: 278, Pl. 28.1).

Figure 59. *Cat. 1596, rim fragment of a pot with simple, laminar rouletting decoration. Early modern stoneware, probably made in Waldenburg or another Saxon pottery town. Found in the early modern layers of the Bryggen excavation.*

5.3.2 'Falke group' stoneware

In addition to the late medieval stoneware from Waldenburg presented above, five other ceramic fragments in Bergen were identified as imports from Saxony (Cats. 1776-1779). This is a small but important group of richly decorated stoneware from the late Middle Ages, the so-called 'Falke group' (Gaimster and Stephan 2002). The production site of this highly specific pottery was previously assumed to be in the area around Waldenburg, but certainly in central Germany (Gaimster 1997: 282-284). However, a large-scale international study, in which numerous fragments of this ware from large parts of Europe were sampled and subjected to neutron activation analysis, convincingly showed that this ware was probably produced in Zittau in south-eastern Saxony (Gaimster et. al. 2003). Four fragments from Bergen were also included in this study and were identified as 'Zittau products' based on their chemical signature (Gaimster et. al. 2003: 237).

Figure 60. *Cat. 1776, two body fragments of the 'Falke Group' with characteristic brown surface and stamped decoration. Found during the Bryggen excavations in context dated to 'around 1400'. The pieces were sampled and identified as products from Zittau in a comprehensive study using neutron activation analysis (Gaimster et. al. 2003: 237). Photo: Angela Weigand, University Museum of Bergen.*

The fabric is grey and completely sintered, with a dark brown wash applied to the surface, which is covered by a clear salt glaze. Completely preserved vessels show that the body was covered with stamped decoration. This consists of square fields, each with four raised dots, which are arranged in a checkerboard pattern alternating with open fields. Five body fragments with this characteristic stamp decoration were discovered in Bergen; two fragments with identical find numbers (Cat. 1776; Figure 60) very probably come from the same vessel. One of the pieces from Bergen shows a slightly lighter fabric and a light brown surface (Cat. 1779), another is so dark due to secondary firing that the original colour is no longer recognizable (Cat. 1778). All the fragments probably once belonged to rod cups or egg-shaped goblets, the most common vessel forms of this ware (Gaimster 1997: 282). This may also apply to the base fragment of grey stoneware with brown wash (Cat. 1347; Figure 53) presented in the previous Chapter 5.3.1. Its frilled foot is shaped by light finger impressions, with a zone of rouletting decoration around the base. As already mentioned, comparable base shapes can be found on vessels from Waldenburg as well as those from the Falke group. Of the latter, an almost complete goblet from Breslau in particular shows details in the foot area comparable to the piece from Bergen (Holl 1990: 100, Fig. 3). As the vessel wall was missing it remains unclear whether the chessboard-like stamp patterns characteristic of the Falke group were present and this base fragment cannot be attributed with certainty to the Falke group. However, it can be fairly safely assumed that it was made in a Saxon workshop. The described finds of stoneware from the Falke group show that this particular ware was accessible and available in the Hanseatic Kontor in Bergen, but only in very small numbers.

5.4 Siegburg drinking bowls

When cataloguing the material for this study, the extensive holdings of Siegburg stoneware in Bergen were also examined cursorily, primarily in order to identify Waldenburg stoneware in Bergen (see the previous Chapter 5.3). A comprehensive review of the Siegburg stoneware in Bergen, which according to the available databases comprise at least 14472 fragments from the BRM 0 / Bryggen site alone, was never planned. During the review, a quite large number of drinking bowls was observed. This special group of ceramic vessels was therefore included in this work. The Siegburg drinking bowls are very shallow vessels, with a round, slightly wavy foot, the 'wall' bends out almost horizontally to form a slightly indented, straight 'rim'. The bowls are made of fully developed, whitish-light grey stoneware and some show a partial glaze. The diameter of the pieces identified in Bergen is 12 cm throughout. This makes an almost standardized impression, so that the vessels can be easily stacked (Figure 61).

Figure 61. *Cat. 1420, 1455 and 1456, three almost complete Siegburg drinking bowls of the same diameter, stacked on top of each other. Recovered during excavations in the medieval wine cellar of the town of Bergen.*

In the production region there is a greater variation of bowls, which include different shapes, handles and medallion supports (Hähnel 1987: 190-194). Bowls of this type also occur in the range of shapes produced from the Siegburg Aulgasse and were described there by Beckmann (1975: Pls. 79, 6, 16) as flat beakers. Finds from excavations in Cologne Cathedral date the form to the second quarter of the 14th century (Höltken 2008: 163), but contemporary pictorial sources indicate that this form was known until the early 16th century (Gaimster 1997: 168). The shallow vessels only held a small amount of liquid and certainly had to be used care-

fully when drinking, and it is also conceivable that they were used as lids (Roehmer 2014: 45). Contemporary paintings confirm the perception of the drinking bowls as vessels for a modest and educate consumption of wine (Roehmer 2022: 71-73).

A total of 83 fragments of such bowls were identified in Bergen, including 18 base fragments, each of which probably represents a vessel. Five drinking bowls are complete or almost complete specimens, meaning that at least 23 Siegburg drinking bowls were recovered from the ground in Bergen. All five complete bowls and 77 fragments come from the excavations in the former wine cellar in the Rosenkrantzgate in Bergen (Cats. 1420-1505), during which a total of 1790 fragments of Siegburg stoneware were recovered. This means that the drinking bowls account for a relevant share of almost 5% of the Siegburg stoneware found in the wine cellar (BRM 76 / Rosenkrantzgate). The wine cellar as the site where the drinking bowls were found underlines and confirms the use of the vessels for the consumption of wine.

Furthermore, six fragments of Siegburg drinking bowls were also recorded from the Strandgaten 55-57 excavation (Cats. 1525, 1526, 1531, 1533, 1535, 1537). As this site can very probably be interpreted as a warehouse where, among other things, pottery was sold (see Chapter 6.12), there

5.5 Highly decorated stoneware

Richly decorated Renaissance stoneware, especially stoneware with relief decoration, is an outstanding ceramic ware that is widespread throughout the former Hanseatic trading area and beyond, although the absolute number of finds is usually small (Stephan 1996: 101). The striking and aesthetically pleasing stoneware vessels decorated in relief have attracted the interest of collectors and museum curators since the 19th century (Gaimster 1997: 15-30). In recent decades, the richly decorated stoneware of the Renaissance has been intensively studied by various researchers as an object category of outstanding cultural-historical significance, both in the distribution areas (Gaimster 1997) and through detailed studies in production regions (Mennicken 2013; Roehmer 2014).

In Norway, too, a number of relief-decorated stoneware finds were noticed and published early on (Grieg 1933: 178-189), but more detailed recent studies have not yet been carried out. Some of the finds presented here have already been treated by the author of this book in various articles and discussed as cultural-historical sources (Demuth 2015b; 2018). This dissertation is the first time that the highly decorated early modern stoneware from southwestern Norway has been completely processed and presented in the context of the findings.

A total of 186 individual vessels or fragments were recorded and described for this book (Figure 62). Almost all of these finds come from Bergen, 7 pieces are from other sites. Only three highly decorated stoneware vessels (Cats. 1545-1547) show elaborate, hand-moulded anthropomorphic decoration, all others are characterized by the use of relief decoration made in models. In this process, thin layers of clay were produced in several steps from a master matrix, which were applied to the finished thrown vessels in the potter's workshop (Ruppel 1991, Roehmer 2014: 78). In this way, detailed decorations could be reproduced in large numbers. The technique was evidently strongly influenced by the flourishing art of woodcutting during the Renaissance, and the numerous prints of this period also provided the models for numerous relief decorations on stoneware (Gaimster 1997: 37-39; Mennicken 2013: 156). The extent to which the form cutters of the original matrices were part of the potteries' workshop staff or sold their models to the potters as specialists has long been the subject of controversial debate among researchers (Gaimster 1997: 39; Hähnel 1987: 90-91). More recent research indicates a close connection between the mould cutters and the pottery workshops (Roehmer 2014: 84-85).

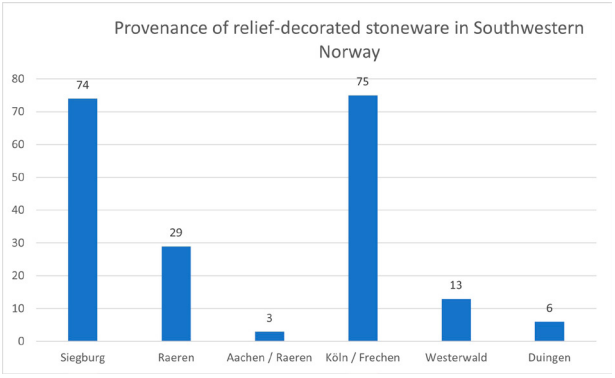


Figure 62. *Diagram of the number of relief-decorated stonewares in the working area, by provenance.*

In the following sections, the technological and typological characteristics of the richly decorated stoneware from various production sites are presented and the respective finds of these wares in Bergen and southwest Norway are presented. Although the conditions for the preservation of archaeological finds from the Early Modern Period in Norway are unsatisfactory due to the difficult conditions for the preservation of monuments mentioned above, it can be stated that richly decorated Renaissance stoneware has been found from most of the relevant production centres in the working area. The quantitative distribution shown in the following diagram is based on the counting of individual fragments and, despite all statistical

imponderables, provides a good insight into the absolute number of finds preserved in museum archives.

5.5.1 Highly decorated stoneware from Siegburg

The potteries in Siegburg and the stoneware produced there are probably the best-known and most widespread ceramics of the late Middle Ages and Early Modern Period, which has been and continues to be the subject of intensive research (Beckmann 1975; Gaimster 1997: 163-185; Hähnel 1987, 1992; Rech 1991; Roehmer 2007: 2014). The potters of Siegburg played a prominent role in the development of the technology of fully developed stoneware and its mass production and distribution (Stephan 1988: 103). Initially, these were primarily undecorated vessels; from the 15th century onwards, small, round or oval relief decorations are occasionally applied on funnel-neck jugs (Roehmer 2014: 61). From around the mid-16th century, various vessel forms were then increasingly decorated with elaborate relief applications, with influences from Cologne presumably playing an important role (Roehmer 2014: 69).

As mentioned before, technological aspects are crucial for the processing of pottery. This also applies to decorated Siegburg stoneware, which shows details that are determined both by the used clay and the elaborated craft technologies used in the town. The fabric of relief-decorated stoneware from Siegburg is always completely sintered with a sealing wax-like sheen when broken and a whitish, sometimes very light grey or light beige colour. Accordingly, Siegburg vessels are predominantly characterized by a white surface, occasionally with a light brown glaze. The use of cobalt-blue, painted decorations to accentuate the relief decoration occurs from the mid-16th century onwards (Roehmer 2014: 180-183) but the presence of this style could not be proven in Bergen.

5.5.1.1 Vessel form: conical tankards *Schnellen*

Of the 71 pieces recorded from Bergen and southwest Norway, 42 can be identified as fragments of *Schnellen*, which are therefore the most frequently recorded vessel form of relief-decorated Siegburg stoneware in the study area. The term *Schnellen* refers to '…tall, wide-mouthed, slightly conical' tankards (Roehmer 2014: 138), which represent a typical form of relief-decorated Renaissance stoneware from Siegburg. As the term *Schnelle* is commonly used as technical term for conical stoneware tankards, it is also used throughout this work. In Bergen, mostly rather small fragments of these vessels were identified. This applies in particular to the 28 pieces from excavation BRM 236 / Strandgaten 55-57, in which the remains of a warehouse were documented (see Chapter 6.12). During the large excavations on Bryggen in the area of the Hanseatic Kontor, 11 further fragments of Siegburg *Schnellen* were recovered. One fragment of a *Schnelle* each came from an archaeological excavation in the old town of Bergen (Cat. 1712: BRM 1126 / Kong Oscars gate) and from an excavation in the old town of Stavanger (Cat. 1766: Skagen 3). The best-preserved Siegburg *Schnelle* from the working area was discovered as early as 1915 during construction work in the area of the 'Bratten' tenement on Bryggen (Cat. 1735).

No remains of the relief decoration can be identified on 15 *Schnelle* fragments, though the vessels originally will have had relief applications. Of the identifiable motifs, eight belong to the field of allegorical depictions or *good heroes* from ancient and biblical tradition. Heraldic motifs can be found on nine fragments and five fragments depict religious scenes. The individual motifs of the *Schnellen* are briefly presented below:

Cat. 1408 - Lower part of a *Schnelle* depicting the Fall of Man. The three relief applications include the themes of instruction, temptation and expulsion (Figure 63-65). As far as can be seen, the model is identical in every detail to a piece from the Aulgasse in Siegburg, whose model of the floral elements is strongly influenced by Cologne models. (Hähnel 1987: 243, Cat. 495). This circumstance and the depiction of the Fall of Man indicate that this is an early *Schnelle* from Siegburg production, made from around the middle of the 16th century (Roehmer 2014: 160).

Figure 63. *Cat. 1408, The Fall of Man. Relief application with motif of instruction.*

Figure 64. *Cat. 1408, The Fall of Man. Relief application with motif of temptation by the serpent.*

Figure 65. *Cat. 1408, The Fall of Man. Relief application with motif of the expulsion from paradise.*

Cat. 1507 - Body fragment of a *Schnelle*. only parts of the right half of the relief application have survived. It depicts a religious scene in which purgatory with devils tormenting a poor sinner can be recognized (Figure 66). Above this is apparently an architectural depiction with several people in Renaissance costume, one of whom is a man with a dog. Hähnel (1987: 226, 372) describes a very similar relief application.

Figure 66. *Cat. 1507, fragment of a Schnelle with depiction of purgatory.*

Cat. 1508 - Body fragment of a *Schnelle* with relief decoration of which only parts of the right half of the picture have survived (Figure 67). A richly decorated column can be seen, crowned by a small figure, with the inscription *RICHEN- MA(NN ?) V- KA (?) X* at the top right, below it a man with a cloak holding a bowl in his hands, below him the head of a man with a high hat can still be seen; to the left of the column, parts of a richly laid table can just be made out, and a tall decanter can be seen on the far right. Obviously, a biblical scene with the poor Lazarus at the rich man's banquet is depicted, a motif that is also found in a different design on Siegburg *Schnellen* (Hähnel 1987: 226, Cat. 376).

Figure 67. *Cat. 1508, fragment of a Schnelle depicting poor Lazarus at the rich man's table.*

Figure 68. *Cat. 1529, fragment of a Schnelle depicting the Temptation of Christ.*

Cat. 1529 - Body fragment of a *Schnelle* with a very carefully executed relief application. An oval medallion depicts a biblical scene with the temptation of Christ (Figure 68). Jesus is depicted with a beard and halo, to his right the devil with a goatee and horns in a monk's habit. Trees can be seen in the background and a tower on the far right. The medallion is held by a female figure, of whom only one arm and parts of the pleated skirt are still recognizable. A *Schnelle* with the same motif, presumably made from the same matrix, can be found in the Stadtmuseum Siegburg (Roehmer 2017: Fig. 13).

Cat. 1735 - Lower part of a *Schnelle*, preserved up to approx. 20 cm high, glued from numerous fragments. Carefully detailed relief applications with biblical scenes from the Old and New Testaments. On the central relief application, a depiction of Christ in the form of a naked man with folded hands under a cross (Figure 70). To the left is a man with a beard, cap and robe, with the inscription *MOORS PROPHETA* below (Figure 71). On the right relief application, next to the central depiction of Christ, a male figure with a halo, at his feet an inscription field: *SIGNATURE CHRISTUS* (Figure 69). Above it in the inscription field: *EMANUEL* and small scenes, including a crucifixion. The very high-quality relief applications probably show scenes from the life of Jesus and were judged early on to be exceptional work (Grieg 1933: 189). A more recent approach interprets the relief applications as allegorical representations of *law and grace* as a central element of Lutheran theology (Buckholm 1998; Krueger 1994: 306). The relief application on the right, depicting the figure with a halo and the inscriptions *SIGNATURE CHRIST* and *EMANUEL*, is almost identical to a relief application on a complete *Schnelle* in the collection of the Hetjens Museum in Düsseldorf, which has been described as a commission for a high dignitary or influential organization (Roehmer 2014: 173, Fig. 427).

Another group of *Schnellen* shows allegorical depictions, including motifs from ancient mythology and *good heroes* in the broadest sense.

Cat. 1400 - Body fragment of a *Schnelle* depicting a moustached man in splendid Renaissance armor with a general's staff and a belted sword (Figure 72). Parts of the inscription can be seen on a surrounding inscription band: *DER GROS... (SE ALEXA)..NDER*. A different depiction of Alexander the Great on Siegburg stoneware can be found on a complete *Schnelle* from the holdings of the Rheinisches Landesmuseum für Volkskunde [Rhenish State Museum of Folklore]in Kommern (Hähnel 1987: 224, Cat. 362). The depiction of male figures as allegories generally seems to occur somewhat less frequently, whereby the ancient, Old Testament or mythological figures can be interpreted as the embodiment of positive qualities (Roehmer 2014: 153).

Figure 69. *Cat. 1735, right panel showing a male figure with halo and lettering Signature Christus. Photo: Angela Weigand, University Museum of Bergen.*

Figure 70. *Cat. 1735, central panel showing a depiction of Christ. Photo: A. Weigand, University Museum of Bergen.*

Figure 71. *Cat. 1735, left panel showing a richly dressed male figure and lettering: Moors Propheta. Photo: Angela Weigand, University Museum of Bergen.*

Figure 72. *Cat. 1400, body fragment of a Schnelle depicting Alexander the Great.*

Cat. 1405 - Body fragment of a *Schnelle* depicting a woman in rich Renaissance costume, with a pendant around her neck (Figure 73). Parts of an inscription on a ribbon: *DE HOFF (…-ART?)*. Presumably this is the allegory of haughtiness, which, like other vices, was occasionally depicted on Siegburg *Schnelle*. A relief application that is apparently similar down to the last detail can be found on a complete *Schnelle* with the date 1591 (Roehmer 2014: 154; Fig. 381).

Figure 73. *Cat. 1405, body fragments of a Schnelle with allegorical depiction of a woman, recognizable as Haughtiness due to the inscription.*

Figure 74. *Cat. 1418, body fragment of a Schnelle with a depiction of Judith.*

Cat. 1418 - Two fragments of a Siegburg *Schnelle* glued together, on which large parts of the left and a small part of the middle relief application are preserved. The left relief application depicts a woman with a hood in rich Renaissance costume, holding a sword in her right hand and recognizable by the inscription: *UOLOFERNUS UN IUDIT* as a depiction of Judith, one of the *Good Heroines* (Figure 74). Below the figure is a frieze with a central winged devil, flanked by two opposing grotesque heads formed from floral tendrils, below which the remains of a shield flanked by lions can still be seen. This is probably the coat of arms of Jülich-Kleve-Berg, while part of the coat of arms of the Kingdom of Spain framed by balusters can still be seen on the rest of the central high support. Allegorical depictions of Judith are generally popular subjects in Renaissance art and are also common motifs on Siegburg relief applications (Roehmer 2014: 152).

Cat. 1516 - Body fragment with parts of the relief application. The lower part of a lozenge can be seen, containing the legs of a lightly clothed woman above two trees (Figure 75). The wings of mythical creatures can be seen in the spandrels. The preserved parts of the relief application correspond in every detail to an application depicting Venus, cf. Hähnel (1987: 229, Cat. 381).

Figure 75. *Cat. 1516, body fragment of a Schnelle with remains of a depiction of Venus.*

Cat. 1540 - Several fragments of a *Schnelle*. The lower part of a female figure with a pleated robe can be seen on one relief application (Figure 76). A downward-pointing arrow can be seen in her right hand, and a bull next to her left foot. The torso of a man with armour, a belted sword and pleated skirt-like legwear can be seen on the right relief application, with a pointed crowned pole to the right (Figure 77). The depictions correspond in detail to the relief applications of a *Schnelle* dated *1567* with images of Venus and Mars (Hähnel 1987: 232; Cat. 386). However, the published relief applications end with a ladder band, which is missing on the present pieces.

Cat. 1541 - Fragment of a body fragment from a *Schnelle*. The relief application is richly ornamented: in the centre is the depiction of the sun as a round disc with a crown of flames surrounded by floral tendrils and star-like ornaments. Below this, part of the crescent moon can still be seen (Figure 78). The relief application is largely identical to one showing the same motif under a crown (Roehmer 2014: 159; Fig. 397). There, the depiction of

the sun and moon is presumably an allusion to the Habsburg Empire '…in which the sun never sets…' (Roehmer 2014: 158).

Figure 76. *Cat. 1540, body fragment with remains of a depiction of Venus.*

Figure 77. *Cat. 1540, body fragment with remains of a depiction of Mars.*

Cat. 1543 - Two glued fragments of a *Schnelle* with a relief application divided into lozenges. The left-hand diamond depicts a bare-breasted woman in a long pleated robe, with a child to her left and a bull to her right. In the right-hand lozenge is a man in ancient warrior costume, to his left a small figure with a bow, who is probably Cupid. Floral tendrils are depicted in the spandrels. Like Cat. 1540, these relief applications also show figures from ancient mythology as allegorical representations.

Cat. 1712 - The body fragment of a *Schnelle* with relief application shows a female figure wearing a hat and rich Renaissance costume, framed by floral ornamentation. A relief application identical in detail with a depiction of Judith can be found in the Rhenish State Museum of Folklore in Kommern (Hähnel 1987: 238-239, Cat. 420). Accordingly, the present fragment probably also shows an allegorical depiction of Judith.

Cat. 1766 - A small fragment of a *Schnelle* with a relief application with an allegorical depiction. The letters …THOF…' can be seen on a band of writing. This is probably an allegory of hope, as can be seen on a complete *Schnelle* salvaged from the harbour of the town of Drammen in eastern Norway (Grieg 1933: 181, Fig. 141).

Another group of motifs includes coats of arms, which can be found on many *Schnelle*, often in combination with other depictions. The coats of arms can appear both as the main motif and in combination with allegorical images. As the finds from Bergen are highly fragmented, it is not possible to deduce the overall composition of the relief applications. The various coats of arms are grouped according to motifs.

Figure 78. *Cat. 1541, body fragment with remains of a depiction of the sun and moon.*

There are several fragments of a *Schnelle* on whose relief application a crown can be recognized, which probably served as part of an overall composition or as the upper end of a coat of arms shield. The fragment Cat. 1397 shows a crown with a headband decorated with stones and flame-like spikes, five narrow brackets converge in the centre and bear an orb with a cross (Figure 79). This is probably the German imperial crown. Another crown, only partially preserved and forming the upper end of a relief application, can be found on the rim of a *Schnelle* Cat. 1401.

Figure 79. *Cat. 1397, rim fragment of a Schnelle with part of a relief application completed by the German imperial crown.*

The coat of arms of the kings of England could be identified on two different fragments of a *Schnelle*, Cat. 1398 (Figure 80) and Cat. 1542. This coat of arms is not uncommon on Siegburg *Schnellen*, as an example from the workshop of the monogramist H H shows (Gaimster 1997: 181-182, 21C); in combination with the coats of arms of Sweden and Denmark, for example, it is probably primarily a decorative representation (Roehmer 2014: 157).

Given the location of the find in the former Kingdom of Denmark-Norway, it does not seem unusual that Cat. 1402, a fragment of a *Schnelle* showing the coat of arms of Denmark was recovered in Bergen (Figure 81). It may be a piece made with a view to sales on the northern European market. As the above-mentioned example of a *Schnelle* bearing the coats of arms of England, Sweden and Denmark shows, the potters probably took a pragmatic approach in order to cover as wide a geographical area as possible (Gaimster 1997: 181-182; Roehmer 2014: 157).

Figure 80. *Cat. 1398, fragment of the coat of arms of England.*

Figure 81. *Cat. 1402, fragment of the coat of arms of Denmark.*

Two different fragments of *Schnellen* show coats of arms with eagles in different versions. On Cat. 1417, only the tail and feet of an eagle can be seen in a shield (Figure 82). On the left side of the shield is the date *15..* Unfortunately, the corresponding right side has not survived. Due to the frequency of the dates 1574 and 1575 on *Schnellen* with imperial eagles, such an addition can also be assumed here. The escutcheon is framed by the collar of the Order of the Golden Fleece.

Cat. 1524 is a body fragment with a coat of arms relief showing the imperial double-headed eagle. The two heads of the eagle are surrounded by circles reminiscent of halos; on the eagle's breast is a small shield with a horizontal bar on the right half and three diagonal bars on the left (Figure 83). This is probably the heart shield of Emperor Maximilian II. The entire double-headed eagle is on a relief application shield under which there is a monogram, of which only the last letter - a W - has survived. It is likely to have been the monogram *LW*, which is found not only on Siegburg but also on Raeren relief applications (Hähnel 1987: 91).

Figure 82. *Cat. 1417, body fragment with collar of the Order of the Golden Fleece.*

While the aforementioned coats of arms have taken up a dominant position on the respective relief applications, there are also coats of arms that are embedded in or conclude an otherwise allegorical or other depiction. The coat of arms of the Duchy of Jülich - Kleve - Berg can be found in such a position several times, for example on Cat. 1413. The body fragment Cat. 1511 also shows a relief application, which is concluded at the bottom by the coat of arms of Jülich-Kleve-Berg. Above it is a pictorial field divided by a diamond. A barefoot figure in a long pleated robe can be seen above two trees, with floral tendrils with acanthus leaves in the spandrels. This is probably an allegorical depiction.

Figure 83. *Cat. 1524, body fragment with coat of arms with imperial eagle.*

5.5.1.2 vessel form: funnel-necked jug

Small vessels with a spherical body on a frilled foot and a funnel-shaped simple upright rim were produced in Siegburg from 1400 at the latest (Hähnel 1987: 29) and are known as funnel-necked beakers or funnel-necked jugs, the latter being characterized by the presence of a handle. From the 15th century onwards, small relief applications increasingly appeared on such funnel-neck jugs as decorations, which were initially simple medallions in a round or oval shape (Roehmer 2014: 61). Due to their small size and corresponding volume, the funnel-necked cups and jugs can certainly be regarded as drinking vessels (Roehmer 2014: 62). At the beginning of the 16th century, decorations in an elaborate, incised technique, the so-called *thistle cut*, appear on funnel-neck jugs, but this could not be identified in Norway (Roehmer 2014: 72). Funnel-neck jugs with pierced outer walls in Goth-

ic ornate tracery and a smaller inner vessel are more likely to be regarded as a special form. Due to the small volume of this inner vessel, the use of these vessels as ordinary drinking vessels can be discussed (Roehmer 2014: 76). In the second half of the 16th century, funnel-necked jugs are decorated in considerable numbers with roundish relief medallions, which occur in great variety (Roehmer 2014: 189-198).

Twenty-three decorated funnel-neck jugs or fragments of such jugs were also recovered from various locations in Bergen. Eight pieces came from the excavations in the area of the Hanseatic Kontor on Bryggen, four fragments were discovered during the excavations in the former wine cellar in Rosenkrantzgate, three fragments during the excavation of a presumably department store at Strandgaten 55-57 and one fragment came from investigations in the city's central square on Vågsallmenningen. In addition, there are seven old finds that were discovered during construction work in the city at the beginning of the 20th century and brought to the museum. Some of these old finds were published in cursory form shortly after their discovery (Grieg 1933: 178-180; Figs. 138-140). In the following, the decorations of the Siegburg funnel-neck jugs from Bergen are presented according to the type and motif of the decoration.

Figure 84. *Cat. 1732, a complete funnel-neck jug except for the neck and handle, with pierced walls and Gothic tracery ornate roundel.*

The typologically oldest piece is a body fragment from the Strandgaten 55-57 excavation with a simple oval medallion, which is probably a depiction of the Virgin Mary (Cat. 1532). The *crowned Mary with the Child* is one of the most common early relief applications on Siegburg funnel-neck jugs (Roehmer 2014: 61, Fig. 91).

Also, from the Strandgaten 55-57 excavation is a fragment of a vessel with a pierced wall (Cat. 1530). An almost complete funnel-neck jug with pierced walls in Gothic tracery ornament, missing only the neck and handle, was discovered as early as 1906 in the area of the former Hanseatic Kontor and consigned to the Bergen Museum (Cat. 1732; Figure 84). As far as can be seen, the pierced tracery in 'rotating fish-bubble ornament' (Hähnel 1992: 292, Cat. 1931) corresponds in every detail to a corresponding funnel-necked beaker from the British Museum (Gaimster 1997: 175, Cat. 11L).

The spectrum of Renaissance relief applications is quite extensive, all of which appear as round medallions in Bergen. The motifs of the medallions are comparable to those on *Schnelle*, although the quantitative proportion of the motif themes differs somewhat. Of the 19 funnel-necked jugs or fragments thereof, ten pieces show religious motifs, only two have allegorical motifs and only one piece shows a coat of arms as a motif. Ornamental arabesques or grotesques, which were identified on a total of seven funnel-neck jugs, are an applied motif not observed on *Schnelle* jugs in Norway. On completely or largely preserved pieces, it is noticeable that the different motifs can also be combined, as three roundel medallions were usually applied to the rounded vessels.

One example of this is the completely preserved funnel-neck jug recovered during the excavations on Bryggen, Cat. 1399 (Figures 85-87)6. On the right-hand medallion there is a barely recognizable scenic depiction in a rectangular frame with a triangular pediment at the top; the round edge of the relief application is formed by an illegible band of writing. The matrix of this relief application was obtained as an impression of a medal depicting the *Raising of the Widow of Zarephath's Son by Elijah* (Figure 87). Matrices and patrices of this type from Siegburg can be found in the Hetjens collection in Düsseldorf (Roehmer 2014: 106, Figs. 227, 228). The left round medallion of this funnel-neck jug, on the other hand, shows a symmetrical arabesque with opposing human grotesques (Figure 85), which is found in the same way on a funnel-neck jug from the Rheinisches Landesmuseum für Volkskunde [Rhenish State Museum of Folklore] (Hähnel 1992: 288, Cat. 1921). Unfortunately, the motif of the central relief medallion on this jug is barely recognizable (Figure 86).

Figure 85. *Cat. 1399, funnel neck jug, round medallion with grotesques.*

Figure 86. *Cat. 1399, complete funnel neck jug, central round medallion not recognizable.*

Figure 87. *Cat. 1399, funnel neck jug with an imprint of a medal as relief application.*

As already mentioned, most of the relief applications on funnel-necked beakers identified in Bergen consist of religious depictions. Three of these are scenes from the Old Testament Book of Tobias, all of which were discovered in different contexts during the excavations in the area of the Hanseatic Quarter on Bryggen.

A body fragment with a roundel medallion (Cat. 1403) shows a depiction of the return of Tobias with two men walking towards a seated old man, with the inscription *DHOBIUS* below (Figure 88). The relief application is identical to a fragment in the Rheinisches Landesmuseum für Volkskunde [Rhenish State Museum of Folklore] (Hähnel 1992: 308, Cat. 2107). Another scene from the life of Tobias is depicted on two other finds.

The fragment Cat. 1415 contains two identical round medallions that have been completely preserved. They depict an older man with a staff and a young, kneeling man holding a strange snake-like creature, with the inscription *DHOBIUS* in very small letters at the bottom left (Figure 89). The scene depicts the story of Tobias with the fish and can also be found on a fragment from the holdings of the Rheinisches Landesmuseum für Volkskunde [Rhenish State Museum of Folklore] (Hähnel 1992: 282, Cat. 1906). Another fragment with the same relief application is Cat. 1415 - perhaps

the scene was very popular or a larger contingent of funnel-necked jugs on which this relief application was used had reached Bergen.

Figure 88. *Cat. 1403, fragment of a funnel-neck jug depicting the return of Tobias.*

Figure 89. *Cat. 1415, fragment of a funnel-neck jug depicting Tobias and the fish.*

A body fragment with a relief application, which very probably depicts a biblical scene, is Cat. 1443, which probably depicts the baptism of Jesus (Figure 90). A person stands with folded hands in a body of water and is being baptized by a person kneeling on the left, with another figure in a wide robe on the right. The piece was found during excavations in the wine cellar in Rosenkrantzgate; no direct parallels to this relief application were discovered. However, the motif can be found in a different form on matrices from Siegburg (Roehmer 2014: 112, Figs. 248-250).

Figure 90. *Cat. 1443, body fragment depicting the baptism of Jesus.*

Figure 91. *Cat. 1520, body fragment with depiction of the Last Day.*

Another relief application with a religious motif, which came to light during the Strandgaten 55-57 excavation, has no known parallel to date. The fragment Cat. 1520 shows a multifaceted scene: in the middle a blank, round disc (sun?), presumably clouds from which angels with trumpets are blowing. At the bottom are several small, dimly depicted figures, most likely a depiction of the resurrection on the last day (Figure 91).

A body fragment with three round medallion supports, Cat. 1734, two of which are not recognizable. The preserved relief application depicts the temptation of Jesus in the desert (Figure 92). On the left is the devil with horns and tail in a monk's habit, on the right is Jesus, at the top is an illegible inscription. This motif is rarely found on funnel-necked jugs, but the relief application has a parallel in the Hetjens collection (Roehmer

2014: 205-206, Fig. 501). The piece from Bergen is an old find that was discovered in the area of the *Kjöbmandsstuen* adjoining the wine cellar on Bryggen and brought to the museum in 1911. Like the applied relief decoration on *Schnelle* Cat. 1529 (Figure 68) with the same pictorial program, the motif is an example of Protestant propaganda on relief-decorated stoneware in Bergen.

Figure 92. *Cat. 1734, fragment of a funnel-necked jug with a round medallion depicting the temptation of Jesus in the desert. The devil is clearly depicted in a monk's habit, which unmistakably identifies the motif as anti-Catholic propaganda.*

Another old find in the museum's store in Bergen, also retrieved from the *Kjöbmandsstuen*, is a largely preserved funnel-neck jug with a missing neck and handle, Cat. 1745. The roundel medallion on the right depicts a scene that is difficult to recognize: On the right are two men in long pleated robes, on the left a man in a short (tunic?) skirt, above all the inscription: *IOANNIS IIII* as a reference to the Book of John IV. The medallion could depict Jesus and the centurion of Capernaum (Hähnel 1992: 185). The other two roundel medallions on this jug also have religious themes and have exact parallels in other finds from Bergen. The central medallion shows the Fall of Man, Adam and Eve plucking the apple of knowledge (Figure 93). The relief application is identical to a piece from the Rheinisches Landesmuseum für Volkskunde [Rhenish State Museum of Folklore](Hähnel 1992: 276, Cat. 1889), as well as a piece from the excavations in the area of the Bergen wine cellar in the Rosenkrantzgate, Cat. 1445.

The left medallion of the jug Cat. 1745 shows a kneeling woman in the forest, looking up to the left, where an angel is in the clouds (Figure 94). This is the biblical scene of Hagar and Ishmael in the desert, as depicted identically in Hähnel (1992: 287, Cat. 1919). The same relief application can also be found on an old find from the Øvregate in Bergen, Cat. 1736.

Figure 93. *Cat. 1745, funnel neck jug with depiction of Adam and Eve at the Tree of Knowledge as a central moulded roundel medallion.*

Figure 94. *Cat. 1736, fragment of a funnel-neck jug depicting Hagar and Ishmael in the desert.*

In contrast to the *Schnellen*, only a few funnel-neck jugs with relief applications depicting allegorical representations or ancient heroes were found in Bergen. From the excavations on Bryggen comes a fragment of a wall with a largely preserved, round moulded roundel medallion, Cat. 1411. A couple is recognizable, on the left a man with a coat and goatee holding a goblet in his right hand, on the right a woman with a hood in rich Renaissance costume holding an unidentifiable object in her outstretched right hand (Figure 95). Both are standing behind a balustrade. This is presumably a genre depiction of an engagement (Roehmer 2014: 193, Fig. 472).

Figure 95. *Cat. 1411, body fragment of a funnel-necked beaker with the allegorical depiction of an engagement scene.*

Figure 96. *Cat. 1728, rim fragment of a funnel-necked beaker with a depiction of Hector.*

Figure 97. *Cat. 70, body fragment of a funnel neck jug with a moulded roundel medallion depicting a crowned eagle, probably representing the heraldic animal of the Polish kings.*

A second fragment of a funnel-neck jug with an allegorical depiction was discovered during excavations in the central square of the city of Bergen, Vågsalmenningen (Cat. 1728; Figure 96). Two similar round medallions depict an antique-style head, which can be identified as Hector, one of the *good heroes* from antiquity, due to the inscription *HEK...(-TOR)*.

In contrast to the relief applications on Siegburg *Schnellen*, coats of arms can only be found on a funnel-necked jug in Bergen in one case. From the excavations on Bryggen comes Cat. 1414, a fragment of a wall. The completely preserved moulded roundel medallion shows an eagle with a crown on its head, under the eagle's tail is a small semi-oval escutcheon, which cannot be further identified (Figure 97). The crowned eagle with its head turned to the right was the heraldic animal of the kings of Poland in this form in the 16th and early 17th centuries (Goodall 1997b: 377).

As already mentioned, grotesques or arabesques are relatively common motifs in relief applications on funnel-necked jugs in Bergen. An only partially preserved moulded roundel medallion (Cat. 1409) shows a symmetrical arabesque consisting of a crowned plant with two opposing female grotesques. The motif is identical to the left moulded roundel medallion of the complete jug Cat. 1399 and can also be found on a piece in the Rheinisches Landesmuseum für Volkskunde [Rhenish State Museum of Folklore] (Hähnel 1992: 288, Cat. 1921). The same moulded roundel medallion is found once again in Bergen on an old find from the Hanseatic Kontor area, Cat. 1744 (Figure 98).

On a body fragment from the excavation in the wine cellar in Rosenkrantzgate there are two identical roundel medallions (Cat. 1419). These show a five-petaled flower in the centre, surrounded by two wreaths with leaves. A similar relief application can be found in Hähnel (1992: 328, Cat. 2429).

On an old find from the area of the Hanseatic Kontor on Bryggen there are two different moulded roundel medallions: in the centre is a medallion with an arabesque of a symmetrical plant cluster. On both sides is the same roundel medallion showing birds on columnar *horns of plenty* bending their beaks towards flowers (Figure 99). This motif is identical to a piece from the Rheinisches Landesmuseum für Volkskunde [Rhenish State Museum of Folklore] (Hähnel 1992: 314, Cat. 2199).

Another old find from the area of the central square Vågsalmenning, which was discovered during construction work on the building of Norges bank (Norways Bank), shows three identical, round moulded roundel medallions (Grieg 1933: 179, Fig. 139). These consist of figures arranged like arabesques, with a winged devil with a goatee in the centre. Two further devil-like figures bend symmetrically to the right and left (Figure 100).

Figure 98. *Cat. 1744, funnel neck jug with arabesque relief decoration.*

Figure 99. *Cat. 1733, funnel neck jug with arabesque relief decoration.*

Figure 100. *Cat. 1737, funnel neck jug with three arabesque-like devils as moulded roundel medallion.*

5.5.1.3 vessel form: bulbous bottle / jug; Pulle

Bulbous jugs with a narrow neck, handle and flat base are a vessel form that was produced in Siegburg from the mid-16th century until around 1640 and for which the term *Pulle* is commonly used (Roehmer 2014: 180). In Bergen, only one body fragment could be identified, which most likely comes from a *Pulle* due to its curvature (Cat. 1407). It was recovered during the excavations on Bryggen and has only a partially preserved roundel medallion. This shows a band with floral tendrils on the outside, in the centre a round field with a woman's head with flowing hair and the inscription *HELE (NA)*. An identical relief application can also be found in the Rheinisches Landesmuseum für Volkskunde [Rhenish State Museum of Folklore](Hähnel 1992: 209-210; Cat. 1073).

An almost complete *Pulle* was recovered during an underwater archaeological emergency excavation in the harbour of Tau near Stavanger and glued together almost completely from numerous fragments (Cat. 1773; Figure 101). Three large, similar, round moulded roundel medallions show a crowned jester's head framed by a band of floral tendrils (Figure 102). Direct parallels to the relief application could not be identified, but it is striking that *Pulle* were recovered several times from Dutch shipwrecks, which may be an indication of the use of these vessels on board (Gaimster 1997: 108-109, Figs. 3.70, 3.72).

Figure 101. *Cat. 1773, Siegburg Pulle from Tau. Photo: Museum Stavanger (MUST).*

Figure 102. *Close-up of the round medallions on the Pulle Cat. 1773, jester's head in floral tendril band.*

5.5.2 Anthropomorphic decorated stoneware from Aachen / Raeren

Three fragments of globular vessels with freehand anthropomorphic decoration are presented in this work under the term Aachen /Raeren. The stoneware from the nearby towns of Aachen and Raeren is technologically and formally almost identical and can hardly be distinguished (Roehmer 2001: 502). There is archival evidence of potteries in Aachen in the second half of the 15th century (Höltken and Steinbring 2017: 717). The bulbous jugs with free-form faces discussed in this chapter have been associated in particular with the production location of Aachen since the 1980s (Hurst 1986: 190-192). The *Aachen / Raeren* stoneware shows a grey, fully sintered fabric and a clear salt glaze, the surface is light grey under the glossy glaze or brownish due to ash deposits. This refers primarily to the finds from Bergen; the salt glaze only appears to be present to a lesser extent on stoneware recovered in Aachen itself (Roehmer 2001: 504).

The characteristic face jugs associated with Aachen as a place of production (cf. Höltken and Steinbring 2017: 716, Fig. 3, top right) are, according to complete surviving pieces from the British Museum in London (Gaimster 1997: 227, Cat. 75), the Boymans van Beuningen Museum in Rotterdam (Hurst 1986: 191, Fig. 93.297) and the Hetjens Museum in Düsseldorf (Mennicken 2013: 86, Fig. 147), they are bottle-like jugs with a strongly globular body on frilled foot and a narrow neck with a handle. Anthropomorphic decorations were applied to the body in the shoulder area between the belly and neck. The details were incised and engraved as well as made from freehand relief applications that were stamped or engraved. Vessels

of this type were produced in Aachen as well as in Raeren in different variations (Mennecken 2013: 82-85, Figs. 122-123, 141-144, 200, 601-606). The production period of these vessels is likely to be the 15th and early 16th centuries in particular (Gaimster 1997: 224, 227). The following finds of face jugs from Bergen were typologically identified as Aachen / Raeren products:

A body fragment with a freehand modelled face mask was recovered from the Strandgaten 55-57 excavation (Cat. 1545; Figure 103). The eye and nose are moulded separately from clay, applied and smoothed. Details such as the nostrils and the pupil are pierced with various objects. In addition to the nose, the face is outlined on both sides by incised lines accompanied by rows of dots. A very similar design of a face jug can be seen in a find from London (Gaimster 1997: Cat. 75 left, p. 227, Col. Pl. 15 above). Possibly formerly applied beard and eyebrows as on the London vessel are not preserved on the fragment from Bergen.

Figure 103. *Cat. 1545, body fragment of a jug from Aachen or Raeren with hand-moulded and engraved facial mask.*

Another fragment from the Strandgaten excavation also comes from such a vessel (Cat. 1547). The brown salt-glazed body fragment shows a hand-made application of the eyebrows of a face, outlined by elongated stamps, and a pressed-out and incised eye is preserved. The fabric, surface and shaping of the face mask on this piece also point to a vessel from Aachen / Raeren production.

From the excavations in the wine cellar in Rosenkrantzgate comes a body fragment made of grey stoneware with a clear salt glaze, which has a hand-moulded relief application in the form of a simply designed representation of an arm (Cat. 1546, Figure 104). Details of the hand and clothing are impressed with a moulded wood. The vessel probably depicts a bagpiper in the manner of the typical 'piper-jugs' from Aachen or Raeren (Hurst 1986: 192, Cat. 93.297; Mennicken 2013: 86, Fig. 147).

Figure 104. *Cat. 1546, body fragment of a jug from Aachen or Raeren with remains of the hand-moulded image of a bagpiper.*

5.5.3 Relief decorated stoneware from Raeren

Fully developed stoneware had been produced in several villages in the municipality of Raeren, now located in Belgium not far from Aachen, since the 15th century (Roehmer 2001: 503). In the 16th century in particular, numerous workshops in the region produced an enormous quantity of stoneware for a far-reaching market (Mennicken 2013: 51-60). The vast majority of production consisted of simple utilitarian stoneware tableware, which is reflected both archaeologically in the English export market (Gaimster 1997: 225) and very prominently in Dutch painting of the 16th and 17th centuries (Mennicken 2013: 91). Simple, undecorated Raeren stoneware is also well represented in Norway (Lüdtke 1989: 29-33). However, the focus of the present model is exclusively on relief-decorated stoneware from Raeren, which was produced in a wide variety from the mid-16th century onwards (Mennicken 2013: 151ff.). This relief-decorated stoneware from Raeren during the Renaissance attracted the interest of collectors at an early stage and was accordingly taken into account extensively in museums and art historical works (Roehmer 2013: 502). In Norway, finds of relief-decorated stoneware from Raeren were processed and published early on (Grieg 1933: 184-188). A total of 30 pieces of relief-decorated stoneware from Raeren were catalogued for this study, all but one (Cat. 1775) from Bergen. Only five of these finds come from the excavations on Bryggen in the area of the Hanseatic Kontor, one was recovered during the excavations in the area of the wine cellar in Rosenkrantzgate and 15 pieces come from the excavation in Strandgaten 55-57. For comparison, it should be noted that there are around 950 fragments from the excavations on Bryggen alone that can be referred to as Raeren stoneware, but relief decoration was only found on five fragments, as mentioned above. However, individual finds of relief-decorated Raeren stoneware were and are regularly recovered during various archaeological measures in the old town of Bergen.

Relief-decorated Raeren stoneware is characterized by a grey, fully sintered fabric and a shiny surface with a brown salt glaze. The spectrum includes various shades of brown from light to dark, occasionally with a mottled colour structure (Roehmer 2001: 504). In the course of the second half of the 16th century, Raeren increasingly produced vessels in which the grey fabric under the clear salt glaze produces a light grey surface. The use of painted decorative elements in cobalt blue also appears to have increased in Raeren during this period, particularly on vessels with a grey surface (Mennicken 2013: 204-205).

The range of shapes of Raeren stoneware is very extensive; a particularly characteristic vessel shape, which was probably developed by Raeren potters around the middle of the 16th century, are large jugs with a cylindrical neck and belly (Mennicken 2013: 151-153). Due to their straight surfaces, these vessels are particularly suitable for decoration with larger relief applications, and accordingly most of the Raeren finds presented from Norway come from jugs of this type. Another form that was produced in Raeren from the 17th century onwards are simple cylindrical roller jugs or tankards (Mennicken 2013: 315-316), of which a typical example was identified in Bergen (Cat. 1396). As many of the pieces from Bergen are rather small fragments, the information available is sometimes limited. The most important vessel types and in particular motif variants of relief-decorated stoneware in the working area are presented below.

5.5.3.1 Straight-sided tankard with Bremen coat of arms

Probably the youngest piece of relief-decorated stoneware from Raeren is a fragment of the rim and wall of a cylindrical mug about 11 centimetres in diameter (Cat. 1396; Figure 105). Below the straight rim there is a beaded border and a circumferential decorative band of applied knobs, followed by a field of horizontal grooves. Below these grooves on the smooth body, an oval coat of arms medallion is applied as a central relief application. It shows a key, the coat of arms of the city of Bremen, in a crowned shield flanked by upright lions, with the inscription: *BREMN* below.

Straight-sided tankards with a comparable beaded band and fluting, as well as a central medallion decoration, are known as floor finds from Raeren and date to the 17th/18th century (Mennicken 2013: 316). One of the finds from Raeren also bears the coat of arms of the city of Hanover, a medallion from a city in the former Hanseatic district of Lower Saxony, which was presumably the vessel's export destination (Mennicken 2013: 316, Fig. 980, Inv. No. 1024).

Figure 105. *Cat. 1396, edge and body fragment of a Straight-sided tankard from Raeren with the Bremen city coat of arms, found in the vicinity of the former wine cellar, excavation BRM 76.*

5.5.3.2 Peasant dance jugs

As already mentioned, almost all other Raeren vessels identified in Norway are so-called cylinder-bellied jugs. Characteristic of these jugs is the high cylindrical middle section, on which a relief application is attached as a pictorial frieze. The most common decorative motif on Raeren jugs in Norway is the so-called peasant dance frieze. The depiction of peasant festivities was a popular subject in 16th century art. Prints by the Nuremberg artist Hans Sebald Beham (*1500-†1550) with this theme served as a model for the widespread depictions on the Raeren jugs (Mennicken 2013: 160-164). A total of four fragments of peasant dance friezes and one complete peasant dance jug were recorded in the working area. The complete jug (Cat. 1775; Figure 106) was donated to the Stavanger Museum in the 19th century, with the note: 'Stavanger 1850. Belonged to Provost Dahl'. The aforementioned provost was a Norwegian enlightener and politician of the early 19th century. The jug presumably remained in use and ultimately came into the possession of the artist Bernhard Hanson, who bequeathed the jug to the museum and made a drawing of the vessel (Figure 293).

It is an approximately 25 cm high, completely preserved baluster jug with a cylindrical belly and neck. On the cylindrical belly there is a depiction of a peasant dance in an arcaded frieze supported by grotesques, the details of the relief application are only moderately visible under the thick brown glaze. The hard-to-read inscription band at the bottom reads: *GERET DU DAPR BLASEN SO DANSSEN DI (BUREN?) WENN SI RASEN UF*

SPRICH.... I DANSED....159(?). The seven simple arcade arches show the musicians in the first arch and six different dancing peasant couples in the following arches, with the man of the couple in the fifth arch about to vomit. Depictions with these details can often be found on different variants of the frieze, which was produced in numerous different models (Mennicken 2013: 164).

Figure 106. *Cat. 1775, Raeren peasant dance jug. From the collection of the artist and museum benefactor Bernd Hansson in the store of the Museum of Stavanger, rediscovered in the store in 2018.*

As early as 1933, a baluster jug with a depiction of a peasant dance was recovered on the *Stranden* opposite the Hanseatic Kontor in Bergen, which is largely complete apart from the missing neck and handle (Cat. 1742; Figure 107). The peasant dance frieze is identical to a depiction in Mennicken (2013: 165; Fig. 443). The frieze shows no arcades and, apart from the pair of musicians, nine different dancing couples depicted in detail. Above the frieze there is an inscription: *GERET DU MUST DAPR BLASEN SO DANSEN DEI BUREN ALS WEREN SEI RASEN FRI UF SPRICHT (P) ASTOR ICH VER DANS....* The date *1583* is inscribed between the musicians and the first dancing peasant couple. The meaning of the phrase in Low German language which appears in various version on peasant dance jugs can be translated as: 'Geret, you have to blow bravely, then the peasants will dance as crazy. Free up, pastor, I dance..'.

Figure 107. *Cat. 1742, old find of a peasant dance jug from Raeren in Bergen with missing neck and handle.*

A fragment of the wall of another peasant dance jug without arcade arches was discovered at the beginning of the 20th century during construction work in the area of the central square *Vågsalmenningen* in Bergen (Cat. 1740). It is also a frieze without arcade arches, the legible part of the inscription above the dancing couples reads: *...SI RASEN FRS UF SPRICHT BASTOR...* The piece has been published in an old edition (Grieg 1933: 185, Fig. 146).

Two further, considerably smaller fragments of Raeren peasant dance jugs were recovered during the excavations in the area of the Hanseatic Kontor on Bryggen (Cat. 1548 and 1550). Due to the high degree of fragmentation of these pieces, it is not possible to describe the type of relief decoration in more detail, but both certainly show sections of the peasant dance frieze. On the piece stored without a more detailed find context, Cat. 1548, there is a small section of the banner. *..WEREN SEI RASEN..*, which is part of the best-known version of the inscription of the peasant dance frieze (Mennicken 2013: 165). The small fragment Cat. 1550 shows feet belonging to two dancing couples, which clearly identify the piece as part of a peasant dance frieze.

5.5.3.3 Susanna frieze

Another motif that was often depicted on the Raeren baluster jugs and was obviously used in very large numbers is the Old Testament story of the *chaste virgin Susanna* (Mennicken 2013: 191). Accordingly, it is not surprising that this frieze can also be identified on two fragments of Raeren jugs from Bergen.

During archaeological excavations on the Kong Oscars gate in the centre of Bergen, a fragment of the wall of a Raeren jug was recovered, the relief application of which can be identified as part of the Susanna frieze (Cat. 1711; Figure 108). The relief application, which is only fragmentary, shows the last section of the frieze and the inscription band below it with the date *1584* and the signature *EP*, which probably stands for *Emond Pesch*. The latter was a vassal of the Aachen Marienstift and his initials appear together with those of *Engel Kran* on jugs that are presumably associated with the workshop of *Jan Emens* in Raeren (Mennicken 2013: 274, Fig. 874). From another archaeological investigation in the same district comes another fragment of a jug with a depiction of the Susanna story, Cat. 1720 (Figure 109). Several pairs of legs are recognizable on the fragment of wall, including the beginning of a banner: *DIT IS DE*.... This is presumably the beginning of the Susanna frieze in a version which, according to fully preserved examples, was signed by the potter or model cutter *Engel Kran* and bears the date *1584* (Mennicken 201: 191, Fig. 551).

Figure 108. *Cat. 1711, body fragment of a Raeren jug with Susanna frieze, recovered in Bergen, Kong Oscars gate.*

Figure 109. *Cat. 1720, body fragment of a Raeren jug with Susanna frieze, recovered in Bergen, Domkirkegaten.*

5.5.3.4 Beheading of John

During construction work in the area of the central square Vågsalmenningen in Bergen, during which part of a Raeren peasant dance jug (Cat. 1740) was also discovered, two further body fragments of baluster jugs from Raeren with elaborate relief applications came to light (Cats. 1738-1739). As the two fragments do not fit together and the brown salt glaze also shows a nuanced difference in colouration, it is unclear whether the fragments come from the same vessel, but it is certain that they are different sections of the same relief application.

Figure 110. *Cat. Nr. 1738, body fragment of a Raeren baluster jug with a frieze showing the beheading of John found at Vågsalmenningen in the centre of Bergen.*

Figure 111. *Cat. Nr. 1739, another body fragment of a Raeren baluster jug with a frieze showing the beheading of John found at Vågsalmenningen in the centre of Bergen.*

Figure 112. *Cat. 1563, Raeren body fragment with frieze of the gods.*

On the piece Cat. 1738, (Figure 110), three striding women in long pleated robes can be seen in front of a building with a balustrade on which two trombone players are standing. The first woman is wearing a severed head, above which is the inscription: *...ROT DU SOLLS....* This is a frieze depicting the beheading of John, which is present in an identical model on a complete vessel from the Hetjens Museum in Düsseldorf (Mennicken 2013: 190, Figs. 544 and 546). The relief application there bears the date *1580*, a section in the central area of the frieze corresponds to the part of the relief application found on the second Bergen fragment, Cat. 1739, Figure 111. This fragment shows several richly dressed couples walking towards a fountain. In an early publication on archaeological finds from Bergen, this depiction was still interpreted as a depiction of a 'fountain of youth' (Grieg 1933: 187, Fig. 149).

5.5.3.5 Frieze of the gods

Of the 15 fragments of relief-decorated Raeren jugs discovered during the Strandgaten 55-57 excavation mentioned above, the motifs of the relief applications could only be determined with certainty on a few pieces. However, several fragments showed antique motifs. A body fragment of a baluster jug (Cat. 1563; Figure 112) showed a section of a frieze with ancient gods. Two figures of gods are depicted in flowing antique clothing and are only preserved up to their stomach and shoulders. Between them are a smaller centaur with bow and arrow, a scorpion, a ram, a lion and two figures with bow and arrow. The content of the frieze as a depiction of ancient gods can be deduced from a comparison with a completely preserved jug with the same relief application from the Hetjens Museum in Düsseldorf (Mennicken 2013: 183, Figs. 514-515).

Figure 113. *Cat. 1553, body fragment of a Raeren jug depicting Alexander the Great.*

5.5.3.6 Antique heroes

Also from the Strandgaten 55-47 excavation is a relief-decorated body fragment of a Raeren vessel which, unlike the previously presented finds, was not a baluster jug but a bulbous jug (Cat. 1553; Figure 113). The fragment shows a high oval medallion, in the centre a man in ancient warrior's gear with the inscription: *The great Alexander*. The carefully executed band around the medallion shows geometric ornamentation and a horned grimace. In Raeren, round and oval medallions were mainly applied to globular vessels and often depicted figures from ancient myths (Mennicken 2013: 181-182). The medallion was probably on a jug from the workshop of Ian Emens, at least a model-like medallion can be found on a jug from a Belgian collection attributed to this potter (Mennicken 2013: 247, Fig. 775).

5.5.3.7 Coat of arms

During the excavations in the area of the Hanseatic gate on Bryggen, a Raeren body fragment was recovered, the relief application of which shows the coat of arms of the Swedish royal dynasty of Vasa (Cat. 1551; Figure 114). The inscription reads: *Kuninck Sweden*, only the date *15*...(?) has survived.

Remarkably, this coat of arms probably refers to John III of the House of Vasa, as a representative of Catholic politics in largely Protestant Sweden (Mennicken 2013: 175).

Figure 114. *Cat. 1551, body fragment of a Raeren jug with a coat of arms medallion of the Swedish royal house of Wasa.*

Unfortunately, there is no information on the location of another Raeren baluster jug, almost complete except for the neck and handle, which is stored in the museum in Bergen (Cat. 1743). The relief applications on the belly show eight coats of arms in arcaded arches supported by grotesques. In detail, the following coats of arms can be identified: 1. a city under a double-headed eagle = Hamburg (Goodall 1997b: 367), 2. an upright lion facing right = Duchy of Berg? (Figure 115), 3. a thick horizontal bar with two St Andrew's crosses, 4. a staff or similar in a vertical bar, accompanied by vertical geometric ornaments, 5. a thick diagonal bar, from top left to bottom right, containing three double spirals, 6. seven stars = Kaspar, 7. a crescent and a star = Balthasar, 8. a man with staff and bucket = Melchior (Figure 116). The last three coats of arms represent the Magi, who were a popular subject on Raeren jugs as *the oldest coats of arms* (Gaimster 1997: 244, Cat. 98). Below the coat of arms frieze is an inscription that is difficult to read: *DEBESSER (?): EN: DIE KAN: HAT: MICH: GEMACHT: SVEINEN: ERMEM: MAN: WIE: ICH: NIT: ME: EIN: HAFSO: SO: MUS: ICH: LASSEN: AF*, as well as the date: *1596*.

Figure 115. *Cat. 1743, coat of arms relief decoration on Raeren baluster jug.*

Figure 116. *Cat. 1743, detail of the Raeren baluster jug with the 'oldest coats of arms' of the Three Wise Men.*

5.5.4 Relief decorated stoneware from Cologne and Frechen

Cologne was probably the place where the technology of decorating stoneware vessels with modeled relief applications was first developed. Around 1500, fully developed stoneware with rich relief decoration began to be produced in Cologne (Gaimster 1997: 191). Both documents and archaeological finds indicate four workshops in the city of Cologne where this richly decorated stoneware was made (Unger 2007: 40-53). From the middle of the 16th century, the stoneware potteries, which had to obtain their raw materials such as wood and clay from outside the city, were increasingly pushed out of the city of Cologne. The majority of stoneware production increasingly shifted to Frechen, 10 kilometers away (Gaimster 1997: 193). Numerous workshops operated in Frechen, which produced very large quantities of stoneware for export in the late 16th and early 17th centuries, although this declined again in the second half of the 17th century (Gaimster 1997: 210).

Due to the close geographical and probably also personal connection between the Cologne and Frechen stoneware potteries, the products of these places are technologically and typologically very similar. The potters in Cologne used the same clay deposits as those in Frechen, and the recipe for the salt glaze also appears to have been identical (Unger 2007: 55-56). It is therefore often not possible to distinguish and attribute individual fragments beyond doubt, which is why the term 'Cologne / Frechen' stoneware was often used in research (Hurst 1986: 208). For a number of pieces catalogued in the present work, the provenance was also simply given as *Cologne / Frechen* if a definite attribution to one of the two places of production seemed impossible. The fabric of the Cologne and Frechen stoneware is grey and completely sintered. The surface is salt-glazed and mostly brown, but also grey to beige in various shades, often with a speckled, *blotchy* appearance (Unger 2007: 22). Occasionally, Cobalt blue colour elements were also used for decoration in Cologne and Frechen (Unger 2007: 64). In Bergen, only a single small body fragment could be identified in which the brown, relief-decorated surface was accentuated with blue paint stains (Cat. 1719)

In general, the relief-decorated stoneware produced in Cologne in particular in the first half of the 16th century is of very high quality and features carefully executed relief decoration. In contrast, the products from Frechen in the 17th century appear to be of a much lower quality. The range of shapes is varied, but in Norway only jugs and, much more rarely, *Schnellen* or *Pinten* are found. The jugs of the 16th century are globular and often quite squat; the development seems to have tended towards somewhat taller jug shapes in the course of the late 16th century. The mouth and neck of Frechen jugs from around the middle of the 17th century are usually narrow like a bottle. As already explained in the models for Siegburg stoneware, the term *Schnellen* refers to tall, cylindrical-conical vessels with a base and handle. The term *Pinten* refers to similar but smaller vessels that are no higher than 12 centimetres (Unger 2007: 57-58).

The motifs of relief decoration are very varied; botanical tendrils are widespread in the first half of the 16th century, with various plant species and parts occurring, especially acorn leaves and acorns, but also roses and other flowers or leaves (Unger 2007: 59). Very characteristic are friezes on the belly, which can be filled with floral as well as grotesque or geometric patterns or contain banners (Unger 2007: 60). Other typical elements of relief-decorated stoneware from Cologne / Frechen are acanthus leaves and round medallions, which were often attached alternately to the surrounding friezes. The round medallions show a wide variety of different anthropomorphic shoulder images in profile (Unger 2007: 60). Perhaps the most striking feature of many jugs from Cologne and Frechen is a beard mask applied to the neck, which characterizes the widespread Bartmann jugs, which are among the best known and most popular vessels of the Early Modern Period (Gaimster 1997: 209; Unger 2007: 70-74). The older Bartmann jugs are of much higher quality and detail, while the Frechen Bartmann masks became increasingly simpler and more grotesquely modelled over the course of the 17th century (Gaimster 1997: 211). The relief applications on *Schnellen* and *Pinten* differ from those on jugs in that figurative or scenic relief applications were often applied to the straight vessel wall, but occasionally frieze-like round medallions also occur (Unger 2007: 61).

In the working area, 78 pieces of relief-decorated stoneware were recorded, which were addressed as Cologne or Frechen products. The exact place of production could not be identified for 68 pieces, nine fragments were very probably catalogued as Cologne products due to characteristic decorative elements, while only one object was classified with certainty as Frechen. Almost all of the pieces were recovered from different sites in Bergen, with the excavations in the Hanseatic Kontor on Bryggen clearly dominating with 33 finds and the Strandgaten 55-57 excavation with 37 finds. In addition to various other sites in Bergen, two fragments each of Cologne / Frechen stoneware were also unearthed during an excavation in Stavanger and in the Utstein monastery. The vast majority of the finds are jugs or fragments in that fabric type. *Pinten* or *Schnellen* can only be found in seven cases. Due to the mostly high degree of fragmentation, it is only possible to make further statements about the shape of the vessels and decoration details on a few pieces. The most important trends in relief-decorated Cologne-Frechen stoneware from the working area are presented below.

5.5.4.1 Bartmann jugs

In total, beard masks were found on six vessels made of Cologne / Frechen stoneware in the working area, the following pieces: Cats. 1592, 1597, 1609, 1730, 1767, 1774, 1592 and 1767 are only very fragmentary body fragments with the remains of a carefully executed beard mask, the other finds are better preserved and allow the vessels to be addressed more closely.

A fragment of the neck and shoulder of a pot-bellied jug with a carefully detailed beard mask comes from the excavations in the area of the Hanseatic Kontor on Bryggen; there are no further decorations on the preserved parts of the wall (Cat. 1597; Figure 117). A comparable Bartmann jug with an undecorated globular belly was recovered

from the Maximinenstraße pottery in Cologne, which also resembles the piece from Bergen in the model of the beard mask and eyes (Unger 2007: 124, Cat. 6). The Cologne jug is dated to the second quarter of the 16th century, the stratigraphic location of the piece from Bergen is uncertain.

Figure 117. *Cat. 1597, fragment of a Bartmann jug from the Bryggen excavations.*

Unfortunately, a Bartmann jug, largely reconstructed from fragments, which was discovered in the area of the royal castle Bergenhus (Cat. 1730; Figure 118) has also survived without more precise information on the context of the find. The light brown speckled salt-glazed piece shows a carefully executed beard mask and a belly frieze with the repeated inscription: *WAN: GOT: VIL: SO: IST: MIN: ZEIL*, which can be translated as *If God wills, my time is (up)*. This inscription band alternates between opposing acanthus leaves and round medallions with a bare-headed man's head with short, curly hair. The lettering and decorative elements have parallels in jugs made in Cologne / Frechen, which are dated to the second third or third quarter of the 16th century (Unger 2007: 144-149, Cats. 33-40).

During the investigation of a shipwreck off the island of Kvitsøy, which allegedly sank in 1677, eight largely identical Bartmann jugs were originally recovered, which, according to the excavators, still contained the remains of a 'foul-smelling yellowish substance' (Molaug 1969: 46). Only one of these Bartmann jugs was discovered in the stacks of the Stavanger Maritime Museum (Cat. 1774; Figure 119). It is a bulbous jug with a narrow neck and a rim set off by two beads. On the neck is a simple, stylized beard mask and on the body an oval relief medallion with a coffered frame and a stylized, star-like rosette. The medallion is similar to a relief application on a Frechen Bartmann jug dated to around 1650 with a slightly different beard mask (Unger 2007: 185-186, Cat. 92). Simple, stylized, almost grotesque beard masks are typical of Frechen bearded tankards from the second half of the 17th century (Gaimster 1997: 210, Unger 2007: 188-201). The contents of the Bartmann jugs handed down by the excavators of the wreck find at Kvitsøy could indicate that the vessels were used as containers for trade goods or commodities on board. Frechen Bartmann jars from a wreck of similar date near Shetland contained both mercury and peach pits and were therefore obviously used as containers for the chemical and for food on the ship (Gaimster 1997: 109).

Figure 118. *Cat. 1730, Cologne / Frechen Bartmannskrug from the middle of the 16th century, from the royal castle in Bergen.*

Figure 119. *Cat. 1774, Frechen Bartmann jug from the second half of the 17th century, recovered from the wreck of a Dutch ship off the island of Kvitsøy.*

5.5.4.2 Friezes

On at least 22 fragments from the entire working area (Cats. 1751, 1769, 1572, 1577, 1586, 1588, 1595, 1598, 1603-1608, 1611, 1614, 1617-1619, 1627, 1631, 1632) there are relief applications in the form of belly friezes filled with bands of writing, floral or geometric tendrils and figural grotesques. There are usually opposing leaves, mostly acanthus, alternating with round medallions on the shoulders and on the rim In Bergen, lion heads (Cat. 1572; Figure 120) and winged angels (Cat. 1632) were identified as grotesque heads in the floral friezes. At least four written frieze fragments show excerpts of the saying *WAN: GOT: VIL: SO: IST: MIN: ZEIL* (cf. also Cat. 1730; Figure 118), which in various versions is one of the common toasts on the jugs (Unger 2007: 67). In addition to mottoes, there are also occasional written friezes, which are apparently letters strung together without meaning (Cat. 1604; Figure 121). Jugs with frieze decoration can be dated to the second quarter or the middle of the 16th century (Gaimster 1997: 197-200; Unger 2007: 140-152). The vast majority of completely preserved vessels of this type show beard masks, so that it can be assumed that these fragments from Norway are also from Bartmann jugs.

Figure 120. *Cat. 1572, Cologne / Frechen jug fragment with surrounding floral belly frieze with lion heads and round medallions.*

Figure 121. *Cat. 1604, glued fragments of a Cologne / Frechen jug with incomprehensible letter frieze, acanthus leaves and round medallions.*

5.5.4.3 Leafy vines

Curved acorn and oak leaf or rose tendrils can be found on 14 body fragments of the characteristically salt-glazed Cologne / Frechen stoneware (Cats. 1571, 1576, 1578-1579, 1582, 1584, 1587, 1589, 1593, 1601, 1608, 1628-1630; cf. Figure

122). Such decorations can be found in large numbers on Bartmann jugs from the first half of the 16th century (Gaimster 1997: 194-196; Unger 2007: 120-138).

Figure 122. *Cat. 1608, body fragment of a bulbous jug from Cologne or Frechen with leaf tendrils. Found during the Strandgaten excavation in layers from the second half of the 16th century.*

5.5.4.4 Round medallions

The round medallions mostly show various men's heads in profile with different headgear. A single round medallion with the profile depiction of a bearded, antique-looking man without headgear in a floral wreath from Utstein Abbey (Cat. 1752; Figure 123) is probably a wall fragment of a Bartmann jug. There could not be identified more antique style round medallions amongst the material from southwestern Norway. Medallions with stylized portraits in contemporary Renaissance manner, often with different hats or other head gear are somewhat more common (e.g. Cat. 1627; Figure 124).

During a building survey in the centre of Bergen, however, the lower part of a *pinte* made of brown-speckled Cologne / Frechen stoneware was also recovered, showing three identical relief applications with five round medallions each (Cat. 1741). A similar *pinte* of unknown location with different round medallions is dated to the second quarter of the 16th century (Unger 2007: 252; Cat. 186).

5.5.4.5 Pinten or Schnellen with religious themes

In addition to the medallion *Pinte* described above, six other fragments of *Schnellen* or *Pinte* of presumed Cologne provenance were discovered in Bergen, showing relief applications with figurative depictions (Cats. 1567-1570, 1573, 1633). The motifs of the fragments found in different locations during the excavations in the Hanseatic Kontor on Bryggen Cats. 1567-1569 can no longer be determined.

Figure 123. *Cat. 1752, body fragment Cologne / Frechen stoneware. Bearded, antique-style head in a floral wreath in a round medallion. Found in the Utstein monastery near Stavanger.*

Figure 124. *Cat. 1627, body fragment Cologne / Frechen stoneware. Relief decoration of floral tendril band and round medallion with man's head with hat and pronounced beard. Found in Bergen, excavation Strandgaten 55-57.*

A large, preserved fragment from the Strandgaten 55-57 excavation shows Adam with the apple of knowledge in his left hand (Cat. 1573; Figure 125). A small dog (?) sits between the unclothed man's legs, and the carefully executed Tree of Knowledge can be seen next to it. An almost identical depiction of the Fall of Man can be found on a *Pinte* from the pottery in Maximinienstraße in Cologne, which is dated to the second quarter of the 16th century (Unger 2007: 386, Cat. 412).

On another small body fragment of a Cologne *Schnelle* or *Pinte* from the same excavation there is a very carefully executed depiction of Mary with the Child (Cat. 1633; Figure 126), to which no direct parallels could be identified. It depicts a lady with long curly hair in a high-necked robe, holding

a small child in her right arm and offering it something with her left hand.

Figure 125. *Cat. 1573, Cologne pinte with depiction of the Fall of Man. Found in Bergen during the Strandgaten 55-57 excavation.*

Figure 126. *Cat. 1633, body fragment of a Cologne pinte or Schnelle with depiction of Mary with the Child. Found in Bergen during the Strandgaten 55-57 excavation.*

5.5.5 Relief decorated stoneware 'Westerwald type'

The so-called *Kannenbäckerland* in the Westerwald, east of the Rhine, with its centre in the town of Höhr-Grenzhausen, is an important production region for ceramics, where stoneware has been produced since the late 16th century. Production increased considerably in the 17th and 18th centuries and was exported to large parts of the then known world. The influx of master potters from Siegburg and Raeren, who also brought with them the appropriate technological skills, was decisive for the development of the richly decorated stoneware (Gaimster 1997: 251-253).

Accordingly, the relief-decorated stoneware is difficult to distinguish from corresponding Raeren products with grey salt glaze and blue painting, which is why some processors also speak of Westerwald type stoneware in order to avoid the problematic assignment to a specific production site (Büttner 1997). This term refers to a grey, fully sintered stoneware with a light grey surface under the clear salt glaze, which is painted blue to a considerable extent. To a lesser extent, manganese purple painting was also used for accentuation. The relief applications clearly show the origin of the master potters from Raeren and Siegburg in the first half of the 17th century and resemble them in every detail. Typical of stoneware production in the Westerwald are a wide variety of utilitarian vessels made of grey, blue-painted stoneware, the production of which began in the 17th century and some of which are still made there today.

In the museum collections inspected in the working area, Westerwald type stoneware is dominated by simple wares without relief decoration. In general, the proportion of Westerwald type stoneware is rather low, which is certainly largely due to the low focus on finds from the Early Modern Period, especially from the advanced 17th and 18th centuries. Only around 200 fragments of this type of stoneware were found in the extensive excavations in the area of the Hanseatic trading post on Bryggen, most of which were simple, blue-painted utilitarian vessels without relief decoration. Only three fragments of a relief-decorated vessel from a late 17th century find context from this excavation were included in the catalogue of the present work (Cat. 1780; Figure 128).

There are also only seven fragments of relief-decorated stoneware 'Westerwald style' from the excavation *Skagen 3* in Stavanger (Cat. 1768; Figure 127). During the Strandgaten 55-57 excavation in Bergen, the only excavation in the working area with a comprehensive documentation of early modern features, a total of 17 fragments of Westerwald-style stoneware were recovered. Of these, 11 fragments with relief decoration were record-

ed in the catalogue (Cats. 1634-1644). The finds from the latter excavation are well stratified and show that stoneware of the Westerwald type can be traced in the working area primarily from the second quarter and in the second half of the 17th century. Due to the very limited source situation, the present information on this ware should be regarded as a cursory overview rather than a fully comprehensive study.

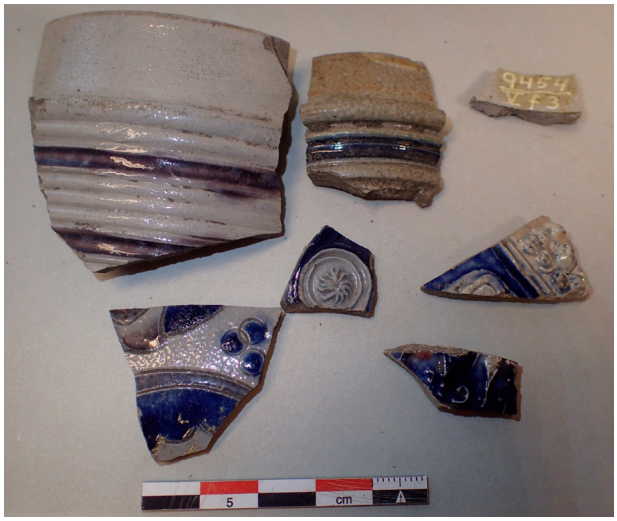


Figure 127. *Cat. 1768, seven fragments of relief-decorated stoneware of Westerwald type, found in Stavanger, excavation Skagen 3.*

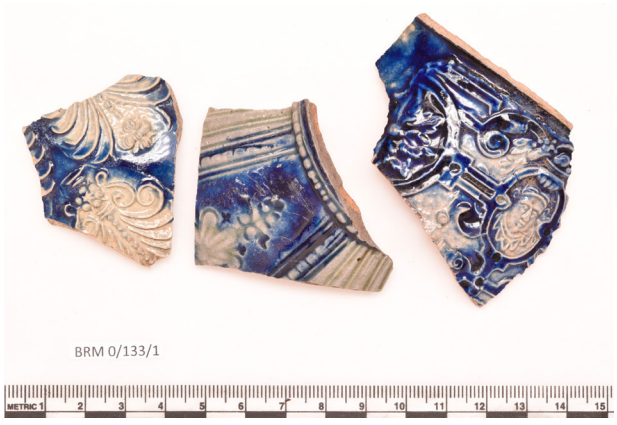


Figure 128. *Cat. 1780, three fragments of relief-decorated stoneware of the Westerwald type, found in a feature relating to the fire layer of 1702 at the Bryggen excavation in Bergen. Photo: Angela Weigand, University Museum of Bergen.*

5.5.6 Relief decorated stoneware from Duingen

As already mentioned in Chapter 5.2.3, a few fragments of relief-decorated stoneware from Duingen could be identified in Bergen in addition to the simple utility ware. Chapters 5.1 and 5.2 also presented medieval stoneware production in the village of Duingen (district of Hildesheim) and referred to the long pottery tradition of this place with its excellent clay deposits. From around the second half of the 16th century, under the influence of Rhenish stoneware potteries, Duingen produced serving and drinking vessels decorated with relief applications made in moulds (Stephan 2012: 47). In addition to the Rhenish influence, contact with the Saxon pottery centre of Waldenburg also made itself felt towards the end of the 16th century through the adoption of vessel forms from there, in particular *beehive tankards* (Gaimster 1997: 300). In long-distance trade, Duingen stoneware is mainly represented as undecorated utensils (Stephan 1996: 101). Vessels decorated in relief sometimes dominate in the regional context, such as those from the cathedral courtyard of the episcopal city of Hildesheim, compared to Rhenish products (Brandorff 2010: 209), but there is only evidence of very small quantities of them in international long-distance trade (Hurst 1986: 226). The brief heyday of the richly decorated Duingen stoneware of the Renaissance apparently ended with the turmoil of the Thirty Years' War around 1630 (Stephan 2012: 52).

Duingen relief-decorated stoneware has a grey, fully sintered fabric and a brown surface with a salt glaze that is thinner than that of Rhenish stoneware and has a characteristic matte sheen (Löbert 1977: 21).

In the 16th century, relief-decorated Bartmann jugs were produced in Duingen, which were closely based on Cologne / Frechen models, while somewhat later, in the early 17th century, forms such as spouted pitchers and *beehive tankards* dominated (Stephan 2012: 49-50). The *beehive tankards* already mentioned as a characteristic form of relief-decorated stoneware from Duingen are usually decorated with moulded roundel medallions, often the coat of arms of Electoral Saxony, alternating with elongated relief applications (Stephan 2012: 55; Löbert 1977: 81, Fig. 17, Cats. 148, 150, 154). Typically, there is also a zone with rouletting decoration on the wide, grooved foot.

Only six fragments of Duingen stoneware vessels decorated in relief could be identified in the working area (Cats. 687, 1376, 1395, 1718, 1727, 1731). All of them were discovered during various excavations in the old town area of Bergen and, as far as the shape of the vessels can be determined, all come from *beehive tankards*. Duingen is therefore the rarest documented production site for relief-decorated stoneware in Bergen, but the multiple finds of this ware indicate that at least *beehive tankards* from Duingen were regularly available on the early modern pottery market in Bergen. The presence of Duingen fragments in the remains of a building interpreted as a warehouse for wares such as ceramics (cf. Chapter 6.12) at Strandgaten 55-57 suggests that the rare pieces of decorated Duingen

stoneware in Bergen can also be regarded as regular trade goods.

Four of the six fragments of Duingen stoneware from Bergen bear the Electoral Saxon coat of arms in different versions (Cats. 1376, 1395, 1718, 1731). Due to the role of the Saxon dukes as patrons and protectors of Lutheran Protestantism, an interpretation of this coat of arms as a symbol of Lutheran faith is possible. An accumulation of pottery decorated with the Saxon coat of arms can generally be observed in Lutheran contexts (Stephan 2012: 55). The large body fragment with the Saxon coat of arms and an elongated relief application in the form of a double acanthus leaf (Cat. 1395; Figure 129) finds a close parallel on a complete *beehive tankard* from Weserstraße 10 in Höxter, which stratigraphically dates to the first third of the 17th century (König 2012: 188, Fig. 8). The corresponding piece Cat. 1395 from the Strandgaten 55-57 excavation was discovered in a layer from the period between 1589 and 1623, which corresponds to the production period of the Duingen *beehive tankards* (Stephan 2012: 55-56). While the body fragment Cat. 1395 is probably from a larger *beehive tankard*, the base fragment Cat. 1718 is also a fragment of a smaller vessel from Bergen, although mainly larger examples are known in Duingen itself (Löbert 1977: 27). A base fragment of a *beehive tankard* from the excavations in the area of the Hanseatic Kontor on Bryggen (Cat. 687) has no preserved relief applications, but the rouletting decoration on the foot and the nature of the fabric suggest that it is a fragment of a vessel similar to the better-preserved small tankard from the city centre (Cat. 1718; Figure 130). Due to the strong fragmentation, a Waldenburg provenance cannot be ruled out for the last pieces listed.

Figure 129. *Cat. 1395, body fragment of a Duingen beehive tankard with Saxon coat of arms. Recovered during the excavation at Strandgaten 55-57.*

Figure 130. *Cat. 1718, base fragment of a small Duingen beehive tankard with Saxon coat of arms. Found in Bergen, Domkirkegaten.*

So far without direct parallels is a body fragment of Duingen stoneware with a small relief application reminiscent of an angel (Cat. 1727; Figure 131). However, it could also be the personified sun, which is documented as a motif on Duingen relief applications and is probably modelled on typical regional Weser Renaissance crafts (Stephan 2012: 56-57).

Figure 131. *Cat. 1727, body fragment of Duingen stoneware with relief application in the form of an angel or the personified sun.*

6. Sites with stoneware finds in Bergen and other places in southwest Norway

A research-historical description of the various sites in Bergen and the surrounding area can be found in Chapter 4.1.2 of this book, which contains an overview of the urban archaeological investigations in Bergen. The sites in Bergen and the rest of southwest Norway where the presented stoneware finds were recovered are presented below (cf. Figure 132). After an introduction to the respective sites, the find contexts are described as far as possible in relation to the findings.

A total of 1773 finds from various sites in Bergen and the surrounding area were identified and catalogued during personal research in various museum stores. In addition, there are some fragments from excavations at the castle in Bergen, which were only accessible from the literature and could not be found, and other fragments from a farmstead near Bergen, which were only accessible on the basis of an unpublished master thesis (Randers 1981). Due to the importance of the respective

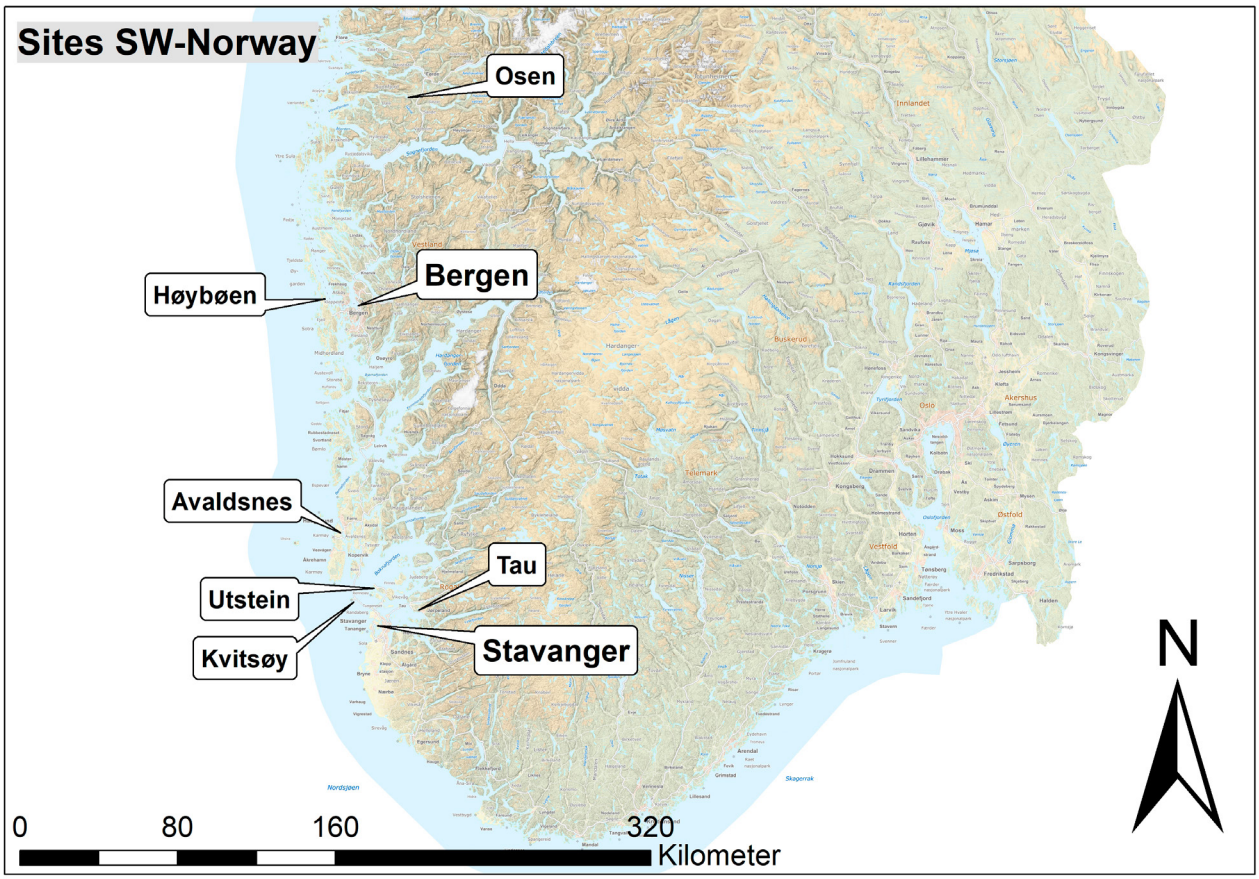


Figure 132. Overview map with location of the sites in Southwest Norway. Map source: Statens kartverk

Ceramic ware → Findspot: ↓	Slip glazed near stoneware Weser Uplands	Other stoneware Weser Uplands	Stoneware from Saxony	Relief-decorated Renaissance stoneware	Siegburg drinking bowls
BRM 0 / Bryggen; Bergen	1063	86	51	61	1
BRM 76 / Wine cellar; Bergen	135	23	16	7	83
BRM 223 / Kroken; Bergen	43	-	2	1	-
BRM 236 / Strandgaten 55	-	24	-	97	7
BRM 465 / Lille Øvregate Bergen	5	-	1	-	-
BRM 544 / Vågsalmenningen	-	-	-	3	-
BRM 1126, 1127 1148, 1154 & 1157; Bergen	22	-	-	7	-
S9454 / Skagen 3; Stavanger	13	-	-	4	-
S13998 Utstein Kloster; Rogaland	1	-	-	2	-
ST-S07319 Avaldsnes Rogaland	2	-	-	-	-
Wreck finds Rogaland	-	-	-	2	-
Old finds Bergen, var. Findspots	-	-	1	15	-
BRM 707 / Osen gård; Vestland	1		-	-	-
B12624 Høybøen; Vestland; not in catalogue	2 (?)	-	-	-	-
Bergenhus festning; Bergen; not in catalogue	5	-	-	1	-
Sum: 1780 catalogized finds (+ 7 not in catalogue)	1292; 1285 in the catalogue	133	71	200	91

Figure 133. *Table showing distribution of the wares among the various sites.*

sites, the latter finds were also taken into account. The quantity of finds from the various excavations varies greatly, as can be seen in the table, Figure 133 above. The varying quantities of finds can primarily be explained by the scope and character of the respective investigations.

Stoneware finds from the following 15 sites were included in this study, although the documentation of finds and features from the various sites varies greatly:

- Chapter 6.15: Bergen; large-scale excavation over several years on Bryggen, the area of the former Hanseatic trading post: approx. 5700 m² (BRM 0 / Bryggen) with comprehensively prepared and published documentation (Herteig 1969, 1985, 1989).
- Chapter 6.14: Bergen; several excavation campaigns in the area of the wine cellar and the old town hall of Bergen: approx. 500 m² (BRM 76 / Rosenkrantzgate) with various excavation reports and publications (Ekroll 1982, 1990; Lindh 1979, 1980).
- Chapter 6.13: Bergen; investigations in a building monument in Bergen in the street Kroken 3: 11 m² (BRM 223 / Kroken 3) with detailed excavation report (Dunlop 1985).
- Chapter 6.12: Bergen; Extensive excavation of a site on the opposite side of the harbour from the German Kontor, the 'Stranden' district at Strandgaten 55-57: ca. 670 m² (BRM 236 / Strandgaten 55-57) with detailed excavation report (Dunlop 1993).
- Chapter 6.11: Bergen; Pre-construction excavation of an undeveloped site in Lille Øvregate: 33 m² (BRM 465 / Lille Øvregate) with detailed excavation report (Hansen 1995).
- Chapter 6.10: Bergen; individual finds from an investigation during construction in the 'Vågsbunnen' district (BRM 544 / Vågsalmenningen) without an accessible excavation report.
- Chapter 6.9: Bergen; finds from profile documentation accompanying construction (BRM 1126 and BRM 1148 Kong Oscars gate; BRM 1154 / Domkirken; BRM 1157 / Korskirken); excavation reports not yet available.
- Chapter 6.8: The only major excavation in the centre of Stavanger (S9454 / Skagen 3) with detailed excavation report and published preliminary report (Lillehammer 1970: 1972).
- Chapter 6.7: Rogaland; marine archaeological diving prospections in the natural harbour at Avaldsnes Royal Court (ST-07319 / Avaldsnes) with preliminary report (Demuth 2001b).
- Chapter 6.6: Rogaland finds from Utstein monastery near Stavanger (S13998) with database entry and mention in publication (Petersen 1941: 113).
- Chapter 6.5: Rogaland finds from marine archaeological investigations of early modern shipwrecks by the maritime department of the Stavanger Museum (with published preliminary reports: Molaug 1969; Andersen 1975).
- Chapter 6.4: Old finds from the old town of Bergen, which were delivered to the museum

in Bergen at the beginning of the 20th century (m.a. 449; B6029; B6389; B6417; B6583; B6758; B6849; B6758) with entry in the inventory lists, but without finding context.
- Chapter 6.3: Vestland; stray find from excavation on farm (BRM 707/ Osen gård) with excavation report (Diinhoff 2002).
- Chapter 6.2: Vestland; pottery fragments from a research excavation on a medieval farmstead west of Bergen (Høybøen on Sotra, Øygarden kommune; B12624). The site is presented in an unpublished master's thesis (Randers 1981). The finds were not personally examined, but some were identified on the basis of illustrations.
- Chapter 6.1: Bergen; Investigations and construction supervision at Bergenhus Fortress, with published report and detailed presentation of the pottery (Molaug 1980).

For the sake of simplicity, the findings from the smaller excavations will be presented first, followed by an explanation of the findings from the larger excavations on Bryggen and in the wine cellar. In the case of the smaller sites with few finds, the find assemblage and chronological aspects are also discussed in this context. For the large sites BRM 0 / Bryggen and BRM 76 / Rosenkrantzgate, from which about 95% of the presented finds originate, the features are first described in detail, the chronological aspects of these sites and the find associations are treated separately in subchapters. The location of the most important sites within the town of Bergen is shown in the following map, Figure 134, which is based on a historical town map of Bergen from 1757.

6.1 Bergenhus Fortress

The finds from these investigations could not be examined personally by the author, as the finds were not retrieved in the storerooms of the University Museum of Bergen. However, the few ceramic fragments from the excavations have already been extensively studied and published by Petter Molaug (Molaug 1980). The following models are therefore based on Molaug's publication; the catalogue numbers refer to the cataloguing of the finds in Molaug's essay (1980). The settlement-geographical significance of the site, which was the castle and palace of the Norwegian and later Danish kings in the largest city of the kingdom, should be empha-

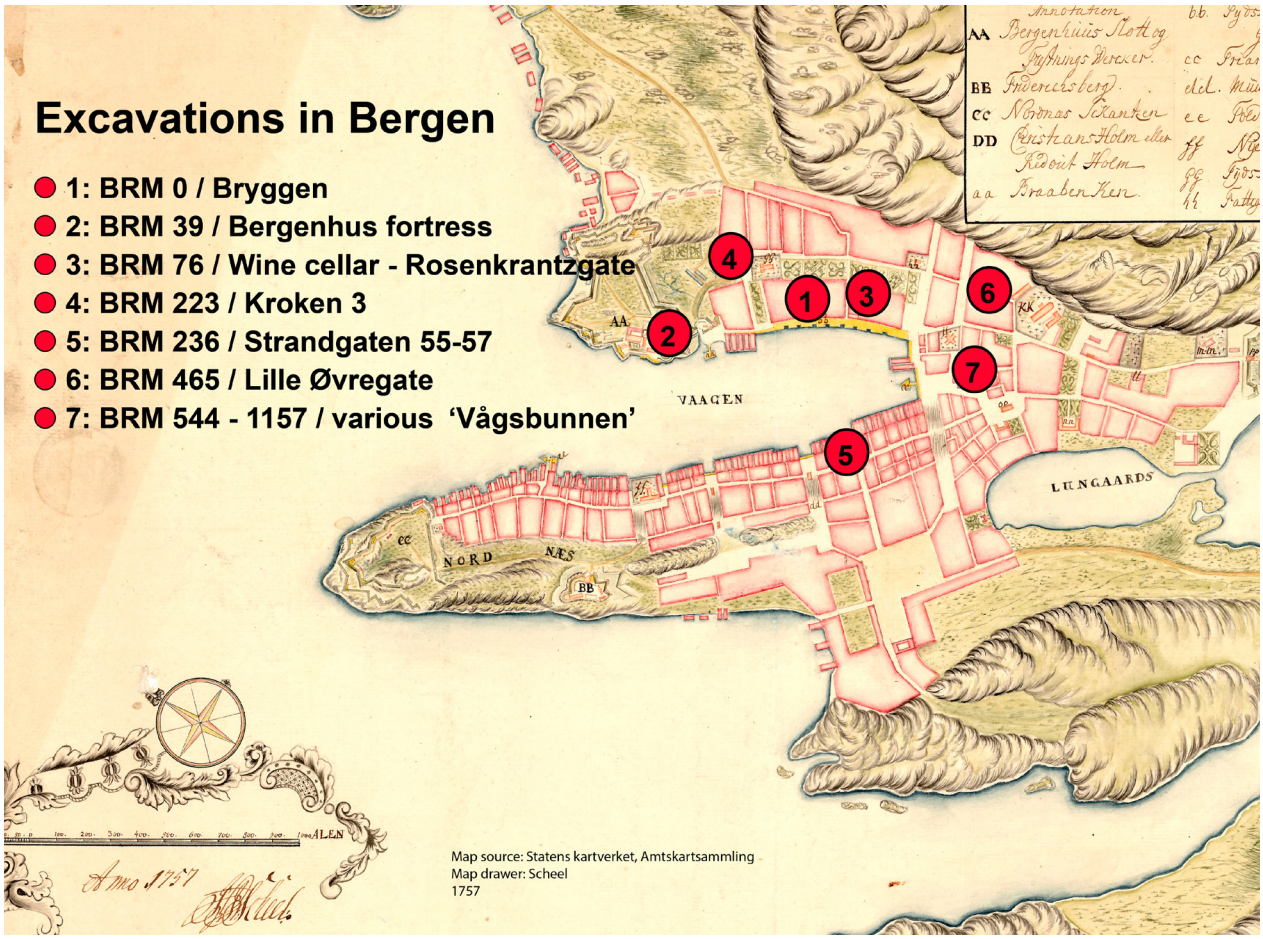


Figure 134. Map of the most important sites in the city of Bergen, drawn on a city map from 1757. Map source: Statens kartverket, amtskartsamling.

sized. With several large, imposing stone buildings, the castle complex was the symbol of royal power in the city of Bergen.

In total, only 40 fragments of medieval pottery were recovered during the investigations at Bergenhus. Of these, 28 fragments are of medieval glazed earthenware, primarily probably of English and southern Scandinavian production. The remaining 12 fragments are made of near stoneware and stoneware. 2 fragments are of fully developed Siegburg stoneware (Molaug 1980: Cat. Nos. 30-31, Figs. 118, 30-31), one of them from a small beaker with frilled foot. Three fragments are certainly of slip glazed Langerwehe near stoneware (Molaug 1980: Cats. 23-24 and 26, Figs. 118, 23, 24, 26). The classification as Langerwehe near stoneware is based both on Molaug's description of the fabric and, in particular, on the formal details of the fragments illustrated, such as the thick, bulging handle and the rouletting decoration on the collar rim, as is characteristic of Langerwehe near stoneware jugs (Hurst 1977: 227, Figs. 2, 1-4).

Four fragments from Bergenhus are very likely to be near stoneware from the Weser Uplands (Molaug 1980: Cats. 25, 29, 39, 40, Fig. 118, 25, 29; Fig. 120). These are body fragments of greybrown to reddish slip glazed near stoneware. The generally very thin walls, the narrow, fine horizontal corrugations (Cats. 25, 39, 40), the profiling by sharp shoulder strips (Cats. 29, 39) and dark fusions on the surface (Cats. 39, 40) strongly suggest that the fragments in question were produced in the Weser Uplands. Three further fragments of near stoneware (Molaug 1980: Cats. 27, 28, 38) cannot be determined with certainty on the basis of the present description and illustrations.

The finds of slip glazed near stoneware from the Weser Uplands at Bergenhus come from different areas of the fortress. Cat. 29 was discovered together with several fragments of lead-glazed earthenware, mainly English Grimston type and Yorkshire type wares, under a floor horizon (Molaug 1980: 188). Another fragment from the Weser Uplands was found at a part of the fortress, where in the 18th century the residence of the *Captain commander of the watch* was erected (Molaug 1980: 190, Cat. 25). The last two fragments from the Weser Uplands (Cats. 39-40) were found in the castle courtyard 'in the lower layers of earth', Cat. 40 presumably together with the above-mentioned foot section of a Siegburg stoneware beaker (Molaug 1980: 186).

It should be noted that of the few ceramic finds from the medieval layers of the Bergenhus fortress, around 10% come from the Weser Uplands. Looking at the stoneware in isolation, 25% of all medieval stoneware fragments from Bergenhus can be considered products of the Weser Uplands. In total, stoneware accounts for around a quarter of all medieval pottery from Bergenhus (Molaug 1980: 181).

Only one find from Bergenhus Fortress was discovered and catalogued in the medieval store of the University Museum in Bergen. It is an almost complete Bartmann jug, the exact circumstances of which are unclear, but which is recorded as coming from Bergenhus Fortress and must otherwise be regarded as a stray find (Cat. 1730; Figure 118). The globular but relatively slender bulbous jug shows a carefully executed relief decoration with a sculpted beard mask and a scroll *WAN GOT WILL SO IST MIN ZEIL* on the belly, alternating acanthus leaves and round medallions with a bearded man's head on the shoulder and the rim of the scroll. The Bartmann jugs originate from workshops in Cologne or Frechen, similar pieces from the holdings of the Cologne City Museum are dated to around the middle of the 16th century (Unger 2007: 142-148, Cats. 32-38).

6.2 Deserted farmstead Høybøen / B12624

It was also not possible to personally inspect the finds from this site as part of this work. There are several fragments of slip glazed near stoneware, most of which are in an exhibition that was inaccessible at the time of writing. On the basis of a photograph taken in the restoration workshop of the University Museum in Bergen before the finds were exhibited, at least two fragments can be identified quite clearly as products of the Weser Uplands (Figure 135). A total of 10 fragments of stoneware were recovered, including one base fragment with a frilled foot, which shows characteristic features of the Weser Uplands due to the flat base and the model of the frilled foot.

Figure 135. *Five fragments of near stoneware from the Høybøen excavation. Base fragment with frilled feet bottom left clearly from the Weser Uplands. Photo: Angela Weigand, University Museum of Bergen.*

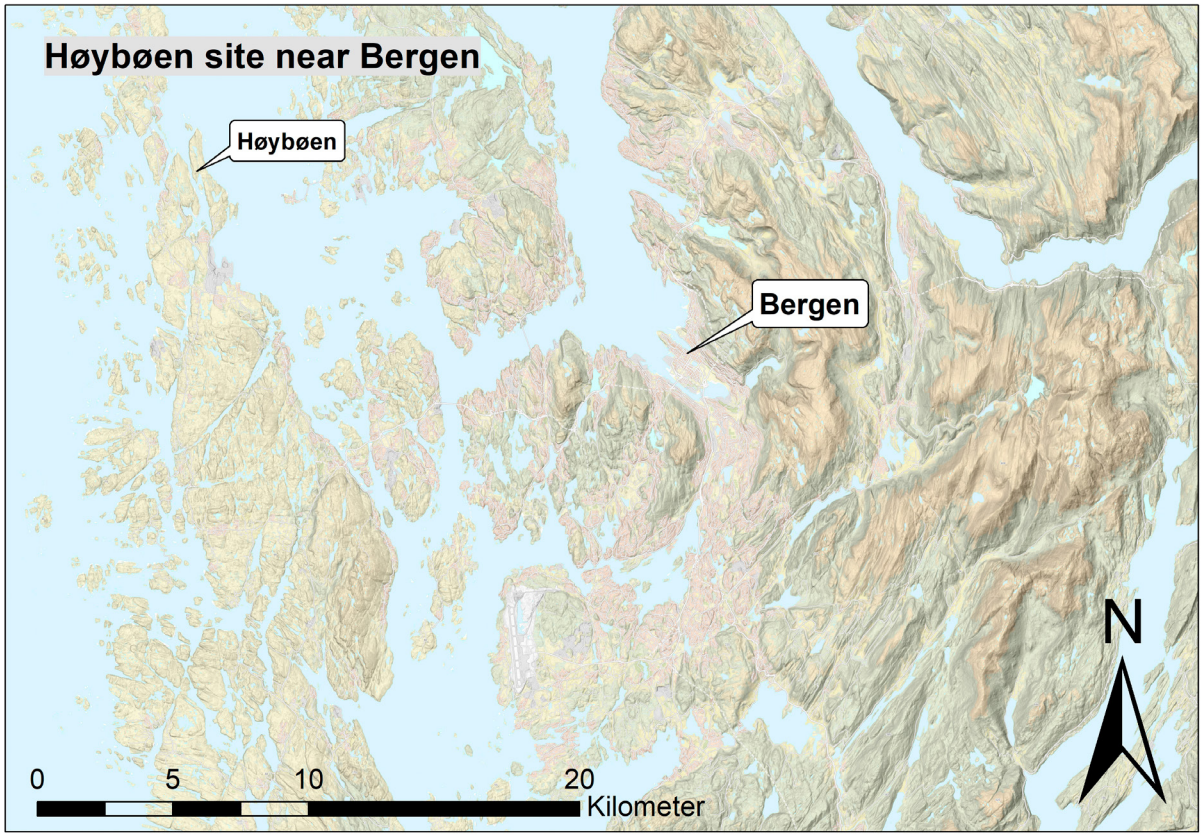


Figure 136. *Map of the situation of the Høybøen site on the island of Sotra, west of Bergen. Map source: Statens kartverk*

The site is the excellently preserved remains of a medieval farmstead on the island of Sotra, about 30 kilometres west of Bergen (see Figure 136), which were extensively investigated and presented as part of a master's thesis (Randers 1981). The central element of the farmstead were two stone buildings, which were divided into several rooms and had a complex, multi-phase construction history. Most of the stoneware fragments were found in the youngest demonstrable layer above a stone slab floor in room 1c (Randers 1981: 71). The stoneware was associated with one fragment each of grey and red earthenware (Randers 1981: 67). Several fragments of eastern English Scarborough Type Ware and richly decorated glazed red earthenware of the 'Aardenburg type' were discovered in the older find layer below the aforementioned stone floor in this room, which are generally dated to around 1250-1350 (Randers 1981: 60-62).

The stone slab floor in Room 1c appears to be one of the youngest elements of the courtyard, which has probably been inhabited since the 10th or 11th century (Randers 1981: 70). However, most of the finds and evidence of activity date from the 13th and 14th centuries, with the stoneware being the youngest datable material. Both the archaeological and archaeobotanical data indicate an abandonment of the farm in the middle or early second half of the 14th century. The presence of numerous, mainly non-ceramic artifacts made of iron, bone and soapstone indicates a sudden, unplanned end of occupation, but there is no evidence of a fire or other destruction (Randers 1981: 74). This finding points to a connection with the devastating plague epidemics of 1349 and 1350, in which a large part of the population in Norway died and many farmsteads fell desolate (Randers 1981: 115).

The stoneware from Høybøen can therefore be dated to the first half of the 14th century, probably shortly before 1350. A total of 82 fragments of pottery were recovered during the excavation of the farm, including 27 fragments of unspecified red earthenware, 15 fragments of soft dark earthenware, 13 fragments of hard-fired grey earthenware, 12 fragments of East English glazed earthenware from Grimston type and Scarborough, and 6 fragments of richly decorated, glazed red earthenware (Randers 1981: 67). In the stratigraphy of the excavation, the stoneware is obviously younger than the eastern English wares. It can therefore be assumed that stoneware from the Weser Uplands came into general use in Bergen and western Norway in the first half of the 14th century at the latest.

The inhabitants of the farm were most likely so-called 'fishermen farmers', who mainly fished and kept domestic animals. The pottery and other imported goods such as soapstone vessels and grinding stones were probably obtained from nearby Bergen, where the products of fishing and farming could also be brought to market (Randers 1981: 112).

6.3 Stray find from excavation of rural farmstead: BRM 707/ Osen gård, Sunnfjord, Vestland

This site is located about 170 kilometres north of Bergen, at the innermost end of the Dalfjord (see Figure 137). On a plain located at the mouth of a river in the fjord, a prehistoric settlement site discovered by chance during construction work was investigated in 2001 and 2002, where traces of an agricultural settlement dating from the late Roman imperial period to the Middle Ages were documented (Diinhoff 2002). Due to the construction work that led to the discovery of the site, parts of the features were heavily disturbed. The surrounding area is characterized by numerous prehistoric graves and a medieval saga tradition, which describes the site as an important farmstead in the late Viking Age (Diinhoff 2002: 18). The extensive traces of settlement from the 3rd-11th centuries documented during the excavation were therefore not surprising. Medieval settlement features were found in much smaller numbers and only in the uppermost, sometimes heavily disturbed layers. A pit house and stone substructures of a wooden construction, as well as a layer of annealed stones were found in the south of the excavation area (Diinhoff 2010: 10).

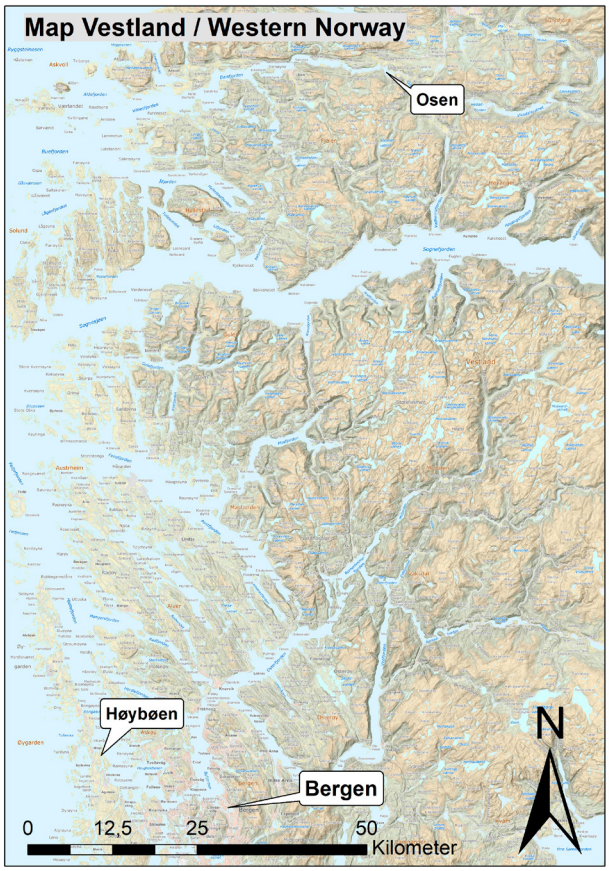


Figure 137. Overview map of western Norway, north of Bergen with the Osen and Høybøen sites. Map source: Statens kartverk

The extensive find material from the excavation is characterized by prehistoric and early historic finds of iron, soapstone, as well as other metal finds and glass beads, without find context are some early modern pottery fragments, as well as two fragments of slip glazed near stoneware, which, according to the description in the find report, most likely come from the Weser Uplands (Diinhoff 2002: 117; BRM 632/01 and BRM 632/05). Unfortunately, the author was unable to personally examine these finds before completing this study. However, further finds were recovered from the same site by the landowner after completion of the investigations when the excavation area was backfilled. In addition to local soapstone artifacts, these finds also include a rim fragment with a collared rim of a jug made of red slip glazed near stoneware from the Weser Uplands (Cat. 1747; Figure 138). This very typical specimen clearly shows that stoneware from the Weser Uplands was also accessible in more distant rural regions that were connected to mountains via sea routes.

Figure 138. Medieval find ensemble from the Osen site, with rim fragment of a jug with collared rim from the Weser Uplands, Cat. 1747 (right), as well as a casting mould (above) and a net weight made of soapstone. Photo: Andrea Weigand, University Museum of Bergen.

6.4 Old finds from the city centre of Bergen: (m.a. 449, B6029, B6389, B6417, B6583, B6758, B6849, B6879, B8975) Cats. 1731-1740, 1742-1744, 1770

The Bergen University Museum's medieval collection contains a considerable number of early modern finds, including a considerable amount of pottery. Most of these finds were brought to the museum at the beginning of the 20th century and, as far as the find location is still known, come from various building sites in the city centre of Bergen. The associations and contexts of these finds have not survived and cannot be reconstructed. They are mostly conspicuous and well-preserved objects that were found during manual excavation work and recovered by the workers.

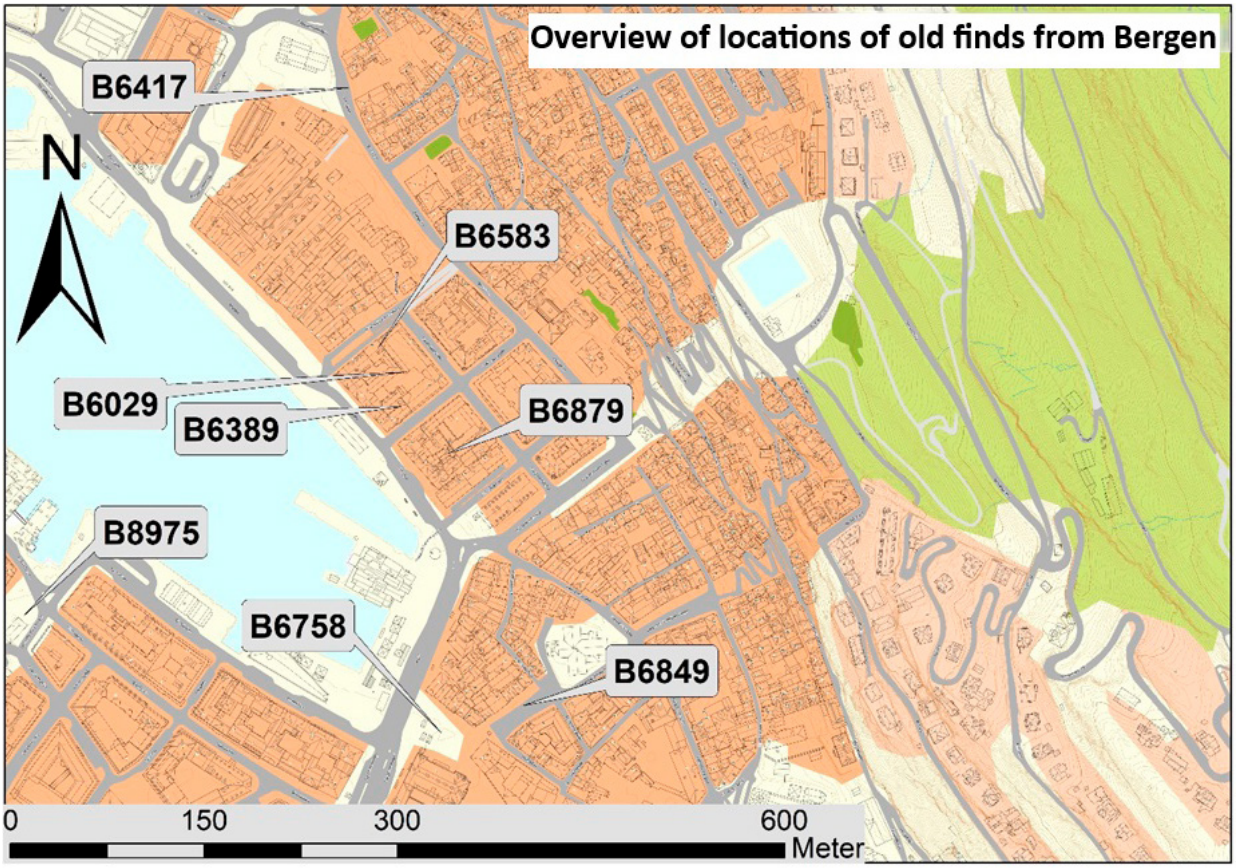


Figure 139. *Map of the old sites in the city centre of Bergen. Map source: Statens kartverk*

In the museum's entry lists, only the approximate find location and the year of delivery are listed for these finds, which at least make it possible to localize the find location within the city of Bergen (cf. Figure 139). A total of 11 Renaissance relief-decorated stoneware vessels of various origins and an almost complete jug made of Waldenburg stoneware were included in the catalogue of the present work as old finds. Illustrations of the finds can be found in the corresponding sections on the various wares in Chapter 5.

Most of these old finds are Siegburg products, in the form of five funnel-neck jugs with moulded roundel medallions and a richly decorated *Schnelle*. In addition, 2 fragments of Raeren jugs decorated in relief, a body fragment of a Duingen vessel with relief application and an almost complete slender jug from Waldenburg are among the old finds that can be assigned to a site. A fragment of a Siegburg funnel-neck jug (Cat. 1744; Figure 98) and an almost complete Raeren jug (Cat. 1743; Figures 115 and 116) from the museum storerooms are probably also finds from Bergen, but no data could be obtained on the places and circumstances of their discovery.

Under find number B6029 is a Siegburg funnel-neck jug with pierced walls in Gothic ornate tracery roundels (Cat. 1732; Figure 84). The piece was delivered in 1906 with the location 'Tyskebryggen'; it was probably discovered during the reconstruction of the eastern section of the Bryggen area, which was destroyed after a fatal fire in 1905. The same discovery site can also be assumed for another Siegburg funnel neck jug, which was recorded in the museum archive in 1910 with the find number B6389 (Cat. 1733; Figure 99).

From the western part of the Øvregate, find number B6417 is a Siegburg funnel neck jug fragment with a relief application depicting a scene with *Hagar and Ishmael* (Cat. 1736; Figure 94). The find came to the museum in 1910. Øvregate, located above Bryggen, was characterized by taverns and places of prostitution in the Middle Ages and Early Modern Period (Hemmie 2007:141-144); the extent to which the funnel-neck jug found there can be seen in this context must remain open due to the unclear find situation.

Under find number B6583 there is a Siegburg funnel neck jug fragment with a moulded roundel medallion showing 'Jesus' Temptation' (Cat. 1734; Figure 92) and a tall slender jug made of Waldenburg stoneware (Cat. 1772; Figure 55). Both pieces were found in 1911 on the site of the former town hall of the city of Bergen, where the administrative offices of the Hanseatic Kontor were located. The find site is located within the Bryggen district in the immediate vicinity of the municipal wine cellar.

A largely preserved Siegburg *Schnellen* is listed with the find number B6879 (Cat. 1735; Figures 69-71). It was discovered in 1916 or 1917 during construction work on *Brattens tomt* in the eastern part of Bryggen. The *Schnelle*, restored from several fragments, shows a careful relief application with a depiction of the baptism of Jesus, as well as a prophet and John the Baptist. The pictorial program can be interpreted as a symbol of the *old and new covenant* as a core element of Protestant theology (Buckholm 1998; Krueger 1994).

Ceramic finds were also recovered outside Bryggen during construction work at the beginning of the 20th century and brought to the museum. Finds discovered in 1914 and 1915 in the Vågsbunnen district on Vågsalmenningen square during construction work inside and in front of the Norges Bank building were given the find number B6758. From Siegburg comes a funnel-neck jug with three round medallions with grotesques (Cat. 1737; Figure 100), the piece appears to be secondarily fired, which may be related to one of the numerous fires in this quarter, for example in 1582 or 1623 (Helle 1998: 66-67). Three relief-decorated fragments of Raeren baluster jugs are also found under the same find number (Cats. 1738-1740; Figures 107 and 108).

Not far from the aforementioned site, a fragment of a *beehive tankard* from Duingen with the relief application of an Electoral Saxon coat of arms (Cat. 1731) was discovered in 1915 during excavation work in the road area and handed over to the museum with the find number B6849.

Finally, the only old find from 'Stranden' opposite Bryggen is an almost complete Raeren peasant dance jug (Cat. 1742; Figure 107). This was discovered in 1933 in the area of the Renaissance stone building *Muren* during construction work and stored with the find number B8975.

Even if all the above-mentioned 'old finds' are largely to be regarded as stray finds without a context, the find locations do at least provide important information on the occurrence of the ceramic wares examined in the respective districts.

6.5 Wreck finds Tau and Kvitsøy

Under the direction of the Stavanger Maritime Museum (formerly the Stavanger Maritime Museum), which is part of the Stavanger Museum Foundation, the remains of two shipwrecks in the waters not far from Stavanger, on Norway's south-western tip, were investigated in 1968 and 1972 (cf. Figure 140). In addition to numerous earthenware vessels, Renaissance relief-decorated stoneware vessels were recovered from both sites and catalogued for this study.

In the bay of Tau in the Boknafjord, around 20 kilometres northwest of Stavanger, there was a water-powered sawmill in the 16th century where timber from the mountainous and densely wooded hinterland was processed. Timber was one of Norway's most important export goods from the 16th century onwards, the main customers being the emerging Netherlands. In 1972, during underwater work for a new ferry terminal, the remains of a wooden ship were discovered, which were examined in a short emergency salvage operation by employees of the Stavanger Maritime Museum (Bang-Andersen 1975).

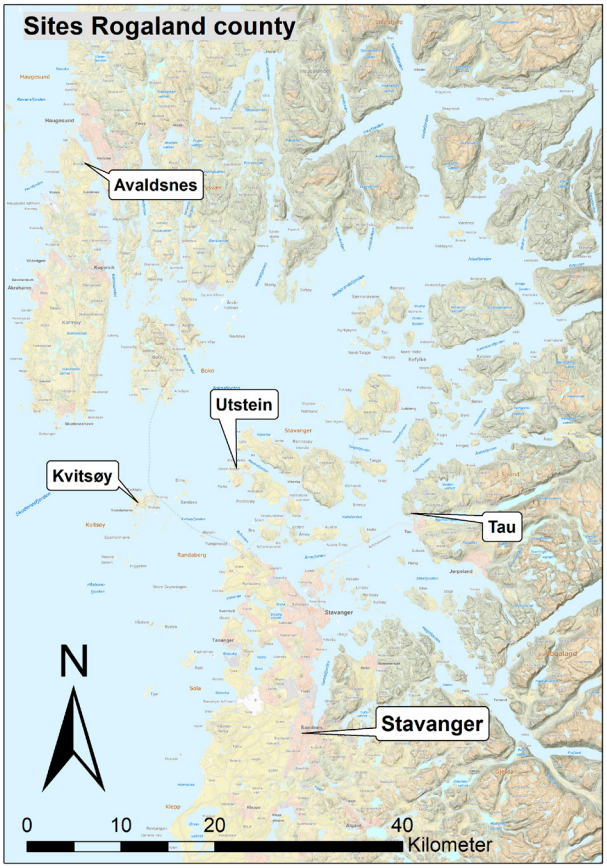


Figure 140. *Map showing the location of the sites in Rogaland County. Map source: Statens kartverk*

An almost complete *Pulle* of Siegburg stoneware with three similar round medallions of a crowned head in a floral frame (Cat. 1773; Figure 101) comes from this investigation. A further body fragment each of incised, blue-painted and relief-decorated stoneware of presumably Siegburg provenance from the site has been published but could no longer be discovered in the museum store (Bang-Andersen 1975: 37, Figs. 8, 9). The *Pulle* dates to the second half of the 16th century (Römer 2014: 185), when the Bay of Tau was frequented by numerous sailing ships for the timber trade. During the salvage of the wreck, in addition to a load of glazed floor tiles, numerous Dutch

kitchen vessels made of red earthenware were also discovered, all of which appear unused and can presumably be regarded as cargo (Figure 141). Whether the Siegburg *Pulle* was also intended as trade goods or rather belonged to the personal inventory of the ship's crew remains to be seen. Interpretations in this regard are discussed in detail in Chapter 8.1.1.

Figure 141. *Illustration of some ceramic finds from the Tau wreck. On the far right the Siegburg Pulle (Cat. 1773), next to it various vessels made of Dutch red earthenware.*

About 20 kilometres northwest of Stavanger lies the island of Kvitsøy off the coast, where the remains of another wreck were excavated in 1968 as part of a research excavation, which is believed to be the 'Stad Haarlem' from Terschelling, which was shipwrecked there in 1677 (Molaug 1969: 57).

In addition to a few pieces of wood from the ship, very extensive parts of a cargo of north Holland majolica from the second half of the 17th century were found, as well as various other earthenware from the Netherlands. The first publication of the find complex mentions a total of 8 Bartmann jugs made of Frechen stoneware, of which only one could be discovered in the store for this work (Cat. 1774). This is probably the youngest vessel presented in this work and dates to the second half of the 17th century. A Bartmann jug with a very similar oval medallion below the rather simple, stylized beard mask from the holdings of the Cologne City Museum is dated there to around 1650 (Unger 2007: 185, Cat. 92). Provided that the identification of the shipwreck on which the jugs were found is correct, the find from Kvitsøy shows that such bearded jugs were also in use in the middle of the second half of the 17th century. According to the excavators, some of the jugs were found to contain 'a white-yellowish, foul-smelling substance' (Molaug 1969: 46). The Bartmann jugs were obviously used as containers, whether for a possible commodity or a substance used on board remains unclear.

6.6 Utstein Monastery

Around 20 kilometres north of Stavanger, on the island of Klosterøy, the Utstein Monastery complex is the only medieval monastery in Norway with largely preserved buildings. The oldest written records of the monastery in Utstein, dedicated to St Laurentius, date from the late 13th century (Helle 2008: 578). The history of the development of this nationally significant site is the subject of a lively historical controversy (Eide 2006; Ekroll and Haug 2007). There is agreement on the existence of the monastery as an Augustinian Canonry in the late Middle Ages and an eventful history characterized by decline with numerous feuds and plundering in the early 16th century before the Reformation was introduced in Norway in 1537. From the middle of the 16th century, the site was used as a royal fief by various, mostly Danish, officials (Lexow 1963: 14-17). In the first half of the 20th century, various restoration measures and building history investigations were carried out in the building complex, during which some ceramic finds were also recovered, but no more detailed information is available on the findings. Remarkable was the discovery of a complete jug with spout made of richly decorated, glazed red earthenware in a niche in the wall of the monastery church (Kielland 1925: Figure 142).

Figure 142. *Almost complete jug with spout made of richly decorated red earthenware, c. 1250-1350, probably produced in Northern Germany. Discovered in a niche in the wall of the monastery church of Utstein. Photo Terje Tveit, Archaeological Museum, University of Stavanger.*

A total of three finds of stoneware from Utstein Monastery were identified in the stores of the Archaeological Museum of the University of Stavanger and included in this study. A complete miniature vessel made of brown slip glazed stoneware (Cat. 1750; Figure 39; see Chapter 5.1.4.7) was discovered during excavations in the 1930s and mentioned in an article a short time later (Petersen 1941: 113, Fig. 2), although no further details about the circumstances of the find are known. The vessel is a product of the stoneware potteries in Coppengrave / Duingen, where numerous similar vessels are documented (Stephan 1981: Pl. 59-61). Well-dated parallel finds in Denmark and central Germany suggest a dating of the find to the second half of the 14th or early 15th century (Liebgott 1978: 72; Demuth 2012: 358).

During reconstruction work on a building known as the 'Abbot's House', a fragment of the wall of a Cologne or Frechen jug with rich floral relief decoration came to light (Cat. 1751). Such jugs with a central tendril frieze and acanthus leaves can be dated to the second third of the 16th century (Unger 2007: 140). Another fragment from the Cologne or Frechen production centres is present with a fragment of a wall with a round moulded roundel medallion (Cat. 1752; Figure 123). Only handwritten notes are available for this piece, which provide information about its discovery in 'the excavation pit of a latrine'. The very carefully executed round medallion shows a bearded man's head in an antique style.

Despite the sparse information on the context of the findings, the finds from Utstein Kloster show that both medieval stoneware from the Weser Uplands and richly decorated Renaissance stoneware were accessible and in use on this site, which belonged to the social elite.

6.7 Avaldsnes

Avaldsnes Bay, with its good natural harbour, is strategically located on a strait between the mainland and the island of Karmøy, roughly halfway between Stavanger in the south and Bergen in the north (see Figure 132 and 140). Due to this location, rule at this place meant control over the sea route along the coast to the north, which gave Norway its name. Accordingly, there are outstanding archaeological monuments from various prehistoric periods in the vicinity of Avaldsnes, and a 10th century royal court from the time of the 'unification of the kingdom' is also assumed to have been located there based on saga sources (Skre 2018). Today, the site is dominated by St Olav's Church, which was built in the middle of the 13th century; a large, representative stone building, presumably also built at this time, was discovered during excavations in 2012 (Bauer 2018). It is very likely that this building was a royal residence; stone buildings of this type were otherwise only found in Norway in the cities of Bergen, Oslo and Kongsberg. In 1368, the royal court in Avaldsnes was burned down by Hanseatic forces during a war between the Hanseatic League and Denmark-Norway (Fyllingsnes 2019: 210). Numerous written sources subsequently report a strong Hanseatic presence at a place called 'Notau', which must have been Avaldsnes (Fyllingsnes 2019).

In the 1970s and 1980s, the first underwater archaeological investigations were carried out in the natural harbour basin below the church and former royal court, which culminated in a research project on the medieval port of Avaldsnes in the period 2000-2012 (Elvestad and Opedal 2019). In addition to a large number of other finds, numerous ceramic objects in particular were recovered during these diving investigations, most of which date to the late Middle Ages (Demuth 2001b).

Two of the finds recovered from Avaldsnes Harbour are made of brown slip glazed stoneware from the Weser Uplands and were therefore included in the catalogue of the present work (Figure 143). One piece is a rim fragment of a globular beaker; it is no longer possible to determine whether the mouth was pinched together like a quatrefoil (Cat. 1749). The second find from the Weser Uplands is a larger fragment from the body of a bulbous jug with a pronounced strip (Cat. 1748).

Figure 143. *Two fragmentary vessels from the Weser Uplands, found on the seabed in Avaldsnes harbour. On the left a bulbous jug Cat. 1748, on the right a beaker Cat. 1749. Photo: Cathrine Glette, Nordvegen historiesenter, Avaldsnes.*

Unfortunately, there is no more precise information about the location of the finds in the harbour basin, so that the pieces there can largely be regarded as stray finds. The other ceramic material recovered there consists mainly of numerous jugs and jug fragments of Siegburg stoneware, but there are also fragments of grey earthenware, Dutch cooking

vessels in red earthenware, a jug of Eastern English glazed earthenware and isolated fragments of early modern pottery (Demuth 2001b). Also noteworthy is a fragment of a ceramic horn made of white earthenware in the style of the *Aachhörner* (Demuth 2001b: 73).

Such ceramic horns can be found widely distributed in various places in Europe and were produced in large numbers in potteries in the Langerwehe and Aachen area in particular (Haasis-Berner 1994). Recent excavations in a monastery ruin in Iceland unearthed a fragment of a coiled blowing horn made of white earthenware, whose chemical composition determined by mass spectrometry indicates production in Duingen (Mehler, Kluttig-Altmann and Kristjánsdóttir 2018). Against this background, the origin of the ceramic horn from the Weser Uplands is at least possible, even if it was unfortunately not possible to subject the piece from Avaldsnes to a scientific analysis within the scope of this work.

The two pieces Cats. 1748 and 1749 show that in the port of Avaldsnes, which was characterized by extensive late medieval trading activities, products from the Weser Uplands were also part of the common ceramic spectrum alongside the dominant Siegburg stoneware. It is possible that they originate from an early phase of the Hanseatic dominance that began here in the late 14th century, which is reflected in a number of historical mentions of *Notau* from the 15th century as well as in the Siegburg stoneware vessels from the port, which also date primarily to the 15th century (Figure 144).

Figure 144. *A selection of Siegburg vessels from the harbour basin in Avaldsnes. Photo: Terje Tveit, Archaeological Museum, University of Stavanger.*

6.8 Skagen 3, Stavanger

In 1968, an excavation of 152 square meters was carried out on the plot 'Skagen 3' in the centre of Stavanger, which to this day represents the largest archaeological investigation in the medieval episcopal city in the far southwest of Norway (Lillehammer 1970; 1971: 56-72; Demuth 2025). The investigated plot is only 60 meters away from the medieval cathedral church and was most likely located close to the former beach line in the Middle Ages, i.e. directly at the harbour.

During the excavation, three primary horizons were distinguished: an approx. 75 cm thick layer was encountered beneath the remains of modern buildings, which was referred to as an early modern garden horizon and had evidently been largely removed by machine. Below this, a clear fire layer was revealed, which turned out to be the remains of a burnt-down building with clearly recognizable wooden details. This house, in which over 100 kilograms of charred grain was recovered on a charred wooden floor, is the most striking feature of the excavation (Lillehammer 1970: 12). The remains of the burnt building were founded in a black, stone-interspersed cultural layer about 50 cm thick. Below this was a sequence of layers of redeposited sand and gravel, alternating with strata of organic material, from which various finds were recovered. The sterile subsoil of fine sand stood about 2.7 meters below the modern ground surface and represents a former sandy beach on the formerly higher coastline (Lillehammer 1972: 58). A total of 24 strata were documented during the excavation, with layer I corresponding to the Early Modern cover and garden layers, layers II-IV comprising the medieval fire layer and strata V-XXIV corresponding to the early to high medieval levelling layers (Lillehammer 1972: 57, 58).

In addition to well-preserved organic finds such as bone tools, animal bones and worked wood, the extensive find material from the excavation also includes numerous stone artifacts and over 4,000 fragments of pottery, including 125 fragments of stoneware of different provenances and dates. Unfortunately, the exact contexts of the individual finds could no longer be reconstructed, but general trends have been documented. Numerous fragments of red earthenware and green-glazed kiln tiles as well as individual fragments of Weser and Werra ware came from the layers referred to as garden soil and more recent disturbances in the medieval fire layer. These indicate that this horizon was created in the course of the 17th / 18th century, which also corresponds with archival documents on the use of this town plot during this period (Lillehammer 1972: 57). The finds from the surface layers and the garden soil horizon include the majority of the stoneware finds catalogued for this

work, including both Renaissance relief-decorated stoneware and relocated medieval stoneware from the Weser Uplands (Cats. 1753, 1754, 1758-1769). Several base fragments of small Siegburg jugs with frilled feet, which only very generally date to the late Middle Ages or the 16th century, also come from these layers, together with numerous fragments of Eastern English glazed earthenware, especially Grimston type ware, some with anthropomorphic decoration (Figure 145).

Figure 145. *Two fragments of Eastern English Grimston type ware with hand-moulded face masks on lead-glazed earthenware vessels. Photo: Terje Tveit, Archaeological Museum, University of Stavanger.*

Only three fragments of slip glazed near stoneware from the Weser Uplands (Cats. 1755-1757) can be assigned to find layer II, which is the uppermost level of the burnt horizon containing the remains of a burnt building. A small fragment of wall with decorative strip (Cat. 1755) comes from the same find layer as a small fragment of a secondary burnt Mamluk enamelled and gilded glass beaker (Figure 146).

Figure 146. *Two fragments of Mamluk enamelled and gilded glass, probably from Syria or Egypt. The left fragment was secondarily fired, presumably in the city fire of 1272. Photo: Terje Tveit, Archaeological Museum, University of Stavanger.*

Together with another fragment of gilded glass from the same excavation, these are the only known examples of this exclusive glass in Norway (Demuth 2017). Fragments of a stoneware jug from the Weser Uplands with a simple upright rim and horizontal corrugations (Cat. 1756; Figure 147) come from the interior of the same building. Among the few pottery fragments that can be assigned to the same context is a fragment of a jug with spout richly decorated with floral elements made of red, glazed earthenware, probably from the southern Baltic region. Among the non-ceramic finds from this feature location, a legged game cube (S9454 Vc2) is worth mentioning, which, together with a number of game pieces, indicates that the users of this plot had enough time for playful activities.

Figure 147. *Cat. 1756, rim piece of a jug, according to the XRF analysis made in Coppengrave, excavated in the remains of a building in Stavanger that probably burned down in 1272. Photo: Anette Øvrelid, Archaeological Museum, University of Stavanger.*

Many ceramic finds, as well as bone and leather artefacts, come from the strongly stratified layered package between the sand and the foundation of the burnt house. These finds, which have not been conclusively processed, are characterized by the occurrence of red-painted earthenware *Pingsdorf style*, Andenne ware from present-day Belgium, as well as grey earthenware *Paffrath style*, all of which indicate a date in the 11th to early 13th century.

The most important relative chronological anchor point of the Skagen 3 excavation is the repeatedly mentioned fire layer with the charred remains of a house. A sample of the charred grain discov-

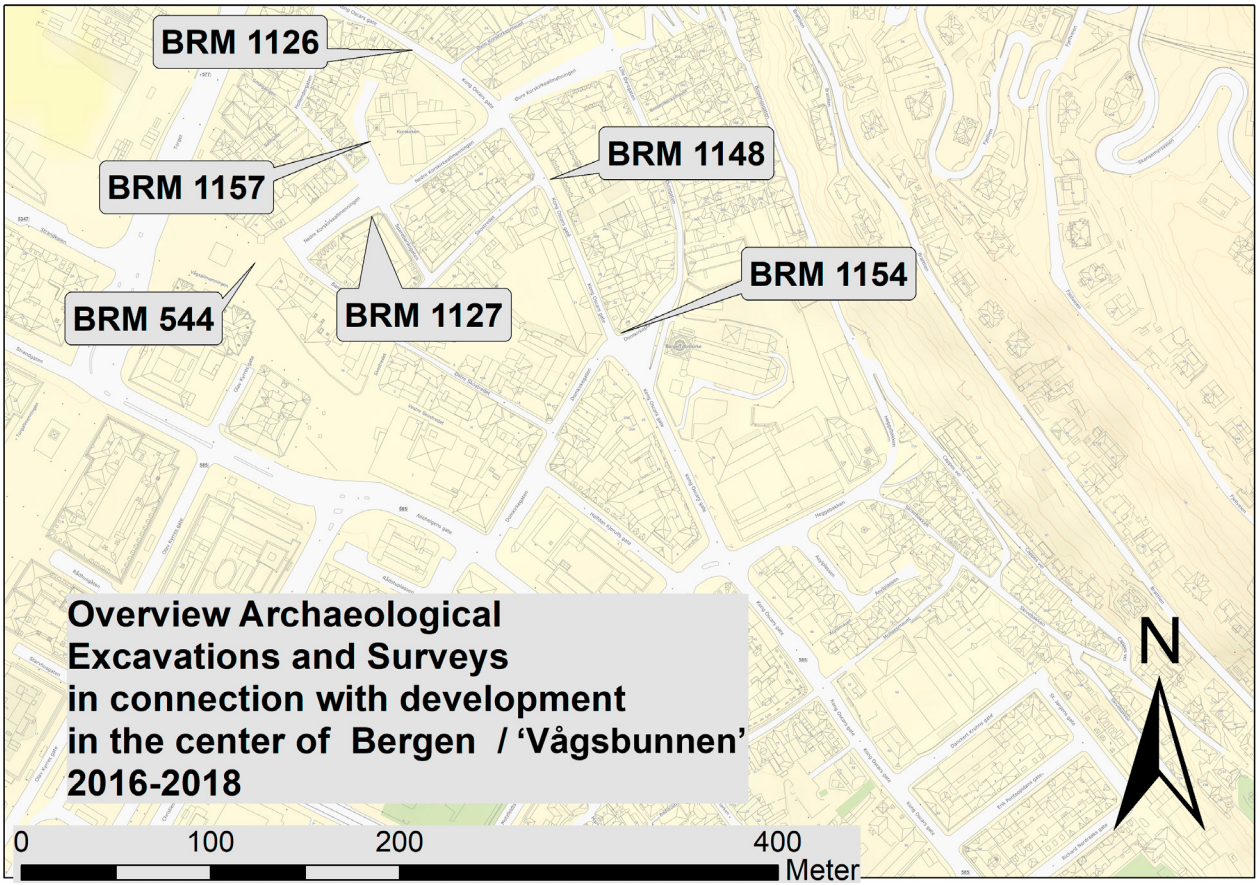
ered in this house was radiologically dated to the period between 1230 and 1350 and the damaging fire was correlated with a town fire archived for the year 1272 (Lillehammer 1972: 63). If this identification of the fire is correct, the fragments of slip glazed near stoneware recovered in Stavanger in primary finds (Cats. 1755, 1756, 1757) date to the third quarter of the 13th century. Due to the rather uncertain documentation of the finds, however, we must caution against their over-interpretation. As already mentioned, most of the fragments of stoneware from the Weser Uplands were found in intermixed layers that are stratigraphically younger than the fire layer and, in addition to the stoneware from the Weser Uplands, also contained Siegburg stoneware from the late Middle Ages, Eastern English glazed earthenware and Early Modern finds.

It should be noted that a total of 13 fragments of stoneware from the Weser Uplands were identified in the find material from the Skagen 3 excavation, which, according to the X-ray fluorescence analysis, come in roughly equal parts from Bengerode / Fredelsloh and Coppengrave / Duingen (Cats. 1753-1765). This means that around 10% of the total of 125 stoneware fragments in this study are from the Weser Uplands. Both the prominent location of the excavated parcel between the quay front and the cathedral church and the find material with fragments of oriental gold enamel glass and numerous stone and bone gaming pieces point to an upscale social milieu. The large quantities of charred grain discovered in the main find of the excavation make it seem plausible that long-distance trade was carried out on this plot of land at the harbour. Obviously, stoneware from the Weser Uplands was a not unknown component in this activity, which probably dates to the late 13th century.

6.9 Rescue excavations in the Vågsbunnen district of Bergen: BRM 1126 and BRM 1148 Kong Oscars gate; BRM 1154 / Domkirken; BRM 1157 / Korskirken: BRM 1127 / Nedre Korskirkealmenning

A total of 22 fragments of slip glazed near stoneware from the Weser Uplands were recovered between 2016 and 2018 during the archaeological monitoring of extensive canal construction work in central areas of Bergen's city centre (Figure 148). Four fragments of Renaissance relief-decorated stoneware were recovered from the Early Modern layers that were also included in these measures. The Vågsbunnen district, located between the cathedral church and Korskirken, in which the sites were found, was characterized by a mixed craftsmanship in the Middle Ages (Helle 1995: 250).

Figure 148. *Overview map of the approximate location of the investigations accompanying the construction work in the years 2016-2018 in the city centre of Bergen. Map source: Statens kartverk*



A very large number of layers were documented during the investigations, but connections between these layers cannot be discussed due to the fact that final reports were not yet available at the time of writing. It is only possible to record the total number of ceramic finds in the respective features and, where noted by the excavators, the provenance of these other ceramic finds.

From the measure BRM 1126/ Kong Oscars gate, 12 fragments were identified as slip glazed near stoneware from the Weser Uplands (Cats. 1699-1710). Four of these pieces came from one feature, layer 277, from which a total of 15 fragments of pottery were recovered, including two Siegburg fabrics and four fragments of Eastern English glazed earthenware from Grimston type and Scarborough. The excavators only generally date the finds and features to the late Middle Ages.

Six fragments of slip glazed stoneware from the Weser Uplands were discovered during the work BRM 1157 / Nedre Korskirkeallmenningen. These all came from different features, each of which is of little significance due to the unclear documentation situation. Insofar as the layers are not characterized to a considerable extent by Early Modern finds (e.g. feature 2303), the finds from the Weser Uplands are associated with Siegburg stoneware and Eastern English glazed earthenware as well as other late medieval wares. From other sites (BRM 1148 / Kong Oscars gate and BRM 1154 / Domkirkegaten) there are only a few finds each without further information, these are largely to be regarded as stray finds given the current state of investigation and documentation.

The finds from the investigations accompanying the construction work cannot be assigned to specific historical complexes, but they show that slip glazed near stoneware from the Weser Uplands was also a common component of the late medieval pottery inventory in the Vågsbunnen district.

6.10 Excavation BRM 544 Vågsalmenning

A preliminary investigation in the area of Vågsalmenning / Nedre Korskirkealmenningen revealed extensive levelling layers associated with land reclamation at the end of Bergen Harbour Bay (Åstveit 1999). After the shallow water areas were filled in, a central square was created here in the course of the 16th century, which is now used as a marketplace. In the extensive Early Modern ceramic material, three fragments of relief-decorated stoneware from the Renaissance were identified and included in the catalogue. These include a body fragment of a vessel from Duingen with a relief application in the form of the personified sun (Cat. 1727; Figure 131). Furthermore, a fragment of a Siegburg funnel-neck jug with two similar round medallions of an antique-style male head with helmet and the inscription: *HEK..* for Hector was also discovered (Cat. 1728; Figure 96). Finally, a fragment of a Raeren cylinder-neck jug was also found during the examination, of which only parts of the domed shoulder and the neck decorated with geometric and floral relief decoration have survived (Cat. 1729). Unfortunately, the stratigraphic context of the finds cannot be determined.

6.11 Excavation BRM 465 / Lille Øvregate

This small excavation was carried out using modern urban archaeological methods and revealed a number of well-stratified features from the High Middle Ages to the Early Modern Period in a small area (Hansen 1995). Two sections covering a total of 33 square meters were investigated on a corner plot between the streets Lille Øvregate and Nedre Hamburgersmauet (see Figure 134). The sequence of layers on the site, measuring up to 2 metres in depth, was divided into 20 stratigraphic phases. The site is located south-east of the Hanseatic Kontor in the north-eastern periphery of Bergen's old town. According to historians, the area was primarily built up with small stalls and craft businesses in the Middle Ages (Helle 1995: 250).

The excavation yielded extensive finds of pottery, bone, metal, glass and stone. As is usual in town core excavations, the finds from the Early Modern layers were the most significant in terms of quantity. A total of 5 fragments of slip glazed near stoneware were recovered from the medieval layers (Cats. 1693-1697). A macroscopic examination by the author led to the conclusion that all these fragments are to be regarded as products of the Weser Uplands. These layers also contained 12 fragments of Siegburg stoneware, 16 fragments of glazed earthenware from eastern England and 11 fragments of southern Scandinavian glazed earthenware. In total, the medieval layers contained 75 fragments of pottery; in addition to the above-mentioned wares, 1-3 fragments each of Dutch earthenware, hard-fired earthenware of the *Pingsdorf* and *Paffrath* types, as well as Andenne and Saintonge ware were identified. The classification of the various pottery finds is based on the excavation report (Hansen 1994), the processing of the pottery documented in the finds database by Rory Dunlop, NIKU Bergen and examination of the finds in the storerooms of the University Museum, Bergen by the author

A rim fragment of slip glazed stoneware from the Weser Uplands (Cat. 1697; Figure 149) was discovered together with 7 fragments of Siegburg stoneware and 4 fragments of various glazed earthenwares in the backfill of a well, feature 61, which can be addressed as a building horizon (Hansen

1995: 12). Stratigraphically, this layer was dated by the excavator to the period 'around 1300', approximately 1275-1325 (Hansen 1995: 25).

A body fragment of stoneware from the Weser Uplands (Cat. 1693) was found in layer 38, most likely a trample or occupation layer, together with four fragments of East English glazed earthenware (Hansen 1995: Tab. 1). Based on the composition of the ceramic material and the discovery of a bone comb, this layer is also assumed to date to the period c. 1275-1325 (Hansen 1995: 26).

Figure 149. *Cat. 1697, rim fragment of stoneware from the Weser Uplands, found in well backfill feature 61 of the Lille Øvregaten excavation, stratigraphically dated 1275-1325.*

Figure 150. *Cat. 1694, base fragment of stoneware from the Weser Uplands, found in fire layer feature 10 of the Lille Øvregaten excavation, stratigraphically dated 'around 1400'.*

A base fragment of slip glazed near stoneware from the Weser Uplands (Cat. 1694; Figure 150) was recovered from the fire layer, feature 10. Two fragments of this pottery (Cats. 1695-1696) were also found in the demolition horizon of feature 32 following this firing. In the fire layer (feature 10), 4 fragments of South Scandinavian glazed earthenware and 1 fragment each of Scarborough, Andenne, Saintongue and Pingsdorf ware were also discovered. In addition, a chess piece made of (reindeer?) antler was also found in this fire layer (Hansen 1995: Fig. 27). In the demolition horizon feature 32, the two fragments of southern Lower Saxon near stoneware were associated with 3 fragments of Siegburg stoneware and 2 fragments of glazed earthenware. The fire layer feature 10 and the associated demolition horizon, feature 32, are likely to be identified with the town fires of 1393 or 1413 (Hansen 1995: 27).

Also closely related to fire layer 10 is the destruction layer feature 55 above it, in which a base fragment of a miniature stoneware vessel was recovered alongside a fragment of South Scandinavian glazed earthenware (Cat. 1698). Due to the nature and colour of the fabric and surface, this piece can most likely be regarded as a product of the Saxon stoneware potteries of Waldenburg, where such small vessels are also referred to as 'Gedrückt-beutelförmige Becher', an otherwise very unusual terminology (Scheidemantel 2005: 150).

In summary, the finds from the Lille Øvregate excavation show that slip glazed near stoneware from the Weser Uplands represents a notable proportion of the medieval pottery assemblage, accounting for around 7.5% of all pottery fragments at the site. These are found in layers dating from the late 13th century to the early 15th century. Saxon stoneware is also present, albeit in very small quantities, and would therefore have been accessible in Bergen as early as 1400. Notable non-ceramic finds include a net weight and a chess piece, which belong to the same find horizon as the pottery finds discussed (Hansen 1995: 31). The soapstone net weight indicates that the inhabitants of the household fished themselves at least occasionally, which is a fairly certain indication that it was an 'ethnic Norwegian' household and not migrants from the Hanseatic region. The chess piece also shows that the inhabitants knew and played this demanding game, which was often associated with higher social status.

6.12 Excavation BRM 236 Strandgaten 55-57

The excavation at Strandgaten 55-57 became necessary in 1986 due to the demolition of the long-established haberdashery store *Grand Magazin* and the planned new development. To date (2020), this emergency excavation is the only major archaeological investigation in the southern area of Bergen's old town, the so-called 'Stranden' (see Figure 134).

In the course of the 16th century, this side of the harbour opposite the Hanseatic Kontor increas-

ingly developed into an economic focal point of the city of Bergen, where craftsmen and merchants from different ethnic backgrounds conducted their business (Fossen 1995: 43). In the last third of the 17th century, Jørgen Thormøhlen, a merchant who had immigrated from Hamburg and was one of the richest and most influential citizens of Bergen at the time, lived on a plot of land adjacent to the excavation site (Fossen 1978: 62-64).

Over the course of 3 months 320 square meters were completely excavated on the 630 square meter site. The anthropogenic layers, up to 2 meters thick, were divided into 5 archaeological phases, each of which was terminated by prominent fire layers. The documentation of the excavation is available in a detailed excavation report (Dunlop 1993). The quite extensive find material consists mainly of ceramics; a total of 22567 individual ceramic finds from the Strandgaten 55-57 excavation are stored and recorded in a database. Of these ceramic finds, 3651 were typologically identified by the excavator Rory Dunlop; the models presented in this paper are primarily based on these identifications accessible via the database. The finds from the excavation were examined by the author in 2000 in order to catalogue the finds of decorated stoneware and Duingen stoneware in detail. The finds and features from the Strandgaten 55-57 excavation had already been examined by the author in connection with the presentation of Weser and Werra ware from Bergen as part of a master's thesis (Demuth 1997), the main contents of which were also published (Demuth 2001a: 87-92).

The development of the buildings on the site documented by the excavations begins in the second half of the 16th century, when the remains of two parallel wooden buildings were found, which were aligned with the quay front of the Bergen harbour at the time and represent the oldest phase 5 of this investigation. The foundations of these houses rested on levelled layers that had been laid on the existing ground of this site, which was originally located directly on the water. In addition to a number of round stones, presumably once used as ship ballast, pottery eroded by the water was also discovered in these layers, indicating that the soil material was at least partially extracted from the harbour area during dredging. The buildings in the area facing the harbour on the gable side were warehouses for goods imported via maritime trade. This first building phase ended with a massive fire, a fire in this district in December 1589 is documented (Fossen 1995: 272). As no finds were discovered in the finds material from the fire layers and stratigraphically older features that suggest a more recent dating, it is very likely that the oldest fire layer of the Strandgaten excavation can be identified with the town fire of 1589 (Demuth 2001a: 88, 94). During the excavation, the layers associated with this oldest building could not be fully investigated due to a lack of time and personnel (Dunlop 1993: 22). Nevertheless, the layers of this phase were the richest in finds of the entire excavation. The building structure of the next most recent phase, phase 4, showed the same pattern with two parallel wooden buildings facing the harbour, which can probably also be regarded as warehouses. These buildings were also destroyed by fire, this time probably as a result of a fire in this area in 1623 (Fossen 1995: 73). As in the previous phases, the area under investigation in Phase 3 was dominated by wooden buildings oriented towards the quay front, which, as in the previous decades, were most likely so-called *sjøboder*, i.e. warehouses (Dunlop 1993: 17). In the southern part of the area facing away from the sea, however, the features of this phase were heavily disturbed by more recent features. Phase 3 also ended with a devastating fire, which is identified with the archival record of a fire in the district in 1660 (Fossen 1995: 473).

The two most recent phases of development archaeologically identified on the site show a considerably different picture of the plot. In both phase 2 and phase 1, the plot is characterized by massive stone foundations, which may have belonged to two parallel stone buildings, known in Bergen as *steinkjeller* (stonecellar) which were used for residential and economic purposes. Obviously, however, this stone construction also offered only limited protection against fire, as the archival records in 1686 and 1702 again report devastating town fires in the district (Fossen 1995: 474, 481), which were also reflected archaeologically in corresponding fire horizons (Dunlop 1993: 30). The plots of land with the structure of buildings evidenced in the archaeological findings can also be found on a cadastral map from the period after the fire of 1686, most of the buildings apparently belonged to the merchant Jørgen Thormøhlen mentioned at the beginning, who apparently rented out the three-storey high stone houses to other merchants of German origin (Fossen 1978: 63-64).

The aforementioned extensive ceramic finds from the excavation are distributed very unevenly across the various archaeological phases (Figure 151). Of the 22,567 ceramic finds, 12,419, i.e. over half, belong to the oldest phase 5, which ends with the fire of 1589. A further 3559 ceramic finds were recovered in layers of phase 4, i.e. the period between 1589 and 1623. 1342 ceramic fragments were recovered in layers of phase 3, which ended with the town fire of 1660. In contrast, the two most recent phases, characterized by the construction of massive stone buildings, yielded significantly smaller quantities of ceramic finds. Phase 2, which ended with the fire of 1686, yielded 520

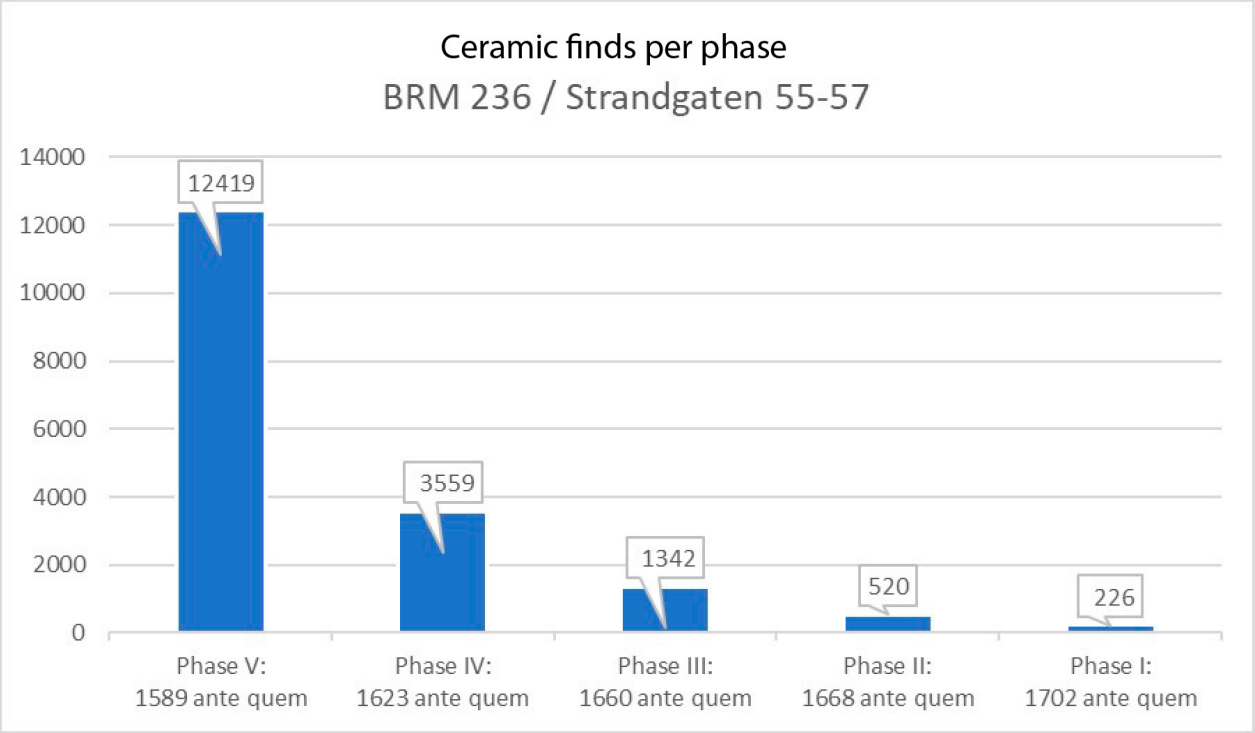


Figure 151. *Diagram of the phase distribution of the pottery from the Strandgaten 55-57 excavation.*

pottery finds, while only 226 pottery finds came from the layers of phase 1. Even if there are occasional redeposits and not all finds are in a primary find context, the vast majority of the finds appear to belong to the respective phases. In the more recent phases 1 and 2, for example, in addition to a few fragments of Weser ware that have certainly been re-deposited, there are several externally brown-glazed small bowls made of Chinese *Capuchin porcelain* or *Batavian ware* porcelain from the Kangxi period, which were increasingly imported into Europe from around 1680 (Bartels 1999: 189-192).

The vast majority of the pottery consists of lead-glazed kitchen vessels, primarily three-legged pots, most of which were probably produced in the Netherlands. In addition to this so called *Grapen*, there are also roasting pots in the style of *pig pots*, three-legged pans and rectangular baking or roasting dishes. The absence of soot or other signs of use on the outside of the cookware is striking, indicating that it was new ware intended for distribution. Everything points to the structural remains of phases V to III being warehouses in which imported pottery was also handled in view of the large quantity of apparently unused pottery. This interpretation of the site as the warehouse of a pottery trader has already been presented elsewhere (Demuth 2001a: 118).

In addition to household ceramics, bricks and glazed tiles are also found in not insignificant quantities. Plates and bowls made of lead-glazed earthenware occur in large numbers; green-glazed plates with brown rims probably come from the Netherlands, green-glazed bowls with incised, wavy underglaze decoration from the area around Cologne or Frechen (Figure 152). Weser ware is also relatively well represented (Figure 153), of which almost 600 fragments are present, making it the most common clearly identifiable and decorated ceramic ware from the site (Demuth 2001a: 89-92).

Figure 152. *Plate of 'Frechen ware' from the Strandgaten excavation. Photo: Angela Weigand, University Museum of Bergen.*

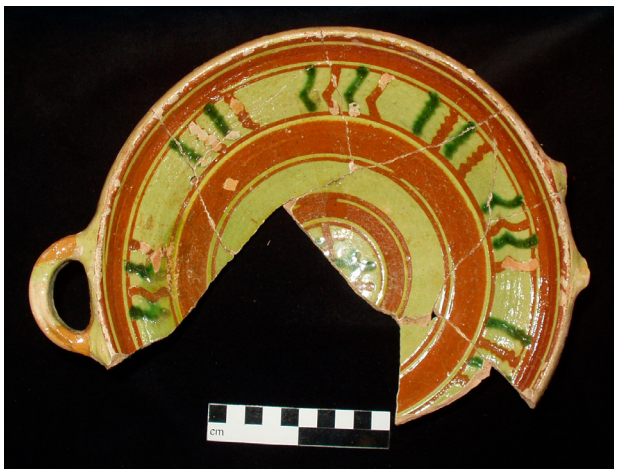


Figure 153. *Weser ware bowl from the Strandgaten excavation.*

Tin-glazed earthenware is about half as common as Weser ware and probably originated primarily from the Netherlands, including numerous fragments of polychrome majolica (Hurst 1986: 117-123). However, fragments of light blue Ligurian 'Berettino' faience are also repeatedly found as individual pieces. Another rare but remarkable earthenware, of which there are 24 fragments from the Strandgaten excavation, almost all of which were discovered in the oldest phase 5, comes from Beauvais in northern France and is decorated in an elaborate sgraffito technique (Hurst 1986: 108-111). Werraware, on the other hand, was very rare in the finds from the Strandgaten excavation; only 8 certain fragments of Werraware were discovered. Among these, however, is a very important base fragment with the painted date *(15) 86*, which was discovered in layer 102 under the fire layer 32 ending phase 5. Since this fire could not have taken place before 1586, the Werraware fragment BRM 236/16920, together with the absence of clay pipe fragments and the appearance of the 'Beauvais double sgraffito' ware, which was no longer common in the 17th century, supports an identification of the fire ending phase 5 with the town fire of 1589 (Demuth 2001a: 94). Due to the careful documentation of the undisturbed stratigraphy of the excavation and the good historical record, the correlation of the subsequent fire layers with the surviving town fires of 1623, 1660 and 1686 also appears very convincing.

The stoneware finds discussed in this study, on the other hand, were recovered almost exclusively from the features of phases 5 and 4, i.e. the oldest building horizons documented on the site. A total of 134 stoneware finds were catalogued for this study, which is about 43% of the 310 stoneware finds from the entire excavation, which make up only a small part of the more than 22,000 pottery fragments from this site.

As can be seen from the diagram above (Figure 154), the stoneware finds are also concentrated in the layers of the older phases, with a clear preponderance of finds in the oldest phase V, which ends with the fire layer of 1589. However, the proportion of stoneware in the total ceramic finds of these phases is only 1-2% and is therefore only a very small part of the ceramic inventory in terms of quantity. The richly decorated pieces primarily

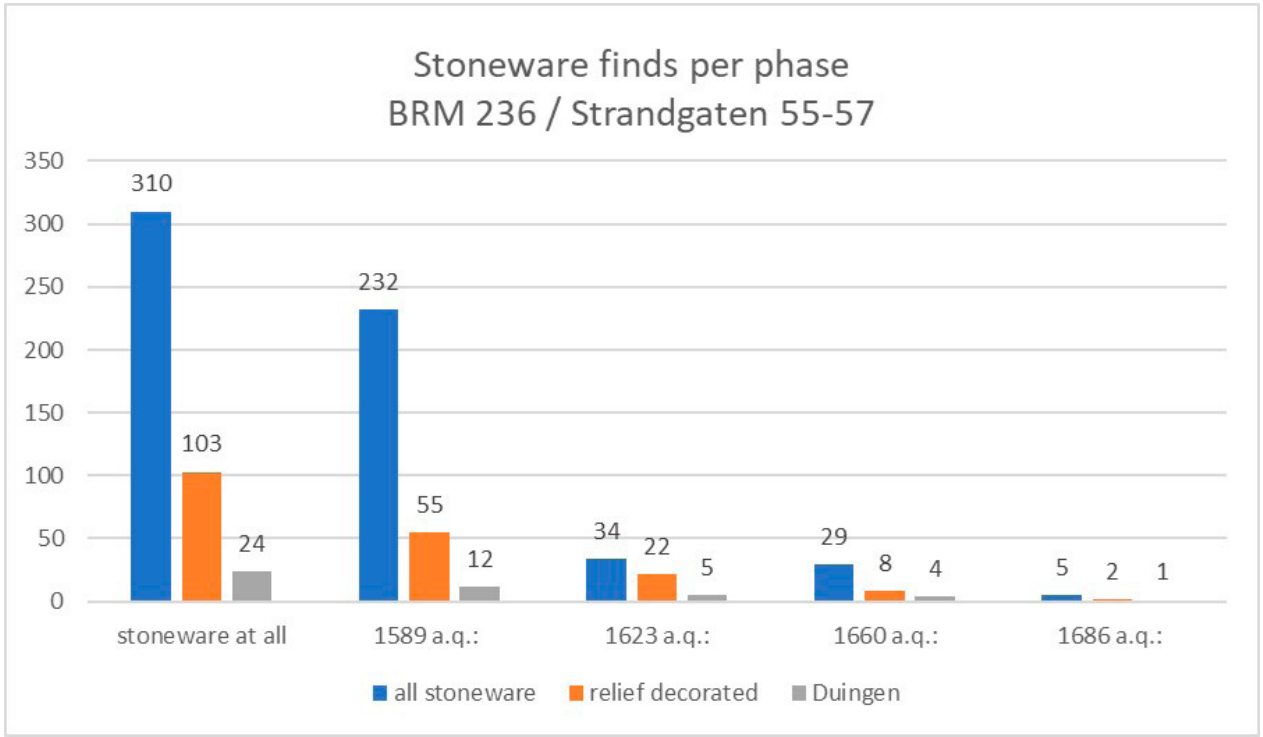


Figure 154. *Diagram of the stoneware finds from the Strandgaten 55-57 excavation by phase.*

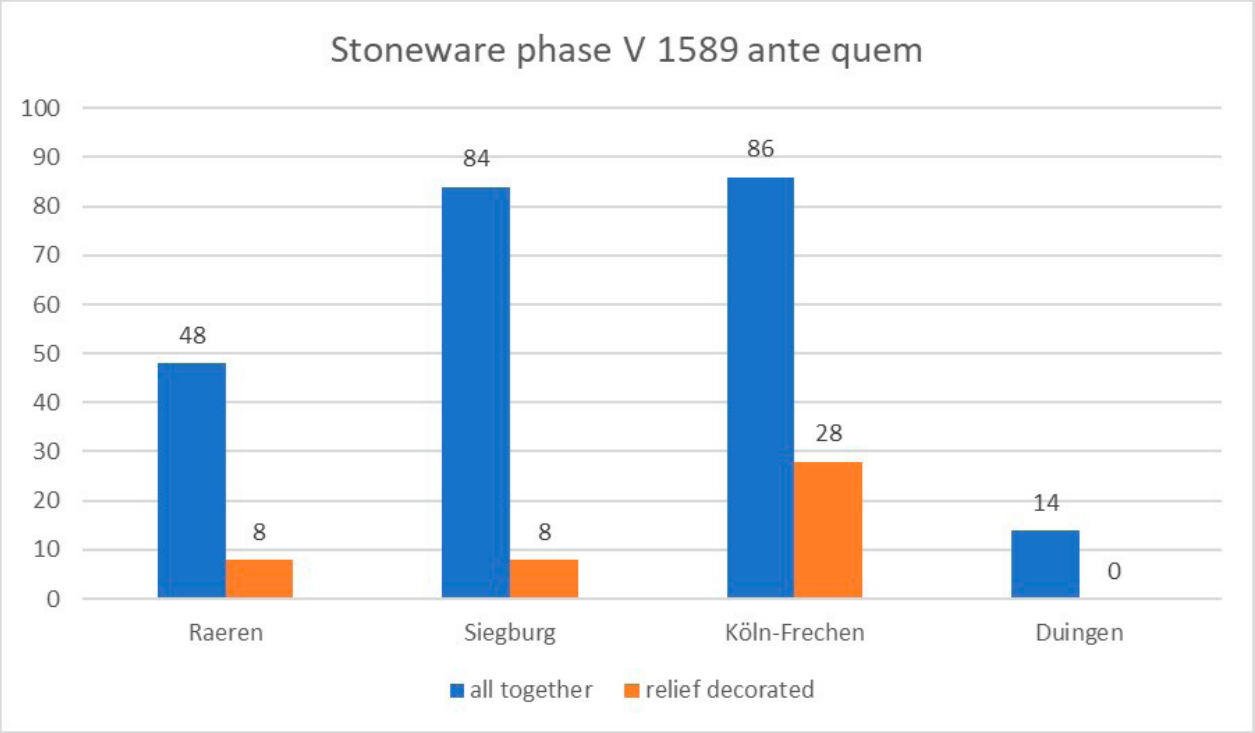


Figure 155. *Diagram of the stoneware in phase V (-1589) by provenance.*

dealt with in this work in turn represent only a small proportion of the stoneware finds as a whole. Taken together, around 33% of all stoneware finds from the Strandgaten excavation show rich decoration. In the oldest phase, which ends in 1589, around 25% of all stoneware finds are richly decorated, whereas in the next most recent phase IV, which covers the period from 1589 to 1623, the figure is almost 65%.

The sharp decline in both the total quantity of pottery and the stoneware in the most recent phases of the site is very clear, which cannot only be explained by the preservation conditions. In phase II, which ends with a fire in 1660, there are still individual stoneware finds, including some richly decorated pieces, mainly blue-painted, grey stoneware from the Westerwald (Cats. 1640-1644). Individual pieces of clearly older stoneware, such as a fragment of a Cologne / Frechen jug (Cat. 1605) from these layers have certainly been relocated. The few stoneware finds from the layers of phase II are probably all material from non-primary deposition. No stoneware fragments were discovered in the layers of the latest utilization phase I, which generally contain only little find material.

Among the stoneware from the oldest phase V, pieces that can be attributed to Siegburg, Cologne or Frechen are represented about equally frequently (Figure 155). These two production locations account for almost 75% of all stoneware fragments from this phase. Raeren stoneware was also clearly represented, although much less frequently than Siegburg, Cologne or Frechen. Together, the production sites in the Rhine and Meuse regions account for over 90% of all stoneware finds from this phase. Around a fifth of the Raeren and just under a third of the Cologne / Frechen fragments are decorated, although the proportion of decorated vessels will have been higher, as undecorated fragments can also come from a relief-decorated vessel, but these do not appear as decorated in this list. In the Siegburg stoneware of phase V, only just under 10% of the fragments show decoration.

The stoneware from Duingen is largely undecorated and is the only 'non-Rhenish' production centre, accounting for around 6% of the fragments. Most of the fragments from Duingen are from storage vessels, but there are also small ointment pots and bottles.

The fragments from Cologne or Frechen are predominantly of bulbous jugs with careful relief decoration in the form of round medallions, acanthus leaves, floral tendrils and inscribed bands. A number of these jugs presumably had beard masks, although only one of them was preserved (Cat. 1609). Furthermore, fragments of three pintles were discovered (Cats. 1570, 1573, 1633), which show depictions of the Fall of Man and Mary with the infant Jesus (figs. 121 and 123). Comparable pintles from Cologne are dated by Unger (2007: 260-270) to the 2nd quarter of the 16th century, while the bulbous (Bartmann jugs) with floral decoration, inscribed bands and / or round medallions are dated from the 2nd quarter to the 2nd third of the 16th century (Unger 2007).

The richly decorated Siegburg fragments of phase V are predominantly from *Schnelle*, but there is also a body fragment of a funnel-neck jug with a medallion depicting the resurrection of the dead on the last day (Cat. 1520; Figure 91). The relief applications of the *Schnellen* are very carefully modelled; in addition to allegorical motifs, an oval medallion with the temptation of Christ by the devil in a monk's robe is particularly noteworthy (Cat. 1529; Figure 68). Siegburg *Schnellen* are generally dated to the second half of the 16th century (Roehmer 2014: 139).

Probably the oldest stoneware discovered during the Strandgaten 55-57 excavation is a fragment of the wall of a small funnel-neck jug made of Siegburg stoneware with a simple, oval relief application that is heavily eroded and possibly depicts the Virgin Mary (Cat. 1532). This piece was probably relocated in the find layer; the rounded edges suggest that it was lying on the beach or under water for some time and was therefore most likely unearthed during dredging work. Siegburg jugs with simple moulded roundel medallions are generally dated to the 15th or early 16th century (Roehmer 2014: 61; Hähnel 1987: 31). The fragment thus probably represents the phase before the first building on the site under investigation. Remarkably, an equally heavily eroded Marian figurine made of white pipe clay was also discovered in the find layers of the oldest phase of the excavation (Demuth 2001a: 91, Fig. 9).

In addition to the richly decorated stoneware fragments, undecorated pieces of Duingen stoneware and fragments of Siegburg drinking bowls were also recorded for this study. A total of 6 fragments of flat drinking bowls of Siegburg provenance were found, all of them in the layers below the 1589 fire layer. Although such vessels occur in the wider production region as early as the first half of the 14th century, they are still common in the 15th and 16th centuries (Roehmer 2014: 45). The present rather small fragments, which were discovered in layers of the 16th century, are likely to have been relocated and thus belong to the period of around 1450-1550 already represented by the aforementioned fragment with a simple medallion (Cat. 1532). A body fragment of a vessel made of Siegburg stoneware, which was subsequently provided with a green glaze (Cat. 1534), was also included as a remarkable individual piece. Such green glazes were applied secondarily to Siegburg vessels in the Netherlands in the 15th century; finds of such pieces are rare but occur occasionally throughout the North Sea region (Hurst 1986: 129).

Of the eight fragments of richly decorated Raeren stoneware from phase V, one piece could possibly also have been made in Aachen; it is a body fragment with a freehand moulded and partially engraved face mask (Cat. 1545; Figure 103). A very similar face mask can be found on a piece from London dated to between 1475 and 1525 (Gaimster 1997: 227, Cat. 75 left, Col. Pl. 15 above). A further fragment of a freehand moulded face mask from Raeren or Aachen production was found as a stray find on the Strandgaten excavation (Cat. 1547). The remaining richly decorated

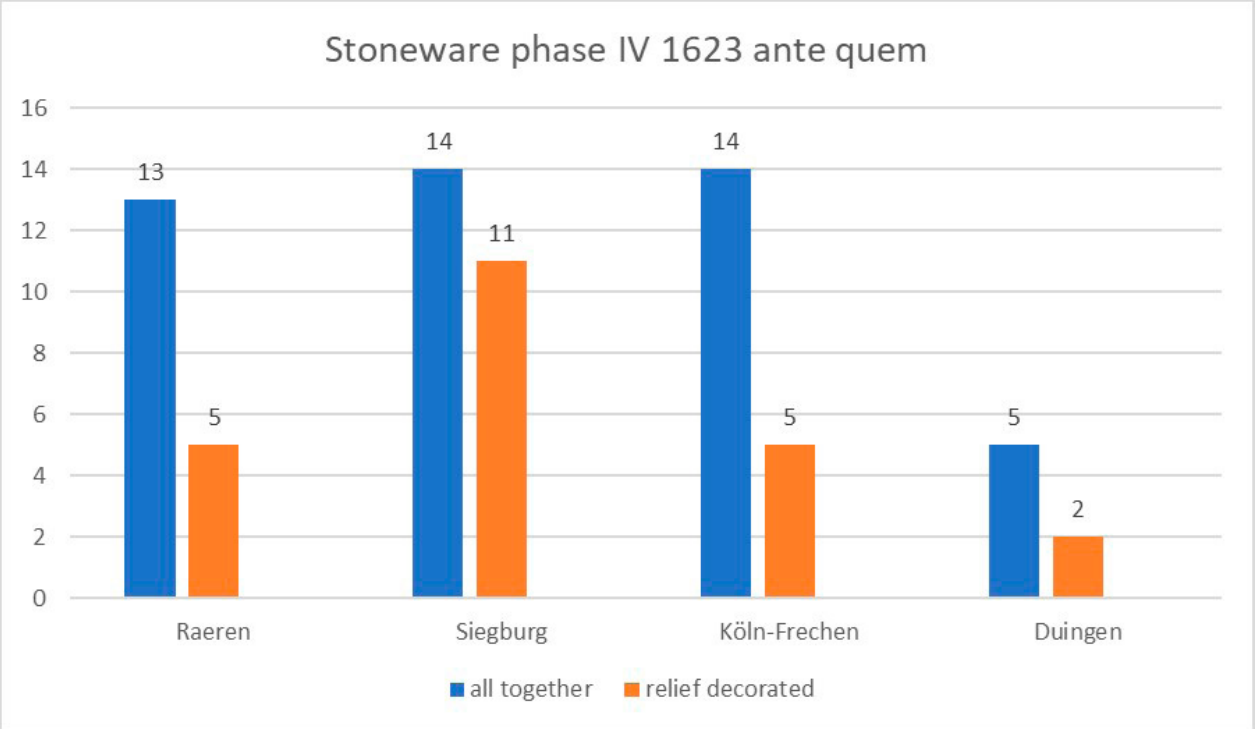


Figure 156. *Diagram of the stoneware in phase IV (1589-1623) by provenance.*

pieces of Raeren stoneware are all relief-decorated and come from bulbous jugs or cylinder-neck jugs, most of which show antique motifs. The relief-decorated Renaissance jugs from Raeren date mainly to the last third of the 16th century (Mennicken 2013: 156).

The composition of the richly decorated stoneware from the layers of phase V of the Strandgaten 55-57 excavation shows a fairly comprehensive selection of the most important types of richly decorated stoneware that were common in the North Sea region in the 16th century. The oldest forms, such as the Siegburg fragment with a simple medallion (Cat. 1532), the Raeren or Aachen face jug (Cat. 1545) or the green-glazed Siegburg fragment (Cat. 1534) show a certain impact of late medieval forms of the late 15th century on the site. However, the majority of the stoneware finds can clearly be assigned to the 16th century. Numerous finds of Cologne or Frechen production are most likely to date to the second quarter or third of the 16th century, while the Raeren and Siegburg pieces with relief decoration are more likely to belong to the second half of the 16th century. Overall, the stoneware finds confirm the picture of a warehouse built and used in the course of the 16th century, and the identification of the damaging fire ending Phase V with the archival evidence of the fire of 1589 is also supported by the stoneware finds.

In general, significantly fewer finds were recovered in the Phase IV features than in the older layers, which is also reflected in the number of stoneware finds. The stoneware comes from the same production sites as in the previous phase, although the proportions of decorated pieces from the different provenances are slightly different (Figure 156).

Siegburg is the most strongly represented place of origin, almost all pieces are decorated in relief, only three fragments show no decoration, but may also come from decorated vessels. As far as the vessel form of the mostly rather small fragments could be determined, *Schnellen* are clearly the predominant form. In addition to allegorical motifs and depictions of coats of arms, there is also a sun and moon depiction (Cat. 1541; Figure 78), which resembles in almost every detail a relief application on a *Schnellen* from the holdings of the Hetjens Museum (Roehmer 2014: 158, Fig. 397). A rare piece is the fragment of a funnel-neck jug with a pierced wall in tracery decoration (Cat. 1530), which was discovered in level 21. Such vessels are dated to the second half of the 16th century (Roehmer 2014: 76); the piece may have been relocated when the site was levelled after the fire of 1589.

While Cologne / Frechen stoneware was still the most common provenance of richly decorated stoneware in the previous phase, all Rhenish production locations are represented in roughly equal numbers in phase IV. Five fragments with Cologne / Frechen fabric and surface show relief decoration (Cats. 1614-1618), nine other fragments are undecorated. Most of the fragments decorated in relief were discovered directly in fire layer 4, which correlates with the documented fire of 1623. The relief decoration is limited to inscription bands and acanthus leaves. On one fragment (Cat. 1614), the inscription band can be supplemented with the toast *WAN GOT VIL SO IST MIN ZIL*, which also appears on Bartmann jugs dated to the mid-16th century (Unger 2007: 143; Cat. 32). As long as the present find is not a repositioned piece, this decoration was probably still in use in the first quarter of the 17th century.

Raeren stoneware appears in phase IV about as often as that from Siegburg or Cologne / Frechen, and as with the latter, only five fragments of the Raeren pieces are decorated in relief (Cats. 1556-1559, 1563). The motifs on the mostly rather small pieces are difficult or impossible to reconstruct; one body fragment of a baluster jug shows a large but illegible inscription (Cat. 1557), another fragment of a baluster jug reveals parts of an antique-style frieze of gods (Cat. 1563; Figure 112).

The only production site outside the Rhineland that can be traced with certainty in phase IV is Duingen in the Weser Uplands. Once again, only a few fragments can be attributed to this provenance, although they include two fragments of a *beehive tankard* decorated in relief with relief medallions showing the coat of arms of Electoral Saxony alternating with opposing acanthus leaves (Cat. 1395; Figure 129). A similar fragment of a Duingen *beehive tankard* was discovered in the same square, but above the fire layer of 1623 (Cat. 1376). It is possible that this is a relocated fragment of the same vessel. A very similar, if not identical, vessel is available from Duingen as a workshop break (Stephan 1992a: 98, Fig. 139), the Saxon coat of arms is common in Duingen as an applied motif (Löbert 1977: 81, Cats. 148, 150, 154). An almost identical, complete *beehive tankard* from Höxter dates stratigraphically to the first third of the 17th century and thus has the same date as the find from the Strandgaten (König 2012: 140, Fig. 8).

The special significance of the Strandgaten 55-57 site lies, as already mentioned in the introduction, in the fact that it is in all probability the remains of a warehouse and / or warehouse in which pottery was sold (Demuth 2001a: 118). The stoneware finds from this excavation can therefore certainly be regarded as trade goods. Even if the stoneware makes up only a small part of the large quantity of pottery recovered, the material provides a revealing insight into the occurrence of richly decorated stoneware on the Bergen pottery market in the 16th and early 17th centuries.

6.13 Excavation BRM 223 / Kroken 3

This investigation was also carried out in 1983 using modern stratigraphic methods within a listed 17th century wooden building ensemble as part of renovation measures. Kroken Street is located in the northern periphery of the medieval city of Bergen, north of Bryggen and not far north of St Mary's Church, the oldest surviving church in the city, built in 1150. The area was apparently already characterized by rather small-scale development in the Middle Ages, and written sources indicate, among other things, the operation of a bathhouse in this area (Helle 1995: 437). The archaeological investigations revealed traces of residential buildings and crafts from the 12th and 13th centuries in the area under investigation; in the period from around 1300 to 1600, the area investigated in Kroken 3 appears to have been located in the backyard area and was primarily used for waste disposal (Dunlop 1985: 59).

The investigation, which was limited to an area of 11 m2, covered a stratigraphy of cultural layers, that was around 3.5 meters thick. In total, over 3000 pottery fragments of various types were recovered during the excavation, more than half of them from the Early Modern layers. The classification of the various pottery finds is based on the excavation report (Dunlop 1985), the processing of the pottery documented in the finds database by Rory Dunlop, NIKU Bergen, and our own examination of the finds in the store in Bergen. Around 1600 fragments of pottery were discovered in medieval find contexts, including 292 fragments of stoneware. A total of 43 fragments of slip glazed near stoneware from the Weser Uplands were identified in the find material from Kroken 3 (Cats. 1647-1689; Figures 154 and 155). The proportion of products from southern Lower Saxony thus amounts to around 15% of all medieval stoneware.

Figure 157. *Cat. 1684, base fragment from the Weser Uplands in the late medieval fill layer feature 20.*

Figure 158. *Cat. 1685, rim piece from the Weser Uplands in the late medieval fill layer Feature 20.*

Most of the fragments of slip glazed near stoneware from the Weser Uplands from the Kroken 3 investigation were discovered in a flat fill, feature 20, which was the richest medieval stratum in terms of finds. With 546 fragments, almost a third of all medieval pottery finds came from this feature. This layer, which according to the excavator was probably deposited in the course of the 15th century (Dunlop 1985: 48), is very likely to be secondary deposited material. Of the 157 stoneware fragments from this layer, a total of 36 fragments, i.e. about 20%, could be identified as having been produced in the Weser Uplands (Figures 157-158). Siegburg stoneware is represented in the same layer with 55 fragments, while 66 further fragments of various stonewares could not be determined with certainty or very probably originate from Langerwehe. The relatively large quantity of finds and the high proportion of very small fragments is certainly also due to the fact that the medieval find layers were partially sieved during the excavation (Dunlop 1985: 10). Among the earthenwares from this layer, various English, mostly lead-glazed wares are most frequently represented with 175 fragments, of which Grimston type ware clearly dominates with 109 fragments. South Scandinavian lead-glazed earthenware is contained in the fill layer of feature 20 with 20 fragments. 167 fragments could not be determined, other ceramic wares such as French

and Flemish glazed earthenware or various hard-fired earthenwares are not significant in terms of quantity.

In addition to the levelling layer described above in feature 20, fragments of slip glazed near stoneware from the Weser Uplands were recovered from 2 other layers at the Kroken site. These are layers 12 and 13, apparently closely associated with the levelling layer of feature 20, in which 3 and 1 fragment respectively of slip glazed near stoneware from the Weser Uplands were discovered.

A homogeneous levelling layer about 70 centimetres thick, feature 9/10, is dated to around 1600 and contains, in addition to relocated medieval finds, mainly Early Modern glazed earthenware, including Weser ware (Dunlop 1985: 42, 47). The body fragment of a vessel made of Cologne or Frechen stoneware with only fragmentary relief decoration in the form of round medallions and leaf applications (Cat. 1692) comes from this context. In this context, two fragments of Waldenburg stoneware, possibly from the same vessel Cats. 1690-1691; Figures 159-160), can be regarded as having been relocated. These are a base fragment of a small jug with a honey-yellow / light brown glaze and a similar body fragment with parts of a hand-moulded beard mask. Such vessels are typical Waldenburg products of the late 14th to early 16th century (Scheidemantel 2005: 107) and can therefore be regarded as relocated in the documented find context.

Figure 159. *Cat. 1690, fragment of a freehand-moulded beard mask of a Waldenburg jug, found during the excavation Kroken 3 in Bergen.*

Figure 160. *Cat. 1691, base fragment of a Waldenburg jug, found during the excavation Kroken 3 in Bergen.*

It should be noted that even in this rather peripheral residential area of the medieval town, the slip glazed near stoneware of the Weser Uplands was present in significant quantities alongside the products from Siegburg and the English lead-glazed earthenware. Even if, as already mentioned, the find situation is to be regarded as relocated and can probably be interpreted as a waste dump, it can be assumed that this waste was primarily produced in the immediate vicinity. As the site has always been dry land and is located on the mainland side of the city of Bergen, there was no need for the 'land reclamation' and level raising that characterizes the quay front of the city of Bergen and other coastal towns. An intentional levelling or filling of wooden foundation boxes, as was otherwise practiced on the quay front in Bergen, cannot be assumed in the area of BRM 223 / Kroken 3.

It is possible that the pottery fragments from this site can be linked to the tavern business in a documented bathhouse or other entertainment facilities in this part of the city (Helle 1995: 437).

6.14 Excavations BRM 76 / Rosenkrantzgate 4 - 'Wine cellar'

In the middle of the northwest-southeast oriented row of houses on the northeast side of Bergen's Vågen harbour bay, the municipal wine cellar was first mentioned in writing in 1315, which was located in the basement of the *Ratsstube* of the city of Bergen (Helle 1995: 197). The stone building formed an open space between the north-south oriented elongated double tenements on Bryggen. To the south towards the harbour was the older market square of the city of Bergen, to the north was the wide square of the 'Breida-Almenningen' which was oriented towards St Nicholas Church. (cf. Figure 161). To the south-east and north-west of the stone wine cellar were wooden double tenements, separated from the wine cellar by narrow passag-

es. The ensemble of town hall and wine cellar was therefore located in the middle of the Bryggen district, which was dominated by the Hanseatic trading post from the 14th-17th centuries.

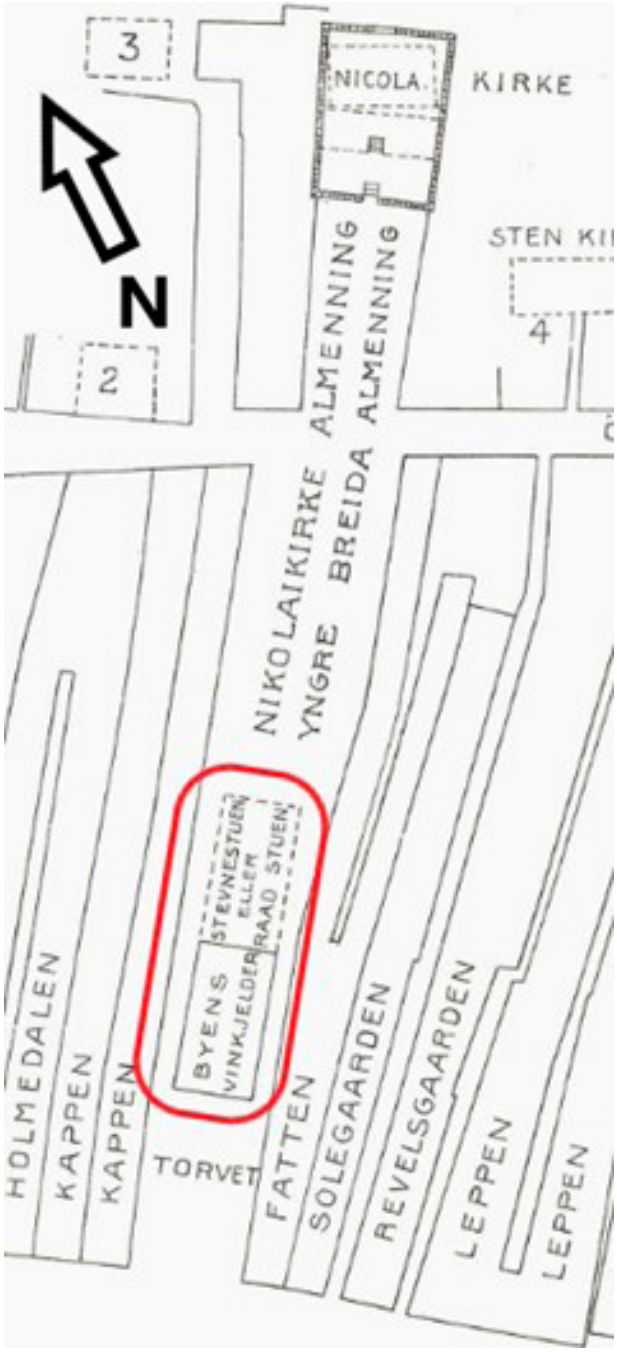


Figure 161. *Schematic plan of the wine cellar and the neighbouring double tenements. After: Koren-Wiberg 1908: 18.*

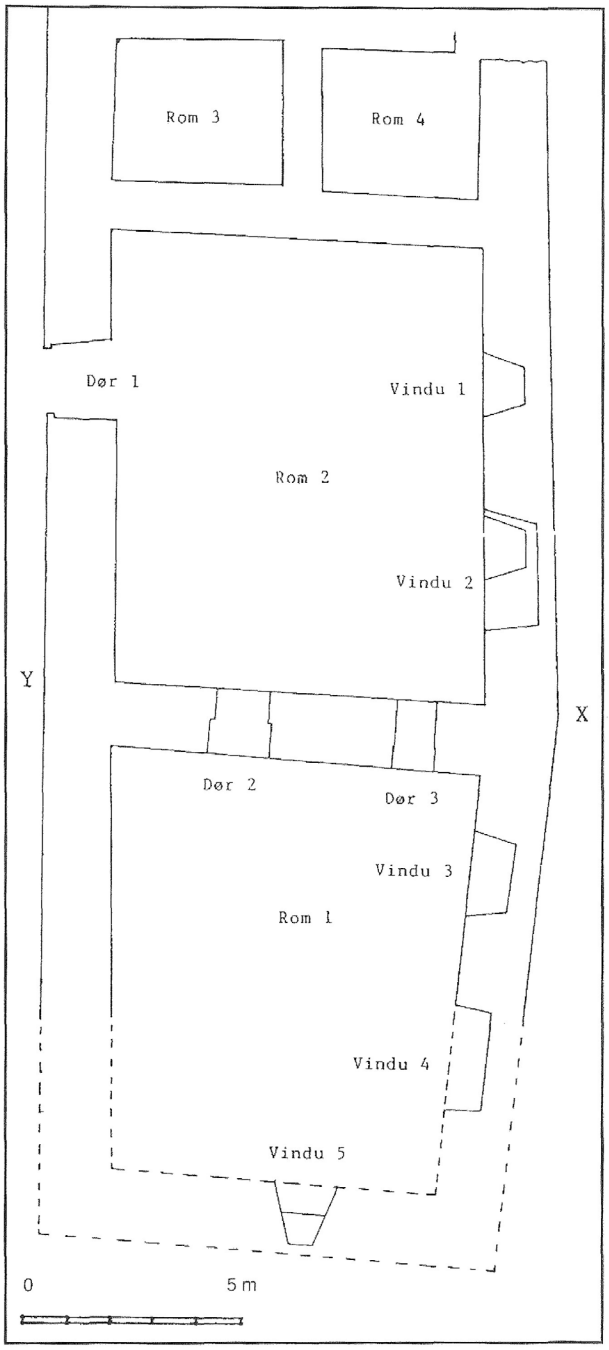


Figure 162. *Sketch plan of the excavated stone building. After: Ekroll 1990: 31.*

Both the urban composition of the town hall, church and market square, as well as the combination of town hall and wine cellar with public bar are clearly influenced by corresponding models in Northern Central Europe, especially in the Hanseatic region (Ekroll 1990: 75-79). A contemporary view of the building can probably be found on the first known town view of Bergen, the so-called 'Scholeus engraving' from around 1580, directly in front of the ruins of the St Nicholas Church (cf. Figure 163). However, the historical depiction cannot be reconciled with the archaeologically verifiable topographical features (Ekroll 1990: 88).

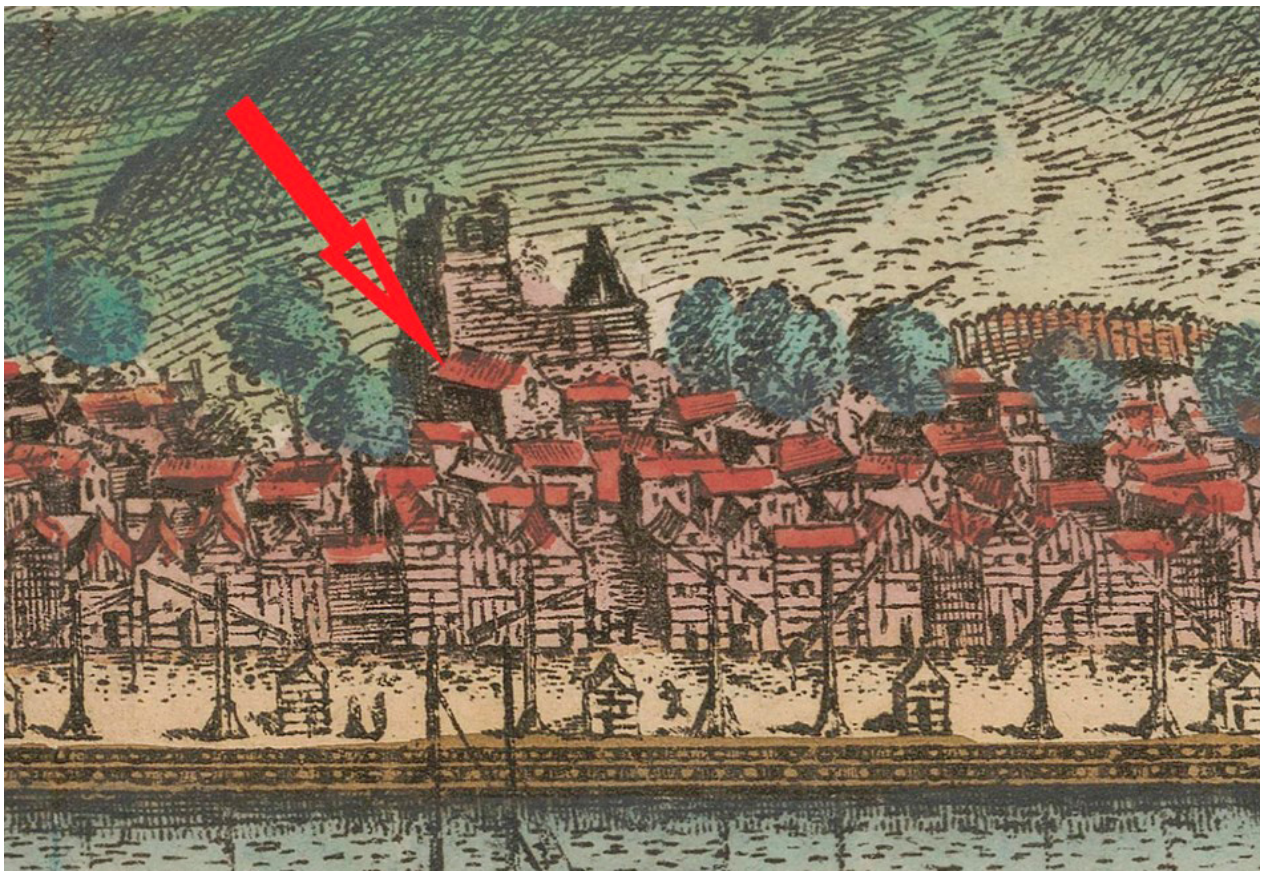


Figure 163. *The building marked with a red arrow probably shows the historic wine cellar in Bergen. Detail from the oldest surviving view of the town of Bergen, around 1580, drawn by Hieronymus Scholeus, engraved in copper by Franz Hogenberg. Source: National Library of Norway.*

The site on which the building complex stood was the subject of several archaeological investigations in the 20th century, the results of which were examined in a master's thesis by Øystein Ekroll and published in a monograph (Ekroll 1990). In 1908, the director of the Hanseatic Museum in Bergen, Christopher Koren-Wiberg, uncovered the floor plan of a stately stone building with two large and several small rooms for the first time, but left most of the archaeological layers in the building untouched. The north-eastern room 2 was interpreted by Koren Wiberg as a storage room and the south-western room 1 as a taproom (see Figure 162). The investigated finds originate from two modern excavation campaigns in connection with the construction of a parking garage. In the course of these measures, the soil layers inside and outside the stone walls were excavated, while the stone ruins were preserved in the basement of the parking garage. The unpublished excavation reports of these investigations could be viewed and partially copied by the author in the archive of the University Museum of Bergen. In 1978/79, excavations led by Jan Lindh investigated the areas adjoining the stone building to the south-east with the remains of the wooden double tenements and large parts of the layers in the north-eastern part of the stone wine cellar with rooms 2, 3 and 4 (Lindh 1979; Lindh 1980). In the north-eastern part of this excavation area, in the remains of the wooden buildings 26, 18 and 8, large quantities of malted grain were recovered, indicating the brewing of beer at this site (Krzywinski and Soltvedt 1988: 9). The archaeobotanical evidence for a brewery is dated stratigraphically to the period between about 1250 and 1400.

The remainder of the stone building with the presumably taproom of the wine cellar, Room 1, was excavated in 1981-1983 under the direction of Øystein Ekroll (Ekroll 1982; 1990). Finds of Siegburg stoneware in the aforementioned Room 1, the presumably taproom of the wine cellar, were examined by Christine Tøssebro as part of a master's thesis (Tøssebro 2010) and published (Tøssebro 2011; 2012).

The documentation of the 1978-1979 investigations by Lindh was carried out according to the methodological guidelines of the Bryggen investigations (see Chapter 6.15). This means that although natural layers were excavated, the location of the individual finds was only documented in relation to the building structures and the numerous fire layers. A description of the individual layers and other earth finds is not available. The finds cannot be assigned to specific features and are only

stratified to a limited extent. Find contexts and find associations cannot be deduced for the finds from this excavation campaign. The only stratigraphic information relates to the relationships to various fire layers, some of which are described in the present excavation documentation. Several fire layers are correlated with fire events recorded in written sources, which is a common but controversial practice in Bergen (Øye 1998). In the excavation report, excavator Lindh identified fire layer *C* with the town fire of 1413 and fire layer *A* with the town fire of 1476 (Lindh 1980: 46). Further fire layers with the designations *F, G, H, K and L* could not be found in the accessible excavation documentation but are listed in the finds database. In an unpublished manuscript, the excavator concludes on the basis of a series of C14 dates that the fire layer *C* corresponds to a town fire of 1332 (Lindh 1981: 24). Hansen (2003: 10) follows this dating approach and also assumes that fire layer 'C' is associated with the fire of 1332. Tøssebro also reproduces this chronology in her master's thesis but rightly points out the many uncertainties in the 'fire layer chronology' of the excavation in the Rosenkrantzgate 4 wine cellar (Tøssebro 2010: 57-59). In addition to the possibility that unknown local fires may have left their mark on the archaeological record, the inaccuracies of radiological data, especially those obtained in the early 1980s, must also be taken into account. In summary, it must unfortunately be stated that the vast majority of the late medieval finds from Jan Lindh's excavations can only be dated very roughly to the 14th/15th century in stratigraphic terms. A total of 195 finds from Lindh's excavations were recorded in the catalogue with inventory numbers from BRM 76/377 - BRM 76/18101. Of these, 110 were identified as stoneware from the Weser Uplands, 58 as Siegburg drinking bowls and 15 fragments as Waldenburg stoneware from Saxony. Only 6 fragments of relief-decorated stoneware were recovered during these investigations. The excavations by Jan Lindh covered both the northern area of the stone wine cellar with rooms 2-4 and areas to the south-east of the stone building with traces of the neighbouring wooden buildings and the alleyway in between.

During the excavations led by Øystein Ekroll in 1981-1983, a more modern excavation documentation was used and, in addition to building structures, layers of earth were also addressed as individual features. The finds from these investigations can largely be assigned to defined features. However, it is not clear from the available excavation report (Ekroll 1982) to what extent the individual find layers in their primary location are to be regarded as horizons of use or destruction or as levelling or fill layers with redeposited material.

Ekroll's investigations mainly concerned the southern Room 1 of the stone wine cellar, as well as smaller areas outside the stone building. All the finds from these excavations are directly related to the wine cellar. Of the finds from these excavations, 78 stoneware fragments were included in the catalogue. These include 48 fragments of stoneware from the Weser Uplands, 24 fragments of Siegburg drinking bowls and one fragment each of stoneware from Waldenburg and richly decorated stoneware.

The finds and features from the various excavation campaigns are discussed together in the following models. Detailed statements on the finds situation, stratigraphy and chronology are only possible to a very limited extent, as the available excavation documentation does not allow a precise classification of the finds. In particular, chronological aspects can only be deduced to a limited extent from the findings.

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The finds and features from the various excavation campaigns are discussed together in the following models. Detailed statements on the finds situation, stratigraphy and chronology are only possible to a very limited extent, as the available excavation documentation does not allow a precise classification of the finds. In particular, chronological aspects can only be deduced to a limited extent from the findings.

As part of the work, the entire ceramic material from the Lindh and Ekroll excavations, comprising around 23,000 fragments, was examined. A total of 158 fragments of stoneware from the Weser Uplands were identified and catalogued (Cats. 1150-1308). The finds correspond to the spectrum of stoneware from the Weser Uplands also known from Bergen. They are predominantly jugs with a collared rim made of slip glazed near stoneware (cf. Figures 165-166). A rim fragment of a jug with a spout, which according to X-ray fluorescence analysis was made in Coppengrave or Duingen, was found in the ruins of the wine cellar (Cat. 1167; Figure 164). Several fragments of a large dispensing vessel were discovered in a wooden foundation (Cat. 1168, cf. Figure 30). Fragments of five small globular costrels with two strap handles were also recovered (Cats. 1205, 1247, 1248, 1250, 1305).

Two of these pieces were examined by X-ray fluorescence and their manufacture in Coppengrave / Duingen was proven (Cats. 1205 and 1248; Figure 165). The most recent find from the Weser Uplands, a small pharmacy dispensing jar, could also be clearly identified scientifically as a Duingen product (Cat. 1177; cf. Figure 48).

Figure 164. *Cat. 1167, rim fragment of a jug with spout from Coppengrave / Duingen, found in the wine cellar in Bergen.*

Figure 165. *Cat. 1248, rim fragment of a costrel with two strap handles from Coppengrave / Duingen, found in the wine cellar in Bergen.*

Sixteen fragments of Saxon stoneware from Waldenburg were identified and included in the catalogue (Cats. 1354-1369). As far as can be determined, these are fragments of slender jugs, it is the base fragments from that vessel type that are most common in this group. As the method used for the forming of the base of vessels of Waldenburg stoneware is the most reliable criterion for distinguishing it from Siegburg stoneware (see Chapter 5.3.1), the high proportion of base fragments can be explained by the fact that they are easier to identify. Further fragments of Waldenburg stoneware are probably hidden among the numerous body fragments of Siegburg stoneware. The best preserved piece of Waldenburg stoneware is a large base fragment (Cat. 1354; Figure 166), which was discovered in the northern room 2 of the wine cellar. However, the layer 2 in which the fragment lay is a modern lime layer, which probably dates from around 1900 (Ekroll 1982: 4). This circumstance exemplifies the difficulties of interpreting this find material, which seems have been disturbed.

Among the large quantity of Siegburg stoneware, 82 fragments of Siegburg drinking bowls were identified and also catalogued (Cats. 1420-1505; cf. Figure 61). Not surprisingly, 65 of these pieces were found in various layers in the stone-built wine cellar. Richly decorated Renaissance stoneware was only recovered in small quantities during the investigations of the wine cellar and adjacent areas.

Figure 166. *Cat. 1354, base fragment of a Waldenburg jug from the wine cellar in Bergen.*

Figure 167. *Cat. 1445, body fragment of a Siegburg funnel-neck jug depicting the Fall of Man from the wine cellar in Bergen.*

	Total	Stoneware Weser Uplands	Siegburg drinking bowls	Relief decorated stoneware	Saxony	Stratigraphical dating
Passage 1	26	22	4			
Passage 2	10	7		1	2	
Passage 4	18	18				
Sum:	54	47	4	1	2	
Foundation 1	9	9				14./15. Cent.
Foundation 6	8	7	1			
Building 2	1	1				
Building 3	2			1	1	
Building 4	2	1		1		
Building 6	8	8				1332/1413
Building 7	2				2	
Building 8	7	7				1332/1413
Building 9	1	1				
Building 10	5	5				1332/1413
Building 11	10	10				1332/1413
Building 19	1	1				1332/1413
Building 28	1			1		Early modern
Building 29	14	1	8	1	4	Early modern
Building 30	1				1	
Building 31	5	5				fire 'H'
Building 33	102	32	64	1	3	14.-17. cent.
Building 39	2	2				15. cent.?
Sum:	181	74	72	5	11	

Figure 168. *Table with number of finds from BRM 76 with reference to building features.*

The only seven fragments of richly decorated stoneware are distributed among the various places of production as follows: one fragment of a jug with freehand anthropomorphic decoration comes from Aachen or Raeren (Cat. 1546, cf. Figure 104). Several fragments of a globular Bartmann jug from Cologne or Frechen with acanthus leaves, round medallions and an inscription frieze were also discovered (Cat. 1604; cf. Figure 121). These pieces date to the first half of the 16th century. A rim fragment of a cylindrical Raeren hump with a relief medallion of the Bremen coat of arms is considerably younger (Cat. 1396; cf. Figure 105). Given the large quantity of Siegburg stoneware from this site, it is not surprising that fragments of four relief-decorated Siegburg funnel-neck jugs were also recovered (Cats. 1419, 1443, 1445, 1450). One of these fragments (Cat. 1421) was found in the backfill layer of a drainage ditch that ran parallel to the stone wine cellar, a situation in which large quantities of fragmented stoneware were often found (Ekroll 1982: 8-9). A further fragment of a relief-decorated funnel-neck jug was discovered in the uppermost backfill layer within the stone wine cellar (Cat. 1443; cf. Figure 90). The two other finds of relief-decorated funnel-neck jugs from excavations BRM 76 / Rosenkrantzgate 4 (Cats. 1445 and 1450) came from areas to the south-east of the wine cellar, which belonged to the wooden buildings of the adjoining tenements. It is striking that one of these finds (Cat. 1445; Figure 167) is related to *Building 29*, in the vicinity of which some Siegburg drinking bowls and several fragments of Waldenburg stoneware were also recovered (cf. Figure 168). However, the above-mentioned *Building 29* only contains wooden threshold beams that have only been examined in detail (Lindh 1980: 30-31). The catalogued stoneware finds were all located in the northern part of this structure or to the north of it, where the stone wine cellar was located.

The distribution of the recorded finds among the various features of the investigations at Rosenkrantzgate 4 is summarized in the following table.

Of the 264 catalogued finds from the Rosenkrantzgate 4 excavation, 181 fragments are docu-

	Total	Stoneware Weser Uplands	Siegburg drinking bowls	Relief decorated stoneware	Saxony	Stratigraphical dating
Layer 001	12	6	5	1		Early modern
Layer 002	2		1		1	19. Cent.
Layer 005	1	1				16. /17. Cent.
Layer 007	2	2				16. /17. Cent.
Layer 008	4	4				19. Cent.
Layer 010	3	2		1		16. /17. Cent.
Layer 021	1	1				15. Cent.?
Layer 022	2	2				15. Cent.?
Layer 031	1	1				14. Cent.?
Layer 032	1	1				14. Cent.?
Layer 033	2	2				
Layer 036	1	1				1332/1413
Layer 037	2	1	1			1332/1413
Layer 038	2	2				1332/1413
Layer 039	1	1				1332/1413
Layer 040	1	1				1332/1413
Layer 045	1	1				1332/1413
Layer 046	1	1				
Layer 054	2	2				1. H. 13. Cent.(?)
Layer 066	1	1				
Layer 069	1	1				
Layer 083	4		4			
Layer 087	2	2				
Layer 091	1		1			
Layer 093	4	4				
Layer 102	1	1				
Fire 'C'	7	7				1332/1413
Fire 'F'	8		3	2	3	
Fire 'G'	12	6	1		5	
Fire 'H'	5	5				
Fire 'K'	46	5	41			
Fire 'L'	1	1				
Sum:	135	65	57	4	9	

Figure 169. *Table with distribution of the finds among the strata of the Rosenkranzgate excavations.*

mented as relating to a building. The majority of these finds, 102 fragments, were discovered in or in the immediate vicinity of the stone Building 33, i.e. the actual wine cellar. This was excavated in various sections by both Lindh (1979: 28, 1980: 43) and Ekroll (1982, 1990). The 32 catalogued finds from the wine cellar are stonewares from the Weser Uplands. Stoneware from Waldenburg was identified in three specimens. The aforementioned Siegburg drinking bowls, 65 of which were discovered in the layers in the wine cellar, underline the consumption of imported wine in the building (cf. Figure 61). Relief-decorated stoneware is only found in the form of a single fragment of a funnel-necked jug (Cat. 1443). The ceramics from the stone building of the wine cellar are clearly dominated by Siegburg stoneware, of which 1720 fragments are recorded in the museum's database. This material was discussed in detail in Christine Tøssebro's master's thesis (Tøssebro 2010: 35-44). These are typical forms of late medieval Siegburg tableware and drinking vessels, which also include the drinking bowls recorded in the present work. The fact that other Rhenish stoneware was also used

in the wine cellar alongside Siegburg stoneware is shown by an almost complete small globular steep-rimmed jug (Cat. 1300; cf. Figure 43), which shows the chemical signature of Brühl stoneware in X-ray fluorescence analysis.

The other finds from the BRM 76 / Rosenkrantzgate 4 excavations were mainly from areas south-east of the stone wine cellar; smaller excavation areas were also excavated north-west of the stone building. Traces of the wooden double tenements were recorded there, which historically belong to the Bryggen district and were part of the area of the Hanseatic Kontor in the late Middle Ages and Early Modern Period. However, only some of the structures described as *buildings* in the excavation reports, database and catalogue are houses or parts thereof. Many of these features are only partially recorded wooden constructions in the log construction style typical of the site. A total of 79 finds were recorded from excavation BRM 76 / Rosenkrantzgate 4 that were documented as being related to a wooden building feature outside the stone wine cellar. These included seven fragments of stoneware from the Weser Uplands, which were recovered in *Building 8*, where charred, malted grain provided evidence of a late 14th century brewery (Krzywinski and Soltvedt 1988: 9). A further 54 finds were recovered in 'passages' between buildings. These are alleyways about 2-3 meters wide, which mainly ran between the stone building of the wine cellar and the adjoining double tenements (Ekroll 1982: 16). These paths remained constant throughout the various phases of use of the area, and occasionally wooden surface reinforcements and drainage channels were found. The extent to which the finds from these passages were deposited as waste in alleys or gullies or were deposited during levelling after the regular damaging fires could not be conclusively clarified.

Of the total of 272 finds, stratigraphic information is available for 135 finds, i.e. around half of the finds. A defined find layer is documented for 56 catalogued finds from the excavations under the direction of Øystein Ekroll. However, no feature descriptions of several find layers could be discovered in the accessible excavation reports.

There are 79 finds with stratigraphic information from the excavations under the direction of Jan Lindh, but these are limited to indicating the stratigraphic relationship to different fire layers. Most of these fire layers are not described in detail in the excavation report. In particular, the fire layers *F, G* and *K*, from which a particularly large number of finds were recovered, and which are dealt with in this work, cannot be found in the accessible excavation documentation. Fire *C*, on the other hand, from which some of the finds discussed here also originate, is repeatedly described. The dating approach varies from 1332 (Lindh 1981: 24), 1413 (Lindh 1980: 46) and after 1350 (Ekroll 1982: 36). The chronology of the site must therefore be described as diffuse; for most of the finds, only a very rough late medieval date in the 14th or early 15th century can be assumed. The distribution of the finds among the individual layers is summarized in the table below (Figure 169).

The occurrence of clearly late medieval finds, such as a fragment of a jug with collared rim from Bengerode (Cat. 1299; cf. Figure 171), whose fragments were discovered in various layers, which the excavator referred to as building horizons of the period around 1900 (Ekroll 1982: 4), shows that considerable displacements of finds occurred. The above-mentioned fragment of a Waldenburg jug (Cat. 1354, cf. Figure 166) was also found in this horizon.

A number of fragments of stoneware from the Weser Uplands, which were recovered from the remains of the poorly preserved wooden buildings 6, 8, 10, 11, 19 and 31 (Lindh 1980: 22-27), probably originate from primary finds. These features yielded a total of 35 finds of stoneware from the Weser Uplands, including a rim piece of a brown slip glazed jug with collared rim composed of several fragments, which showed the chemical signature of Bengerode in X-ray fluorescence analysis (Cat. 1236, cf. Figure 170).

Figure 170. *Cat. 1236, rim piece of a jug from Bengerode, found in a 14th century find context, Bergen Rosenkranzgate 4 / wine cellar.*

Figure 171. *Cat. 1299, rim fragment of a jug from Bengerode, found in relocated modern layers during the excavation of Rosenkranzgate 4 / wine cellar.*

All of these fragments come from layers in connection with wooden parts of the building, which probably date roughly to the 14th century. A total of 30 finds of stoneware from the Weser Uplands were recovered from the actual wine cellar, the stone 'Building 33'. In addition to the already mentioned fragments of a jug (Cat. 1167; cf. Figure 164) and several costrels with two strap handles (Cats. 1247, 1248; cf. Figure 165), several jug fragments were also found here. All finds of stoneware from the Weser Uplands that were recovered within the actual wine cellar were most likely from a relocated context. However, it is striking that there are no mugs or other clear drinking vessels from the Weser Uplands from the investigations at Rosenkrantzgate 4. It is possible that the jugs and jugs with spouts of this provenance were primarily used here for serving drinks. However, the smaller jugs may also have been used as drinking vessels. Siegburg stoneware, such as the numerous drinking bowls (see Chapter 5.4.2), may have been used primarily for drinking. In addition, many previously unprocessed fragments of drinking glasses were discovered in the area of the wine cellar, which may be the most extensive ensemble of late medieval/early modern glass finds in Scandinavia (Ekroll 1990: 93).

6.14.1 Summary BRM 76 / 'Wine cellar' Rosenkrantzgate 4

It should be noted that there are over 20,000 ceramic fragments from the various investigations, which are summarized under the site number 'BRM 76 / Rosenkrantzgate 4'. The find contexts of the investigations are, however, quite diffuse and cannot be reconstructed with certainty based on the available documentation. Some of the finds originate from the area of a massive stone building, which was the municipal wine cellar (Ekroll 1990). Numerous finds also come from the layers in neighbouring alleys and drainage ditches, as well as from wooden structures belonging to adjacent double tenements. Many finds were discovered in layers of earth that have very probably been disturbed. The chronology of the area is determined by the excavators and other investigators by numerous fire layers whose exact dating remains uncertain.

Among the ceramic finds, the large quantity of Siegburg stoneware, which has been processed and published elsewhere, is particularly striking (Tøssebro 2010; 2011; 2012). Of the Siegburg stoneware, only the drinking bowls were included in the present study (cf. Chapter 5.4.2), of which 64 finds were recorded in the wine cellar. These were obviously used to consume the wine sold in the tavern.

A total of 158 finds were identified and catalogued as stoneware from the Weser Uplands (Cats. 1150-1308). The majority of these are jugs made of slip glazed near stoneware, which, like a fragment of a jug with spout, probably date to the 14th century. There are also several fragments of costrels with two strap handles made of light-coloured stoneware, which may date to the 15th century. It can be assumed that the jugs and jugs with spouts were used for serving wine. Despite the significantly smaller volume, this could also apply to the costrel with two strap handles. Perhaps smaller quantities or special drinks were served in these vessels? The most recent find of stoneware from the Weser Uplands is a small pharmacy dispensing vessel (Cat. 1177; cf. Figure 48), which could be clearly identified as a product from Duingen by means of X-ray fluorescence analysis. As the wine cellar in whose ruins the vessel was discovered was demolished in the early 18th century at the latest (Ekroll 1990: 93), the vessel can probably be dated to the 16th/17th century. The small vessel seems unsuitable for wine consumption, but perhaps some visitors to the wine cellar also had acute medical needs? It could also have been used for tasting wine or as a cup for brandy.

The 16 finds of Saxon stoneware from Waldenburg (Cats. 1354-1369) were mainly discovered outside the actual wine cellar, although mostly in its immediate vicinity. This could indicate that, in addition to the dominant Siegburg stoneware, the very similar Waldenburg stoneware was also used in individual cases. As the Waldenburg stoneware was very probably predominantly distributed via the Oder, a connection with the import of wine from Silesia via Guben, which is documented as

'Gabinj' in Bergen, can possibly also be considered (Ekroll 1990: 86).

The rather small number of seven pieces of relief-decorated stoneware vessels recovered during the investigations is striking. It is possible that these presumably higher-priced vessels were only used to a limited extent in the pub trade. The four Siegburg funnel-neck jugs decorated in relief (Cat. 1419; 1443; 1445; 1450), as well as a Cologne Bartmann jug (Cat. 1604; cf. Figure 121) and a 'piper jug' from Aachen or Raeren (Cat. 1546; cf. Figure 104) may well have been used as drinking vessels for wine. However, a large cylindrical tankard from Raeren with the coat of arms of the city of Bremen (Cat. 1396; cf. Figure 105) is more likely to have been a drinking vessel for beer. The extent to which this tankard was used in the wine cellar must remain open due to the unclear documentation of the findings. In general, it can be stated that even among finds that were found directly in the wine cellar, there are a certain number of vessels that are interpreted as primarily suitable for the consumption of beer (Tøssebro 2011: 200). The brewery documented in the 14th century in the area of the Rosenkrantzgate 4 excavation suggests that beer was served on site as well as wine. The extent to which individual vessel types can be linked exclusively or predominantly to certain consumption patterns is discussed in more detail in Chapter 8.2.

6.15 Excavation BRM 0/ Bryggen

6.15.1 Introduction

As already briefly mentioned in Chapter 5.1.2, the excavations in the Bryggen district of Bergen were a measure of outstanding importance for the development of medieval and urban archaeology in Norway and throughout Northern Europe. The primary reason for these investigations was a devastating fire on July 5, 1955, which reduced some 5,000 square meters of the historic building area to ashes (Herteig 1969: 9). The affected district Bryggen on the north-eastern side of the harbour bay of Bergen was the oldest settlement core of the city and in the late Middle Ages and early modern times the location of the Hanseatic Kontor (Herteig 1985: 9). The building structure was and is characterized by elongated double tenements facing the quay front (Figure 172). The narrow passageway in the middle served as a circulation area for the various buildings grouped around it. This layout has remained the same since the High Middle Ages and the traditional names of the double tenements also served as a classification criterion when evaluating the Bryggen excavations.

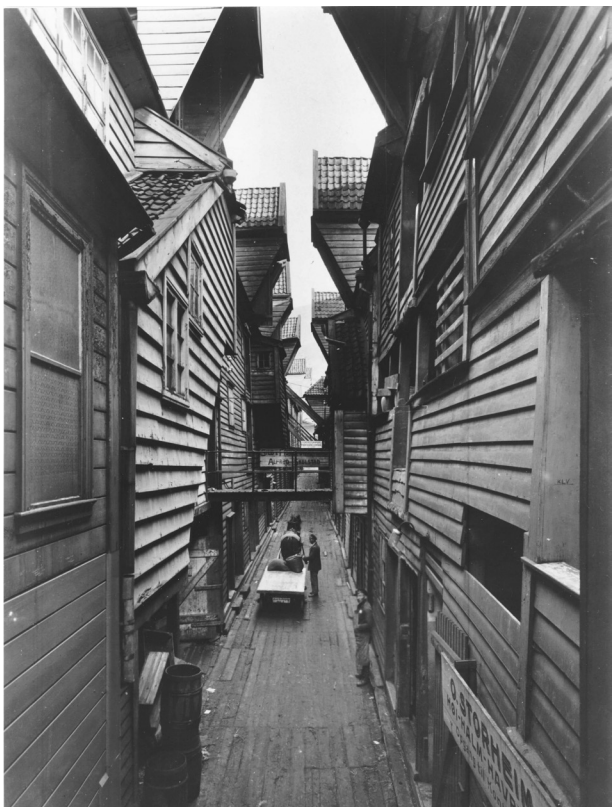


Figure 172. *Historical photograph of a double tenement on Bryggen, early 20th century. Photo: The Hanseatic Museum, Bergen.*

The excavations initiated in response to the fire disaster began in 1955 and lasted until 1968, with smaller investigations following in 1971-72, 1974 and 1979. In total, the remains of seven double tenements up to 120 meters long were excavated, stretching from the quay front in the southwest to the Mariakirken (St Mary church) in the north of the area. (Figure 173).

The excavated archaeological sequence of layers was up to eight meters thick. The entire area was covered with a coordinate system of quadrants with edge lengths of 8 x 8 meters, whereby the axes were not based on the cardinal points but on the orientation of the double tenements. Accordingly, the X-axis runs over 152 meters from southwest to northeast, on which quadrants with the designations A - T lie. The Y-axis of the excavations runs over 104 meters from northwest to southeast, the quadrants bear the designations -1-12 (Herteig 1985: 14-15); (cf. Figure 174).

Figure 173. *Overview of the Bryggen excavations. You can see the remains of the rubble from the 18th century buildings that burnt down in 1955 and was cleared away by the excavator. St Mary's Church in the background. Photo: University Museum of Bergen archive.*

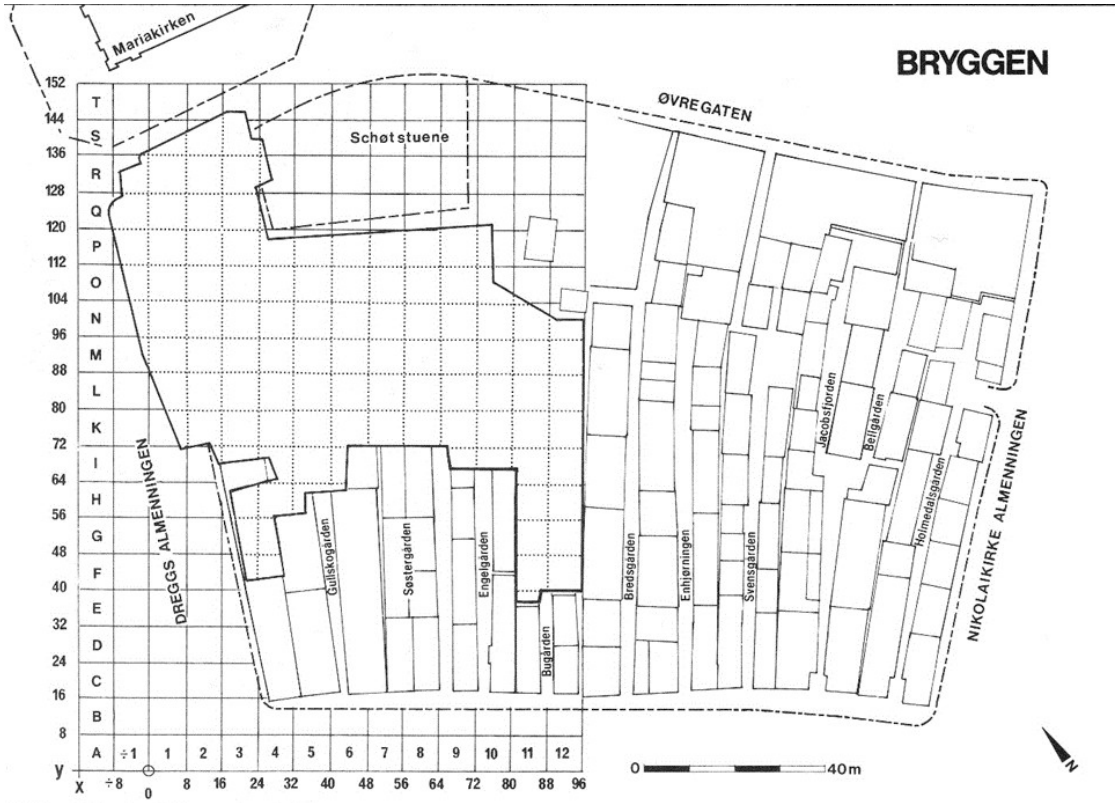


Figure 174. *Overview map of the Bryggen district with the investigation area outlined in black and the coordinate system of the excavation. From: Herteig 1990: 10, Fig. 1.*

6.15.2 Methodology and chronology of excavation and documentation

The excavation methodology had to be newly developed for these investigations, as there was no experience of urban archaeological excavations of this scale in Norway. From the outset, the work was carried out by a very heterogeneously composed excavation team under the direction of Asbjørn E. Herteig who relied on a stratigraphic methodology in which the remains of buildings and layers of earth were removed step by step (Herteig 1985: 15-18). In principle, excavations were carried out over a large area and stratigraphically. An important point of orientation was the well-preserved building remains of the double tenements in the damp subsoil, whose basic structure had remained largely the same over the centuries, which is why the various plot names serve as classification terms in documentation and publications (Herteig 1990, 1991).

At the same time, however, quadrants were also used, which meant that numerous profiles could be documented at the quadrant boundaries (cf. Figure 177). The stratigraphy and chronology of the excavations are based on the numerous extensive fire layers (Herteig 1985: 21-33). Due to the predominance of timber construction, there were repeated devastating fires in which entire buildings were destroyed by the flames. Large urban fires are regularly described in written sources, which are relatively numerous for Bergen as the temporary Norwegian capital and the largest settlement in the country (Helle 1998). The archaeologically verifiable fire layers were correlated with the written records. The most important evidence for this correlation is the discovery of runic inscriptions on organic material in a secure context. Several of these inscriptions mention personal names that correspond to documented persons whose life dates are known. In this way, several fire layers can be dated with a high degree of probability to the exact year. For example, an inscription with the find number 0/31390, which mentions the name Gunnar Kvit, was discovered in a reconstruction layer following a fire. A person of this name was royal treasurer in Bergen between 1340 and 1343, which suggests that the fire layer IV in question represents the town fire of 1332 (Herteig 1985: 31). Further inscription finds were recovered in older layers and led to the fire layer chronology presented by Herteig, which comprises a total of 12 fire layers between the early 12th century and 1955 (Herteig 1990: 12-16).

Figure 175. *Working picture from the Bryggen excavation, illustrating the excavation technique. Photo: University Museum of Bergen archive.*

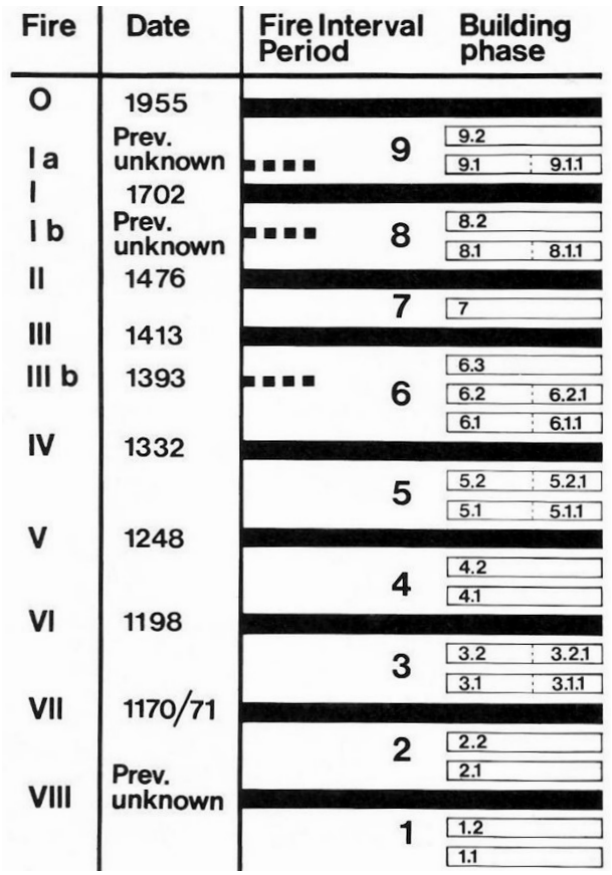


Figure 176. *Fire layer chronology of the Bryggen excavation. From: Herteig 1990: 12, Fig. 3.*

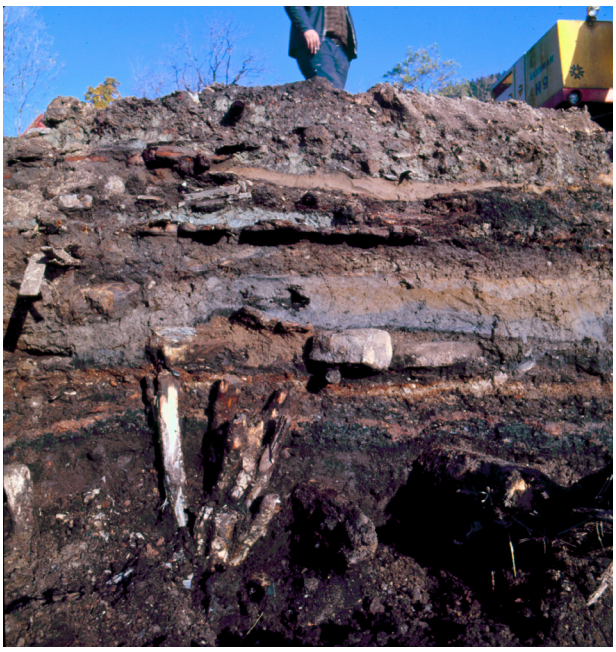


Figure 177. *Working picture from the Bryggen excavation. The sequence of layers on a quadrant profile illustrates the stratigraphic sequence of the excavation: Photo: University Museum of Bergen archive.*

This dating approach has been discussed extensively and controversially (Øye 1998). Dendrochronological investigations indicate that the chronology for the older phases must be made more precise, whereas the identification of fire layer *IV* with the fire of 1332 and also the dating of the younger fire layers *IIIb* = 1393; *III* = 1413 and *II* = 1476 is confirmed by dendrochronology (Hansen 1998: 89).

Due to the pioneering nature of the excavations, all the recording methods had to be developed on site, with the roughest classification principle consisting of quadrants measuring 8 x 8 meters each. In addition, the features such as 'building', 'wooden foundations', 'fireplace', 'well', 'ditch' are addressed and numbered as far as possible in the documentation. The numbering is consecutive for the corresponding feature category; there are no specific, unique feature numbers. The stratigraphic layers were not clearly defined and numbered as features, so that it is not possible to assign the finds to specific soil layers. Although information on the composition of layers is occasionally documented, the layers are not referred to as construction, use, destruction or levelling layers. The horizontal localization of the finds refers to the structural features. The vertical stratification of all finds refers to the fire layers described above. Ideally, the distance to the reference features is given in centimetres. The documentation of the excavation was organized at a very early stage in such a way that it was possible to record it by computer (Herteig 1985: 33-46). The localization data was initially recorded in the field in handwritten lists, which were later transferred to various databases that were updated several times. For the presented work, the localization of the finds was primarily recorded using an MS Access database used in 1999, on the basis of which the catalogue was also created. In the 2010s, the original database was transferred to a new database of archaeological museums in Norway and information on chronologically relevant localizations was updated (Hansen and Hope 2017). In 2020, the data in the catalogue was compared with the revised find data, so that the final version of this paper reflects the current state of the documentation. In particularly problematic cases, the localization information was checked against the find number in the original, handwritten find lists from the topographical archive of the Medieval Collection of the University Museum in Bergen.

The recovered finds were separated according to material groups, such as stone, wood, metal or ceramics, and archived with a consecutively assigned find number (Norwegian: *tilvekstnummer*). Such a find number can contain both individual fragments and collections of numerous individual

finds. In extreme cases, several hundred fragments have the same find number, which is why in some cases different catalogue numbers have the same find number in the catalogue. According to the current database, around 140,000 ceramic finds are archived under around 50,000 find numbers. Over 7000 find numbers comprise more than three individual fragments. A find number always refers to a specific localization, whereby the degree of accuracy of this find information varies greatly. The excavator expressly points out that finds were displaced during the excavation and assigned to the wrong feature contexts or layers, especially in the west Norwegian weather, which was characterized by heavy rainfall (Herteig 1985: 18).

Overall, there is therefore quite good information available for the finds from the Bryggen investigations with regard to the stratigraphic and spatial localization of the objects. However, due to the documentation methodology described above, it is not possible to classify the character of the find layers, for example to distinguish redeposited finds from those in primary find layers. As there are no closed finds or clearly defined find layers, it is also very difficult to make statements about find associations. However, clear tendencies in the distribution of the finds can be identified. The spatial distribution of the pottery was initially roughly mapped on the basis of the excavation quadrants. At a more detailed level, numerous catalogued finds could be placed in a spatial relationship to specific, precisely defined building features.

As already mentioned, the various fire layers represent the decisive vertical stratigraphic element of the excavations. These fire layers define a total of nine building phases in the investigation area, covering the entire period between the 12th and 20th centuries (see Figure 176). The fire layers 'IV', 'III', 'IIIb', 'II' and 'I' are primarily relevant for the processing of late medieval and early modern finds. As mentioned above, fire IV was identified by the excavator as the town fire of 1332 on the basis of a datable runic inscription and documentary sources (Herteig 1990: 13). The fire layer was detectable over the entire area and the Icelandic annals also refer to a 'town fire', which indicates an extensive damaging fire (Helle 1998: 41). The stratigraphically next higher fire layer IIIb was only found in the south-eastern part of the excavation area, between the underlying fire layer IV and the fire layer III above it (Herteig 1985: 25). It is very likely that this catastrophic fire was caused by a raid on Bergen by the Victual Brothers and did not affect the northern parts of the town according to the documentary sources (Helle 1998: 43). Both Icelandic annals and a contemporary English source date this attack to April 22, 1393 (Helle 1998: 42).

The fire layers III and II were again detectable over the entire investigation area (Herteig 1990: 13). Fire layer III is associated by the excavator with a devastating town fire in 1413 (Herteig 1985: 25). This fire is mentioned in Icelandic annals as well as in two other sources and can probably be dated to October 29, 1413 (Helle 1998: 46). The stratigraphically next higher fire layer II is identified with an archival well-documented fire in 1476 (Herteig 1985: 26). This fire event is described in detail in numerous documents, with several Hanseatic sources in particular relating to the extensive destruction in the area of the Hanseatic Kontor (Helle 1998: 57-59). The last archaeologically relevant fire layer I was located directly below the buildings destroyed in 1955. This layer dates back to the last great fire in Bergen, which took place in 1702 and was one of the most devastating fire disasters in Bergen ever (Helle 1998: 67). The debris from this damaging fire was clearly visible throughout the excavation area and was preserved in a thickness of up to 30 cm (Herteig 1990: 23).

Only a small proportion of the finds were recovered directly in or at the level of one of these fire layers. Much more numerous is the number of finds for which it was documented that they were discovered either above or below one of the fire layers. In the majority of cases, this relationship means that the objects were excavated a maximum of 20 cm above or below the fire horizon. A certain temporal proximity of the dumping to the respective fire event can therefore be assumed, but there may well have been several years between the dumping and the fire. The uncertainty factor that the material may have been relocated in a grading layer is always ignored. These limitations must be taken into account when evaluating the information on the localization of the individual finds.

6.15.3 Ceramic identification and research history

As already briefly mentioned in the introductory remarks to Chapter 6 and in the models on the history of research in Chapter 4.2, the great potential of the pottery finds from Bryggen was already emphasized by Gerald Dunning in the 1960s (Herteig 1969: 164). This pottery was pre-sorted by Rory Dunlop and Ian Reed in 1981 according to different types of wares, most of which were named after known sites. These names can be found in the find databases and have also been used in various publications. In the summary treatment of the pottery from Bryggen, this terminology is largely followed, even if the practice of naming according to find locations must otherwise be viewed rather critically (Bauer et. al. 1993, 14). One example is the widespread high medieval 'Pingsdorf ware', which can be understood as a defined ceramic ware, but

which was by no means produced exclusively in the eponymous village in the Rhenish foothills (Keller 1995: 19-21; Sanke 2002). It is therefore expressly pointed out that the type designations of various ceramic wares used in the finds database of the University Museum in Bergen cannot automatically be regarded as reliable provenance determinations. A careful investigation and clarification of the provenance of selected ceramic finds in Bergen forms the basis not least of the present work. For the following overview of the entire known spectrum of pottery from the Bryggen excavations, a summary evaluation of the data in the 2020 version of the Bergen University Museum's finds database was carried out.

In addition to the initial sorting of the pottery finds, a number of scientific works have already been published on the pottery finds from Bryggen, which were briefly presented in Chapter 4.2. The first comprehensive and still fundamental analysis of pottery from Bergen is the treatment of Pingsdorf ware (Lüdtke 1989). In addition to presenting this ware, this publication also provides an introduction to all the ceramics from the Bryggen site. A rough overview of the total quantity of ceramic wares recovered is given on the basis of the number of drawers in the museum stores (Lüdtke 1989: 22-25, Figs. 4-6). Various wares from Germany, England, Belgium and France found in Bergen are presented and the problems of nomenclature mentioned above are discussed. For example, a large proportion of the grey, reduced-fired earthenware in Bergen is catalogued under the name 'Paffrath' (Lüdtke 1989: 25), but according to the specifications of the 'North German Frame Terminology' (Erdmann et. al. 1984: 424) it is occasionally referred to as 'Blue-Grey Ware'. In this context, reference is also made to the problem of the find material sorted in Bergen as 'Langerwehe - Duingen' (Lüdtke 1989: 25), which is referred to in the 'North German Frame Terminology' with the term 'Rotengobiertes Faststeinzeug' (Erdmann et. al. 1984: 428). As described in detail in Chapter 5.1.1, this term covers models from both the Rhineland and the Weser Uplands. In addition to other methodological problems in the evaluation of the ceramic material from Bergen, Lüdtke also points out that one find number can be assigned to several fragments (Lüdtke 1989, 29). A numerical evaluation of the find numbers is used to illustrate the vertical distribution of selected wares in Bergen (Lüdtke 1989, 28-34). The finds are each assigned to a building phase, i.e. the stratigraphic section between two fire layers.

The main focus of Lüdtke's work is on the processing of the hard-fired, red-painted ware 'Pingsdorf type', of which a large spectrum from layers of the 12th and early 13th century is available in Bergen (Lüdtke 1989: 35-120). This study is a fundamental model of this ceramic ware, of which more comprehensive treatments were lacking in the production area for a long time (Keller 1995: 19; Sanke 2002).

Allan Vince and Lyn Blackmore examined various wares from south-eastern England in 1987 (Blackmore and Vince 1994). Both coarse utility vessels and various glazed and in some cases richly decorated jugs come from the London area. However, the considerably larger number of eastern English imported wares from Scarborough, the Humber region and especially Grimston type near King's Lynn could not be considered at that time (Blackmore and Vince 1994: 32). Grimston type ware occupies a special position in Bergen as it is represented in very substantial quantities in the 13th-15th centuries. Finds from Bergen have recently been considered in an overarching treatment of this ware (Green 2015: 148-150; 2018: 129). In addition to the general significance of the pottery as an indicator of trade connections, the potential of the vessels, some of which are richly anthropomorphically decorated, for further socio-historical interpretation becomes clear.

The partly richly decorated and colourfully glazed French earthenware of the High Middle Ages from Saintonge and Rouen, which is found in limited quantities in Bergen, has also been thoroughly examined and published (Deroueux, Dufournier and Herteig 1994). The import of this pottery from the south-west and north-west of France was probably closely linked to the import of wines from the corresponding regions (Deroueux, Dufournier and Herteig 1994: 175-180).

The only study of early modern pottery from Bergen to date was devoted to the imports of Weser and Werra wares in Bergen (Demuth 1997, 2001a). A considerable proportion of the finds processed were recovered during the excavations on Bryggen, but mostly without a secure find context, as the most recent find layers were only documented to a limited extent (Demuth 2001: 81-82). The analysis showed that the Weser ware, which was probably primarily exported via Bremen, was by far the most common painted earthenware from the period 'around 1600' in Bergen. In contrast, the considerably more elaborately decorated Werra ware is only represented in much smaller numbers. Both wares can be seen as evidence of the close economic and socio-cultural links between Bergen and northern Germany during the Renaissance (Demuth 2001a: 117-130).

As already mentioned in the introduction, the current finds database contains around 50,000 inventory numbers with a total of 140,000 ceramic finds. The following is a brief overview of the occurrence of various ceramic wares in the finds from

the excavations at Bryggen. It is based exclusively on the identification of the finds recorded in the databases. The summary overview is tended to supplement and update the previously published statements on the vertical distribution of various ceramic finds in Bergen (Lüdtke 1989: 28-34). In the years 1986-1987, when Lüdtke carried out his analyses, only the inventory numbers were listed in the database, but not the number of fragments. In the 2020 version of the finds database, however, information on the number of fragments is also available. These form the basis of the overview tables and diagrams below. In contrast to Lüdtke's evaluation, the respective fire layer was primarily chosen as the stratigraphic and chronological frame of reference for the following representations. This approach follows the consideration that finds that lie directly below or above a fire layer were most likely deposited in close temporal connection with the corresponding fire event. Finds under the fire layer will probably belong to the period of use immediately before the fire. Finds directly above the fire layer, on the other hand, were probably deposited during the clean-up or reconstruction phase after the fire. Accordingly, the following tables (Figures 179-180) and various more detailed diagrams list all finds of the corresponding ware types for which a close relation to the respective fire layer is recorded. 'Relation' in this context means that the finds were discovered either in, 'at the level of' or up to 20 cm below or above the fire layer.

The current finds database for 2020 shows around half of all ceramic finds as 'undefined' or 'miscellaneous'. The occurrence of the most important ware types identified in the database is shown in the following diagram (Figure 178). This refers to the entire occurrence, regardless of find context and stratigraphic classification. It is very clear that the quantity of different types of wares found varies greatly. There are also large quantities of various grey and red earthenwares in the find material from Bryggen, but these are not defined as separate ware types in the database and therefore cannot be shown here. These probably represent a large proportion of the pottery recovered from Bryggen. A rough stratigraphic and chronological classification of the selected ware types can be found below in the table Figure 179, which shows the occurrence of selected wares with reference to a fire layer.

Siegburg stoneware is the most common pottery on the BRM 0 / Bryggen site, both in terms of the find numbers assigned and the number of fragments recorded. These are almost exclusively simple utility ceramics made of fully developed Siegburg stoneware. Only 23 fragments of Siegburg stoneware from Bryggen show relief decoration; these are dealt with separately below. Stoneware from other provenances clearly recedes into the background. The largest group of other stoneware is slip glazed near stoneware, which, as already mentioned, was inventoried in Bergen under the term 'Langerwehe / Duingen'. For a detailed breakdown of this group, see generally Chapter 6.1.1 and the models below. Raeren stoneware also occurs, although only 4 fragments of relief-decorated Raeren were discovered. Early modern stoneware from Cologne / Frechen and Westerwald is represented in small numbers. Other stoneware was only generally classified as 'Rhenish'.

In terms of quantity, the eastern English Grimston type ware is almost as well represented as Siegburg. The fragments of this lead-glazed earthenware are often quite large, which is why they take up considerably more storage space in the stores, which is also the reason for the exceptional quantity of this ware in Lüdtke's overview (Lüdtke 1988: 22, Fig. 4). Various other British earthenwares are also strongly represented. These include, in particular, numerous glazed earthenwares from eastern England and Greater London. However, plain earthenwares also occur, including various shell-gritted wares (Blackmore and Vince 1994).

The occurrence of lead-glazed, partly richly decorated red earthenware, the production of which is located in southern Scandinavia, is to be expected. However, this type of pottery was also produced in Lübeck and other places on the southern Baltic coast (Drenkhahn 2015: 157-159).

Various French earthenware items are small in quantity but interesting in terms of cultural history (Deroueux, Dufournier and Herteig 1994). In addition to richly decorated medieval vessels from Saintonge and Rouen, these include 16th century plates and bowls from Beauvais. Much more common than the French earthenware is the light-bodied, yellow-glazed Andenne ware from the French-speaking part of present-day Belgium.

As already mentioned, the red-painted ware 'Pingsdorf type' is represented in very significant quantities in the find material from the Bryggen excavations (Lüdtke 1994). This also applies to a hard-fired grey earthenware with a shiny metallic surface, which was identified in Bergen as 'Paffrath'. However, the extent to which all the pieces inventoried in this way are 'Paffrath ware' in the narrower sense (Höltken 2000: 59) must remain an open question. In Lübeck, this ware is only rarely documented and takes a back seat to other grey earthenware (Drenkhahn 2015: 56). It remains for future research to clarify the extent to which the situation in Bergen is completely different.

It has already been pointed out several times that early modern ceramics from the late 16th and 17th centuries were only recovered and documented to a limited extent during the excavations at Bryggen. Nevertheless, a significant amount of

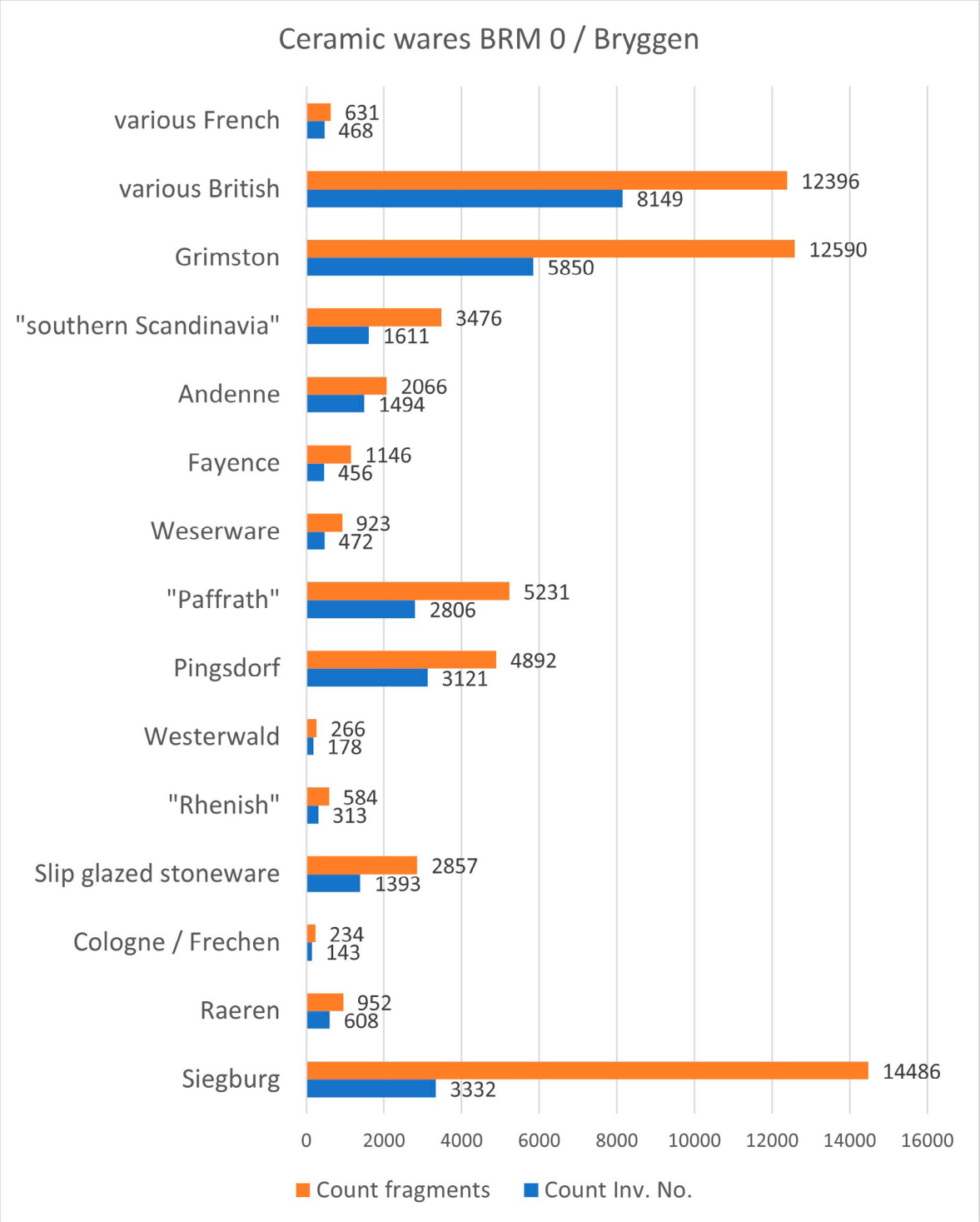


Figure 178. *Diagram of a number of selected ceramic wares from the Bryggen excavation based on the information in the University Museum of Bergen's finds database.*

faience and painted earthenware is recorded in the ceramic inventory of the excavation. Weser ware is by far the most common painted earthenware recovered from Bryggen and other sites in Bergen (Demuth 2001a). Under the English term 'Delft', faience and majolica are stored in comparable quantities, which have not yet been studied in detail.

The previous statements and tables primarily describe the overall occurrence of the respective ware types. The following table Figure 179 gives an impression of the chronological trends of the Bryggen pottery sequence. The number of fragments of each ware type whose stratigraphic reference is recorded as in, or up to 20 cm 'below' or 'above' the respective fire layer is given. The indication of the ware types is largely based on the museum's finds

Fragments in / over / under	No fire	1702	1476	1413	1393	1332	1248	1198	Sum ware
Stoneware Weser Uplands	149	75	220	476	101	113	8	7	1149
Siegburg	1875	2683	4307	3925	893	626	105	24	14438
Raeren	119	249	295	79	56	43	4	1	846
Köln / Frechen	46	54	92	8	2	6	0	2	210
Westerwald	80	90	84	2	2	5	0	0	263
"Other stoneware"	124	115	502	78	209	361	57	16	1462
Pingsdorf	234	13	24	36	8	476	1518	1997	4306
Paffrath	227	11	5	20	3	432	1282	1819	3799
South Scandinavian earthenware	296	46	496	1033	182	1152	104	37	3346
Various British earthenwares	824	65	443	1381	254	2759	2442	1641	9809
Grimston	1007	143	1267	2836	739	5062	748	106	11908
Andenne	148	1	4	10	1	61	380	416	1021
Weserware	214	228	405	48	0	16	6	3	920
Delft / Fayence	248	341	448	36	1	59	11	1	1145
French earthenwares	52	75	43	104	12	161	132	39	618

Figure 179. *Overview of the occurrence of selected wares with reference to different fire layers from the excavation at the BRM 0 / Bryggen site.*

database. From the 'Langerwehe / Duingen' group listed there, however, the fragments of stoneware from the Weser Uplands were filtered out on the basis of the catalogue prepared for the present book and are listed as separate wares. The remaining slip glazed stoneware from the 'Langerwehe / Duingen' group was assigned to the 'Other Stoneware' group together with the fragments stored as 'Rhenish'.

In addition to the stratigraphic and chronological distribution of the respective ware types, the table also illustrates the uncertainties in the evaluation of the features of the individual finds. The latter confirms in particular the occurrence of pottery in a stratigraphic context in which the respective finds must necessarily have been relocated. This concerns, for example, the occurrence of clearly post medieval pottery, such as Cologne / Frechen and Westerwald stoneware, Weser ware or faience with a reference to medieval fire layers of the 12th-15th centuries. Whether these cases are due to errors in the documentation or material that was moved during the excavation can no longer be clarified in individual cases. Ultimately, however, the number of finds in question is so small that the distribution of the pottery across the corresponding layers can be regarded as generally accurate. This also applies to cases in which pottery with a stratigraphic reference occurs that must clearly be regarded as secondary relocation. This can be assumed, for example, if high medieval pottery of the Pingsdorf or Paffrath type is undoubtedly documented in layers with reference to late medieval fire layers. This must be redeposited material, for example from levelling layers. The distribution of the pottery finds tends to indicate that most of the finds were deposited within a reasonable period of time after use. However, it must be repeatedly emphasized that the fire layers are not certain chronological fixed points. The chronological relationship between the finds and the fire layers can only be roughly estimated. For example, the runic inscription with inventory number 31390, cited at the beginning as an example of fire layer chronology, was found 'above' the fire layer associated with the fire of 1332 (Herteig 1985: 31). A person named Gunnar Kvit mentioned in this inscription appears in documents as royal treasurer in the years 1340-1343, which means that the find dates to around 10 years after the fire in question. If the fire layer chronology developed for Bryggen is accepted as a chronological framework, the finds recovered up to 20 cm 'below' or above the respective layer are likely to have been deposited in a period of ten or twenty years before or after the respective event. The reference to a fire layer can therefore certainly be interpreted as a chronological indication of a period of about 40 years around the fire event.

More precise stratigraphic / chronological information can be achieved from those finds whose find location is documented in or 'about / at the level of' a fire layer. These are shown in the following table Figure 180.

The distribution of the selected wares in the respective fire layers roughly follows a similar pattern to the distribution of finds with a broader reference to the respective fire layers. The firelayer stratigraphy of Bryggen thus provides a good overview of the sources of supply of ceramics in Bergen during the 12th-17th centuries. The following statements largely confirm previously published findings regarding the vertical distribution of different wares from the Bryggen excavations (Lüdtke 1989: 28-34, 94-15). The vertical stratigraphy and chronology of the stoneware from the Weser Uplands, as well as the other types of stoneware discussed, will be dealt with in more detail in later chapters. The models in the next few paragraphs are first inten-

Fragments IN firelayer	1702	1476	1413	1393	1332	1248	1198	Total
Stoneware Weser Uplands	16	64	75	8	4	1	0	168
Siegburg	792	1203	1228	41	35	7	1	3307
Raeren	52	78	32	2	0	0	0	164
Köln / Frechen	14	15	1	0	0	0	0	30
Westerwald	33	7	0	0	0	0	0	40
"Other stoneware"	25	168	107	23	14	0	0	337
Pingsdorf	1	5	8	0	0	184	230	428
Paffrath	0	1	0	0	5	178	200	384
South Scandinavian earthenware	5	108	91	0	83	6	0	293
Various British earthenwares	12	123	128	10	451	216	162	1102
Grimston	14	330	262	25	498	80	27	1236
Andenne	0	0	0	0	3	34	56	93
Weserware	65	10	0	0	0	2	0	77
Delft / Fayence	58	20	0	0	0	0	0	78
French earthenwares	29	4	7	0	8	26	6	80

Figure 180. *Overview of the occurrence of selected wares in the fire layers of the BRM 0 / Bryggen site.*

ded to provide a rough overview of the ceramic assemblage in the find material from Bryggen.

At the end of the 12th century and in the first half of the 13th century, earthenware from the Rhineland, such as Pingsdorf and Paffrath ware, is particularly well represented. In addition, Andenne ware and, to a lesser extent, French earthenware, especially Saintonge and Rouen ware, also occur in this period (Deroueux, Dufournier and Herteig 1994). Various English earthenwares also make up a considerable proportion of the pottery in Bergen. These are mainly unglazed cooking pots such as 'Shelly-ware' and glazed jugs of the 'London-Brown' type (Blackmore and Vince 1994). The fire layer of 1248 also already contains some fragments of Grimston type ware, a glazed earthenware that was one of the most important products of the potteries around King's Lynn in Norfolk in eastern England in the mid-13th century (Green 2015: 146). The extent to which isolated fragments attributed to Siegburg in the fire layer of 1248 are early exported examples of proto-stoneware (Roehmer 2001: 479) or must be regarded as mislocalized cannot be clarified here. The accuracy of the localization and dating of the single piece of slip glazed near stoneware from the Weser Uplands, which is said to have been discovered in this fire layer (Cat. 466), is also unclear. In general, the occurrence, vertical stratigraphy and chronology of the stoneware, especially from the Weser Uplands, is presented and discussed in detail below.

In the second half of the 13th century and the first half of the 14th century, English glazed earthenware dominated the ceramic production in Bergen. Grimston type ware in particular is clearly dominant in this period, but other East English glazed earthenwares such as Scarborough, Stamford and Humber ware are also strongly represented. The fact that richly decorated glazed earthenware dominated in Bergen during this period is also shown by the quite numerous occurrences of South Scandinavian earthenware. This largely corresponds to a trend that can also be observed in Lübeck, where glazed red earthenware also had its greatest significance in the second half of the 13th and first half of the 14th century (Drenkhahn 2015: 161). Stoneware, primarily from the Weser Uplands, but also from other provenances, is already present in the Bryggen fire layer of 1332, but only in quite modest quantities.

Around the second half of the 14th century and in the 15th century, represented by the fire layers of 1393, 1413 and 1476, the ceramic deposits on Bryggen change significantly. Stoneware is clearly the most numerous of all identified pottery types in this period. Siegburg stoneware dominates, accounting for about half of all the selected ceramic finds in the respective fire layers. Other mostly Rhenish stoneware production sites are also represented in significant numbers, including Langerwehe, for example. The stoneware from the Weser Uplands also has its focus in this phase, especially in the period around 1400. In the 15th century, Raeren stoneware also appears among the finds from Bryggen, towards the end of the 15th century as the second most documented production site after Siegburg. The glazed earthenware is still largely of English provenance, although in individual cases it is unclear to what extent this is material has been disturbed from the older layers. Grimston type ware is also the most common glazed earthenware in this period, whereas other English production sites are in greater decline. Glazed red earthenware, which is thought to have been produced in southern Scandinavia, can still be traced.

As already mentioned several times, the documentation of post medieval finds in Bryggen is difficult. Clearly early modern pottery from the

16th and 17th centuries is Cologne / Frechen and Westerwald stoneware, both of which occur in certain quantities. The relief-decorated stoneware from both provenances, as well as from Siegburg and Raeren, is discussed in more detail later in this chapter. Various painted earthenwares appear in this period, including those from Beauvais in France, some of which are elaborately decorated *double sgraffito* wares (Hurst 1986: 108). In terms of quantity, however, the painted earthenware of this period is dominated by Weser ware, which is found in large numbers throughout Bergen and also on Bryggen (Demuth 2001a: 81-82). The sgraffito-decorated Werraware also occurs, albeit in much smaller numbers. Faience, which probably originated primarily from the Netherlands, is about as numerous as the Weser ware. It should be noted that the early modern ceramics from Bryggen have been little studied to date; according to the database, around two thirds of the ceramic finds recovered in early modern layers are undetermined or belong to various wares. In addition, there is a considerable amount of secondary medieval material.

In summary, it can be stated that in the oldest layers of Bryggen, from the 12th to the middle of the 13th century, the ceramic deposits are characterized by earthenware from various regions of the North Sea area. In the second half of the 13th century and for most of the 14th century, East English glazed earthenware dominates. Various stonewares, with Siegburg as by far the most important place of production, increasingly appear in the course of the 14th century and are clearly dominant around 1400 and throughout the 15th century. In the course of the 16th and 17th centuries, the ceramic sequence of Bryggen diversified significantly again. This rough overview does not consider both the finer subdivisions, especially of English earthenwares, and the large quantity of simple, previously unclassified wares. It was also not possible to deal with the isolated finds of rare but culturally and historically highly interesting pottery. These include, for example, various wares from the Mediterranean region, of which a total of 179 fragments are stored, including olive oil amphorae, Italian faience and Iberian chandelier ware, as well as two fragments of Syrian faience.

The overview of the pottery from the BRM 0 / Bryggen site forms the background for the classification of the stoneware finds discussed in more detail below, which are the focus of this work. A total of 1286 ceramic finds from the Bryggen excavations were catalogued. These are the finds identified in the stores of the stoneware presented in detail in Chapter 6. With 1149 fragments, stoneware from the Weser Uplands accounts for over 90% of the catalogued finds. Forty-seven fragments of stoneware from Waldenburg in Saxony, 33 fragments of relief-decorated stoneware from Cologne / Frechen and 23 fragments of relief-decorated stoneware from Siegburg were identified (cf. Figure 181). Relief-decorated stoneware from Raeren and stoneware from the Falke group were each present in four examples. The horizontal and vertical distribution of these wares is presented in detail in the following sections. Particular attention is paid to the chronological aspects and possible contexts of the finds.

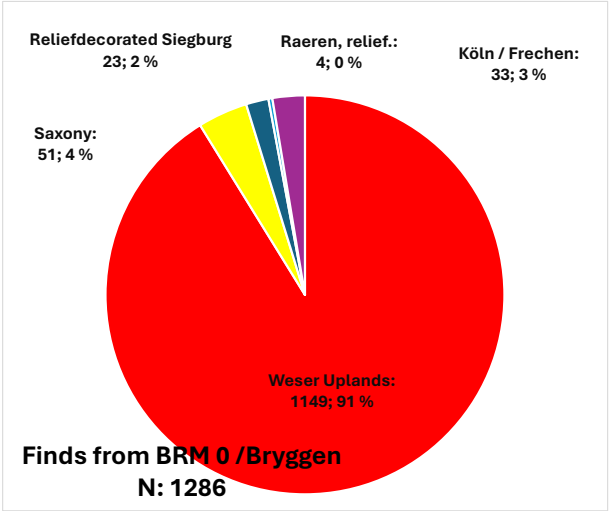


Figure 181. Diagram of the stoneware finds of various provenances recovered from the BRM 0 / Bryggen site that were recorded in the catalogue and described in this book.

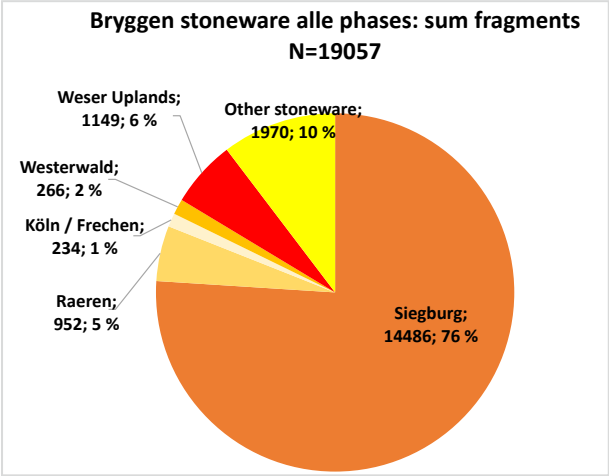


Figure 182. Diagram of the total number of stoneware finds recovered from the BRM 0 / Bryggen site.

6.15.4 The stoneware from the Weser Uplands of Bryggen

As explained in the previous chapter (Figure 181), the stoneware from the Weser Uplands, with 1149 fragments, represents the largest part of the recorded finds from the Bryggen excavations that are examined in this book (Cats. 1-1149, 1770,

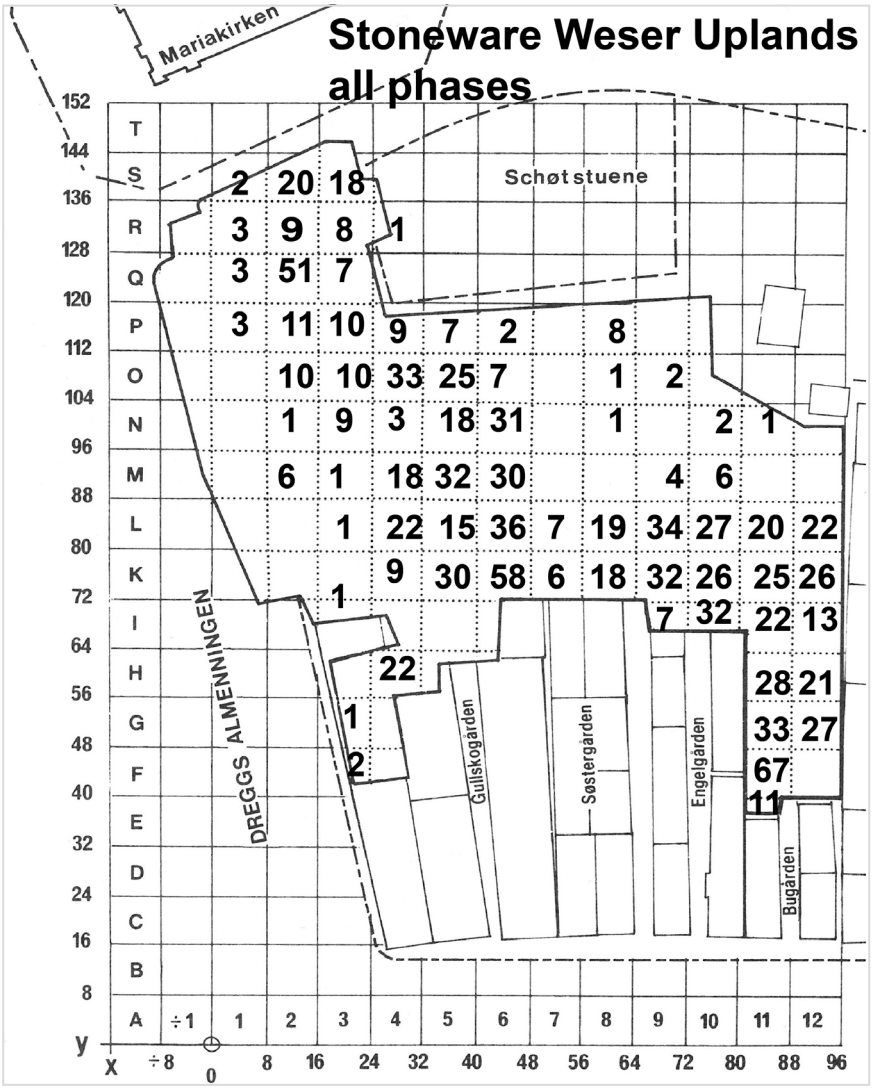


Figure 183. Rough mapping of all fragments of stoneware from the Weser Uplands on the excavation area of Bryggen per quadrant, without consideration of the find layer. Map source: Herteig 1990: 10, Fig. 1.

1771). The site thus also accounts for most of the stoneware finds of this provenance in the working area. Of the total of around 66,000 ceramic fragments identified by ware or provenance that were recovered and stored during the Bryggen excavations, stoneware from the Weser Uplands therefore accounts for just under 2%. If only the stoneware from Bryggen is considered, the proportion of products from the Weser Uplands is around 6% (cf. Figure 182).

The finds recovered are distributed over almost the entire excavation area, even if there are large differences in the quantities found in the individual quadrants (Figure 183).

These variations in the distribution of finds show both stratigraphic / chronological and spatial aspects. The following models first break down the stoneware from the Weser Uplands of Bryggen according to stratigraphic phases, which are defined by the different fire layers as described in the previous section. Particular attention is paid to the finds with a direct reference to a fire layer. First of all, the respective occurrence is summarized and put in relation to selected other wares. The summary analysis of various types of wares was primarily based on the information in the current finds database. The wares selected for the statistical analysis represent a clear majority of the most important specific wares of the respective phase. Only the stoneware from the Weser Uplands was identified piece by piece by the researcher; the information on these pieces is based on this examination and the catalogue of the present work. The most important technological and typological features of the finds from these phases are described and highlighted. Within the fire layers, a rough overview of the horizontal distribution of the finds is presented by mapping the fragments per excavation quadrant. Finally, individual finds and concentrations of finds that can be assigned to specific constructions and structures are discussed in more detail.

The distribution of the stoneware from the Weser Uplands among the various layers of the excavations at Bryggen, defined by the fire layers, is

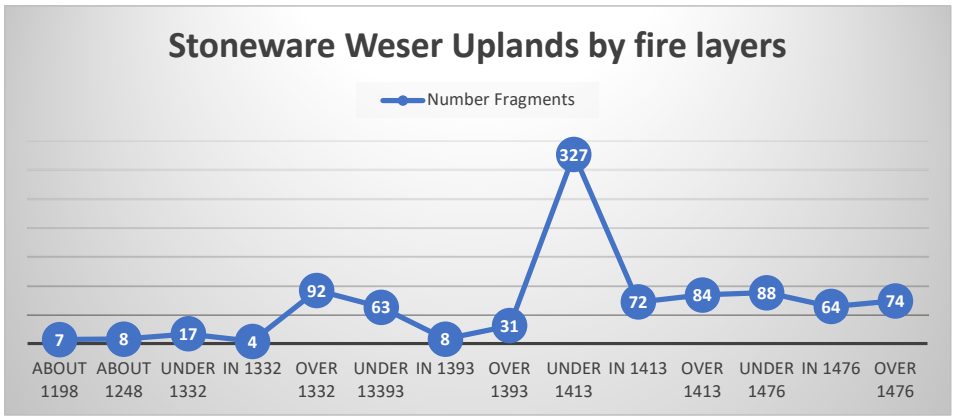


Figure 184. *Diagram of the occurrence of stoneware from the Weser Uplands in, below and above the various fire layers of the Bryggen excavation.*

very uneven. Despite all the uncertainties, the reference to the fire layers shows very clear chronological trends (Figure 184).

The diagram above clearly illustrates that the focus of the Bryggen deposit is in layers delimited by Fire Layer IV - identified as the 1332 fire - and Fire Layer III - identified as the 1413 fire. Only 21 finds were recovered from layers that predate 1332 and therefore date to the second half of the 13th century and the first third of the 14th century. In contrast, 310 fragments were found after the fire layer associated with the fire of 1413, which can very probably be dated to the 15th century. The finds from the various stratigraphic horizons are broken down in detail below. When stating the percentage of individual wares, it should always be borne in mind that around half of the ceramic finds from Bryggen are unidentified, and no information is available on this material. The proportion of unidentified finds or finds merely referred to as 'miscellaneous' is remarkably consistent in all stratigraphic phases. The percentages therefore always refer to the selected ceramic wares, which make up the lion's share of the identified pottery of the respective phase.

6.15.4.1 Stoneware from the Weser Uplands from 13th century layers on Bryggen

According to the finds database, a total of seven fragments were discovered in find contexts related to fire layer VI, which is associated with a city fire in 1198 (Cats. 343, 577, 852, 945, 1069-1071). However, all these finds are clearly typologically younger. Vessels with sintered brown wash, almost sintered light grey fabric, strap handles and pronounced strips, such as Cat. 343 are inconceivable before the second half of the 13th century and are more likely to date to the 14th century (Stephan 2012: 23-24). Rather, it can be assumed that the few finds with a reference to fire layer VI / 1198 were relocated and erroneously documented in older layers.

The dating of the four fragments which, according to the finds database, were recovered in or above the fire layer V associated with the fire of 1248, must also be viewed with certain reservations. A pear-shaped steep-sided beaker (Cat. 635; Figure 185) was recovered from the remains of building 174, which was erected in the second half of the 13th century (Herteig 1990: 80).

A base fragment with frilled foot was recovered directly in fire layer V, which is undoubtedly brown slip glazed near stoneware from the Weser Uplands (Cat. 466; Figure 186). If the dating of the find is correct, it is probably a very early example of exported stoneware from this region. However, the piece is quite isolated, otherwise only a few examples of slip glazed stoneware are documented from the layers of this time horizon in Bryggen. This piece, too, could well have been relocated and cannot be regarded as reliable evidence for the early appearance of stoneware from the Weser Uplands in Bergen.

Figure 185. *Cat. 635, rim fragment of beaker, from 'Building 174'; stratigraphically dated to the second half of the 13th century.*

Figure 186. Cat. 466, base fragment of brown engobed near stoneware with frilled foot from fire layer V / 1248.

6.15.4.2 Stoneware from the Weser Uplands at the level of the 1332 fire on Bryggen

Stoneware from the Weser Uplands is found in significant quantities for the first time on the stratigraphic horizon defined by fire layer IV, even if the ceramic assemblage is strongly dominated by glazed earthenware (cf. Figure 180). As already mentioned in the introduction, there are good archaeological arguments for the identification of this fire layer with a documented fire in 1332 (Herteig 1990: 13).

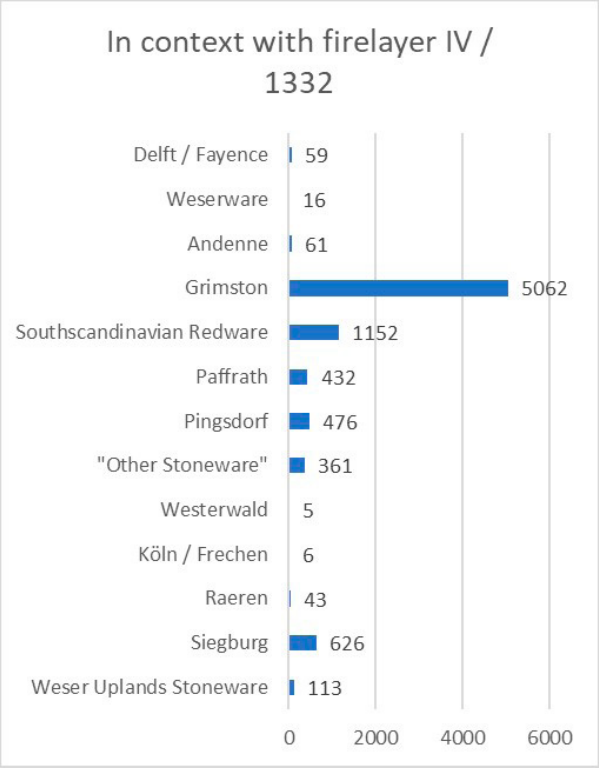


Figure 187. Selected pottery wares found in context relating to fire layer IV of 1332.

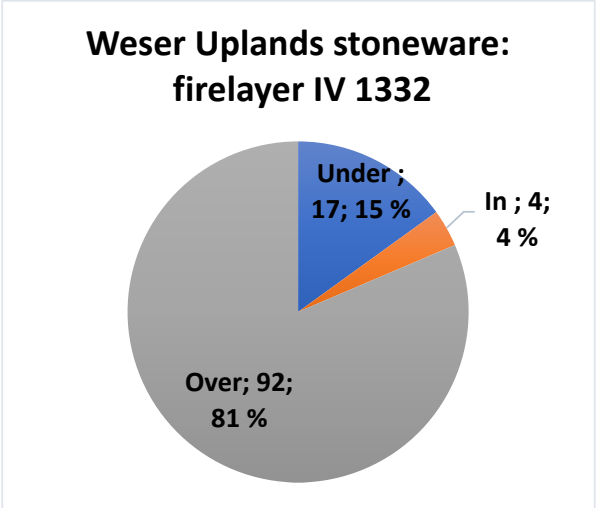


Figure 188. Pie chart over stoneware from the Weser Uplands with stratigraphic relation to fire layer IV of 1332.

A total of 113 fragments related to this fire event have been catalogued. Only four fragments were discovered *in* or *approximately* or *at the level* of the fire layer of 1332 (Figure 188). The stratigraphic assignment *below the fire layer of 1332* is found for 17 further fragments. With 92 fragments, four-fifths of all finds with a reference to the 1332 fire layer were recovered *above* this firelayer. This strongly suggests that stoneware from the Weser Uplands was occasionally found in Bergen in the first third of the 14th century, but only in modest quantities. It is only from the second third of the 14th century onwards that the ware appears to a considerable extent in Bergen, as the breakdown of the most important wares in the findings above the fire layer of 1332 shows (Figure 189). Stoneware from the Weser Uplands accounts for about 2% of the pottery from this phase. Stoneware is already dominated by products from Siegburg, but in total only about 10% of the pottery from this phase is stoneware. Overall, the pottery of this phase is very clearly characterized by lead-glazed earthenware, with Eastern English Grimston type ware accounting for about half of the identifiable pottery finds (Figure 187).

The distribution of finds related to the fire layer of 1332 across the excavation area is quite uneven, as the following rough mapping shows (Figure 190). However, the distribution of finds follows a certain pattern that remains similar across the different phases, as a comparison with the mapping of finds from all phases makes clear (see Figure 189 above).

With 45 fragments, almost half of all finds from this period were recovered in a passage / alley or in an open space. In some cases, this is reflected in the high number of finds per quadrant. Various wooden box foundations also contained a consider-

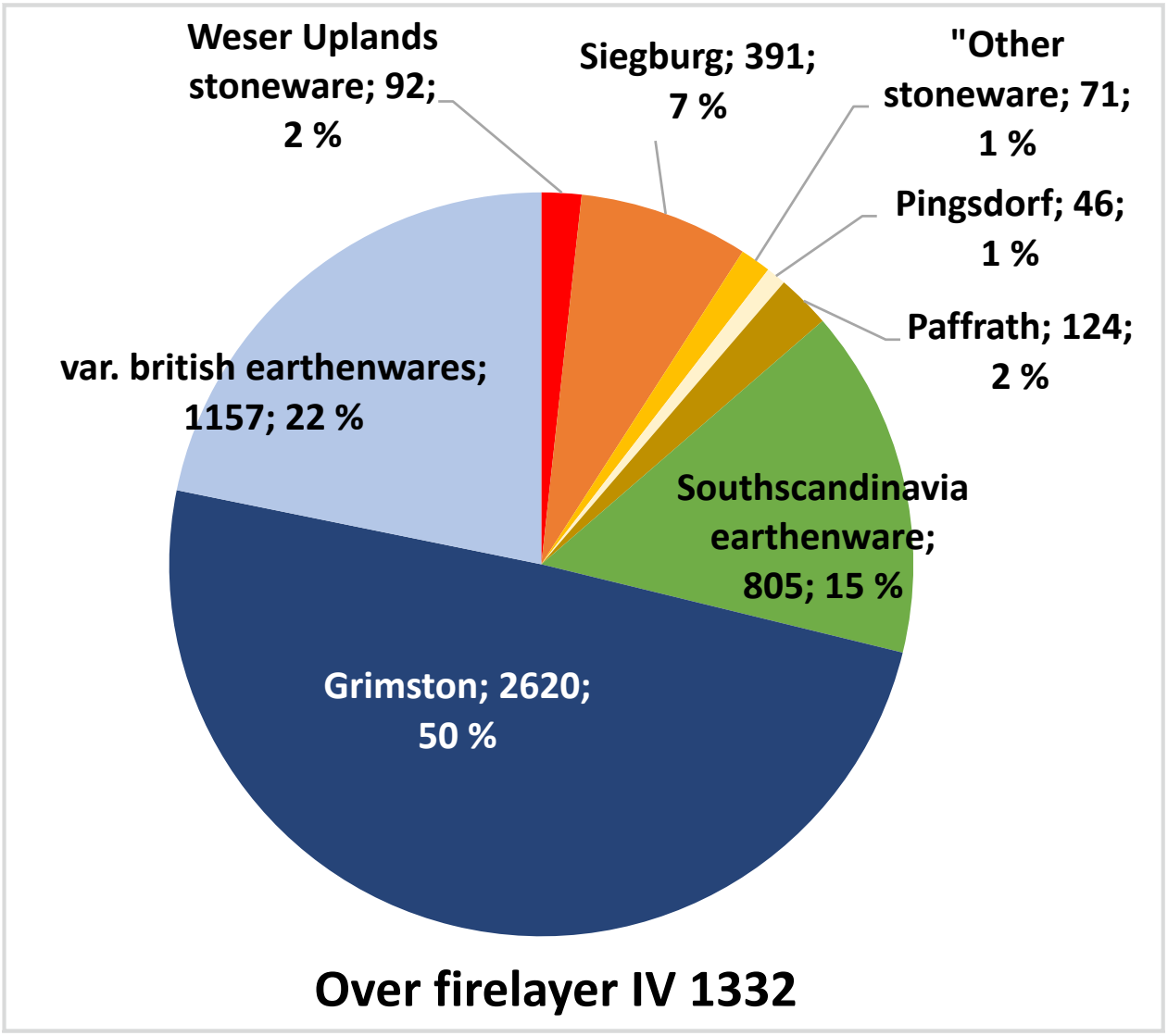


Figure 189. *Pie chart with selected pottery wares recovered from the strata immediately above fire layer IV of 1332.*

able amount of stoneware from the Weser Uplands, with 36 fragments. A total of 18 fragments were related to different buildings. Only three fragments were found in an eaves-drip, six pieces came from two wells and only one fragment was discovered in a privy. The latter, well-defined find contexts are the most likely to allow a more precise reconstruction of the find assemblage, even if they cannot be regarded as secure closed features.

In well no. 17, a rim fragment of a quatrefoil beaker made of near stoneware with reddish wash was recovered (Cat. 334; Figure 191), which was identified by X-ray fluorescence analysis as a product from Coppengrave. Three fragments of East English glazed earthenware from Scarborough and Grimston type were also found in the same well, as well as a fragment of South Scandinavian glazed earthenware. According to the documentation database, the backfill of well 17 was below fire layer IV of 1332, although the excavator describes well 17 in connection with buildings burnt down in fire V in 1248 (Herteig 1990: 56). Typologically, however, both the quatrefoil beaker Cat. 334 as well as the various glazed earthenwares from the well are more likely to date to the period between around 1250 and 1350, which confirms the statement in the database. The finds from well 17 are good examples of the pottery used in Bryggen during this period.

This also applies to the finds from another well of this phase (Figure 192). Well 2 is located in quadrant O/4, was built after the fire of 1332 and was probably abandoned in the second half of the 14th century (Herteig 1991: 38). A total of 53 fragments of pottery were found in this backfill, including six fragments of stoneware from the Weser Uplands (Cats. 327-332;).

Two further stoneware fragments could not be assigned to a specific place of production. However, British glazed earthenware dominated here too, with 31 fragments of different provenance. The finds from well 2 are broken down by provenance in the diagram in Figure 192. Stoneware from the Weser Uplands accounts for 11% of all the pottery

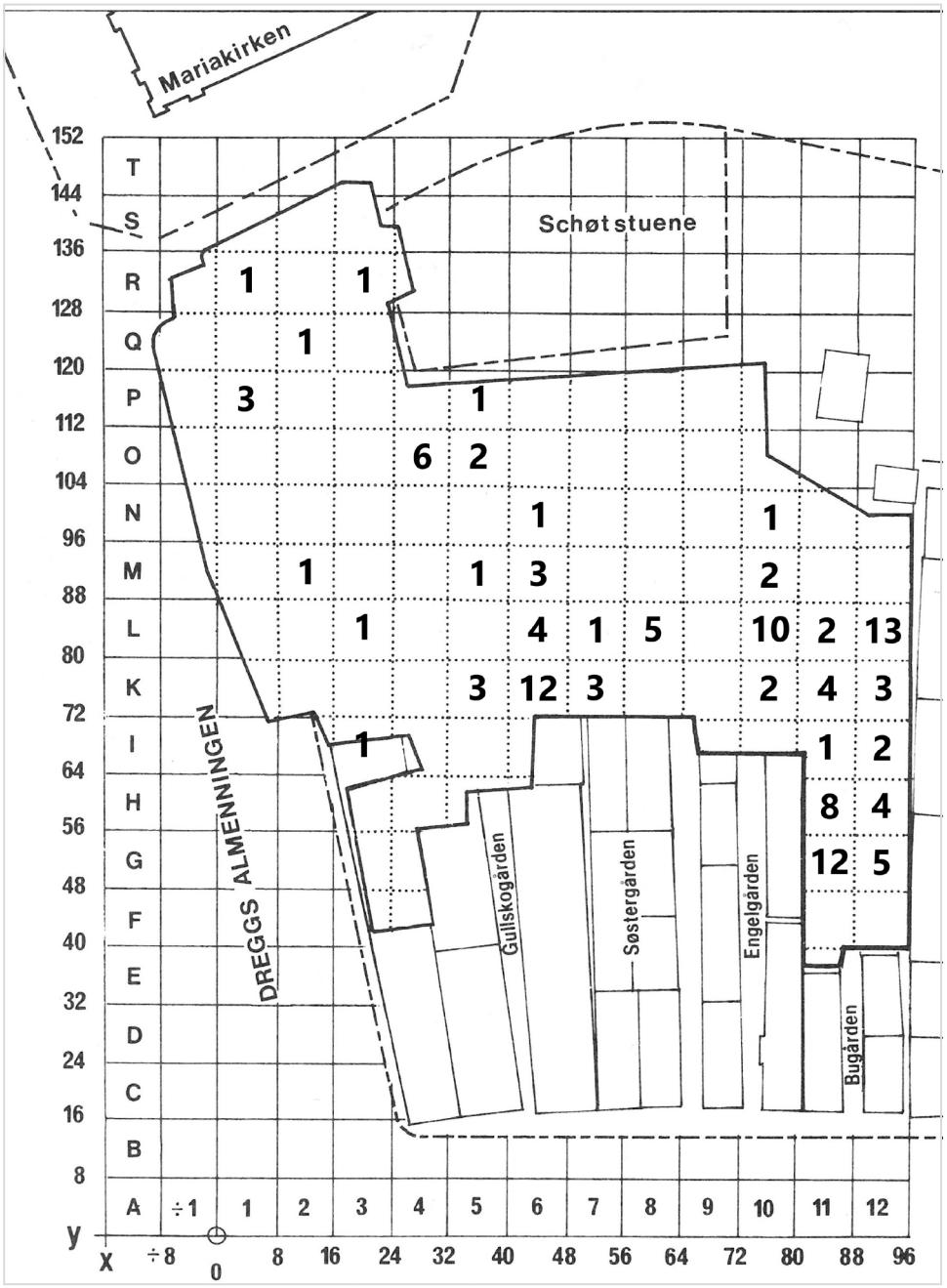


Figure 190. *Stoneware from the Weser Uplands with reference to fire layer IV from 1332 per quadrant.*

in this find, with stoneware representing only 15% of the ceramic finds overall. This well also contained a rim fragment of a quatrefoil beaker made of near stoneware with reddish wash (Cat. 327), a typical Weser Uplands form, which, according to X-ray fluorescence analysis, shows the chemical signature of Coppengrave / Duingen. Several base fragments show the typical form of frilled feet from the potteries of the Weser Uplands. One of these pieces of brown slipped near stoneware was made in Bengerode (Cat. 332) according to the X-ray fluorescence analysis.

As mentioned above, 17 finds of stoneware from the Weser Uplands were related to a defined building. Aspects of the association of finds from this period will be presented on the basis of two buildings that were documented at different locations during the Bryggen excavations. The two selected buildings were both erected after the town fire of 1332, and the finds are therefore likely to date to the middle of the 14th century. All finds were counted that had an identical finding situation and were therefore recorded as having been discovered in the buildings.

Building 330 (Herteig 1990: 37) in the Bugården tenement (L-K11), consisted only of the wooden frame foundation. Two fragments of stoneware from the Weser Uplands (Cats. 750 and 1771) were associated with nine fragments each of Siegburg stoneware and lead-glazed Grimston type ware (cf. Figure 193).

Figure 191. *Cat. 334, rim fragment of a quatrefoil beaker from Coppengrave, found in well 17 on Bryggen in a find context of the first third of the 14th century.*

Building 430 (Herteig 1991: 36; Figure 19) in the Gullskoen tenement (K06) presented itself in the excavation findings with a largely intact floor of floorboards. A total of 23 pottery fragments were found in this building, thirteen of which were determined in terms of ware and provenance. With three fragments, stoneware from the Weser Uplands (Cats. 784-786) is represented just as frequently as Siegburg stoneware (Figure 194).

It is striking that the composition of the pottery finds in the selected feature contexts, however uncertain they may be, deviates in individual cases from the pattern obtained on the basis of the total quantity of pottery finds from the stratigraphic phase. This could be interpreted to mean that individual tenements or plots of land on Bryggen were used by people of different social or regional origins who used pottery of different provenance. However, it is also conceivable that the composition of the pottery is primarily due to different usage activities in the respective areas. Fine chronological causes or purely coincidental conditions can also be considered as possible explanations for the variations in the pottery spectrum of different features of the same stratigraphic phase.

In addition to the macroscopic determination, the provenance of selected fragments of stoneware from the Weser Uplands was verified by X-ray fluorescence analysis for eleven pieces from features related to fire layer IV of 1332. All selected pieces showed the chemical signature of clay deposits from the Weser Uplands. Three pieces could be identified as products from Bengerode: Cats. 332, 634 and 845 (Figure 195). Seven fragments, on the other hand, came from potteries in the Coppengrave / Duingen region: Cats. 327, 334 (cf. Figure 191), 418 (Figure 196), 423, 446, 624, 887. Somewhat surprisingly, one base fragment had the chemical signature of the clay deposits of Gottsbüren in the Reinhardswald in the north of the federal state Hesse (Cat. 885; Figure 197). Almost all pieces of this phase are reddish or brownish slip glazed near stoneware. Some finds also show a light brown surface, reminiscent of a glaze and often accompanied by a higher degree of sintering of the fabric (e.g. Cat. 418 Figure 196). Overall, however,

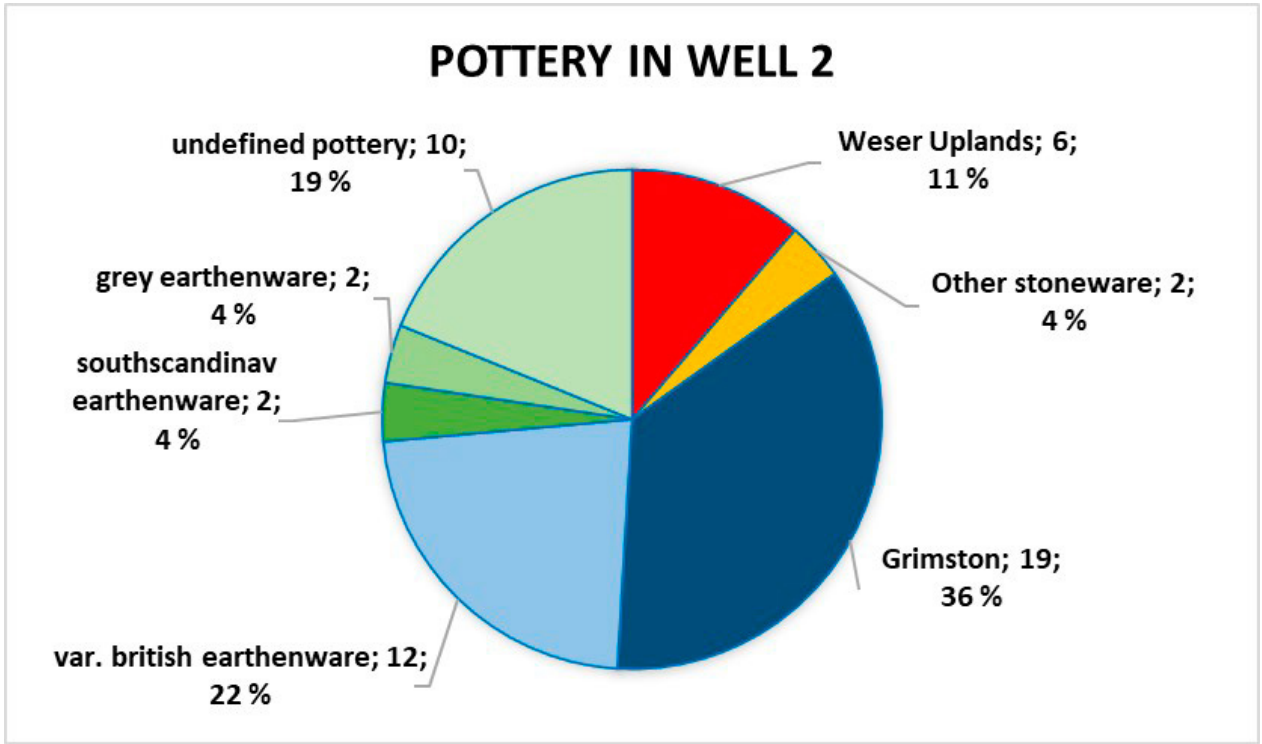


Figure 192. *Diagram of the number of ceramics in well 2.*

only ten fragments, i.e. less than 10% of this period, can be said to have a completely sintered fabric.

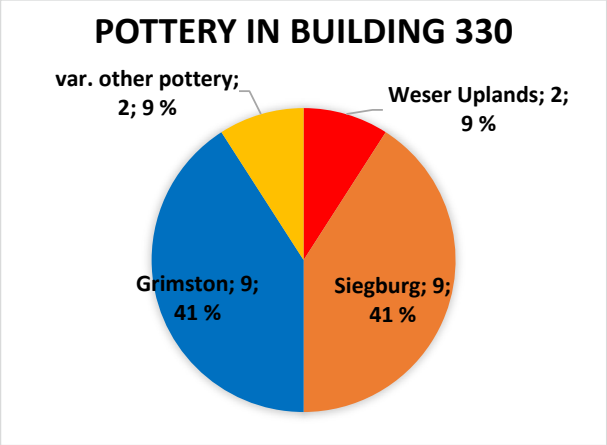


Figure 193. Diagram of selected pottery finds from building 330.

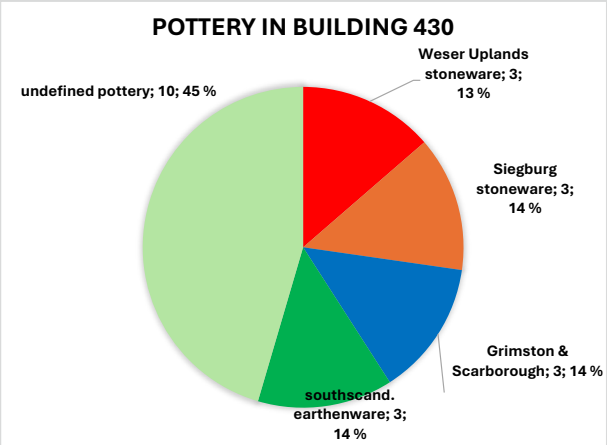


Figure 194. Diagram of the pottery finds from building 430.

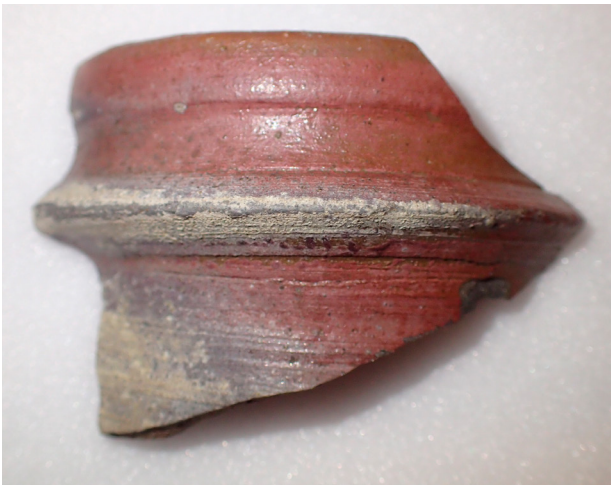


Figure 195. Cat. 845, rim piece from Bengerode, context: fire layer 1332.

Figure 196. Cat. 418, base fragment from Coppengrave, context: fire layer 1332.

Figure 197. Cat. 885, base fragment Gottsbüren, context: fire layer 1332.

The vast majority of fragments from the phase around the 1332 fire layer appear to be from medium-sized jugs. These are characterized by collared rims, flat strap handles and frilled feet pinched out of the base. In addition to jugs, there are also two quatrefoil beakers (Cats. 327, 334; Figure 191), which belong to the characteristic range of shapes of stoneware potteries in the Weser Uplands. A special piece is the rim fragment of a small pear-shaped beaker made of red slipped stoneware (Cat. 423). The chemical signature of the grey, fully sintered fabric, determined by X-ray fluorescence analysis, suggests production in Coppengrave / Duingen.

Apart from typical profiled strips, only a few decorative elements are found on the fragments from this phase. A total of five pieces shows the characteristic wavy decorative strips (e.g. Cat. 260). Three fragments show simple rouletting decoration on the decorative strip (e.g. Cats. 887, 951; Figures 198 and 199).

Figure 198. *Cat. 887, body fragment with rouletting decoration, according to XRF from Coppengrave; context: fire layer 1332.*

Figure 199. *Cat. 951, body fragment with rouletting decoration; context fire layer 1332.*

6.15.4.3 Stoneware from the Weser Uplands at the level of the 1393 fire on Bryggen

Fire layer IIIb, identified as a fire from 1393, was only found on about one third of the excavation area of Bryggen. This is located in the south-eastern part of the investigation area, with the double tenements Bugården and Engelgården (Herteig 1990: 13, 29-35, 72-74). With 102 fragments, almost as many fragments were found relating to this fire layer as to the previous fire layer IV of 1332, although the latter was found across the entire excavation area. This considerably higher frequency of finds is impressively demonstrated by the mapping of finds per excavation quadrant (Figure 200). The mapping also clearly shows the limitation of fire layer IIIb to the two south-eastern tenements of the investigation area. It can also be clearly seen that the fire layer was only found in the southern, front part of the elongated tenements, while the rear areas yielded no finds and no traces of the fire.

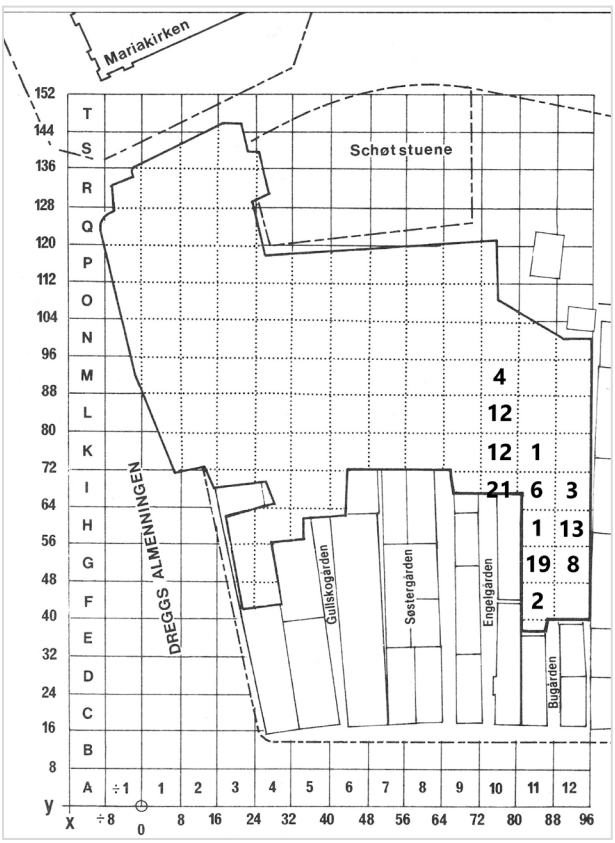


Figure 200. *Mapping of stoneware from the Weser Uplands by quadrant in the area of the 1393 fire on the Bryggen excavation. Map source: Herteig 1990: 10, Fig. 1.*

The range of pottery has changed significantly compared to the previous fire interval, as the proportion of stoneware now corresponds roughly to that of the various lead-glazed earthenwares (Figure 201). The fact that individual displaced finds must always be expected has already been mentioned several times in the introduction. In the case of the finds related to the fire layer of 1393, this is strikingly evident in the example of Cat. 1549, a fragment of a Raeren baluster jug, which, according to the excavation documentation, is said to have been discovered *under* this fire layer. This is of course impossible in the primary find location; the Post medieval piece must have been relocated in this context.

Most of the finds of stoneware from the Weser Uplands that are related to fire layer IIIb and thus to the fire of 1393 were discovered *below* this fire layer (Figure 202). With eight fragments, around 8% of the finds were recovered directly in the fire layer, while just under a third were found 'above' the fire layer of 1393. Roughly speaking, all finds with such a reference can probably be dated to the second half of the 14th century or to the period around 1400. Looking at the emergence of selected ceramic wares respectively *below, above* and *in* the fire layer IIIb, which is interpreted as the fire of

1393, it becomes clear that the fire layer obviously represents a horizon in which the ceramic spectrum on Bryggen changes noticeably (cf. Figures 203 and 204). Very striking is the fact that various glazed earthenwares dominate the findings under the fire layer of 1393, above all the East English Grimston type ware. Stoneware already accounts for around 40% of the identifiable pottery finds, of which almost a quarter were identified as Siegburg products. Unidentifiable stoneware is well represented at 11%, while Raeren stoneware is present but does not play a role in terms of quantity. Stoneware from Waldenburg is also represented for the first time in the finds *under 1393*, albeit only in limited numbers. Stoneware from the Weser Uplands accounts for around 4% of the identifiable pottery finds in the features documented under the 1393 fire layer.

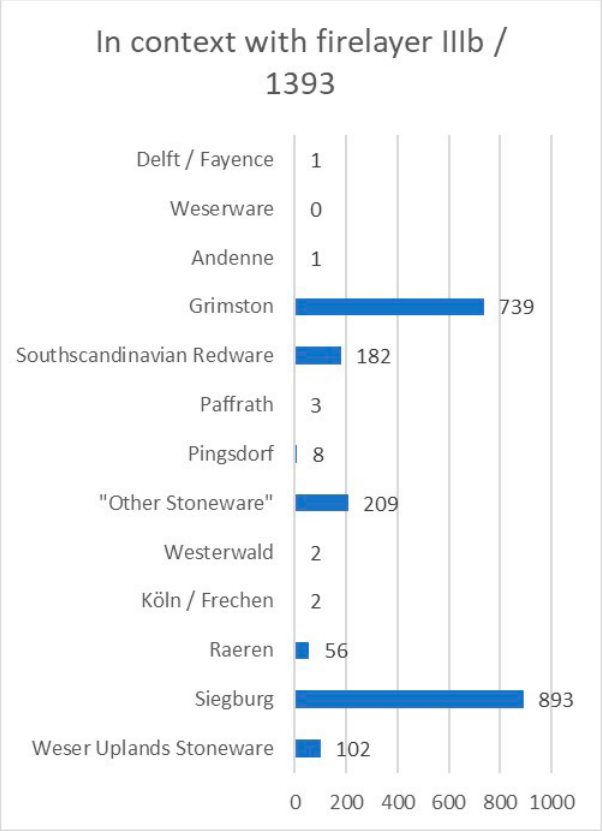


Figure 201. *Diagram of selected ceramic wares relating to fire layer IIIb from 1393.*

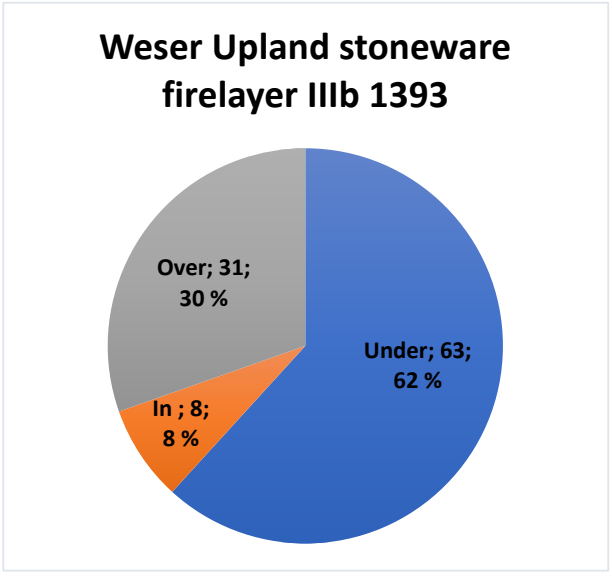


Figure 202. *Pie chart over stoneware from the Weser Uplands with stratigraphic relation to fire layer IIIb of 1393.*

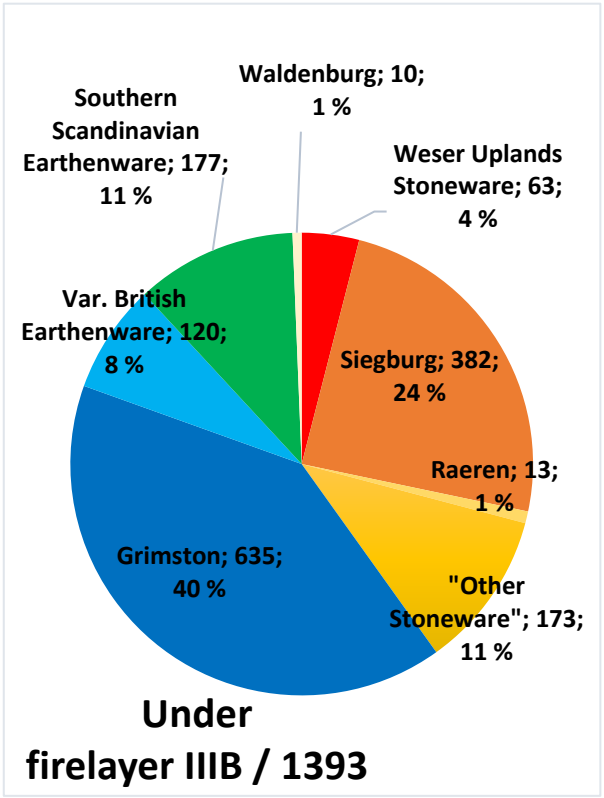


Figure 203. *Diagram of selected pottery stratigraphically under fire layer IIIB from 1393.*

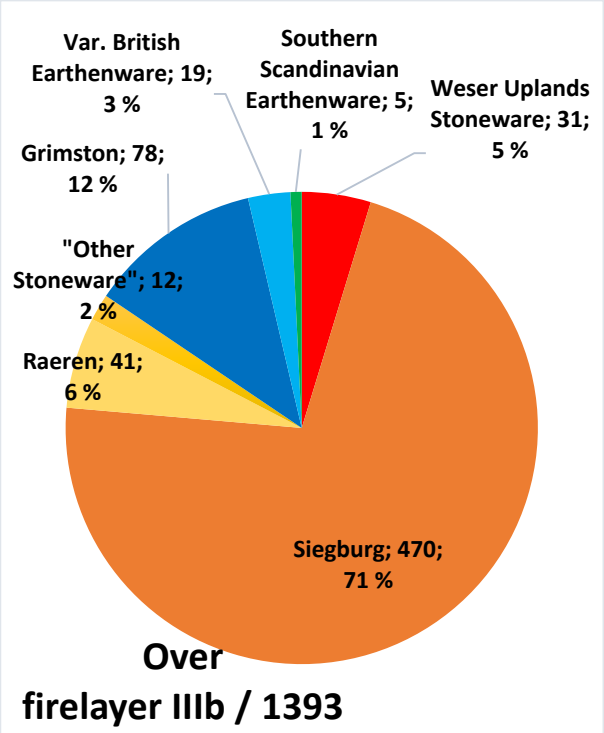


Figure 204. Diagram of selected pottery stratigraphically over fire layer IIIB from 1393.

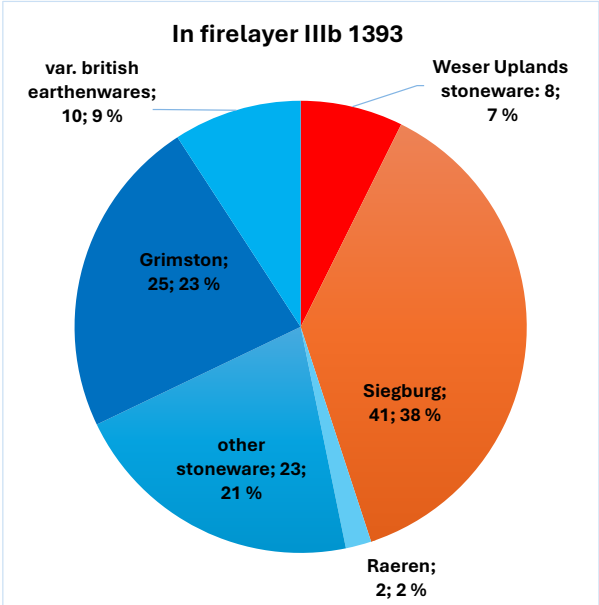


Figure 205. Diagram of type-determined pottery in fire layer IIIb from 1393.

In contrast, the composition of the pottery finds in the features documented above the fire layer of 1393 has changed significantly. Only the proportion of stoneware from the Weser Uplands has remained roughly the same at 5%. However, the proportion of stoneware, which accounts for around 82% of the identifiable pottery finds from this phase, has increased enormously. Siegburg is by far the most important production site, accounting for over 70% of the identified pottery. For the first time, stoneware from Raeren is also clearly identifiable in this phase with 6%. Stoneware from other production sites is only found in small numbers; for example, only one fragment of Waldenburg stoneware was identified in features *above* the fire layer of 1393. The Waldenburg stoneware deposit is presented and discussed in detail in Chapter 6.15.5.

The composition of the most important ceramic wares in terms of quantity that were recovered directly or *approximately* in fire layer IIIb from 1393 corresponds roughly to a *mean value* between the situation in the features below and above the fire layer. This may indicate that the distribution of the ware types reflects a chronological trend. However, due to the relatively small absolute number of finds recovered directly in or approximately at the level of the fire layer, there is a certain statistical uncertainty. A total of 104 fragments of pottery from fire layer IIIb of 1393 were identified according to ware type (Figure 205).

Of these, around a third were glazed English earthenware, primarily Grimston type ware, while two thirds were various stonewares. At 38%, Siegburg stoneware accounts for almost half of all ceramic finds. Around a third of the pottery identified came from other stoneware potteries. The eight fragments of stoneware from the Weser Uplands discovered in or at level of the fire layer represent 7% of the finds. Two fragments of Raeren stoneware are also recorded at this level, while around 21% of the identified finds are stoneware of unknown, presumably primarily Rhenish provenance.

In the area, the finds of stoneware from the Weser Uplands relating to the fire layer of 1393 were mainly found in or under various buildings. A total of 37 fragments were found in eight different buildings. The four immediately adjacent buildings 278, 294, 327 and 328, with a total of 28 fragments, represent the majority of finds of stoneware from the Weser Uplands with a building context in this phase. These buildings are the wooden buildings of phase 6.2 near the former quay front, which burned down in the fire of 1393 (Herteig 1990: 32-33). The location could indicate its use as storage and trading houses, but a privy documented between the houses also points to longer human stays. A further 19 fragments were recovered from other features, such as squares, foundations or passages and eaves ditches in the immediate vicinity of the above-mentioned buildings. This confirms the impression gained from the quadrant mapping (see above, Figure 200) that there is a clear concentration of finds in the southern area of the Bugården and Engelgården tenements facing the quay front.

Unfortunately, find contexts such as wells, cesspools or specific building contexts, which would allow a compilation of the pottery fragments recovered there, are not documented in this area.

The range of shapes of the finds recovered from the features around the fire layer of 1393 consists almost exclusively of jugs of different sizes, all of which, as far as could be determined, stood on frilled feet that had been pinched out of the base plate (cf. Figures 208 and 209). The rim is predominantly formed as a collared rim (cf. Figures 206 and 207); simple upright rims were only rarely observed. In addition to the dominant jugs, a rim fragment of a costrel with two strap handles was also identified (Cat. 696). A flared, chipped rim probably belongs to a small roundish beaker (Cat. 967).

About 90% of the fragments are near stoneware with individual recognizably open pores in the fabric, while the remaining 10% of the fragments have an obviously completely sintered body. About 90% of the pieces are brown or red slip glazed, in some cases only patches of the wash are preserved, while otherwise the grey fabric is visible (cf. Figures 206 and 207). In eleven fragments, the surface is light brown or shiny beige, which is either due to a lighter wash or a glaze (cf. Figure 208).

Figure 206. *Cat. 71, rim fragment of a jug with collared rim from the Weser Uplands, recovered in find context with reference to fire layer IIIB of 1393.*

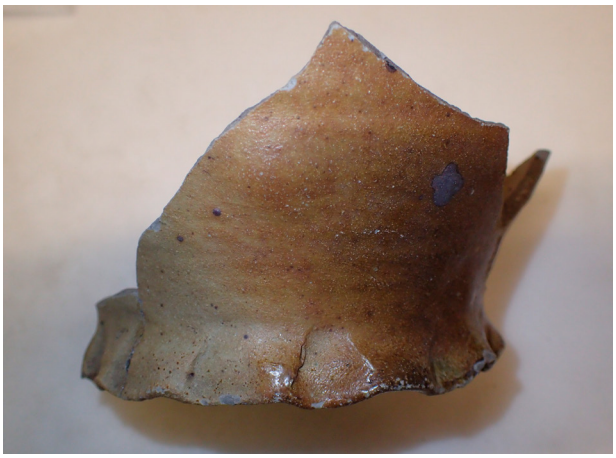


Figure 207. *Cat. 963, rim fragment of a jug with collared rim from the Weser Uplands, recovered in find context with reference to fire layer IIIB of 1393.*

Figure 208. *Cat. 766, base fragment of a jug from the Weser Uplands, recovered in find context with reference to fire layer IIIB of 1393.*

Figure 209. *Cat. 671, base fragment of a jug from the Weser Uplands, recovered in find context with reference to fire layer IIIB of 1393.*

6.15.4.4 Stoneware from the Weser Uplands at the level of the 1413 fire on Bryggen

As already shown in the introduction (see Figure 175), the 486 fragments of stoneware from the Weser Uplands relating to fire layer III represent over 40% of all finds of this ware from the excavations at Bryggen. Fire layer III was found across the entire excavation area (Herteig 1985: 25) and is associated with the well-documented city fire of 1413, in which large parts of the city of Bergen and the entire Bryggen district went up in flames (Helle 1998: 46-49). The finds are widely distributed over large parts of the survey area, with focal points in individual quadrants, as the rough mapping clearly shows (Figure 210).

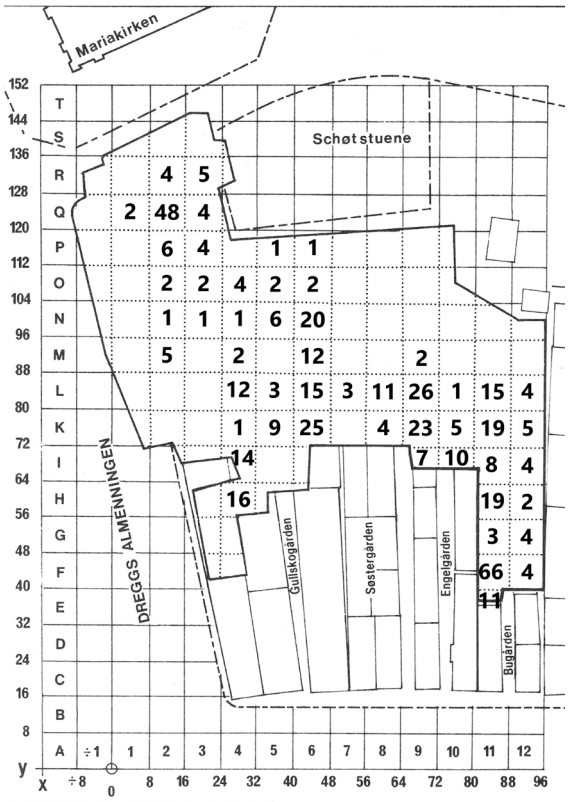


Figure 210. Mapping of stoneware from the Weser Uplands by quadrant in level of the 1413 fire on the BRM 0 / Bryggen site. Map source: Herteig 1990: 10, Fig. 1.

Obviously, the occurrence is irregularly concentrated in different quadrants, which can primarily be explained by an increased frequency of finds in connection with certain building structures, as will be modelled in detail below. It is striking that in areas where an increased number of finds could already be recorded in the older layers, there are also many fragments in relation to fire layer II. Further concentrations of finds can also be observed in quadrants that previously yielded few or no finds. However, it is also noticeable that there are also areas of the survey area where no stoneware from the Weser Uplands was discovered.

Of the 486 stoneware fragments from the Weser Uplands that are related to fire layer III / 1413, only 17% were discovered directly or approximately in the fire layer (see Figure 212). Slightly less, 16% of the finds were recovered above fire layer III. The majority, about two thirds, lay under fire layer III and thus - if Herteig's fire layer chronology is accepted - can probably be dated to the period 'around 1400'. Together with the stratigraphically and chronologically 'neighbouring' features of the somewhat older fire layer IIIb, fire horizon III represents the high point of the appearance of stoneware from the Weser Uplands.

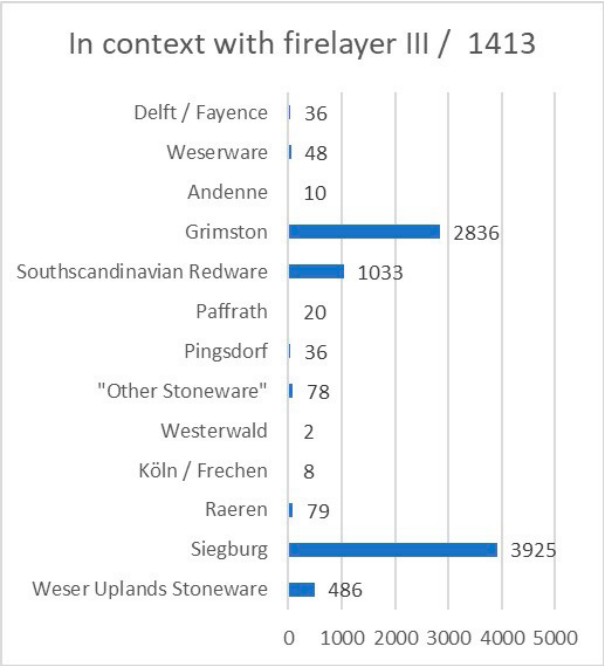


Figure 211. Occurrence of selected ceramics related to fire layer III from 1413.

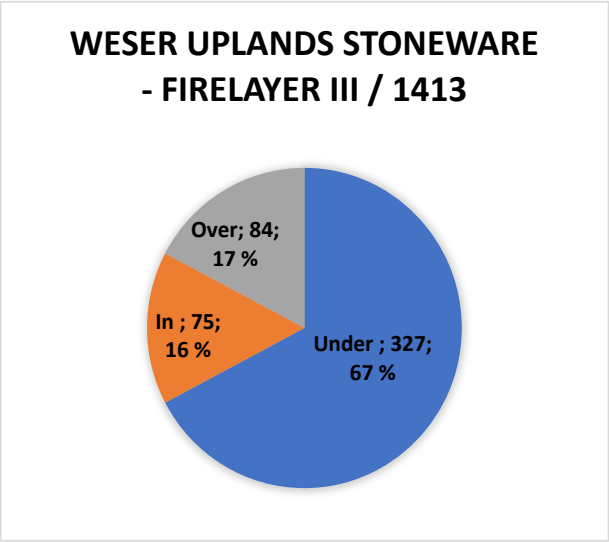


Figure 212. Diagram of Weser Uplands stoneware with reference to fire layer III from 1413.

The occurrence of the most important wares relating to fire layer III shows clear parallels with the previously described find situation relating to fire layer IIIb (cf. Figure 211). Siegburg stoneware is clearly the most strongly represented ceramic in this horizon. Overall, various types of stoneware and glazed earthenware, especially from England, are represented in roughly equal numbers. This suggests that this is not a random inventory, but that there are clear chronological trends in the occurrence of different wares. As in the examination of fire layer IIIb from 1393, it is also noticeable in fire layer III from 1413 that the relative composition of the pottery in the layers below and above the fire layer differs significantly.

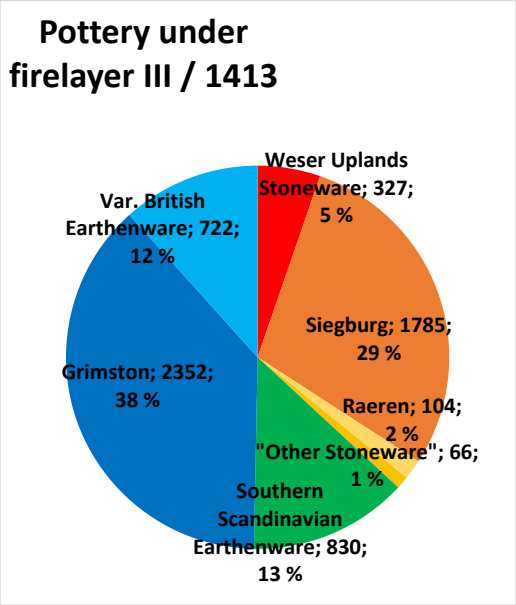


Figure 213. Diagram of the occurrence of selected ceramics stratigraphically under fire layer III from 1413.

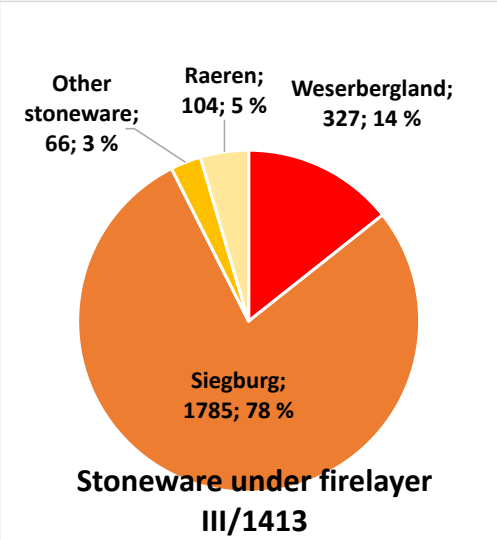


Figure 214. Diagram of proportions of different stoneware stratigraphically under fire layer III from 1413.

Under the fire layer of 1413, glazed earthenware predominates in the finds from Bryggen (cf. Figure 213). Half of all the pottery identified is English earthenware, with the dominant Eastern English Grimston type ware clearly the most common ware. Glazed red earthenware from the Baltic region is also well represented. Stoneware makes up around 37% of the pottery identified, with Siegburg stoneware alone accounting for 29% of the pottery finds identified. Stoneware from the Weser Uplands accounts for 5% of the identifiable pottery in this time horizon. Raeren stoneware accounts for around 2% and stoneware from other production sites for around 1% of the pottery identified. Siegburg stoneware thus represents almost four-fifths of the stoneware, while stoneware from the Weser Uplands has a share of 14% and Raeren stoneware is represented by about 5% (Figure 214).

The proportion of the most important wares changes significantly if one considers the finds recovered in or at the level of fire layer III of 1413 (cf. Figure 215). Lead-glazed earthenware accounts for only a quarter of the identified pottery, with Grimston type ware still being the most common. Stoneware accounts for the remaining three quarters of the identified pottery. Siegburg stoneware accounts for 64% of all ceramics and is the dominant production area for stoneware, as 85% of all stoneware from this phase is produced in Siegburg (cf. Figure 216). Stoneware from the Weser Uplands holds a small but noticeable share of 4% of the most important wares and 5% of stoneware. Raeren stoneware accounts for around 2%, while various other, predominantly Rhineland production locations such as Langerwehe account for 5% of all ceramics and 8% of stoneware.

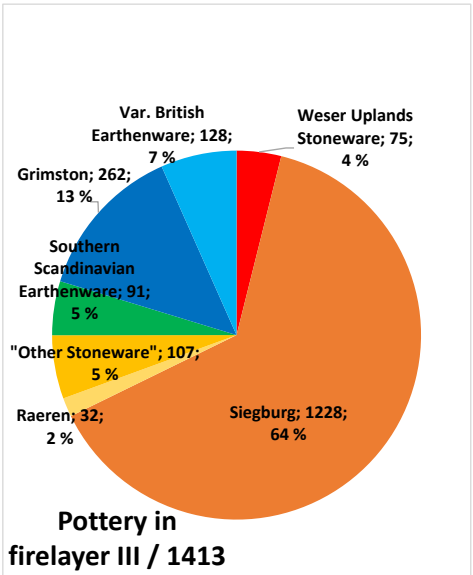


Figure 215. Diagram of the occurrence of selected ceramics in fire layer III from 1413.

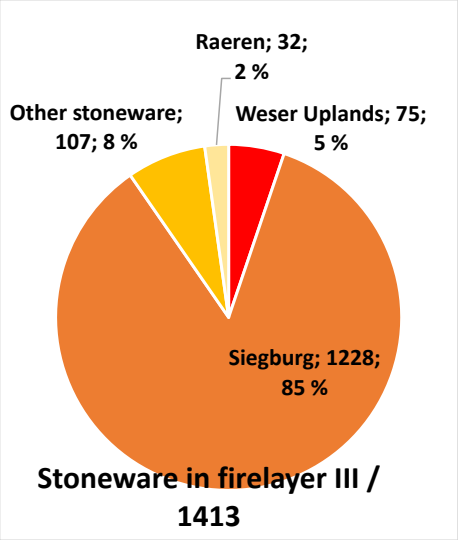


Figure 216. Diagram of proportions of different stoneware in fire layer III from 1413.

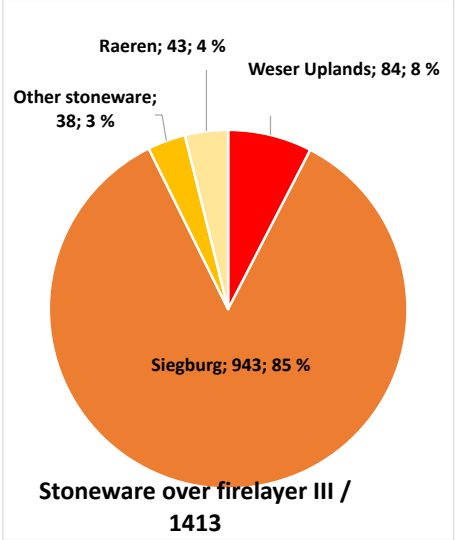


Figure 218. Diagram of the proportions of different stoneware stratigraphically above fire layer III from 1413.

The proportions of ware types in the finds in fire layer III from 1413 indicate that the shift away from earthenware and towards stoneware, which was already strongly indicated in the finds in fire layer IIIb from 1393, intensified again in the early 15th century. Such an interpretation is also supported by the distribution of the different wares in the layers immediately above fire layer III (cf. Figure 217). This largely corresponds to the situation found in the fire layer itself: Stoneware is much more strongly represented than earthenware, and Siegburg products clearly dominate the stonewares present.

Stoneware from the Weser Uplands also has a stable share of 6% of the recorded pottery and 8% of the stoneware in the layers above the 1413 fire layer. In comparison, this is about twice as much as Raeren stoneware, which is more prominent in this phase (cf. Figure 218).

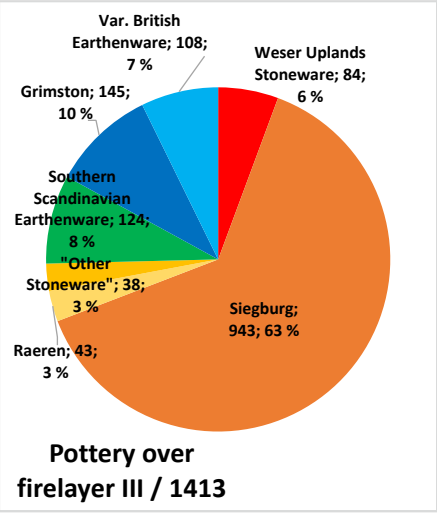


Figure 217. Diagram of the occurrence of selected ceramics stratigraphically above fire layer III from 1413.

As can be seen from the mapping of the find occurrence per excavation quadrant (cf. Figure 210), the stoneware from the Weser Uplands is also unevenly distributed across the investigation area in the phase around fire layer III. Some concentrations of finds are conspicuous in the south-eastern quadrants, where a significantly increased occurrence of stoneware from the Weser Uplands had already been recorded in connection with fire layer IIIb of 1393 (cf. Chapter 6.15.4.3). In addition, clear concentrations of finds also occur in other areas of the study area in Bryggen in connection with fire layer III. In the quadrants with a particularly high occurrence of stoneware from the Weser Uplands, there are individual features in the vicinity of which numerous fragments of the ware were recovered.

With 174 fragments, almost a third of the finds are documented as relating to a building. The majority of these finds, 95 fragments, were recovered in the vicinity of only seven buildings. Many finds also come from foundations, as buildings without surviving rising structural parts were called in Bryggen. A total of 103 fragments were recovered from such foundations. Several finds, 89 fragments, also came from the areas of passages and passageways between the wooden buildings. In contrast, only relatively few finds were recovered from eaves-drips (eleven fragments) or the places called *Almenningen* between the buildings (eighteen fragments). Only 79 fragments have no documented information on the context of the find.

There are areas with many finds. In the northwest of the investigation area, immediately south of stone building 48 of the St Mary guild hall (Herteig 1991: 49), there was a dense wooden development with several buildings in which a noticeable concentration of stoneware from the Weser Uplands can be seen. Building 443 contained 31

fragments, building 49 contained 15 fragments and building 3 also contained six finds. In total, 71 fragments of stoneware from the Weser Uplands were documented in quadrants P 02/03, Q 02/03 and R 02/03, in which these buildings are located, at the level of fire layer III, which represents a noticeable focus of the finds (cf. Figure 219). These buildings are all located at the rear of the Gullskoen tenement complex, which forms the north-western end of the Bryggen district and the Hanseatic Kontor (Herteig 1991: 10-11). It may be a coincidence that among the fragments recovered here it is mainly pieces from larger jugs that stand out, cf. Figures. 220 and 221.

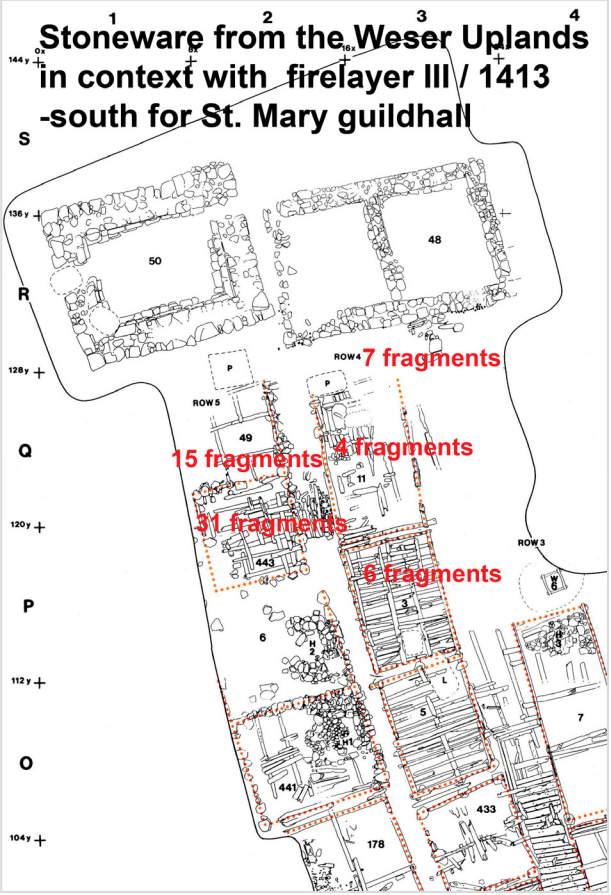


Figure 219. *Extract from the excavation plan with finds from wooden buildings south of the guild hall of the St Mary guild, which were destroyed in the fire of 1413.*

A further concentration of stoneware from the Weser Uplands in the Gullskoen was found in quadrants H4 and I4 with a total of 30 finds, including a largely reconstructable slender jug (Cat. 1148; Figure 223). This was found together with twelve other fragments of stoneware from the Weser Uplands in the poorly preserved remains of Building 445 (Herteig 1991: 35). The 17 other finds from this area of the investigation site are also likely to be associated with Building 445, as it almost completely fills the excavation quadrants in question (cf. Figure 222). Among the finds recovered here are several smaller fragments as well as larger fragments of jugs, which can be assumed to have been used on site (Cat. 1147; Figure 224). It is noticeable that no or very little stoneware from the Weser Uplands was recovered in the immediately adjacent features to Building 445.

Figure 220. *Cat. 544, rim piece of a larger jug, recovered from layers under fire III of 1413, south of building 443.*

Figure 221. *Cat. 1139, rim piece of a larger jug, according to XRF analysis from Coppengrave. Recovered from layers under fire III of 1413, south of building 443.*

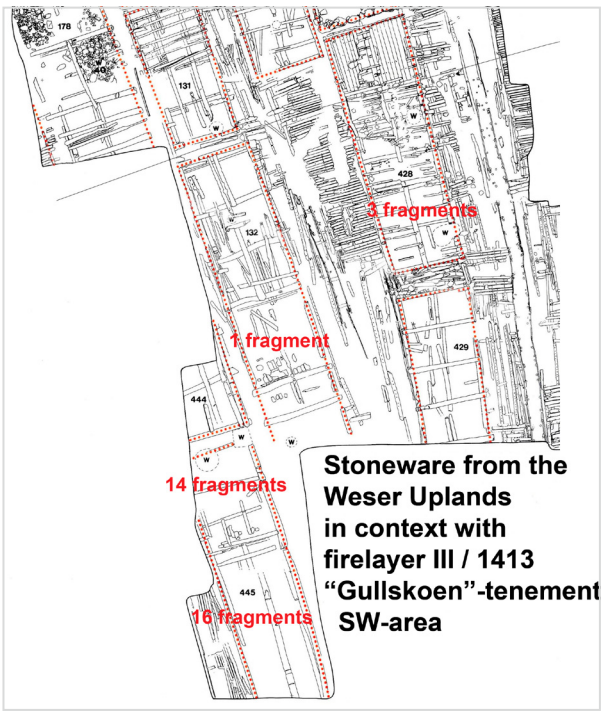


Figure 222. Extract from the excavation plan with finds from buildings destroyed in the fire of 1413.

Figure 223. Cat. 1148, slender jug from the vicinity of building 445, under fire layer III of 1413.

Figure 224. Cat. 1147, bulbous jug from the vicinity of building 445, under fire layer III of 1413.

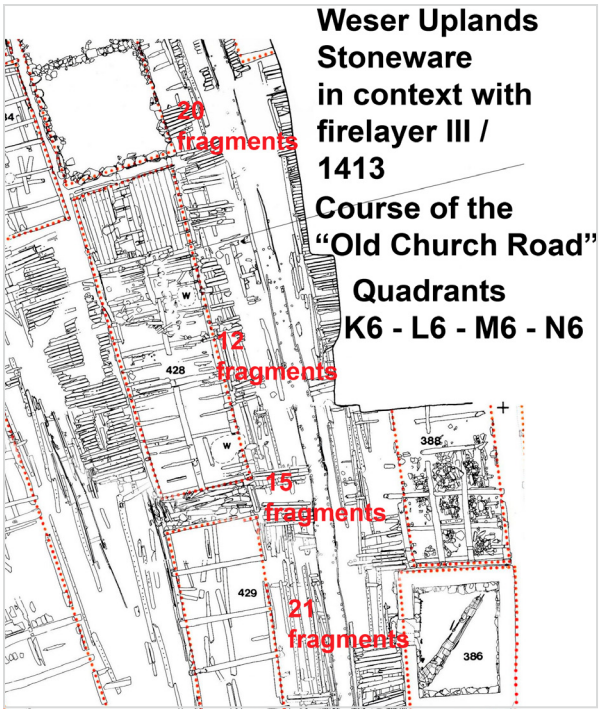


Figure 225. Detail of the excavation plan in the area of the Old Church Road with finds of stoneware from the Weser Uplands.

Figure 226. *Cat. 1144, an almost complete small jug from the eaves ditch between two buildings of the Søstergården under fire layer III from 1413.*

Another area of this tenement complex in which much stoneware from the Weser Uplands was discovered is an elongated traffic area between rows of wooden buildings in the southeast of the Gullskoen, the Old Church Road (Herteig 1991: 32-33, Fig. 17). This wooden-paved street had a central drainage ditch and was identified during the excavation in quadrants K6, L6, M6 and N6. The localization of the stoneware from the Weser Uplands was mainly referred to Almenningen or Passagen, meaning squares or passageways, which were not recorded in detail, but most likely are the aforementioned Old Church Road. The stoneware that found its way into the ground here was mostly small fragments, although it is not possible to clarify conclusively whether it was produced as waste on site (cf. Figures 216-219).

Figure 227. *Cat. 413, base fragment, found in the area of the Søstergården under fire layer III from 1413.*

Figure 228. *Cat. 997, base fragment, found in the area of the Søstergården under fire layer III from 1413.*

In general, only certain areas or individual buildings in the elongated tenement complexes typical of Bryggen appear to have a higher occurrence of stoneware from the Weser Uplands. Other focal points can also be identified in the other tenement complexes in the Bryggen district.

A vessel that could be almost completely reconstructed (Cat. 1144; Figure 226) was found south of building 389, in the narrow eave alley to the neighbouring building 84 in quadrant L8. This quadrant is adjacent to the quadrants on *Old Church Road* and, with ten fragments, also yielded a considerable amount of stoneware from the Weser Uplands (Figure 225). In addition to the almost complete jug, there were also other quite large pieces, such as two larger base sections of jugs (Cat. 413; Figure 227 and Cat. 997; Figure 228). The complex belongs to the double tenement Søstergården (Herteig 1990: 103-15, Fig. 67).

In the area of the Engelgården tenement there is a striking concentration of stoneware from the Weser Uplands in quadrants L9 and K9. Building 359, in which ten fragments were recovered, was located there (cf. Figure 229). Eight further fragments are recorded as having been found under the successor building 357. Further fragments were recovered from an unspecified foundation and an eaves-drip, which can also be located in these quadrants in the vicinity of Building 359 (Figure 229). Overall, building 359 of Engelgården also gives the impression that stoneware from the Weser Uplands was present here to a particularly large extent. The extent to which building 359, like the successor buildings 357 and 358, was related to the stone building 107 immediately to the north remains unclear (Herteig 1990: 69-72). However, it is striking that this concentration of finds, like the one described above, is also located in the north-western quadrants of the Gullskoen tenement in the immediate vicinity of one of the rare stone buildings in the Bryggen quarter, which is otherwise characterized by wooden buildings.

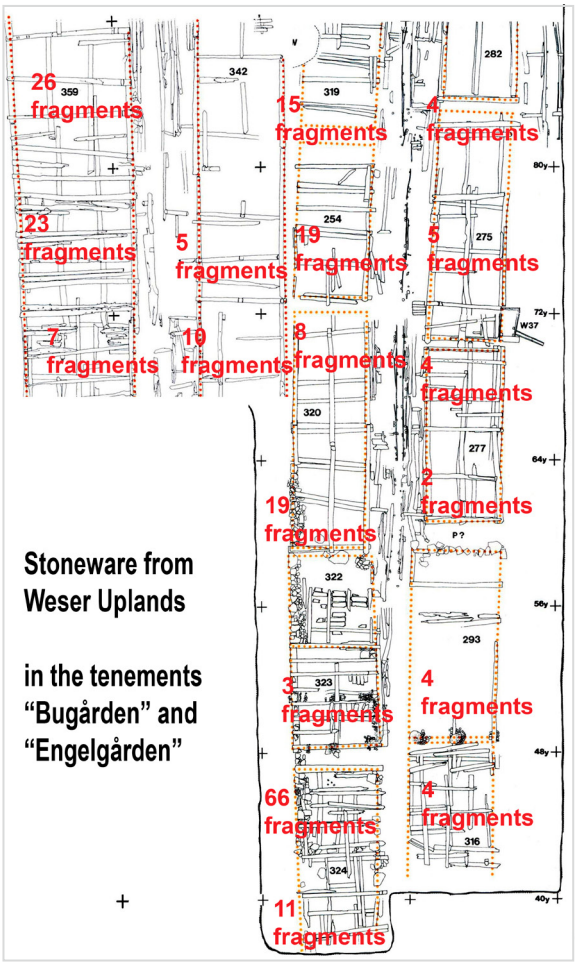


Figure 229. *Section of the excavation plan in the area of Bugården and Engelgården tenements with buildings around 1400 and marking of the amount of stoneware from the Weser Uplands.*

Figure 230. *Cat. 772, base fragment found in building 359, under fire layer III from 1413.*

Figure 231. *Cat. 117, base fragment found under fire layer III from 1413.*

Figure 232. *Cat. 394, rim piece found under fire layer III from 1413.*

A clear focus of the finds of stoneware from the Weser Uplands relating to the fire layer of 1413 lies in the south-eastern area of the survey area. In the eight quadrants E11, F11, G11, H11, I11,

K11, L11 and I10, 151 fragments were found, almost a third of all finds from this period (cf. Figures 230-231-232). 25 fragments were documented in the western row of buildings of the double tenement Bugården with the buildings 254, 319, 320, 322 and 324 (Herteig 1990: 29-30). The remaining finds from this area are located in unspecified 'foundations', passages and eaves-drips in the same quadrants. Quite a few fragments of stoneware from the Weser Uplands were already found in the previous development phase, which was completed with fire layer IIIb from 1393, which was only documented in this area (cf. Chapter 6.15.4.3). However, it is uncertain whether this fact indicates a particularly intensive use of this ware in this area.

Figure 233. *Cat. 382, body fragment with wavy strip and finger dent decoration. According to XRF produced in Coppengrave. Found under fire layer III from 1413. Photo: Angela Weigand, University Museum of Bergen.*

Figure 234. *Cat. 1143, two body fragments with wavy strip and rouletting decoration. According to XRF produced in Bengerode. Found in an eaves-drip at the level of fire layer III from 1413.*

The types and forms of the stoneware from the Weser Uplands found in the layers below and above fire layer III of 1413 largely correspond to the spectrum of material recovered from the older horizons. Jugs of different shapes clearly dominate, with both smaller and larger vessels occurring. Among the rim pieces, 45 collared rims of various shapes could be counted, but also 27 simple upright rims. All 91 base fragments are modelled as frilled feet, which were pinched out of the base plate. Another typical feature is the structuring and stabilization of the vessel wall with surrounding strips and horizontal corrugations. 21 pieces with the characteristic strips waved by finger impressions have been identified (cf. Figures 233-235). However, rouletting decoration was only found on four fragments. In addition to jugs, a quatrefoil beaker (Cat. 357) and a costrel with two strap handles (Cat. 76) were identified. No other vessel forms could be identified.

Of the total of 486 fragments, 401 pieces were slip glazed in various shades of brown and reddish (cf. Figures 230-232; 236) The slip glazing is mostly flat and shiny, but some pieces also show a patchy brown slip glaze that has burned away or flaked off in places so that the grey fabric is visible. A smaller but noticeable group of about 60 pieces is characterized by a light brown surface, where it is unclear whether it is a particularly light slip or a glaze. Most of the pieces are almost completely sintered but still show some open pores. In 38 pieces, however, no more open pores are visible, the fabric appears to be completely sintered and can therefore be addressed as genuine stoneware.

In addition to the macroscopic provenance analysis, 25 fragments from the horizon around 1413 were selected, whose chemical signature were examined using X-ray fluorescence analysis. The composition of the trace elements of these pieces corresponded in all cases to the pattern of various pottery sites from the Weser Uplands. With eleven fragments, Bengerode / Fredelsloh was the most frequently identified site. Nine pieces showed the chemical signature of Coppengrave / Duingen. Somewhat surprising was the finding that 5 pieces showed clear affinities to the clay deposits near Gottsbüren in the Reinhardswald in northern Hesse (Cats. 595, 598, 600, 614, 1138). As the latter fragments are quite similar in shape and fabric and were discovered in two adjacent quadrants, it cannot be ruled out that they come from the same vessel.

Figure 235. *Cat. Nr. 533, rim fragment with collared rim and wavy strip. According to XRF analysis produced in Coppengrave. Found in context under firelayer III of 1413.*

Figure 236. *Cat. 707, rim fragment with collared rim and strap handle. Found in find context under fire layer III of 1413.*

6.15.4.5 Stoneware from the Weser Uplands around the 1476 fire on Bryggen

A comprehensive and archivally well-documented fire that devastated large parts of the city of Bergen in 1476 was correlated by the excavator with a fire layer that was found on the entire Bryggen investigation area (Herteig 1985: 26). A total of 226 fragments of stoneware from the Weser Uplands were recovered in this fire layer II, or in the strata and features immediately above and below it. These are distributed quite evenly between the fire layer itself and the features below and above it (cf. Figure 238). As in the older layers, a large proportion (almost three-fifths) of the pottery found in the area around fire layer II of 1476 is unidentified. Of the remaining pottery finds listed by provenance in the finds database, the most important are shown in the following diagrams (Figures 237, 239-241). The respective wares comprise around 90% of the identified pottery; it remains unclear how high the proportion of relocated or secondarily deposited finds is.

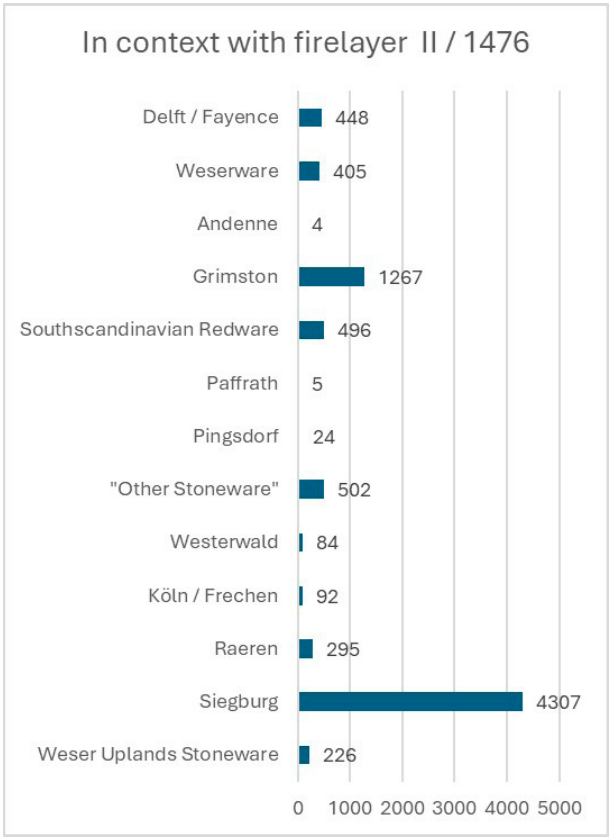


Figure 237. *Diagram over selected pottery wares in context relating to fire layer II from 1476.*

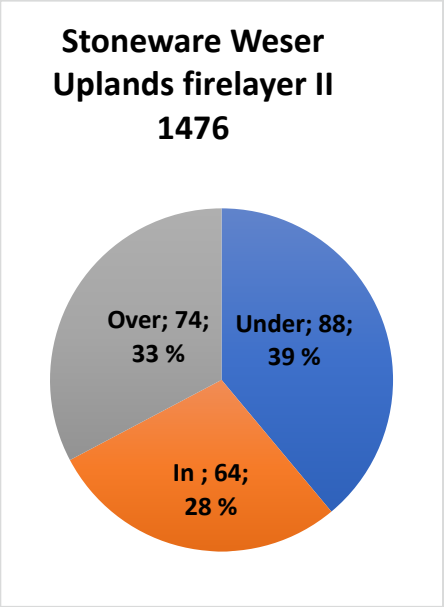


Figure 238. Pie diagram of Weser Uplands stoneware with reference to fire layer II from 1476.

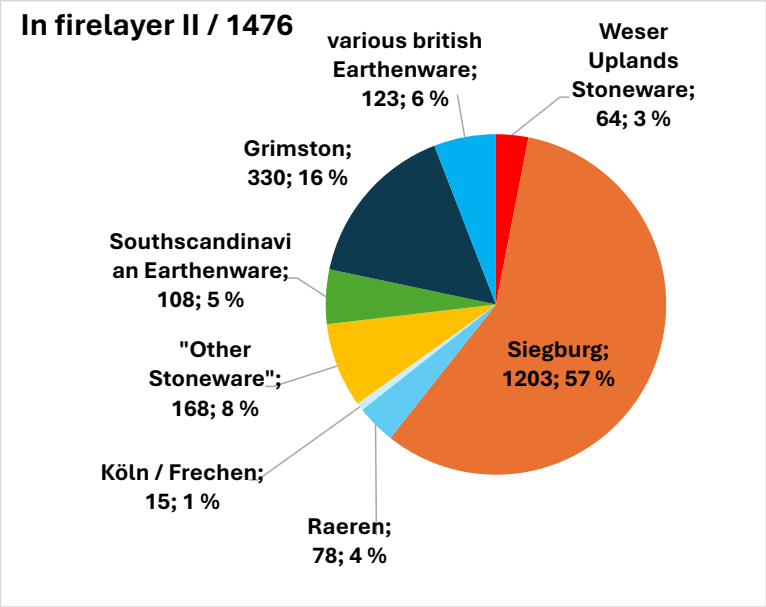


Figure 239. Pie diagram of selected ceramic wares found in fire layer II of 1476.

Just as in the previous stratigraphic phase, the finds from fire layer II of 1476 also show a very high proportion of stoneware, comprising almost three quarters of the selected and identifiable pottery finds (Figure 239). Glazed earthenware, mainly from England but also from the southern Baltic region, makes up the remaining quarter of the pottery identified.

Siegburg stoneware is still by far the most important pottery in terms of quantity, accounting for 57% of the finds recorded. In contrast, other stoneware production sites are represented much less frequently. Stoneware from the Weser Uplands is still common, although its share has decreased to 3% of all recorded finds during this period. Stoneware from Raeren is more strongly represented than stoneware from the Weser Uplands for the first time in fire layer II of 1476, accounting for 4% of all recorded wares. With fifteen fragments, accounting for just under 1% of the finds, stoneware from Cologne or Frechen is recorded for the first time. Other stonewares, especially those from Langerwehe and / or other Rhenish pottery towns, make up a relevant proportion of the pottery from this stratigraphic horizon, accounting for 8% of the finds.

Clear differences in the number of finds become apparent when the occurrence of the most important wares in the layers below and above fire layer II of 1476 are considered separately (Figures 240-241).

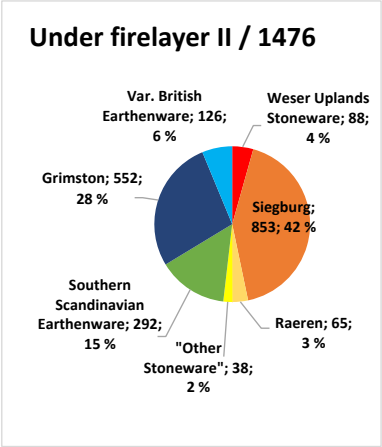


Figure 240. Diagram of selected ceramic wares found under fire layer II of 1476.

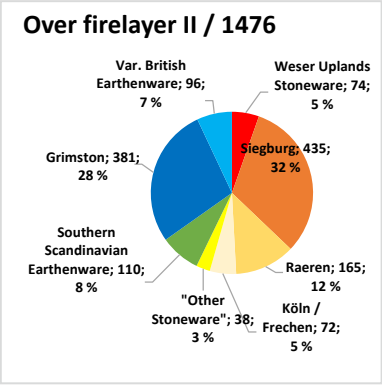


Figure 241. Diagram of selected ceramic wares found above fire layer II of 1476.

It is striking that the proportion of glazed earthenware, especially Eastern English Grimston type ware, is significantly greater in both the finds below and above the fire layer of 1476 than in the finds from the fire layer itself. Unfortunately, it is unclear to what extent these finds represent relocated material. In King's Lynn, the most important export port for Grimston type ware, this pottery is certainly dated to the 15th century (Clarke and Carter 1977: 206). This could indicate that the consumption of glazed earthenware increased again in the second half of the 15th century. Earthenware and stoneware appear in roughly equal quantities both above and below fire layer II. The proportion of stoneware from the Weser Uplands is around 4-5% of the ceramics determined over the entire period. Siegburg stoneware continues to be the most common pottery, although the proportion decreases from 42% in the layers below the fire of 1476 to only 32% in the features above fire layer II. Raeren stoneware only occurs in limited quantities in the layers below the firing of 1476 with 3% of the pottery determined but is very strongly represented in the layers above this firing with 12%. Stoneware from Cologne / Frechen also makes its first significant appearance in the features above fire layer II, accounting for 5% of the pottery determined. Stoneware of other provenances plays only a minor role with 2-3%.

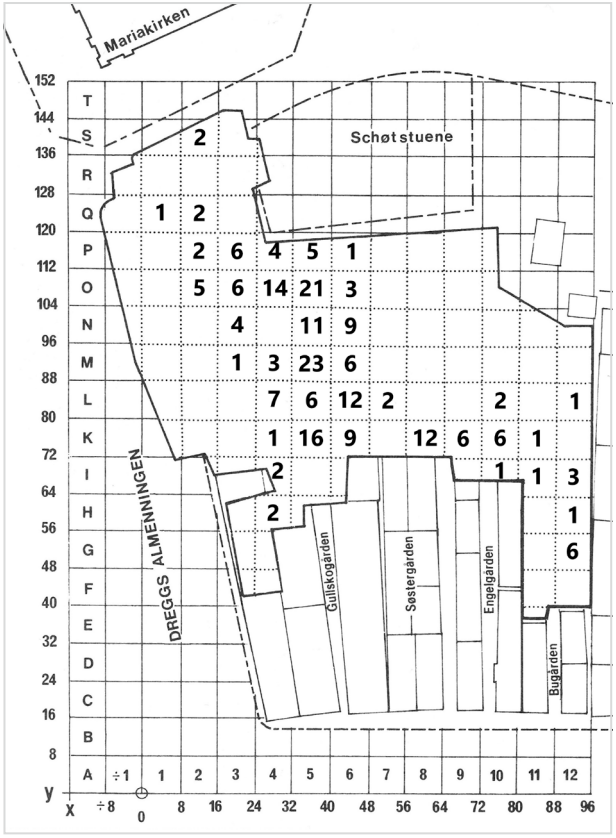


Figure 242. *Mapping of stoneware from the Weser Uplands by quadrant relating to fire layer II from 1476 on the BRM 0 / Bryggen site. Map source: Herteig 1990: 10, Fig. 1.*

Figure 243. *Cat. 1126, neck section of a large, red-slipped jug with rim, found under fire layer II of 1476.*

Figure 244. *Cat. 1129, body section of a small, brown-slipped jug, found under fire layer II of 1476.*

The distribution of stoneware from the Weser Uplands in the study area in connection with the fire disaster of 1476 shows a clear difference to the situation in connection with the older fire layers (Figure 242). Areas in the north and southeast of the investigation area, where many finds were documented in the previous fire horizon, are now largely devoid of finds. A clear concentration can be seen in the eastern area of the Gullskogården, along the Old Church Road, where a lot of stoneware was already present in the previous phase. In

the area of quadrant K8 in Søstergården, too, quite a lot of fragments of stoneware from the Weser Uplands were again discovered.

With over 80 fragments, the proportion of finds in this phase for which no localization information beyond the quadrant is available is quite large. With 68 finds, there is also quite a lot of material from passages or open squares, mainly from the area of the *Old Church Road* (Herteig 1991: 27). A reference to a building is only documented for 52 finds, whereby in a third of these cases there is no information as to which building is involved. The remaining pieces are distributed across numerous buildings, although in no case are more than four fragments documented in one building.

In the stoneware from the Weser Uplands from this phase, it is noticeable that almost a quarter of the pieces show a lighter, beige or light brown surface, which is either due to a glaze or a very light wash. However, three quarters of the pieces are still characterized by a reddish to brownish wash, which has burned off in spots on some pieces. The vast majority of the pieces are partially sintered near stoneware, with only a small proportion of around 5% showing a fully sintered fabric.

There are a total of 32 rim pieces from the features relating to the fire layer of 1476, of which thirteen are simple upright rims and sixteen are collared rims. The 42 base fragments are all carved as frilled feet from a base plate. As far as can be ascertained from the mostly small fragments, the majority are jugs of various sizes. Among them are quite large forms, presumably to be regarded as bar jugs (Cat. 1126; Figure 243), but also small vessels that were presumably used as drinking jugs (Cat. 1129; Figure 244).

In addition to the jugs, however, there are also some fragments that can clearly be attributed to other vessel forms. For example, two fragments of quatrefoil beakers made of near stoneware with reddish wash (Cats. 506 and 1132; Figure 246) and a base fragment of a small beaker (Cat. 1019) were found. Furthermore, a light brown costrel with two strap handles (Cat. 661; Figure 245) was identified, which according to the XRF analysis was made in Coppengrave or Duingen. Two small fragments, probably from a spouted pitcher (Cats. 1025-1026), are the only references to this vessel form in Norway. The only lid made of stoneware from the Weser Uplands discovered in the working area was also recovered in a context above fire layer II from 1476 (cf. Figure 38).

X-ray fluorescence analysis was used to determine the proportions of various trace elements in eight fragments, all of which showed the chemical signature of clay deposits from the Weser Uplands. One rim piece (Cat. 660) comes from a jug with collared rim apparently made in Bengerode / Fredelsloh. A base fragment made of grey stoneware with a light brown glaze (Cat. 1770; Figure 45), which was discovered in fire layer II of 1476, shows similarities with the clay deposits at Gottsbüren in the Reinhardswald in northern Hesse. All other pieces of this stratigraphic phase, whose provenance was verified by X-ray fluorescence analysis, show the chemical signature of Coppengrave / Duingen (Cats. 661, 1008-1010, 1117, 1146). Obviously, the stoneware from Bengerode / Fredelsloh and the Reinhardswald in Bergen largely disappears in the course of the 15th century. Coppengrave / Duingen, however, continues to be clearly represented as a place of production.

Figure 245. *Cat. 661, neck fragment of a costrel with two strap handles, according to XRF produced in Coppengrave, found in building 272, above fire layer II of 1476. Photo: Angela Weigand, University Museum of Bergen.*

Figure 246. *Cat. 1132, rim and body fragment of a quatrefoil beaker made of near stoneware with reddish wash, found under fire layer II of 1476.*

6.15.4.6 Stoneware from the Weser Uplands in the level of the 1702 fire on Bryggen

The most recent archaeologically fire layer identified from the Bryggen excavations is correlated with a very well documented fire that destroyed almost the entire city of Bergen in 1702 (Herteig 1985: 26). The fire layer was therefore located directly under the buildings of the early 18th century, which were destroyed by the 1955 fire that prompted the archaeological investigations. The dating of fire layer I can be assumed to be certain. As already mentioned, several times, the most recent finds and features were documented to a certain extent during the excavations, but the focus was on the medieval layers, so that only limited information is available on the early modern excavation results.

A total of 78 recorded finds of stoneware from the Weser Uplands are documented as relating to the fire layer of 1702. Only eleven fragments were typologically identified as early modern during the excavation, the remaining 67 fragments are predominantly relocated, clearly medieval finds (e.g. Cats. 656-658). The pieces that can certainly be classified as early modern are the following Cats. 215, 226, 228, 304, 305, 699-704, although only the latter finds have a documented find context that goes beyond the quadrant. The fragments Cats. 699-704 are brown-engobed, completely sintered stoneware, most probably from Duingen, which was discovered in the remains of the building 312 (Herteig 1990: 22), which was destroyed in the fire of 1702 and is not further documented. Seven fragments of Raeren stoneware and 48 fragments of Siegburg stoneware were also discovered there.

Due to the large amount of relocated material and the precarious state of documentation, the finds from the most recent layers of the Bryggen excavations can only be used for further considerations with considerable reservations. Only about 5000 fragments of the total of about 15000 ceramic fragments from features related to the fire of 1702 have been identified by ware or provenance. Against this background, a detailed breakdown of the finds of different wares from the most recent find horizon of Bryggen does not appear to be expedient. The problematic nature of the finds from the early modern layers is particularly evident in individual vessels that were glued together from different fragments. For example, the small jug Cat. 1129 (cf. above, Figure 244) consists of several fragments, some of which were discovered 'under the fire layer of 1476' according to the finds database, while others were recovered from layers 'above the fire layer of 1702'. The stratigraphic dating of this undoubtedly late medieval vessel is therefore not reliable; the fragments have very probably been massively relocated. The situation is similar for the body fragments from the same vessel, Cat. 1143, one of which was recovered 'approximately at the level of the fire layer of 1413', while the other two were recovered 'above the fire layer of 1702' according to the database. Obviously, the latter finds have also been relocated or incorrectly documented.

It can only be stated that stoneware from the Weser Uplands was still used in the Bryggen area in the 17th century, as individual finds of early modern material certainly prove. However, the majority of the finds from the most recent layers have been relocated.

6.15.5 Stoneware from Saxony from Bryggen

As described in more detail in Chapter 6.3, Saxon stoneware from Waldenburg was not previously known in Norway. For this reason, the almost 15,000 fragments previously sorted as Siegburg stoneware from the Bryggen excavations were examined in order to identify any pieces of Waldenburg stoneware among them. A total of 47 fragments were identified as stoneware from Waldenburg (Cats. 1309-1353, 1596). This number is so small in relation to the total quantity of ceramics and stoneware that it is not meaningful to show the relationship to other wares as a percentage. The mere presence of this ware in the finds from the Bryggen excavations is remarkable, as Waldenburg stoneware has its main area of distribution around the Baltic Sea and is hardly known from sites along the North Sea. This also applies to the few finds of stoneware from the Falke group, which were presumably also produced in Saxony (see Chapter 5.3.2). All four fragments of Falke Group stoneware in the study area come from the Bryggen excavations.

Waldenburg stoneware occurs in Bergen primarily in features relating to the fire layers of 1393, 1413 and 1476 (cf. Figures 247 and 248). A single fragment recovered under the 1332 fire layer and seven fragments recovered in or above the 1702 fire layer must be considered relocated or incorrectly documented. Consequently, the appearance of the Saxon stoneware in Bryggen can be dated quite well to the late 14th and 15th centuries. The fragments of the Falke group date from the same period.

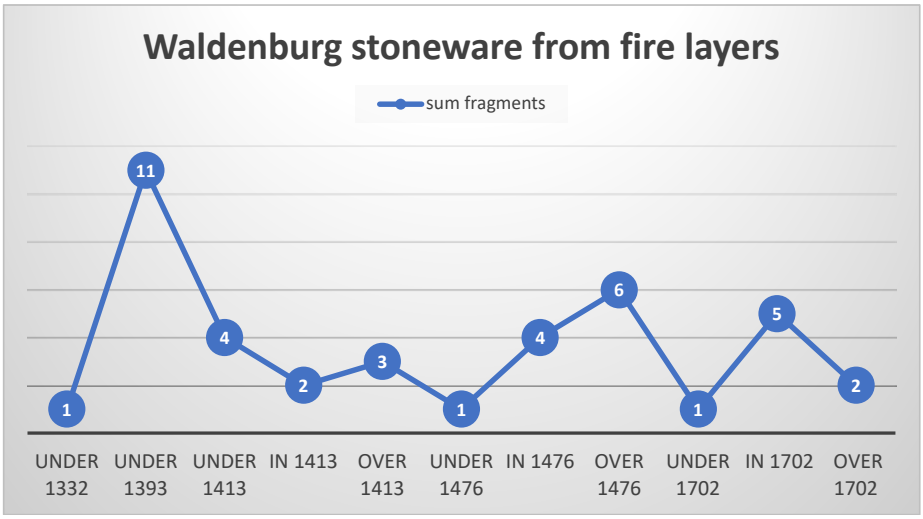


Figure 247. Diagram of the occurrence of stoneware from Waldenburg in, below and above the various fire layers of the Bryggen excavation.

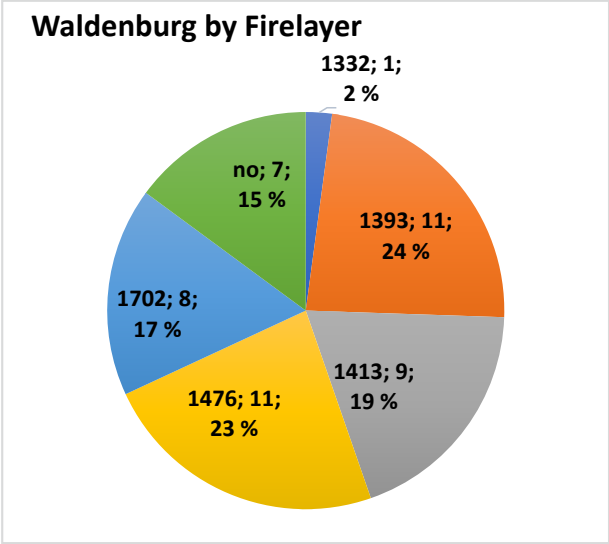


Figure 248. Diagram showing the relationship of the Waldenburg stoneware to the fire layers on Bryggen.

The distribution of Saxon stoneware from Waldenburg across the area is very irregular (Figure 249). It is striking that despite the small number of finds, there are certain similarities with the distribution of stoneware from the Weser Uplands. Fragments of Waldenburg stoneware can be found both in the northern area of the Gullskogården and in the vicinity of the *Old Church Road*. A clear concentration can be seen in the south-eastern area of the survey area in quadrants F11 and G12, which belong to the double tenement Bugården. A lot of stoneware from the Weser Uplands was also recovered in this area, as described in the previous chapter. The high find frequency of Saxon stoneware in quadrant F11 is due to ten fragments documented as having been discovered 'under building 324'. This is the southernmost building in the western row of the double tenement Bugården (Figure 250). A database query for pottery finds with an identical find location results in a ceramic sequence, which is shown in the diagram in Figure 251. The identified pottery recovered 'under House 324' is predominantly stoneware, only 7% of the finds are East English lead-glazed earthenware. Siegburg stoneware dominates with 85% of the identified finds. In contrast, other stoneware centres are only weakly represented, with the nine fragments of Waldenburg stoneware making a noticeable contribution of 4% in this context. It is possible that many stoneware vessels were used or handled in the buildings in Bugården.

The finds of Saxon stoneware discovered under building 324 are all fragments of tall, slender jugs (Cats. 1309-1312, 1334-1336, 1353). Several fragments show a striking orange-red surface, some with folded walls, which must come from at least two vessels. One piece of a hand-moulded beard mask (Cat. 1353; Figure 252) represents the slender tall Waldenburg jugs with anthropomorphic decoration, of which a total of four pieces could be identified in the Bryggen find material (Cats. 1313, 1315, 1334, 1353). Like the finds under Building 324, the other Waldenburg stoneware finds are almost exclusively slender tall jugs, mostly with frilled feet. One exception is a rim piece of a cylindrical jug or pot with rouletting decoration, which was recovered in an early modern context (Cat. 1596; Figure 59).

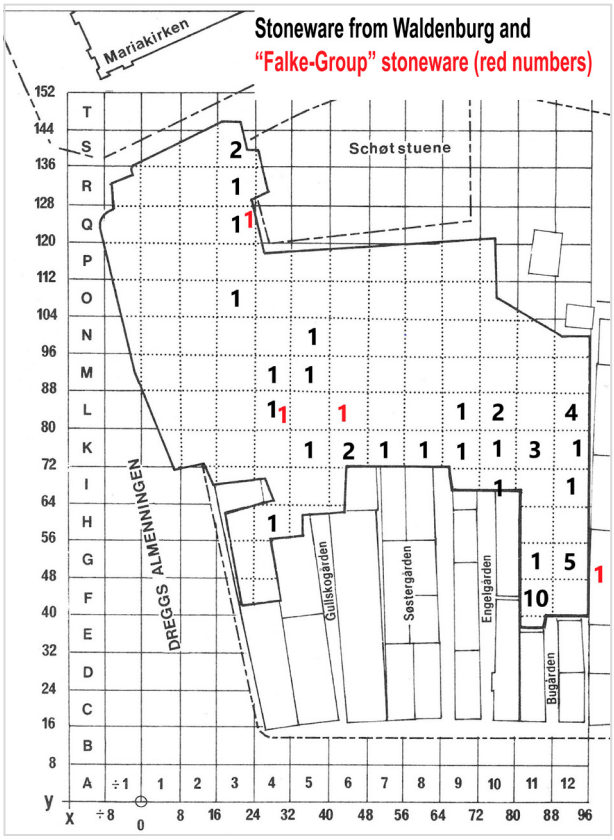


Figure 249. Mapping the stoneware of the Falke Group (red) and the Waldenburg stoneware by quadrant on the Bryggen excavation. Map source: Herteig 1990: 10, Fig. 1.

6.15.6 The relief-decorated stoneware from Bryggen

As already mentioned, several times, the excavation and documentation of the early modern layers on Bryggen had to be considerably curtailed, and the surviving material is correspondingly limited. Nevertheless, a total of 59 fragments with relief decoration were identified in the find material. The finds have already been presented in detail in Chapter 6.1.5.

Relief-decorated stoneware from Cologne or Frechen could be identified with 32 fragments in the find material from Bryggen (Cats. 1567-1569, 1574-1603; cf. Chapter 5.5.4). Siegburg stoneware with relief decoration was also well represented with 21 fragments (Cats. 1397-1418; cf. Chapter 5.5.1). In contrast, there is little evidence of other places of production. As many as four fragments of relief-decorated stoneware from Raeren were discovered in the Bryggen find material (Cats. 1548-1551; cf. Chapter 5.5.3). In particular Siegburg but also Raeren stoneware occurs in large numbers at Bryggen, but the relief-decorated pieces make up only a negligible proportion. The low proportion of relief-decorated stoneware compared to plain stoneware is not unique to Bergen but was also found in ceramic finds from Hanseatic cities such as Lüneburg (Penselin 2013: 36) or Lübeck (Drenkhahn 2015: 172, 182).

This also applies to blue-painted stoneware *Westerwald style*, which occurs in significant quantities in the early modern finds. Among these, however, only three fragments with relief decoration could be identified (Cat. 1780).

A single base fragment of grey, red-brown slipped stoneware with rouletting decoration (Cat. 687; Figure 258) has no relief decoration but is very likely to come from a small jug or *beehive tankard* with relief applications from Duingen or Waldenburg. It is the only fragment of a richly decorated stoneware vessel from Bryggen that was not made in the Rhineland.

The Renaissance relief-decorated stoneware was discovered in the most recent layers of the Bryggen excavations (Figure 253). Eighteen fragments are documented as relating to fire layer II of 1476, most of which were recovered 'above' or in the fire layer. Almost all these stratigraphically early pieces are Cologne / Frechen stoneware, which also corresponds well with the general dating of relief-decorated stoneware from Cologne, which was produced from the period 'around 1500' and then mainly in the first half of the 16th century (Unger 2007: 20). In the case of eight fragments of Cologne / Frechen stoneware, however, a reference to fire layer I of 1702 was also recorded; these pieces must be regarded as having been relocated. This probably also applies to the twelve pieces of relief-decorated stoneware from Siegburg for which the excavation documentation indicates a reference to the 1702 fire layer. No stratigraphic information is available for most of the relief-decorated stoneware finds, or these are certainly incorrect, as the pieces were relocated during the excavation. This applies, for example, to Cat. 1594, a fragment of a Raeren baluster jug which, according to the finds database, was discovered 'under the fire layer of 1393', but cannot be original in this location, as these vessels were first produced in the 16th century.

The fragments of relief-decorated stoneware are irregularly distributed across the investigation area, with concentrations in the Bugården in the southeast and in the central quadrants around the *Old Church Road* (Figure 254). These are areas of the excavation where also more finds of late medieval stoneware were recovered. It is unclear whether this is the result of certain long-term patterns of use or rather an increased number of finds due to the excavation circumstances. Reliable find contexts that would allow further conclusions to be drawn about the use of the vessels are not documented for the relief-decorated stoneware at Bryggen, as the early modern layers in general were treated quite roughly at the BRM 0 / Bryggen site.

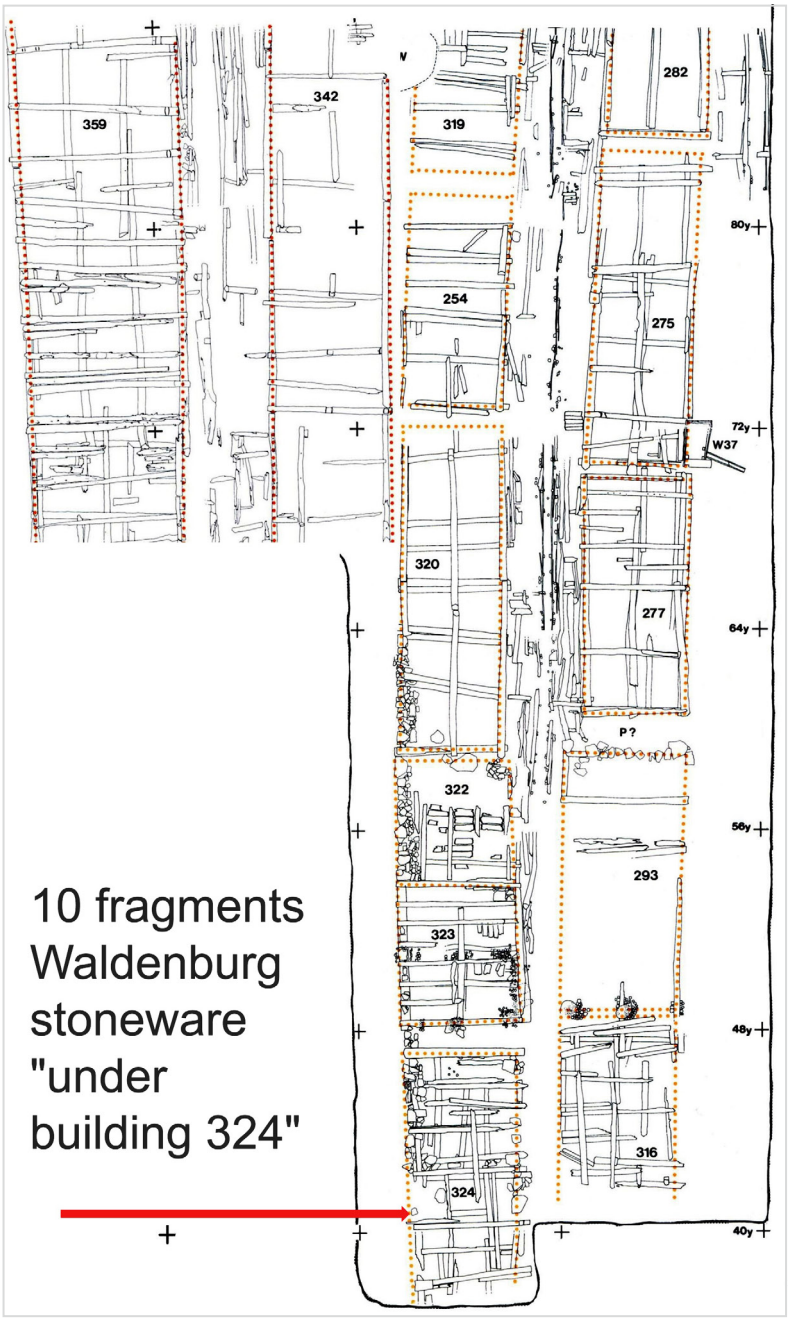


Figure 250. Extract from the excavation plan in the area of the Bugården around 1400, with concentration of Waldenburg stoneware.

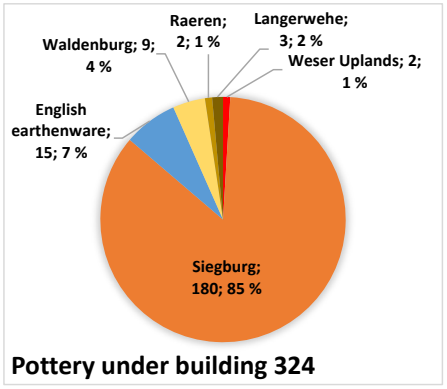
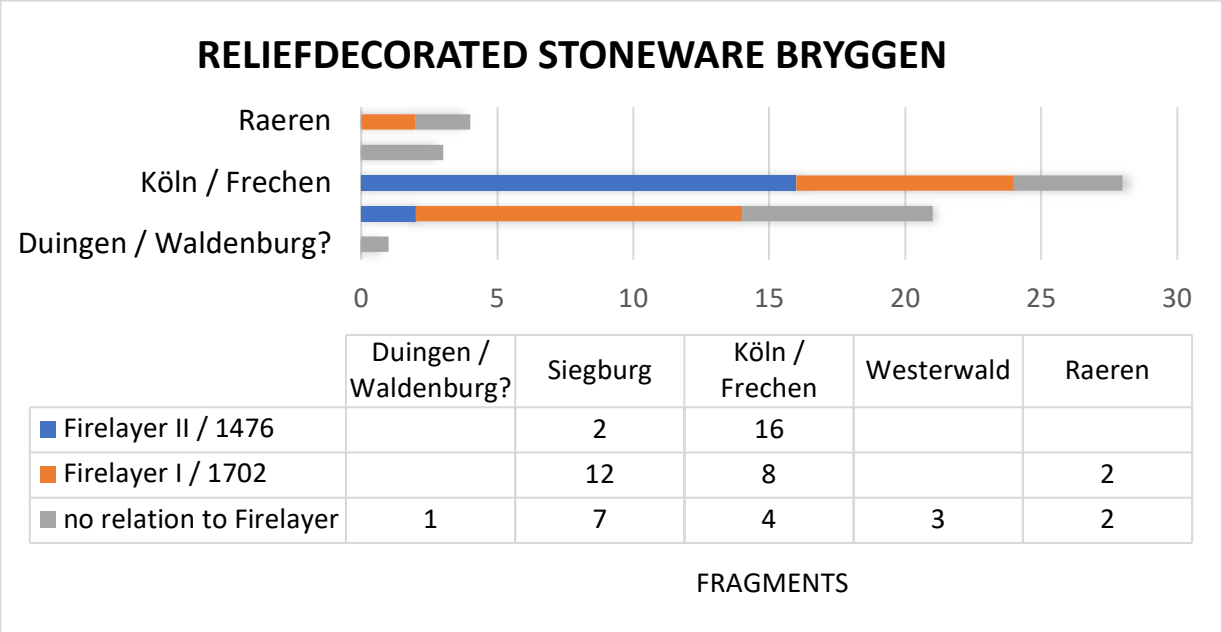


Figure 251. Diagram of selected pottery found 'under building 324'.

Figure 252. Cat. 1353, fragment of Waldenburg stoneware with beard mask.

Even though most of the finds of relief-decorated stoneware from Bryggen are only available in small fragments, the range of shapes can be estimated quite well. Most of the Cologne / Frechen stoneware found at Bryggen were fragments of bulbous jugs, which are very likely to be Bartmann jugs. A larger fragment of such a jug with a careful beard mask and smooth walls, without further relief applications (Cat. 1597; Figure 117) was discovered in the remains of building 355, which burned down in 1702 (Herteig 1990: 65). The other, mostly very small fragments of such jugs from Bryggen show a wide range of relief applications on the globular vessel body as known from the Cologne workshops (Unger 2007). The Bryggen material contains inscribed bands, round medallions and various floral elements such as acorns, acanthus and oak leaves, as well as rose tendrils. A total of 29 fragments can be attributed to such bulbous jugs; only three fragments of Cologne / Frechen stoneware from Bryggen come from *Pinten* (Cats. 1567-1569), the decoration of which is unfortunately not identifiable due to the heavy fragmentation.

Siegburg stoneware, the second most common relief-decorated stoneware at Bryggen, is present in the forms also found elsewhere in Norway. Eleven pieces were found from Siegburg *Schnellen*, including a half-preserved *Schnelle* with a frieze showing



	Duingen / Waldenburg?	Siegburg	Köln / Frechen	Westerwald	Raeren
Firelayer II / 1476		2	16		
Firelayer I / 1702		12	8		2
no relation to Firelayer	1	7	4	3	2

Figure 253. *Diagram showing provenance and stratigraphical context of the relief-decorated stoneware from the Bryggen excavation.*

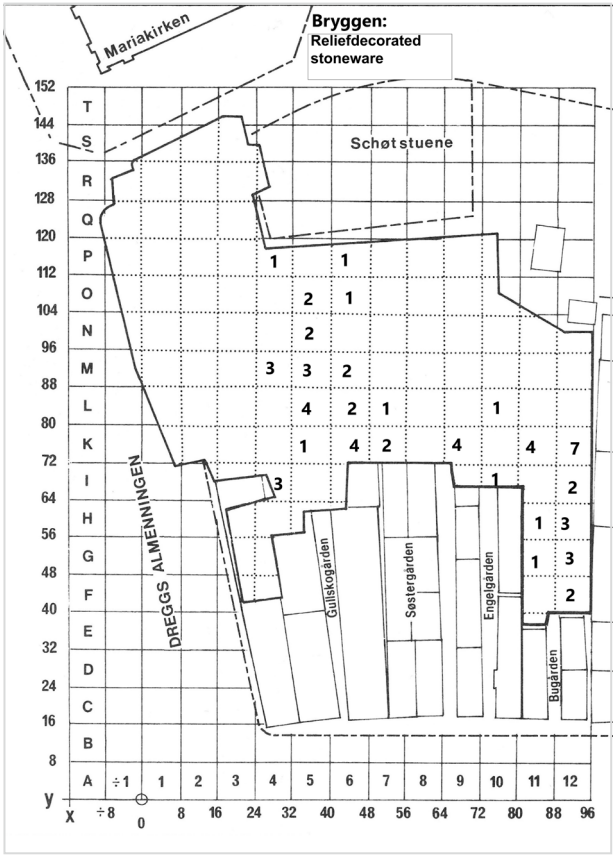


Figure 254. *Mapping of the relief-decorated stoneware by quadrant on the Bryggen excavation. Map source: Herteig 1990: 10, Fig. 1.*

the Fall of Man (Cat. 1408; Figures 63-65) and a larger body fragment with the allegorical depiction of Judith (Cat. 1418; Figure 74). All other *Schnellen* fragments found on the site are very small. Funnel-neck jugs with relief decoration were found in eight cases on the BRM 0 / Bryggen site. A complete funnel-neck jug (Cat. 1399; Figures 85-87) was discovered in the Bugården tenement in quadrant K12. The piece shows three different relief applications, including the impression of a medal depicting the *Raising of the Widow of Zarpath's Son by Elijah* (Roehmer 2014: 106, Figs. 227-228). There are also seven fragments of funnel-necked jugs with moulded roundel medallions showing arabesques, coats of arms and biblical scenes. A fragment of a larger globular vessel made of Siegburg stoneware with a larger round moulded roundel medallion is most likely from a *Pulle* (Cat. 1407). A small fragment of a carefully crafted beard mask (Cat. 1404) suggests that it belonged to a Siegburg Bartmann jug. However, the latter examples should not detract from the fact that relief-decorated stoneware from Siegburg is predominantly found on Bryggen in the form of *Schnellen* and funnel-necked beakers. The only four fragments of relief-decorated stoneware from Raeren come from large jugs, three of which are small fragments of baluster jugs (Cats. 1548-1550; Figures 255-257), while one body fragment with the royal coat of arms of Sweden (Cat. 1551; Figure 114) comes from a jug with a rounded body.

Three fragments of *Westerwald-style* stoneware with relief decoration from Bryggen (Cat. 1780; Figure 128), which were recorded for the work, probably come from the same large-volume vessel, although its shape cannot be determined from the small fragments. The shape of a small base fragment of grey, reddish-brown slip glazed stoneware with rouletting decoration (Cat. 687; Figure

258), which was discovered above fire layer II from 1476, cannot be determined with absolute certainty either. However, the piece most probably comes from a small *beehive tankard*. Fragments of such relief-decorated vessels from Duingen production were discovered several times at other sites in Bergen (cf. Chapter 5.5.6). The piece from the Bryggen excavations shows a slightly different colour and base shape, possibly Cat. 687 is more likely to have been made in Waldenburg. Jugs of the so-called *Glier group*, decorated in relief, often show a very similar rouletting decoration on the foot (Horschik 1978: 73-76, 434-435). The base fragment Cat. 687 may represent the only known fragment of such a vessel in Norway to date.

Figure 255. *Cat. 1548, fragment of a peasant dance frieze.*

Figure 256. *Cat. 1549, fragment of a Raeren frieze.*

Figure 257. *Cat. 1550, fragment of a peasant dance frieze.*

Figure 258. *Cat. 687, base fragment of a jug with rouletting decoration, probably a fragment of a Waldenburg or Duingen beehive tankard.*

7. Stoneware in Northern Europe

This chapter briefly examines the occurrence of the examined wares, i.e. the stoneware from the Weser Uplands and Saxony, as well as the richly decorated Renaissance stoneware in other regions of the former Hanseatic area. This overview is primarily based on literature research and, where appropriate, information from colleagues in the respective regions. The present author inspected a limited amount of material in the storerooms of the Gamla Lödöse Museum in western Sweden and the State Archaeology department Bremen (See Appendices, Supplementary materials). The aim of these task is to place the finds from Bergen and southwestern Norway in a broader geographical context and to establish a link to the Hanseatic region in general. However, as it is neither possible nor intended to provide an overall description of stoneware in northern and central Europe, the focus is placed on the situation in Scandinavia and northern Germany. Against the background of various significant sites (cf. Figure 259) from the North Sea and Baltic region, the find material from Bergen and southwest Norway can be better evaluated.

7.1 Stoneware in other Norwegian regions

As already described in Chapters 4.1.2 and 4.2, the state of research when it comes to historical archaeology is very heterogeneous in different regions of the country, particularly regarding processing of the ceramic finds. Along the coast between Bergen and Trondheim, a good 500 kilometres to the north, virtually no finds of the presented wares have been discovered to date. One exception is the find from the Osen farmstead described in Chapter 7.3. A new study of finds from the excavation of the 'Borgund' trading post near Ålesund, which is currently underway, will soon provide new insights into this settlement, which lies roughly halfway between Bergen and Trondheim (Blobel 2020). Mass finds from the cities of Trondheim, Tønsberg and Oslo have been partially presented. Otherwise, most statements on pottery deposits in Norway largely refer to individual sites from which finds have become known due to a favourable observation and processing situation. The difficult research situation for medieval sites in rural Norway has been subject for a conference in 2004 (Martens, Martens and Stene 2009), without major changes since then. Also, the knowledge about pottery from urban sites in Norway is largely depending on the varying state of research and the activity of individual researchers (Hansen 2017: 80, 85).

7.1.1 Trondheim

The episcopal city of Trondheim was the seat of the archbishopric of Norway under the old name 'Nidaros' and, with the burial place of St Olaf, the most important place of pilgrimage in the country. In the Middle Ages and Early Modern times, the city functioned in some respects as the spiritual centre of Norway, which also held a key position in trade with the northern provinces. During numerous major excavation projects, a considerable amount of pottery was recovered, which was published as an overview shortly after termination of the largest projects (Reed 1990). Slip glazed near stoneware represents a significant amount of the late medieval pottery deposit in Trondheim, which is otherwise heavily dominated by English earthenware (Reed 1990: 51). When processing the finds from Trondheim, the stoneware from the Weser Uplands was not distinguished as a separate ware but was included together with Rhenish wares as 'Langerwehe stoneware', although it is made clear that a certain number of these pieces originated from the Coppengrave / Duingen area (Reed 1990: 36). Overall, slip glazed near stoneware appears to account for about 5% of all pottery finds in Trondheim and to occur mainly in the late Middle Ages, from about the mid-14th century onwards (Reed 1990: 78). Remarkably, slip glazed stoneware seems to occur in greater numbers in Trondheim than Siegburg stoneware (Reed 1994: 62). Only a very limited amount of relief-decorated stoneware has

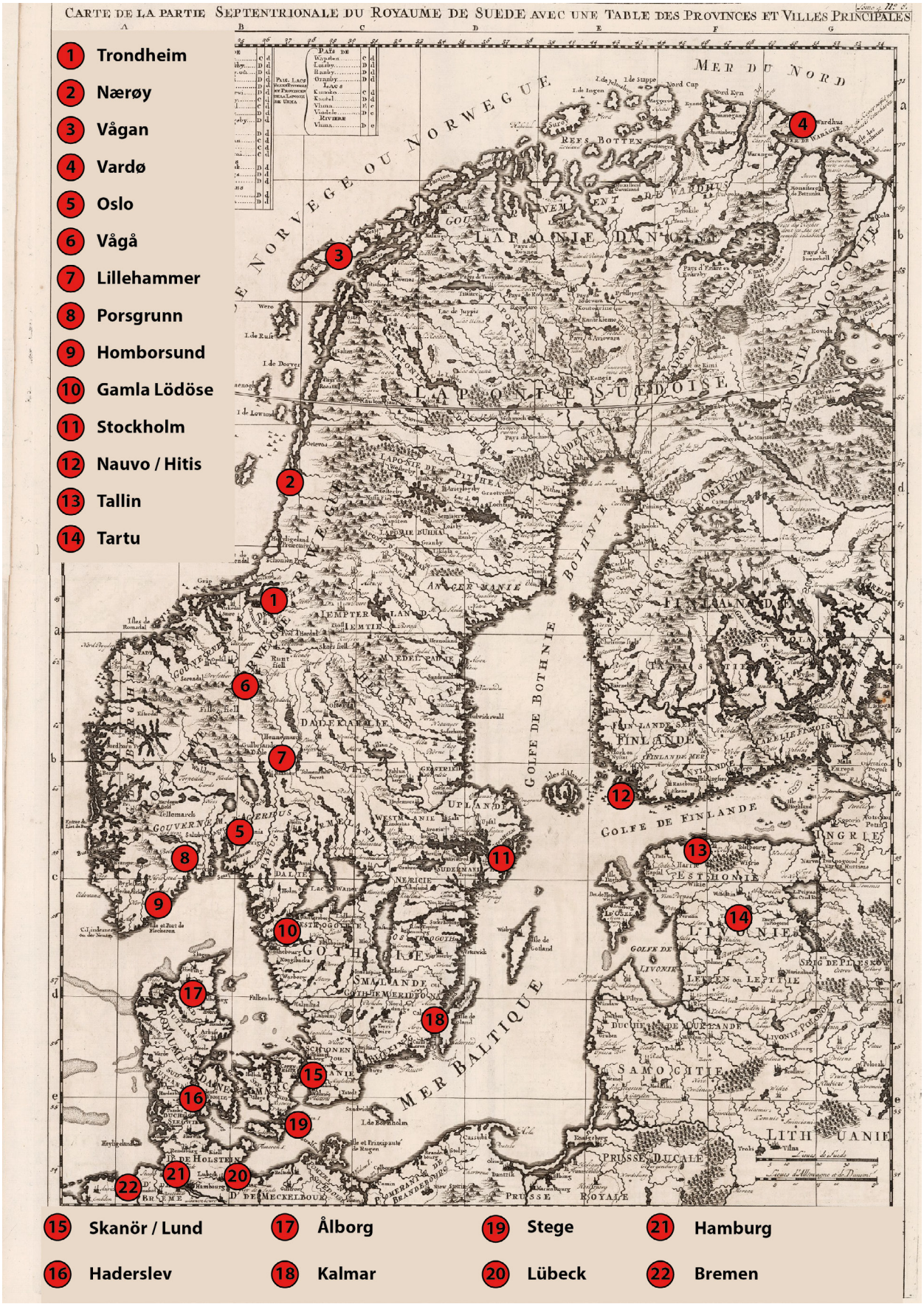


Figure 259. Map of Scandinavia with important sites mentioned in Chapter 7. Map basis: Map of the Kingdom of Sweden by Nicolas Gueudeville, 1714. Map source: David Rumsey Map Collection, David Rumsey Map Center, Stanford Libraries

been published from Trondheim, which is also largely true for the rest of Norway. However, the characteristic Frechen Bartmann jugs, both in the older and the younger, highly stylized variants, occur regularly in Trondheim (McLees 2019: 227). These jugs were probably also traded from Trondheim to the surrounding area, as suggested by the unpublished find of a Frechen Bartmann jug on the farm 'Bakken' in the municipality of Rennebu, about 100 kilometres south of Trondheim (Figure 260). The piece from Bakken dates to the mid-17th century and shows a simple, stylized beard mask on the neck and three similar oval coats of arms medallions, which are possibly coats of arms of the county of Ravensberg (Unger 2007: 187, Cat. 94).

Figure 260. *Frechen Bartmann jug from the second half of the 17th century. Found on the 'Bakken' farm in Rennebu parish, south of Trondheim. Photo: Jenny Kalseth, Collections Department, University Museum NTNU, Trondheim.*

7.1.2 Martnasund / Nærøy

About 250 kilometers north of Trondheim, in a sheltered sound on the main sailing route to the north, lies the island of Nærøy in the municipality of Nærøysund, about halfway between Trondheim and the Lofoten Islands with their rich fishing grounds. A regionally important stone church was built there in the 12th century, which had close connections to the cathedral chapter in Nidaros / Trondheim (Nymoen 1994: 19). In the 18th century, a contemporary source mentions a lively market that took place at Midsummer '...since time immemorial...' (Bing 1899: 148) at the place called *Martnasund*, which means *Marked sound* in English. This market was banned in 1876, mainly due to the '...damage caused by the (...) trade in intoxicating drinks...' (Woxeng 1973: 49). After local scuba divers reported finds on the seabed in 1983, an underwater archaeological prospection was carried out in 1984, during which the oldest find was a complete jug with collared rim made of brown slip glazed stoneware (Nymoen 1994: 26). Based on the characteristic shape of the collared rim, strap handle, decorative strips and frilled foot, the vessel is clearly a product of the Weser Uplands (Figure 261).

Figure 261. *Weser Uplands stoneware jug found on the seabed in 'Martnasund', Nærøy island, Nærøy municipality, central Norway. Photo: Pål Nymoen, Norsk Maritim Museum.*

The chipped engobe in places and the dark melting in the wash indicate production in Bengerode. The small jug is very similar in form and dimensions to the almost complete jug from Bryggen in Bergen (Cat. 1144; Figure 33). The jug from Bergen is dated to around 1400, which indicates that the jug in Næroy harbour ended up at the bottom of the sea during the same period. A loss of the complete vessel during reloading or other trading activities is a plausible explanation for its presence at this lo-

cation. Archival sources for late medieval trading activities are not known. An instruction from the royal governor in Trondheim from 1546 states that the clergy, including the parish priest of Nærøy, should devote themselves more to pastoral care and less to the Nordland trade (Nymoen 1994: 24). Against this background, the stoneware jug from the Weser Uplands should be seen as a clear indication of mercantile activities in *Martnasund* as early as the late 14th century.

7.1.3 Northern Norway

The most important production area for stockfish, Norway's most important export product in the Middle Ages and early modern times, is located on the Lofoten archipelago. The medieval settlement of *Vágar* was located near the present-day village of Kabelvåg, which is mentioned in numerous written sources as an important trading centre and has also been the subject of some archaeological research since the 1970s (Bertelsen 2008). During an informal visit in 2002, the author was able to gain a brief insight into the ceramic finds. Among the finds that had not yet been catalogued at the time, several fragments of slip glazed near stoneware could be clearly identified as stoneware from the Weser Uplands. The characteristic features such as the thin walls and the shaping of the bases, band handles, frilled foot, collared rims and decorative strips were decisive for this classification. Unfortunately, this material has not yet been published, nor was it possible to produce photographs, drawings or other documentation at the time. It can only be stated at this point that slip glazed near stoneware from the Weser Uplands can be found in the important medieval trading centre *Vágar*, also known as *Storvågan*.

Medieval pottery from the Trondenes and Storvågan sites was also presented as part of an academic thesis, which unfortunately contains no illustrations of finds (Brun 1996). The thesis deals with finds from excavations at Vágar from 1985-1986, including sixteen fragments of near stoneware from late medieval layers, which make up just under a third of the pottery finds from the corresponding phase (Brun 1996: 48, Tab. 4.1). It is very likely that at least some of the material is slip glazed near stoneware from the Weser Uplands. Production in the Weser Uplands can also be assumed for some finds, not described in more detail, which are labelled *Langerwehe / Duingen* or *Langerwehe* and were discovered in the vicinity of the regionally important church site of Trondenes (Brun 1996: 48, 108-115). An origin from the Weser Uplands is explicitly assumed for a larger group of Renaissance stoneware listed *as Coppengrave / Duingen* (Brun 1996: 48). These fragments represent almost half of the Early Modern stoneware found during small-scale excavations in the area of the vicarage of the stone church of Trondenes (Brun 1996: 16-19, 48). In addition to these two larger sites, unspecified fragments of proto- and near-stoneware have also been reported from smaller farmsteads in northern Norway (Brun 1996: 51-52). With all due reservations regarding the precarious material documentation, stoneware from the Weser Uplands also seems to have been present in significant quantities in northern Norway.

As part of an academic thesis, the pottery recovered during archaeological investigations in Vardø, in the far north-east of Norway, has been processed in recent years (Lahti 2022). The evidence of Waldenburg stoneware in the form of a fragment of a so-called *hedgehog vessel* is unusual and very remarkable (Lahti 2022: 75). Two body fragments of light grey stoneware with the characteristic thorn-like decorations come from one of these rare but widespread vessels, which are dated to the 15th and first half of the 16th century (Scheidemantel 2004, 65, Tab. 7). In addition to the spiky relief applications that give them their name, hedgehog vessels often also feature one or more hand-moulded face masks and elaborate feet as well as other decorative elements. Why and by whom such outstanding tableware was used in the most remote corner of Norway, just a few kilometres from the Russian border, remains a matter of speculation. However, a fortification was built in Vardø as early as the 14th century to protect against the influence and military incursions from the territory of the Republic of Novgorod (Sørgård 2018: 185). The location of the hedgehog vessel in Vardø indicates that it was used by the garrison of this castle (Lahti 2022: 81). The use of hedgehog vessels on aristocratic fortifications in various regions of Europe is also shown by comparable fragments in the palace of the Hungarian kings in Buda (Holl 1990: 212, Fig. 2).

Finally, as a further example of the occurrence of the stoneware discussed in this work in northern Norway, a piece that has survived in use should be mentioned. The small fishing settlement of Medfjord is located on the island of Senja near Tromsø, directly on the open North Atlantic. At the beginning of the 20th century, a Siegburg *Schnelle* was described in the Tromsø Museum as having served as a communion chalice or wine jug on the altar in the church of Medfjord (Nicolaissen 1916: 24, Fig. 2). Remarkably, fragments of Siegburg stoneware vessels are also known from medieval churches in Iceland, where they were presumably used in the liturgy (Mehler 2009: 104). The church, which no longer exists today, is described in 1770 as a small church in need of renovation, without a tower and with a grass roof (Nicolaissen 1916: 22). The Siegburg *Schnelle* in question was missing its handle,

and the three different relief applications show allegorical depictions of 'good heroes' in the form of Hector of Troy and Alexander the Great. The central relief application shows an antique-style depiction of 'Caesar Karolus' and the year 1588. Unfortunately, it was not possible to determine the whereabouts of the piece today. In any case, the use of a Siegburg *Schnelle* as a liturgical device in a settlement that is very peripheral, even for Norway, is remarkable.

7.1.4 Oslo and Tønsberg

Apart from Bergen and Trondheim, there were only a few other towns in medieval Norway. Oslo and Tønsberg, both located in eastern Norway on the Oslofjord, have been fairly well researched archaeologically (Molaug and Brendalsmo 2014). Medieval and early modern ceramics from both places have been presented in various works, but the stoneware has been addressed in very different ways, which do not allow a reliable assignment to known production areas. For this reason, it is not possible to draw a clear picture of the occurrence of the types of wares worked on the basis of the literature, even though stoneware from the Weser Uplands and relief-decorated stoneware from the Renaissance can be identified in various publications. For example, a base fragment of brown-engobed near stoneware with a characteristic Weser Uplands shape of the frilled foot has been published from Oslo, but the editor is certain that it is not a Siegburg product (Molaug 1977: 107, Fig. 15, 4/8). Other base fragments typical of the Weser Uplands, made of grey stoneware with a brown, shiny surface, are thought to have been produced in Langerwehe (Molaug 1977: 108, Fig. 15, 7/4 and 7/5). Against the background of the experience with the slip glazed near stoneware from Bergen, it can be assumed that many of the finds referred to as Langerwehe are more likely to be products from the Weser Uplands. However, quantities or more precise contexts of the finds are not known. This also applies to the few published pieces of relief-decorated stoneware from excavations in Oslo. These include several fragments with small round moulded roundel medallions, acanthus and oak leaves, which probably originate from Cologne or Frechen Bartmann jugs (Molaug 1977: 114, Fig. 18). Relief-decorated Siegburg stoneware is apparently very rare in Oslo; during a larger excavation, which also yielded extensive early modern ceramic material, only a single fragment of relief-decorated stoneware from Siegburg was found (Molaug 1987: 322). Investigations in the area of the new residential town of *Christiania*, founded under Christian 4 in the second quarter of the 17th century, revealed a number of relief-decorated vessels from the late 17th century from Frechen and the Westerwald (Urth 1981: 118-120). Several fragments of relief-decorated baluster jugs from Raeren were recovered and published in Oslo at the beginning of the 20th century (Grieg 1933: 184-189). In addition to peasant dance friezes, the motifs also include coats of arms. During modern investigations accompanying the construction of the Norwegian Maritime Museum in Oslo, which also scientifically record early modern find material, a number of finds of relief-decorated stoneware from the 17th century from Frechen and Raeren were documented (Vangstad 2013: 31-34). These are mainly Frechen Bartmann jugs from the late 17th century, but a fragment of a Raeren jug with the Amsterdam city coat of arms was also found.

The published findings of medieval stoneware from Tønsberg, about 100 kilometres south of Oslo, appear even more sparse than in Oslo. In a summarized presentation of the finds from various investigations in the city area, the entire slip glazed stoneware is again generally referred to as Langerwehe (Reed 1992a: 78). In individual sites in Tønsberg, this apparently accounts for around 6% of the medieval pottery finds and dates primarily to the late 14th century (Reed 1992a: 83). However, the author explicitly points out that some of the stoneware probably comes from the Coppengrave / Duingen region (Reed 1992a: 85).

Completely isolated is the discovery of a complete Siegburg *Schnelle* with an allegorical depiction of hope, the date *1591* and a pewter lid, which came to light during dredging in the harbour of the settlement of Drammen, halfway between Oslo and Tønsberg (Grieg 1933: 180-181, Fig. 141). Drammen, situated in the favourable harbour of the Drammensfjord, is today one of the larger towns in Norway, but was only granted city rights in the 18th century. In the 16th century, considerable quantities of timber from the hinterland were exported from Drammen. In 1539, seventeen Saxon miners who were supposed to develop ore deposits in the Telemark hinterland for Christian III of Denmark-Norway drowned there while going ashore (Berg 1999: 38).

Taken together, the ceramic material from the eastern Norwegian towns is considerably sparser and less varied than in Bergen. Whether this appearance is due to the state of research, the smaller number of inhabitants in these towns or the weaker economic power of the region cannot be conclusively clarified here.

7.1.5 Relief-decorated stoneware in upscale rural settings

In addition to being found in the ground, individual vessels made of relief-decorated stoneware have also survived in use or as 'inherited property' and were later recorded in the museum collections.

These pieces are significant in that they convey an impression of the value placed on the tableware by its former users and their social status.

The inventory of the Bogstad estate near Oslo, which is now a museum, contains a complete Siegburg *Schnellen* with a silver lid and the inventory number NFBO.00679 (Figure 262). The piece shows three different coats of arms: in the centre the coat of arms of Duke William V of Jülich-Kleve-Berg, on the left the coat of arms of Philip II of Spain and on the right the English royal coat of arms (Mary Stuart?), below the date '1574'. The silver lid shows the coat of arms of the Leuch family, who owned the estate between 1665 and 1768. The first representative of the Leuch family at Bogstad was Peder Nielsen Leuch, who died in 1693. He had risen from a journeyman tailor to become a wealthy merchant in Christiania and came into possession of the estate in 1665 through his marriage to the wealthy widow Anne Mortensdatter (Collett 1915: 22). It is unclear whether the silver mounting of the Siegburg *Schnellen* was made during his lifetime or only in the 18th century. In any case, the richly decorated stoneware vessel seems to have been a valued representative heirloom for the ascendant Leuch family. The vessel has been preserved in a cupboard in the manor house, where it was apparently kept safe.

Another example of relief-decorated stoneware from Siegburg in a rural setting can be found in the form of a fragmentary *Schnelle* that has been preserved in the collection of the *Maihaugen* open-air museum in Lillehammer (Figure 263). The piece with the inventory number SS-07070 came into the possession of the museum in 1911 and was allegedly in use in Vågå, a mountain community inland, about halfway between Oslo and Trondheim. The *Schnelle*, known only from photographs, shows similar relief applications with a large double-headed imperial eagle and the date '1591'. It is one of the very few examples of 16th century pottery discovered at a considerable distance from the coast. Unfortunately, there is no information about the exact circumstances of the find, but it is striking that the site is located at an important crossroads for traffic between eastern, central and western Norway.

The museum in Lillehammer also has a relief-decorated cylindrical tankard made of light grey stoneware with blue painting and secondary silver mounting (Figure 264). The piece with the inventory number SS-14495 shows a skull in a medallion with crossed bones underneath and the initials *EB* and the date *1637* as the central relief application. This medallion is framed by a *Vanitas* inscription in capitals: *ACH MEYN LYEBER (L) ESER BESYCH M(I)CH AL WAS DOW NOW (B) YST DAS BEN YCH GEWST UND WAS YCH NOW BEN DAS MOS DOWE AUCH NOCH WERDEN*. The text can be translated to English as *Oh my dear reader, look at me. What you are now, I have also been. And what I am now, you still must become*. A fragment of the same Vanitas relief application, which was apparently produced in the same mould, was discovered in the coastal town of Haapsalu in Estonia (Russow 2006: 163; Fig. 63).

Figure 262. *Siegburg Schnelle with relief application dated 1574 and silver mount with the Leuch family coat of arms from the late 17th century. Photo: Jon-Erik Faksvaag / Bogstad Gård.*

The original handle of the jug has been broken off and replaced by a solid silver handle, which is connected to an elaborate silver lid with oak leaves and animal heads. The lid is engraved with the coat of arms of the Monrad family, the initials *FM* and the date *1689*. These initials presumably refer to Fredrik Monrad, who was a priest in the parish of Øyer, located around 150 kilometers north of Lillehammer, towards the end of the 17th century. His father, Erik Monrad, was parish priest in Middelfart, Denmark, in 1637 and bishop in Ribe in 1643; the aristocratic Monrad family was obviously highly respected in Lutheran circles (Bricka

Figure 263. *Body fragment of a Siegburg Schnelle, probably used in the municipality of Vågå, brought to Maihaugen Museum in 1911. Photo: Maihaugen Museum, Lillehammer.*

Figure 264. *Raeren tankard with 'Vanitas' motif, relief application dated 1637, silver mounting on foot, handle and lid with coat of arms of the Monrad family and date '1689'. Photo: Maihaugen Museum, Lillehammer.*

1897: 461). Based on the initials *EM* in the central medallion, it can be speculated whether the jug was commissioned by Erik Monrad, but it is more likely that the initials stand for the potter, probably referring to Emund Mennicken from Raeren (Mennicken 2013: 223). The jug was probably made in Raeren, where light grey stoneware with blue painting was produced from the late 16th century onwards (Mennicken 2013: 204-206). The Raeren Pottery Museum has a very similar applied relief decoration with a Vanitas motif and skull on a baluster jug with the inventory number 4026 (Mennicken 2013: Pl. 25). The vessel may have been acquired by or for Erik Monrad who was appointed as bishop in Ribe by the Danish king in 1643. In the year 1637, which is the date on the tankard, he married his wife Margarethe Bang and achieved his first employment as parish priest in Middelfart. The potter's initials and the content of the relief applications may have been considered as an appropriate gift for this occasion. In any case, it is remarkable that the jug was in use for a long time, was presumably valued as a family heirloom and was further enhanced with the elaborate silver mounting 52 years after it was made.

Obviously, individual representative vessels made of relief-decorated stoneware were kept in family ownership for a long time, especially in families that belonged to the new elites that emerged in the Early Modern Period. The complete peasant dance jug from the Stavanger Museum (Cat. 1775; Figure 106; Figure 293), already described in Chapter 6.1.2.3, probably belongs in this context. According to the sparse documentation for this vessel, it was also owned by a cleric and politician who lived from 1778-1852. Dahl was a cleric in western Norway and belonged to a wealthy family, documented among other things as administrators of a noble estate in Hardanger (Randal 1995: 1). It is an obvious assumption that the Raeren peasant dance jug, which was already 200 years old during Dahl's lifetime, was in his possession as an heirloom.

7.1.6 Porsgrunn, Kjerringåsen site

The difficult situation of early modern archaeology in Norway has already been mentioned several times. The situation is even more precarious in rural areas, where archaeological finds from the Early Modern Period have only been documented in fortunate exceptional cases. In this context, finds from a small farmstead on the mountain *Kjerringåsen*, near Porsgrunn, about 150 southwest of Oslo, are worth mentioning. There, on a private initiative, numerous fragments of 17th and 18th century pottery, along with a number of other finds, were recovered from a presumed waste dump that had been destroyed by the construction of a forest road (Sethre 2017). The finds also included several fragments of various vessels made of relief-decorated stoneware.

The oldest finds are several fragments of a Raeren baluster jug with full-body depictions of the electors in arcaded arches (Figure 265). The inscription 'Bischoff Trir' can still be seen on one of the fragments, but further details of the depictions cannot be deduced from the fragments. Jugs with an electoral frieze were part of the common repertoire of Raeren potters around 1600 (Mennicken 2013: 178). In the waste heap at Kjerringåsen, however, the Elector jug was also associated with much younger material, such as a Frechen Bartmann jug from the second half of the 17th century (Figure 266). The piece with a flat, stylized beard mask on the neck shows a carelessly executed moulded roundel medallion with an unidentifiable coat of arms on the body. In addition to these two stoneware vessels, individual fragments of blue-painted stoneware 'Westerwald style', faience and painted earthenware were also collected (Sethre 2017: 261-262). Given the location of the find, a small farm in an agriculturally unfavourable location that was subject to taxation in the late 17th century, the inhabitants are most likely to have belonged to an underprivileged social class (Sethre 2017: 266). However, the proximity to the trading centres of Porsgrunn and Skien, where a lot of timber was handled in the 17th century, certainly provided opportunities for wage labour. Seafaring may also have offered both income opportunities and knowledge of sophisticated table manners and utensils, as can be seen in the discovery of a two-pronged fork (Sethre 2017: 264). In summary, the finds from Kjerringåsen indicate that relief-decorated stoneware was occasionally accessible to and used by poorer sections of the population.

7.1.7 Homborsund (Grimstad municipality), Aust-Agder; natural harbour in southern Norway

In 1968, the amateur researcher and local diver Hartvig W. Dannevig delivered a 15 cm high fragment of a *Pulle* made of Siegburg stoneware to the regional museum and archive for Aust-Agder 'Kuben'. The piece was recovered in the natural harbour basin of Homborsund on the south coast of Norway, where local scuba divers recovered numerous objects from a depth of around 10 meters (Falck et. al. 2013: 32). The site is registered in the national monument database Askeladden with the ID number 140798 as a protected historical harbour facility, and it is very likely that the bay was used in the Middle Ages and Early Modern Period. The lower part of the Siegburg *Pulle*, which has the inventory number AAM.09903 in the Aust-Agder

Figure 265. *Fragments of a Raeren elector's jug from the Kjerringåsen site near Porsgrunn.*

Figure 266. *Late 17th century Frechen Bartmann jugs from the Kjerringåsen site.*

Figure 267. *Lower part of a Siegburg Pulle, recovered from the seabed in the natural harbour Homborsund near Grimstad. Photo: Karl Ragnar Gjertsen, Aust-Agder museum og arkiv - KUBEN.*

Figure 268. *Detailed view of the moulded roundel medallion of the Pulle from Homborsund. Antique depiction of Julius Caesar with shield and double-headed eagle in an oval garland frame. Photo: Karl Ragnar Gjertsen, Aust-Agder museum og arkiv - KUBEN.*

Museum's storeroom, shows clear turning grooves and three moulded roundel medallions (Figure 267). The available photographs show an oval relief medallion framed by a garland wreath with four small round medallions (Figure 268).

The central motif depicts a male figure with antique-style armour and helmet, holding an oval shield with a double-headed eagle and marked 'IULIUS CAESAR' with a scroll. *Pulle* with oval, framed moulded roundel medallions date to the last decade of the 16th century and the first decades of the 17th century (Roehmer 2014: 186). It thus belongs to the same chronological horizon as the complete *Pulle* from a wreck in the Bay of Tau near Stavanger (Cat. 1773). The period around 1600 was an early peak of the timber trade on the southern Norwegian coasts, in which the Dutch in particular played a major role. The fact that Siegburg *Pulle* vessels were in use on Dutch ships at this time is also shown by the example of such a vessel with a pewter lid and the date *1585* on the East Indiaman *Witte Leeuw*, which sank in 1613 (Gaimster 1997: 108). The presence of Dutch ships in the harbour bay of the Homborsund in the period around 1600 is also very likely. It is therefore not implausible to regard the Siegburg *Pulle* from this harbour as the legacy of seafaring Dutchmen.

7.1.8 Papa Stour, Shetland Islands

The Shetland Islands, which today belong to Scotland and thus to Great Britain, are located in the North Atlantic between western Norway and Scotland and were subject to taxation by the Norwegian kings in the 13th and 14th centuries (Crawford 1999: 14-18). On the small island of Papa Stour in the northwest of the archipelago is the court of the *Biggins*, which functioned as the administrative centre for Norwegian royal power in the late Middle Ages (Crawford 1999: 30). This former court site was archaeologically investigated in several excavation campaigns and a well-preserved log building on stone foundations with wooden furnishing details and elaborate hearths was found, which is dated to the 13th-15th century. In addition to a large quantity of presumably locally made coarse utility pottery, the finds also included 31 fragments of imported late medieval pottery, including eleven fragments of stoneware from the Weser Uplands, the largest group of imported wares (Stephan 1999: 156). The fragments were clearly identified as stoneware and near stoneware from Coppengrave and Bengerode on the basis of their style; they were primarily found in contexts associated with the destruction of the representative building and probably date to the 15th century. The stoneware jugs from the Weser Uplands are associated with lead-glazed earthenware of East English provenance. Although the number of finds is smaller, the pottery from this site, which was used by the Norwegian elite in the late Middle Ages, is similar to the range found in the city of Bergen. Tableware and drinking vessels made of imported stoneware were obviously very popular. The absence of Siegburg stoneware in the finds from Papa Stour is conspicuous, as it dominates in the contemporaneous finds from Bergen and other Norwegian sites.

7.2 Stonewares in Sweden

7.2.1 Gamla Lödöse / West Sweden

Gamla Lödöse (= *Old Lödöse*), located about 40 kilometers inland on the largest river in southern Sweden, the Göta River, was the most important town in the western part of medieval Sweden. The oldest archaeologically verifiable traces of settlement date from around 1100, the oldest written mention of Lödöse is from 1151-52 (Carlsson 2008: 231). Situated at a contested crossroads between the three Nordic kingdoms, Lödöse was medieval Sweden's only access to the North Sea. In the late Middle Ages, the town was an important trading and craftsmen's town, whose importance was primarily based on power politics and economic reasons (Carlsson 2008: 239). Many of the town's inhabitants were of German origin, and the town charter stipulated that the town council should have an equal number of Germans and Swedes (Holmbäck and Wessén 1966: 172). Towards the end of the 15th century, the town was largely abandoned, and its inhabitants and functions were transferred to *Nya Lödöse*, the predecessor settlement of Gothenburg, founded in 1473 and located closer to the coast (Carlsson, Ljungdahl and Gustavsson 2017: 365). The finds from Gamla Lödöse are therefore almost exclusively medieval finds, which were recovered in numerous excavations of various sizes and are stored on site in the Lödöse Museum. Two monographs have been published on pottery finds from Gamla Lödöse (Carlsson 1982a: 1982b). The successor settlement 'Nya Lödöse' was also archaeologically researched to some extent at the beginning of the 20th century (Strömbohm 1923). Extensive rescue excavations were carried out in the settlement area between 2013 and 2018 (Cornell and Rosén 2017). In connection with the processing and evaluation of the most recent excavations in Nya Lödöse, a first article on the pottery has already been published (Carlsson, Ljungdahl and Gustavsson 2017).

As part of the present study, the drawers in the Lödöse Museum stores were examined in February 2013 for finds of stoneware from the Weser Uplands and Waldenburg stoneware. In the process, 10 fragments of Waldenburg stoneware and 293 fragments of stoneware from the Weser Uplands were identified macroscopically; these pieces are recorded with the respective find numbers and included in a tabular catalogue as an appendix (Appendices, Supplementary materials), Chapter 11.1). Due to time constraints, however, the recording and description of the fragments could only be rudimentary. It was not possible to assign the fragments to an exact find context, as there was no access to the excavation documents. Information on find assemblages and quantitative proportions of different types of wares is therefore only possible to a very limited extent. The decision as to whether individual fragments were stoneware from the Weser Uplands had to be made very quickly due to the limited time available. For this reason, only pieces that could be identified macroscopically on the basis of technological and typological criteria were included. A more recent revision of the ceramic material by Sonja Jeffrey identified several hundred more stoneware fragments from Gamla Lödöse, which very probably originate from the Weser Uplands.

A total of around 45,000 ceramic fragments have been recovered from Gamla Lödöse (Carlsson 1982a: 14). These were divided into technologically subdivided groups according to Dagmar Selling's usual Swedish scheme, which differ according to firing, degree of sintering and surface treatment (Carlsson 1982b: 14-16). Stoneware is included in groups C1 and C2, which in turn are further subdivided according to technological criteria (Carlsson 1982b: 37-42). With the exception of the known and easily identifiable stoneware from Siegburg, it was not possible to determine the production sites of the stoneware finds in the early 1980s. However, reference is made to a reddish-brown slip glazed stoneware, some of which is already completely sintered and has a dark grey fabric (Carlsson 1982b: 40). A considerable proportion of this is likely to be stoneware from the Weser Uplands, although the author speculates that this ware originated in the Limburg workshops published at the time. The first examples of brown-engobed stoneware seem to appear in layers from the last quarter of the 13th century, albeit only in a few examples (Carlsson 1982b: 40). During the 14th century and into the 15th century, stoneware dominates the ceramic assemblage at Gamla Lödöse, particularly in the form of fully developed Siegburg stoneware, which accounts for the majority of the stoneware finds (Carlsson 1982b: 40, 44, 50). In total, about 30% of the ceramic finds can be attributed to stoneware, with fully sintered stoneware accounting for about 22% and near stoneware for about 8% (Carlsson 1982b: 48, Fig. 67). It should be noted that very hard-fired 'blue-grey ware' is also included in the near stoneware of the material group *C1a* (Carlsson 1982b: 38). Slip glazed stoneware from the Weser Uplands can be found in both groups, which are published in example pictures (Carlsson 1982a: 66, Figs. 72-73). Slip glazed stoneware from Langerwehe with its characteristic rouletting decoration on the rim also occurs in Gamla Lödöse (Carlsson 1982b: 41, Fig. 61). Individual finds of Renaissance relief-decorated stoneware indicate that the town was still inhabited to some extent in the 16th and early 17th centuries (Carlsson 1982b: 40, Fig. 57). In addition to glazed earthenware, mainly grey and inconsistently fired

earthenware is known from the site from the older periods (Carlsson 1982a: 55-58). These were probably both imported and locally produced pottery. Among the glazed earthenware, richly decorated wares from France and England stand out in particular (Carlsson 1982a: 58-59). The composition of the ceramic material found in Gamla Lödöse is more similar to the pottery found in Norwegian towns than in other Swedish medieval towns (Carlsson 1982b: 51). Presumably the location on the west coast also resulted in a more 'Western European' trade pattern in medieval Lödöse.

Detailed information on the proportions of different types of wares is not possible for Gamla Lödöse at the current stage of processing. The finds from the area of the deserted town have been recovered in a number of different investigations. In a first publication on the stratigraphy of Gamla Lödöse, the finds from individual excavations were summarized (Carlsson 1982a: 19-54). The tabular breakdown of individual product groups in this publication provides a rough overview of the quantitative proportions of stoneware from the Weser Uplands in relation to other types of stoneware in different areas of the town (cf. Figure 269).

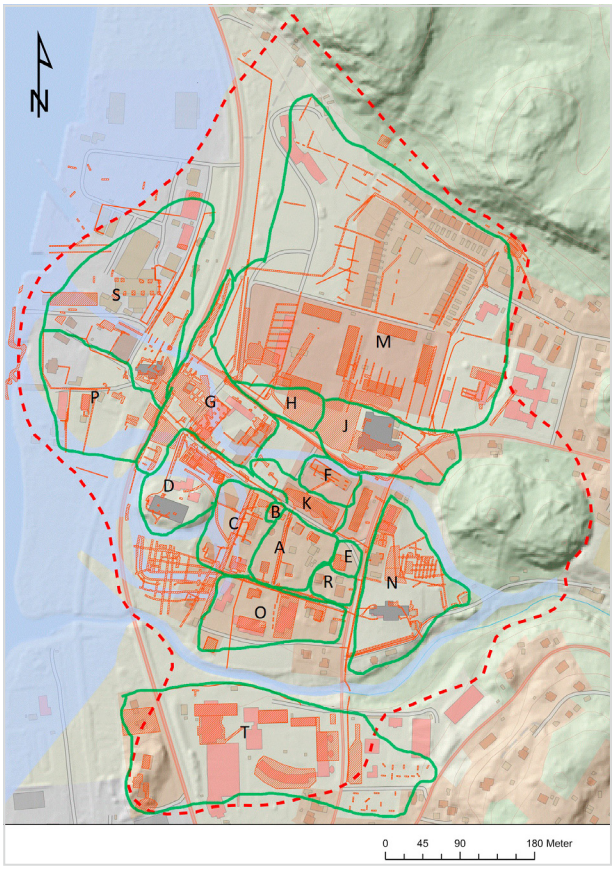


Figure 269. *Map of the urban area of Lödöse with excavation areas and modern buildings. Excavations are shaded red; the letters indicate the higher-level investigation areas. Map: Sonia Jeffrey, Lödöse Museum.*

In the investigation area DC (Carlsson 1982a: 22-30, Fig. 10), which mainly yielded material up to around the middle of the 14th century, a total of 702 fragments of various types of pottery were recovered, from 465 sherd units (Carlsson 1982a: 22). The finds from the excavation, which was only 15 square meters in size, were quite extensive and yielded fragments of almost all ceramic wares known in Lödöse. These include 76 fragments of stoneware, of which 9 fragments were identified as stoneware from the Weser Uplands, representing just over 10% of the stoneware (Carlsson 1982a: 18, Fig. 10).

Another investigation area is the *Project NE*, where about 250 square meters were excavated in the period 1971-74 (Carlsson 1982a: 30-39). Of the total of about 600 ceramic finds, almost half are various unglazed earthenware, about 190 fragments of glazed earthenware and 127 fragments of various stoneware (Carlsson 1982a: 30). Of these, a total of 11 fragments of stoneware from the Weser Uplands were identified with certainty, accounting for slightly less than 10% of the total.

An investigation from 1969 is referred to as *Project AD*, in which a stratigraphic survey of up to 1.5 meters in thickness was carried out over an area of around 120 square meters (Carlsson 1982a: 39-42). Around 1200 ceramic fragments were recovered, of which 307 were classified as stoneware and near stoneware. Among them are also about 40 fragments of an unknown, non-sintered ware ('C1a'), which is characterized by a coarse fabric and a dark coating and dates to the late 12th century (Carlsson 1982a: 39). It is probably a very hard, reduction-fired globular pottery. A total of 12 fragments from this investigation were identified as stoneware from the Weser Uplands, which corresponds to just under 5% of the stoneware. The finds from the survey generally date from the 12th to the 15th century (Carlsson 1982a: 42).

Project C is the name given to an excavation carried out in 1963 in the central part of medieval Lödöse, during which a stratigraphy almost 4 meters thick was investigated over an area of almost 90 square meters (Carlsson 1982a: 43-46). A total of 210 pottery fragments were recovered, 49 of which were classified as stoneware. Six fragments were identified as stoneware from the Weser Uplands, accounting for about 6% of the stoneware finds in this study.

In 1973, central areas of Gamla Lödöse were excavated over an area of around 360 square meters as part of *Project GI* (Carlsson 1982a: 46-51). Around 1100 fragments of pottery were recovered from the stratigraphy, which was up to 2 meters thick, of which 375 fragments were made of various types of stoneware, accounting for around 30% of the pottery material. Only 12 fragments

could be identified with certainty as stoneware from the Weser Uplands, which therefore accounts for only 3.5% of the stoneware in this excavation.

The *Project PE* was a smaller excavation in 1976, during which only 53 pottery finds were recovered (Carlsson 1982a: 54-55). Of these, 22 fragments were of different stonewares, with 6 fragments identified as stoneware from the Weser Uplands. The approximately 1.2 meter thick stratigraphy of the site probably dates exclusively from the 13th and 14th centuries. Subject to the small quantity found, the stoneware from the Weser Uplands represents about 10% of all ceramic finds and 25% of the stoneware recovered near the river port during this investigation.

The excavations listed are the only ones for which basic information on the find situation is available in printed form. Most of the finds of stoneware from the Weser Uplands from Gamla Lödöse come from investigations for which no further data could be obtained. Many of these archaeological investigations were very limited in scope and yielded correspondingly few finds. However, it is striking that a total of 41 fragments of stoneware from the Weser Uplands are available from *Project GB*; this excavation represents the largest single item of this ware from Gamla Lödöse.

The stoneware finds from Gamla Lödöse are all very fragmented and can therefore only be determined typologically to a very limited extent. A total of 86 base fragments, 49 rim fragments and 155 body fragments were recorded, plus 3 fragments of handles. The vast majority of these, 212 fragments, were brown or red-brown slip glazed, while 39 fragments had a light brown surface. The surface of the other pieces could no longer be clearly determined. The shapes of the stoneware from the Weser Uplands follow the familiar pattern. The bases are designed as flat frilled feet, the rims as far as can be determined as collared rims or simple upright rims. Decorative strips, often modeled twice, are characteristic forms of the wall structure; wavy decorative strips appear several times as typical decorative elements of the Weser Uplands.

Remarkable is the rim fragment of a quatrefoil beaker, which has a decoration in the form of rouletting decoration (G.Lod 166 / J-3036; Figure 270). Another form that is otherwise rare in Scandinavian export material is the spout of a small spouted pitcher (G.Lod 251 / OA-1045a; Figure 271). Two examples of double-handled jugs made of stoneware with a light brown surface have also been identified (G.Lod 051 / CA-2037g; G.Lod 062 / DC-341a-c; Figure 272). Otherwise, the

Figure 270. *Rim fragment of a quatrefoil beaker (G.Lod-166) made of near stoneware with reddish wash with rouletting decoration, found in Gamla Lödöse.*

Figure 271. *Spout of a small spouted pitcher (G.Lod-251) made of near stoneware with reddish wash, found in Gamla Lödöse.*

Figure 272. *Rim fragment of a costrel with two strap handles (G.Lod-062) found in Gamla Lödöse.*

Figure 273. *Rim fragment of a jug with collared rim (G.Lod-276) found in Gamla Lödöse.*

fragments of stoneware from the Weser Uplands probably all come from jugs with collared or simple upright rims (cf. Figure 273).

In addition to the stoneware from the Weser Uplands, a total of 10 fragments of Waldenburg stoneware were also identified in Gamla Lödöse on the basis of clear technological and typological characteristics. These include 7 base fragments, as these are easier to distinguish from Siegburg stoneware (Figure 274). As far as can be seen, all the Waldenburg pieces are from jugs. One body fragment (G.Lod 006 / M-2391; Figure 275) shows a handmade beard mask from one of the characteristic, anthropomorphically decorated Waldenburg jugs. The Waldenburg pieces identified in the present work were mainly discovered during the excavations of *project M*, in which the brick-built Dominican monastery in the north of the city was examined.

The summary overview of the stoneware from the Weser Uplands and from Waldenburg in Gamla Lödöse confirms, despite its fragmentary nature, that the town, with its connection to the North Sea, also shows clear impulses from the North Sea region in its ceramic sequence. As in Bergen, stoneware from the Weser Uplands is regularly present in layers from the late 13th century to around the middle of the 15th century, with evidence of jugs being predominant. However, the stoneware is clearly dominated by Siegburg products. It is often difficult to distinguish Waldenburg stoneware from these, which also occurs with a certain regularity as a special form that is remarkable in terms of cultural history.

Figure 274. *Base fragment of a small jug made of Waldenburg stoneware (G.Lod-006), found in Gamla Lödöse.*

Figure 275. *Body fragment of Waldenburg stoneware with parts of a hand-moulded beard mask (G.Lod-006), found in Gamla Lödöse.*

7.2.2 Stockholm

Only a few lines can be devoted to the occurrence of stoneware from the Weser Uplands in Stockholm. The city was founded in the 13th century and was heavily influenced by German settlers from the Hanseatic cities (Wubs-Mrozewicz 2004). Archaeological monument preservation was and is carried out very thoroughly in Stockholm, but for the present work it was possible to consider mainly the published finds from an older large-scale excavation.

In 1978-80, an area of around 8000 square meters was excavated on the island Helgeandsholmen, which was settled in the late Middle Ages and was located in front of the actual medieval old town of Stockholm (Dahlbäck 1983). The name of the island is derived from the Holy Spirit Hospital located there. In the course of the excavation, around 260 find numbers were assigned to stoneware-like ceramic vessels (Dahlbäck 1983: 213). These are primarily dated to the end of the 13th and the 14th century. Based on the published illustrations, some stoneware vessels from the Weser Uplands can be clearly identified. Outstanding is a funnel-shaped beaker made of brown slip glazed stoneware with frilled foot and three wavy decorative strips (Dahlbäck 1983: 205, Pl. 22). Some fragments of larger jugs with a shiny, partly stained, brown slip glazed surface are also likely to come from the Weser Uplands (Dahlbäck 1983: 209, Pl. 28). This probably also applies to a series of brown engobed,

single-handled miniature vessels that strongly resemble vessels from Coppengrave (Dahlbäck 1983: 214; Fig. 171). On the basis of the published finds, it is not possible to make any further statements about the occurrence of stoneware from the Weser Uplands in Stockholm, but it should be noted that it was obviously part of the common ceramic inventory in the late Middle Ages. Stoneware from the Weser Uplands was very well represented in Stockholm, especially in the 14th century, as evidenced not least by characteristic slip glazed stoneware jugs from various places in the old town (Gaimster 2002: 195-196). Waldenburg stoneware is also regularly found in Stockholm and Saxon stoneware was probably an important competitor to Rhenish products there in the 15th century (Gaimster 2002: 195-197). In addition to the simple Waldenburg jugs, there are also several examples of richly decorated stoneware from the Falke group in Stockholm, which was very probably also produced in Saxony (Gaimster 2002: 196).

7.2.3 Rest of Sweden with Kalmar and Lund

Of the numerous other medieval towns in Sweden, only a few from which significant quantities of pottery finds of the wares worked have been published can be considered here.

The city of Kalmar on the Baltic coast is still characterized today by a mighty castle built in the 13th century, which protects and controls the harbour. Kalmar's importance can also be seen in the fact that the union of the three Nordic kingdoms of Sweden, Denmark and Norway was agreed here in 1397 (Gaimster and Elfwendahl 1998: 95). During the years 1932-1934, around 100,000 cubic meters of sludge were manually removed from the harbour basin as part of a job creation scheme. A vast number of medieval and early modern finds were recovered, including over 30,000 ceramic vessels in varying states of preservation (Gaimster and Elfwendahl 1998: 97; see also Figures 276-278 in this volume).

These are now stored in the Kalmar Museum and the Statens Historiska Museum in Stockholm. The ceramic finds date from the 13th to the first half of the 17th century. About 1700 vessels, approximately 5.5% of all finds are imported, of which about three quarters are stoneware, especially from the Rhineland, but also from Waldenburg and the Weser Uplands (Gaimster and Elfwendahl 1998: 99). During a brief visit to the storerooms of the Statens Historiska Museum in Stockholm in April 2016, several typical jugs of stoneware from the Weser Uplands were identified among the finds

Figure 276. *Historical photograph of finds recovered from Kalmar harbour in the 1930s. Photo: Kalmar läns Museum.*

Figure 277. *A stoneware jug from the Weser Uplands with partially burnt wash in the store of the Statens Historiska Museum Stockholm; Kalmar Slottsfjärden Collection.*

Figure 278. *A stoneware jug from the Weser Uplands with light brown firing skin in the store of the Statens Historiska Museum Stockholm; Kalmar Slottsfjärden Collection.*

from the port of Kalmar (Figures 277-278). The finds from Kalmar represent one of the largest find complexes of medieval pottery in the Baltic region, although it still awaits comprehensive analysis. The presence of stoneware from the Weser Uplands among the Kalmar finds thus indicates the prevalence of this ware in the ceramic spectrum of Northern Europe.

The town of Lund, located in what is now the Swedish landscape of Scania, became the oldest bishop's seat in Scandinavia in the 11th century and, like the whole of Scania, belonged to Denmark until the middle of the 17th century. Since the late 19th century, various archaeological excavations have been carried out in the town, during which a very large number of medieval and early modern finds were recovered, including a great deal of pottery (Gaimster 1998: 159). From the 13th century onwards, it is also apparent in Lund that stoneware was increasingly used as tableware and drinking vessels instead of lead-glazed earthenware (Gaimster 1998: 165). Rhenish stoneware predominates, with Siegburg being the most important production site. However, ten different sites in Lund also yielded jugs made of the characteristic slip glazed stoneware from the Weser Uplands (Gaimster 1998: 170, Fig. 6). Waldenburg stoneware is attested from eleven sites in the city area, mostly in the form of slender tall jugs, but also as fragments of an elaborate 'hedgehog vessel' (Gaimster 1998: 170-172, Fig. 9). Several examples of relief-decorated stoneware from Lund date from the 16th and 17th centuries, occurring in smaller numbers but regularly throughout the city (Gaimster 1998: 173). These include an almost complete Siegburg *Schnellen* and a Waldenburg *beehive tankard* (Gaimster 1998: 174-175, Figs. 10-11). Remarkably, the Siegburg *Schnellen* bears the coat of arms of the Kingdom of Sweden as a relief application, while Lund belonged to the Kingdom of Denmark, which was repeatedly at war with Sweden in the 16th and 17th centuries. Further finds of relief-decorated stoneware from various Rhenish production sites are also available from Malmö, from where a fragment of a beaker decorated with a wavy rim from the Weser Uplands has also been published (Gaimster 1997: 67-69, Figs. 3.21-3.28).

A complete funnel-necked beaker from Waldenburg is known from the small Scanian town of Ystad (Gaimster 1997: 69; Fig. 3.29). Several Waldenburg stoneware jugs, some with anthropomorphic decoration, were discovered at Skanör Castle in Östersund, from where the Danish royal power supervised the important Scanian fair on the Falsterbo peninsula (Gaimster 1997: 177; Fig. 3.33). These finds illustrate the widespread distribution of Waldenburg stoneware in the Baltic region.

7.3 Stonewares in Finland and the Baltic States

7.3.1 Finland

In the archipelago of the Finnish south coast, the wreck of a ship was discovered in 1996 in the municipality of Nauvo, near the rocky island of *Egelskär*, whose cargo included several hundred vessels of slip glazed near stoneware from Bengerode / Fredelsloh (Tevali 2010: 6). Among them are mainly bulbous and cylindrical jugs, some decorated with wavy strips, but also seven quatrefoil beakers (Tevali 2010: 59-65). In addition to the pottery, other components of the load were also found, such as prefabricated whetstones made of Norwegian Eidsborg slate, iron ingots, limestone and a bronze church bell (Tevali 2019: 70). Presumably there were also barrels of salt and / or grain on board, but no traces of these have survived. The ship probably represents a trading vessel with mixed cargo, which seems to have been common in the Hanseatic region in the late Middle Ages. The find complex is typologically dated to the end of the 13th century. At the present time, the wreck find from Egelskär is the best and clearest evidence of trade in stoneware from the Weser Uplands in Northern Europe.

In addition to the Egelskär wreck, stoneware vessels from the Weser Uplands have also been found on other ships along the Finnish coast. On the so-called *Lapuri ship*, which was discovered in the waters shortly before today's Russian border, a jug made of Siegburg stoneware and a jug made of stoneware from southern Lower Saxony were found (Tevali 2019: 70-71). Finds from an excavation on the Hanko Peninsula, where fragments of this ware represented the largest group of medieval pottery, show that stoneware from the Weser Uplands was also present in settlements in rural southern Finland (Jansson et. al. 2010: 76).

The wreck of *Metskär* from the Hitis archipelago, between Turku and Helsinki, dates from the late 16th century (Edgren 1978: 84-89). In addition to several cooking vessels made of red, lead-glazed earthenware of Dutch provenance, two stoneware vessels decorated in relief are recorded from this site. These are a globular Frechen Bartmann jug with an inscription frieze (Edgren 1978: 85; Fig. 1) and a Siegburg *Schnellen* with the coats of arms of Denmark and Jülich-Kleve-Berg (Edgren 1978: 85-88; Fig. 2 a & b). It remains unclear whether the stoneware vessels were on board the presumably Dutch ship as cargo or as the skipper's property. With regard to the original ports of destination of the ships mentioned, it can only be assumed that the city of Reval, today's Tallinn, as the nearest Hanseatic city, may have been a possible destination for the ships wrecked in the difficult waters of the Finnish archipelago (Tevali 2019: 73).

7.3.2 Estonia

Thanks to many years of intensified archaeological research in recent decades, a rough overview of the ceramic finds from Tallinn has been obtained (Mäll and Russow 2000). Stoneware from the Weser Uplands seems to have been clearly represented there in the 14th century and into the 15th century (Mäll and Russow 2000: 127). Waldenburg stoneware appears more frequently in Tallinn from the 15th century onwards and is a direct competitor of Siegburg stoneware.

The imported pottery of various smaller towns in western Estonia has been comprehensively researched and presented as part of a dissertation (Russow 2006). In the late Middle Ages, coastal towns such as Lihula / Leal, Haapsalu / Hapsal and Pärnu / Neu-Pernau belonged to the territory of the Bishopric of Ösel-Wiek and the Livonian Order, which was affiliated to the Teutonic Order. In the course of the 16th century, the region came under the rule of the Swedish crown. Stoneware from the Weser Uplands is regularly found in almost all towns in the region in the late Middle Ages, and in Lihula it accounts for around a third of all stoneware finds towards the end of the 13th century (Russow 2006: 244). Among the published finds are mainly fragments of jugs, but there is also an almost complete miniature vessel, which typologically can most likely be dated to around 1400 (Russow 2006: 148, Fig. 48). In Haapsalu, stoneware from the Weser Uplands dominated over its Rhenish competitors towards the end of the 13th and up to the middle of the 14th century (Russow 2006: 245). These are also predominantly fragments of different jugs (Russow 2006: 156-157, Figs. 55-56). Even though Siegburg stoneware dominates there in the late 14th and 15th centuries, light brown stoneware from the Weser Uplands can be traced into the 15th century (Russow 2006: 246). In addition to medieval stoneware, fragments of Renaissance relief-decorated stoneware from Siegburg, Raeren and the Westerwald are also found in Haapsalu (Russow 2006: 162-163). Among them is a fragment of a vanitas depiction on a cylindrical tankard, presumably of Raeren production. This is obviously identical in model to the relief application of the jug from the municipality of Øyer in Norway presented in Chapter 7.1.5. The situation in Pärnu is almost the same as in the other towns of western Estonia (Russow 2006: 248). Several fragments of Waldenburg stoneware jugs from there have also been published (Russow 2006: 172-173, Figs. 73-74).

In view of the large quantities of imported stoneware in the towns of western Estonia, it can be assumed that there was regular trade in this ware (Russow 2006: 251). Finds of simple tableware made of Duingen stoneware from the late

16th century can also be found in rural Estonia (Russow 2006: 197).

While the above-mentioned sites in Estonia all had direct access to maritime trade, the city of Tartu lies almost 200 kilometres from the coast, on the land route to Novgorod. Thanks are due to Arvi Haak of the Tartu City Museum for pointing out a complete jug with spout made of slip glazed stoneware from the Weser Uplands, which was recovered in 1989 in a wooden cesspit on Lossi Street (Figure 279).

Figure 279. *Slip glazed stoneware jug from the Weser Uplands, found in a cesspit in Lossi Street in Tartu / Estonia. Photo: Arvi Haak, Tartu City Museum.*

Together with the jug with find number A-470, a miniature vessel with find number A-486 was also discovered, which probably also comes from the Weser Uplands (Maesalu 1990: Pls. XXXIII, 5, 6). A total of six different wooden sewers with rich find material were examined there, dating from the end of the 13th to the beginning of the 15th century (Maesalu 1990: 451). Unfortunately, the published information does not reveal the contexts in which the individual finds were recovered. In addition to the imported stoneware vessels, a rich ensemble of enamel-painted glass jars stands out, including very high-quality pieces with pelican decoration and inscriptions in Gothic letters (Maesalu 1990: 446-447, Pls. XXXII 1-4). What is remarkable about the find from Tartu is the occurrence of the imported stoneware far from the coast, which is clear evidence of transportation by overland trade routes. The city of Tartu lies on the old overland route from the coast to the Russian trading metropolis of Novgorod. That such transportation took place is also shown by finds of stoneware from the Weser Uplands in Novgorod, which were discovered there in small numbers, especially in districts frequented by German merchants (Gaimster 2001: 70; Tab. 1, 75, Fig. 6-49).

7.4 Stonewares in Denmark

7.4.1 Eastern Denmark

In addition to the finds mentioned above in Chapter 7.2 from the now Swedish towns in Scania, such as Ystad, Lund and Malmö, which belonged to the Kingdom of Denmark until the mid-17th century, a number of finds of the types of ware found have also been published from the rest of Denmark. Of particular chronological importance here are vessels containing coin hoards, which were already presented monographically at the end of the 1970s (Liebgott 1978). Against the background of the state of research at the time, all stoneware vessels were generally referred to as products of the Rhineland. Based on the published descriptions, photographs and drawings of the finds, several of these pieces can very probably be identified as stoneware from the Weser Uplands and Waldenburg.

A small, complete, slender jug with spout made of grey, slip glazed stoneware was discovered as early as 1910 in the Torvestrede in the small town of Stege on the island of Møn (Liebgott 1978: 70, Cat. 32, Figs. 81, 82). The surface and the shape of the frilled foot strongly suggest that the piece was made in one of the potteries of the Weser Uplands. The youngest coin in the hoard of 41 coins and costume jewellery was minted after 1353.

Near Lynge, in the municipality of Sorø in the south of the island of Zealand, a miniature vessel made of grey stoneware with a light brown surface was discovered in 1885 on a plot of land belonging to the former vicarage (Liebgott 1978: 72, Cat. 33, Figs. 84, 85). This contained 34 North German bracteates, suggesting that it was laid down shortly after 1350. The miniature vessel is very similar to corresponding pieces from Coppengrave and can very probably be regarded as a product of the potteries there (Stephan 1981: 44, Pls. 59-61).

An almost identical miniature vessel was discovered in 1899 in the town of Grenå in the county of Randers in eastern Jutland (Liebgott 1978: 90, Cat. 43, Figs. 105-106). It contained 14 copper coins minted under Erik of Pomerania in 1422. This piece is also very likely to have been made in the Weser Uplands.

The base fragment of a jug made of brown slipped stoneware with a flat base and frilled foot was found in 1863 near Roneklint, in the municipality of Bårse in southern Zealand (Liebgott 1978: 77, Cat. 36, Figs. 91- 92). The vessel can be identified as a product from the Weser Uplands on the basis of the surface treatment and the shaping of the base section. A total of 503 coins were discovered in the treasure jar, mainly North German witten, the most recent of which was minted before 1381. The final coin is a Swedish Örtug, which was minted under King Albrecht, who reigned from 1364-1389. The jug with the treasure was probably hidden shortly after 1380.

Another coin hoard from the town of Stege on the island of Møn was concealed in a bulbous jug made of light grey Waldenburg stoneware with a light brown surface (Liebgott 1978: 88, Cat. 42, Figs. 103-104). In particular, the characteristic surface colouration and the flat base with a faintly pronounced frilled foot clearly identify the piece as a Waldenburg product. The treasure contained 1669 coins; the most recent coins were minted under the Pomeranian dukes Barnim VIII and Svantibor II after 1415. The deposition of the treasure vessel can therefore very probably be dated to around 1420.

It is striking that all the stoneware treasure vessels from the Weser Uplands and Saxony were discovered in the eastern regions of Denmark and date to the late 14th and early 15th centuries. Most of the older treasure vessels are known to be made of grey or glazed earthenware, occasionally also of proto-stoneware. The finds presented here were all discovered close to the shipping lanes frequented by Hanseatic ships.

7.4.2 Jutland

Remarkably few finds of stoneware from the Weser Uplands are known from the Jutland peninsula, which forms the western part of Denmark. Only in the towns of Haderslev and Kolding in southern Jutland have fragments of medieval stoneware been recovered that were very probably made in Weser Uplands (Linaa 2006: 119). During an excavation in the core of the small trading town of Haderslev, several stoneware fragments were recovered which, on the basis of surface and wavy foot design, can be confidently identified as products of the Weser Uplands (Kristensen 2015: 152, Fig. 105). These pieces are only generally dated to the period between 1250-1500; stoneware as a whole represents just under 2.5% of the ceramic finds from this phase in the find material from the 'Møllestrømmen' excavation in Haderslev (Kristensen 2015, 154, Tab. 8). In the presentation of finds from Aalborg in the north of the Jutland peninsula, explicit reference is made to the fact that no stoneware from southern Lower Saxony could be identified in the otherwise comprehensive find material (Klingenberg 2010: 103). This finding may be explained by other trade or distribution patterns. Waldenburg stoneware is also occasionally found in Jutland (Linaa 2006: 118). A remarkable example is an almost complete slender face jug made of Waldenburg stoneware, which was discovered as early as 1912 in the area of the former castle 'Rosborg' near Vejle (Linaa 2006: 118, Fig. 45).

Figure 280. *Raeren Schnelle with the coat of arms of the Dukes of Pomerania and the date '1580' from the hunting lodge 'Grønngård' in southern Jutland.*

Renaissance relief-decorated stoneware appears repeatedly throughout Denmark, but in limited numbers and predominantly in higher social milieus (Linaa 2006: 171). Raerener *Schnellen* with coats of arms were found in Copenhagen and Roskilde (Gaimster 1997: 70), but also in the ruins of Duke Hans' hunting lodge 'Grøngård' in southern Jutland (Linaa 2006: 118; Fig. 44). On the *Schnelle* from the aristocratic milieu of the hunting lodge there is an elaborate coat of arms medallion with the coat of arms of the Dukes of Pomerania and the date '1580' (Figure 280). Sev-

eral fragments of relief-decorated stoneware were also recovered in the town of Aalborg in northern Jutland, including those from a Siegburg *Schnellen* as well as a Cologne Bartmann jug and a Westerwald baluster jug with a Landsknecht frieze (Klingenberg 2010: 101-104).

7.5 Stonewares in Wendish Hanseatic towns

7.5.1 Lübeck

The 'Queen of the Hanseatic League', Lübeck, which was founded at the end of the 12th century, stands out with its exemplary heritage management including the archaeological remains. Since the 1970's, numerous archaeological investigations have been carried out. The pottery from a quarter of the documented excavations, a total of around 185,000 finds, was comprehensively processed and presented in a monograph in 2015 (Drenkhahn 2015). Stoneware from the Weser Uplands was not recorded separately in Lübeck, however, but is found in various technologically defined subgroups. Thus, a relevant part of the slip glazed near stoneware documented in Lübeck was probably produced in potteries in the Weser Uplands, while other pieces are more likely to have come from Langerwehe or other Rhenish production sites (Drenkhahn 2015: 162-167). In particular, the processor identifies the spouted pitchers made of slip glazed near stoneware as products of the Weser Uplands (Drenkhahn 2015: 166, Fig. 96). The proportion of near stoneware in Lübeck ceramics as a whole is given as around 3-5%, with a focus in the second half of the 14th century (Drenkhahn 2015: 167). The proportion varies greatly at different excavation sites and appears to be highest in the former craftsmen's quarter (Drenkhahn 2015: 235, 291, Tab. 29).

Stoneware, which accounts for only about 2% of the total ceramic output in Lübeck, was primarily divided into 'Siegburg stoneware' and 'grey stoneware', with the latter being found to be *'... often difficult to separate from corresponding near stoneware...'* (Drenkhahn 2015: 181). The author assumes that a considerable proportion of this 'grey stoneware' was produced in the Weser Uplands.

Late medieval stoneware from Waldenburg has not been independently identified in Lübeck, although a slender jug attributed to Siegburg shows a characteristic hand-moulded beard mask as is typical of Waldenburg pieces (Drenkhahn 2015: 175, Fig. 102). It is striking that hardly any relief-decorated stoneware from Siegburg from the Renaissance period has been published in Lübeck; only a single fragment of a *Schnelle* is cited (Drenkhahn 2015: 172-173). Small, simple moulded roundel medallions from the late Middle Ages, on the other hand, are often found at (Drenkhahn 2015: 172-174, Figs. 100-101). Relief-decorated stoneware from Raeren, Cologne / Frechen and the Westerwald was apparently recovered rather rarely in Lübeck, where it is considered a 'distinct luxury item' (Drenkhahn 2015: 185, Figs. 110-113). Relief-decorated stoneware from Duingen also appears occasionally, such as an application in the form of a lion's head from the site of the former castle monastery (Drenkhahn 2015: 181; Fig. 107.2).

7.5.2 Mecklenburg-Western Pomerania

Stoneware finds from the numerous medieval towns in Mecklenburg-Vorpommern have been extensively studied by Heiko Schäfer since the late 1980s (Schäfer 1991). Due to the enormous increase in the work of archaeologists, particularly in the 1990s, a comprehensive ceramic chronology for the area on the south-western Baltic coast and its hinterland was compiled on the basis of this wide range of material (Schäfer 1997). In cities such as Wismar, Rostock, Stralsund and Greifswald, but also in inland towns such as Neubrandenburg, Güstrow and many others, numerous find complexes of medieval pottery were recorded. Stoneware from the Weser Uplands, especially red-brown slip glazed near stoneware, is therefore particularly well represented in the decades around 1300 and is a characteristic ware of this phase (Schäfer 1997: 320). From around 1320 until the end of the 14th century, on the other hand, Siegburg stoneware dominates, but stoneware from the Weser Uplands can also be found in both slip glazed, and non- slip glazed variants in the towns of Mecklenburg-Vorpommern (Schäfer 1997: 326). From the end of the 14th century and in the 15th century, jugs made of Waldenburg stoneware increasingly appear in the area, while stoneware from the Weser Uplands is obviously no longer strongly represented (Schäfer 1997: 329). Waldenburg stoneware was recognized early on in north-eastern Germany as a distinct ware with important cultural-historical implications (Schäfer 1993). However, the naming of Waldenburg jugs as 'Saxon stoneware of Siegburg type' (Schäfer 1997: 326) may have contributed to confusion rather than shedding light on this ware.

It should be noted that stoneware from the Weser Uplands occurs regularly and in considerable quantities in Mecklenburg-Western Pomerania in the late 13th and 14th centuries. From the late 14th century onwards, jugs made of Waldenburg stoneware increasingly appear in competition with stoneware from Siegburg, which clearly dominates the ceramic spectrum of the 14th and 15th centuries (Schäfer 2005: 104). Renaissance relief-deco-

rated stoneware in the form of *Schnellen*, jugs and jugs with spouts from Siegburg, Cologne, Frechen, Raeren and the Westerwald, reached Mecklenburg-Vorpommern 'in large quantities' (Schäfer 2005: 105).

7.6 Stonewares in Bremen

Repeated reference has been made to the key position of the city of Bremen for the distribution of stoneware from the Weser Uplands. The old episcopal city on the lower reaches of the Weser was the hub between inland and maritime trade and was an important trading city with staple rights. It is therefore not surprising that an early overview of medieval and modern ceramics in Bremen already presented stoneware finds that were available in 'almost immense' numbers (Grohne 1940: 92). These include relief-decorated Siegburg *Schnellen* and funnel beakers, as well as jugs from Raeren, Westerwald and Duingen. Individual pieces of late medieval stoneware from the Weser Uplands, such as costrel with two strap handles and jugs with collared rim decorated with a roll stamp, have also been illustrated there (Grohne 1940: Figs. 60 and 68).

Over the last few decades, the archaeologists of the city state of Bremen have repeatedly been able to recover and document numerous finds and features from the Middle Ages and the Early Modern Period, sometimes under difficult conditions. Some of these have already been published in various forms. Thanks to Ms. Uta Halle and Mr. Dieter Bischop from the State Archaeology Department of Bremen, the author was able to view finds in the State Archaeology Department's storerooms in January 2014.

In connection with the recovery of the remains of a medieval ship, which was excavated in 1992 in the silt at the Schlachte, the former harbour of Bremen, numerous ceramic finds also came to light, which were embedded in this harbour silt (Rech 1995). These probably represent vessels that were lost during loading or unloading or ended up in the harbour for other reasons. In terms of stoneware, products from Siegburg dominated 'as everywhere in Bremen's old town', but stoneware from the Weser Uplands also appeared regularly (Rech 1995: 48).

In 1997, during an emergency excavation at Hutfilterstraße 16/18 on the edge of Bremen's old town, several sunken features from the late Middle Ages were unearthed, which contained remarkable ceramic ensembles (Stubbe 1998). In the backfill of the brick well *Feature 4*, which was erected on a wooden box (Stubbe 1998: 48), several fragments of brown slip glazed stoneware from the Weser Uplands were recovered together with fully developed Siegburg stoneware (Figure 281). This brick well was cutting an older wooden barrel, feature 5, in which an almost complete jug of grey stoneware with a brown firing skin was discovered (Figure 282). The forming of the base, the fabric, the surface and other formal details of this vessel indicate that it was made in the potteries of the Weser Uplands. The excavator dates the find to 'around 1300 or the 14th century' (Stubbe 1998: 49). This dating seems quite plausible for the large jug with strap handle and collared rim. Several pottery fragments were also found in another feature of the excavation, the elongated pit of feature 8, which was filled with slag, animal charcoal and other waste (Stubbe 1998: 51). In addition to numerous fragments of Siegburg stoneware, there were also some red-slipped and brown fragments, which can be clearly identified as products of the Weser Uplands based on the characteristic iron wash.

Figure 281. *Fragments of stoneware from the Weser Uplands and Siegburg stoneware from the backfill of a brick well in Hutfilternstraße in Bremen.*

In the winter of 2000/2001, an excavation in the centre of Bremen's old town at site 193 / stock exchange documented not only early medieval features but also a small wooden cellar that had been filled with fire debris and household goods around 1450 (Bischop 2002; Rech 2004: 133). An extensive ceramic ensemble with a lot of grey earthenware and numerous stoneware vessels was recovered from this backfill (Rech 2004: 225, Fig. 239). This is probably a relevant part of the ceramic inventory of a household in this wealthy quarter of the city. Noteworthy is the occurrence of slender jugs of fully developed red-fired Siegburg stoneware together with a bulbous jug of red-brown slip glazed stoneware from the Weser Uplands (Figure 283). A rim fragment of a costrel with two strap handles and a rim fragment of a brown engobed jug from southern Lower Saxony were also discovered in the same context.

Figure 282. *Almost complete stoneware jug from the Weser Uplands, found in a 14th century feature in Hutfilternstraße in Bremen.*

Following the demolition of a cinema in the winter of 2006, a number of sunken features were documented on the northern edge of the old town, from which numerous stoneware fragments were recovered (Bischop 2008a). A waste pit filled mainly with butcher's waste and dated to the 15th century contained numerous stoneware fragments, including an animal figurine made of red slipped stoneware (Bischop 2008a: 66; 69, Figs. 9 and 11). Several of these stoneware fragments can be confidently identified as stoneware from the Weser Uplands on the basis of the shape of the base and the brown surface, characterized by reddish slip glaze and iron precipitations (Figure 284). A base fragment of a brown-slipped stoneware jug from the Weser Uplands was also found in the backfill of a brick cesspit, whose find material was mainly characterized by drinking jars from the middle and second half of the 15th century (Bischop 2008a: 70-72, Figs. 13-15).

In summary, the listed finds from Bremen show that, as expected, stoneware from the Weser Uplands is present there in considerable quantities and was obviously in regular circulation until the 15th century. Waldenburg stoneware, on the other hand, has not yet been identified in Bremen.

Insofar as early modern finds from Bremen have been published, Renaissance relief-decorated stoneware is also repeatedly found there. Even in

Figure 283. *Small bulbous jug made of slip glazed stoneware from the Weser Uplands and almost complete jug made of Siegburg stoneware, both found in the remains of a wooden cellar in Bremen that burned down around 1450, at the site of the stock exchange.*

Figure 284. *A selection of different fragments of stoneware from the Weser Uplands and the Rhineland, recovered from a garbage pit (feature 9) at the 'Stern Kino' excavation in Bremen, probably 15th century.*

the periphery of the medieval city, fragments of jugs from Raren and Cologne with rich relief decoration were found in various disposal shafts (Bischop 2008b: 87-88, Figs. 4 and 5.1). Fragments of Siegburg *Schnellen* with elaborate relief decoration with biblical motifs were found relocated in the backfill of the city moat together with other richly decorated pottery from the period 'around 1600' (Bischop 2008c: 164, Figs. 5-6).

7.7 Stoneware from the Weser Uplands in Hamburg

Trade with Norway was only of minor importance for Hamburg's foreign trade, even though a number of ships regularly sailed to Bergen from the 15th century onwards, mainly exporting grain and beer (Lorenzen-Schmidt 2019; 68). One of the most extensive published complexes of late medieval pottery from Hamburg is in the form of finds from backfill layers on the edge of the old town of Hamburg, which were recovered during old excavations after the war (Först 2007: 110). Stoneware from the Weser Uplands in various models makes up a high proportion of the pottery from this site and is more strongly represented than stoneware from the Rhineland (Först 2007: 133). There are mainly jugs with collared rims and frilled feet made of red and brown slipped stoneware and near stoneware, occasionally with rouletting decoration on the rim and wall, the production of which is assumed to be predominantly from the Weser Uplands (Först 2007: 124-130, Figs. 20-23). These finds indicate that the archaeological pottery finds from Hamburg's Old Town have considerable potential for research into these wares, which still largely awaits processing and publication.

7.8 Stonewares in selected cities of Lower Saxony

After the previous chapters have given an overview of the occurrence of the examined wares in various regions and cities of the North Sea and Baltic Sea area, the situation in the *Hanseatic* interior will also be examined. Particular attention will be paid to the immediate vicinity of the production sites of stoneware from the Weser Uplands, which belonged to the Hanseatic district of Lower Saxony.

7.8.1 Einbeck

In the *beer town* of Einbeck, which is only about 10 to 25 kilometers away from the pottery centres of Bengerode / Fredelsoh and Coppengrave / Duingen in southern Lower Saxony, archaeological research has been carried out regularly since 1991 (Heege 2002: 59). Due to the close proximity to the two production sites, it is not surprising that typical Weser Uplands stoneware is regularly recovered there during investigations. Red slip glazed near stoneware and brown stoneware from nearby producers can be found in sewers and other features in Einbeck's old town from the mid-13th century up to the early 15th century (Heege 2002: 257-258, Figs. 541-542). During a visit to the Einbeck City Archaeological Museum in the summer of 2020, the author was able to view several find complexes containing these wares. The regional stoneware is mainly in the form of beakers and jugs; a special feature is an inkwell made of red slip glazed near stoneware (Heege 2002: 258; cf. also Figure 285).

Figure 285. *Inkwell made of red-glazed stoneware, from Einbeck.*

The brown regional stoneware still appears at the beginning of the 15th century together with Siegburg stoneware and cookware made of glazed and grey earthenware in a cesspool at Marktplatz 5/7 (Heege 2002: 258, cf. also Figure 286). In the late 15th and 16th centuries, small costrels with two strap handles and face jugs of very probable Duingen provenance were in use in Einbeck (Heege 2002: 260-262, Fig. 248). From the mid-16th and early 17th centuries, stoneware vessels decorated in relief appear from Duingen, Waldenburg and the Westerwald (Heege 2002: 270, Fig. 571).

Figure 286. *Small stoneware jug from the Weser Uplands, found in a cesspit on the market square in Einbeck from the early 15th century.*

7.8.2 Höxter, Corvey and Nienover

The town of Corvey, located directly next to the monastery of the same name on the Weser, was permanently destroyed in 1265 and was not rebuilt afterwards, but largely abandoned (Stephan 2000: 110). In a stone cellar of the deserted town, which can probably be attributed to the so-called *Surgeon of the Weser*, an ensemble of various jugs with collared rim made of slip glazed near stoneware from the Weser Uplands was found, which dates to the time horizon of this destruction (Stephan 2000: 107-108, 736, Fig. 128). This provides reliable evidence for the appearance of slip glazed near stoneware from this region in the second half of the 13th century.

After the destruction of Corvey, nearby Höxter became the most important trading town in this section of the Weser River and was mentioned in documents as a member of the Hanseatic League in 1295 (Streich 2015: 80). Stoneware from the Weser Uplands is well represented in finds associated with the construction of the town hall towards the end of the 13th century (König 1994: 162). In the course of the 14th century, regional stoneware in Höxter was largely displaced by Siegburg stoneware, although serving and drinking vessels in similar shapes made of grey earthenware of re-

gional production are still common (König 2011: 130). In the 15th century, stoneware from the Weser Uplands is only rarely found in Höxter and is largely replaced by Siegburg stoneware, although the known production sites are only 20 to 40 kilometers away (König 1994: 160; König 2007: 126). However, individual drinking cups and costrels with two strap handles from Coppengrave continue to be found in Höxter in the first half of the 15th century (König 2007: 127, Figs. 3, 1-3).

Different forms and variants of stoneware from the Weser Uplands appear in the deserted town of Nienover in Solling from around the middle of the 13th century, with stoneware rarely accounting for more than 2% of the total pottery assemblage (König 2009: 256). The finds from the town, which was destroyed around 1270, show the characteristic types of stoneware from the Weser Uplands, such as globular quatrefoil beakers, as well as steep and jugs with collared rims, some decorated with wavy strips (König 2009: Pl. 13). This proves the early regional distribution of this stoneware, which can otherwise be dated from the mid-13th to the 15th century (König 2009: 61-66).

7.8.3 Hildesheim

From 1986 to 1992, a number of excavations were carried out in the area of the cathedral castle in Hildesheim, which was already documented as a bishop's seat in the 9th century, and the ceramic finds were processed in a dissertation (Brandorff 2010). Against the background of the sovereignty of the Hildesheim bishops over the town of Duingen, it is understandable that stoneware from this production centre accounts for almost three quarters of all stoneware finds from the excavations at the *Bernwardsmauer* (Brandorff 2010: 135, Fig. 37, 145). This pottery is clearly detectable in the 14th and 15th centuries and occurs *en masse* in early modern finds in Hildesheim (Brandorff 2010: 156). In contrast, only two fragments in Hildesheim were identified as near stoneware from Bengerode and Reinhardswald respectively (Brandorff 2010: 162-163).

Only two examples of relief-decorated stoneware from Siegburg were also found in the Hildesheim cathedral castle (Brandorff 2010: 137; Cats. 2359-2360). Only a few fragments of relief-decorated stoneware were also recovered from Cologne / Frechen. Richly decorated stoneware of the *Westerwald type* and from Saxony is also only sporadically represented (Brandorff 2010: 137-141). In contrast, there is evidence of numerous elaborately decorated Renaissance pieces from Duingen in Hildesheim (Brandorff 2010: Pls. 23-29).

The finds from Hildesheim are a clear indication that regional connections and supply lines can have a strong influence on the pottery produced at the site. This may explain the high proportion of stoneware from Duingen, which belonged to the domain of the Hildesheim bishops.

7.8.4 Brunswick / Braunschweig

Located north of the Harz Mountains, on the southern edge of the north German Plain, Braunschweig was '…one of the most important cities in the German-speaking world…' in the Middle Ages (Rieger 2010: 17). With up to 17,000 inhabitants and significant commercial activity, Braunschweig was '… always the undisputed head of the (Lower) Saxon quarter of the Hanseatic League…' (Dollinger 1976: 160). Systematic urban archaeology has been carried out in the heavily war-damaged city since the 1970s (Rötting 1997). As part of a large-scale rescue excavation, a quarter on Echternstraße in Braunschweig's old town was investigated between 2003 and 2004, the finds and features of which were processed in a dissertation that also includes a '…verified ceramic chronology…' (Rieger 2010: 13).

A total of around 12,000 ceramic objects with a total weight of over 180 kilograms were recovered during the excavation at Echternstraße. The hard grey earthenware makes up around three quarters of all fragments, or just under 65% of the total weight (Rieger 2010: 175-176, Figs. 130-131). The 645 stoneware fragments in the study represent around 5% of all individual objects, of which the Siegburg stoneware dominates with 440 fragments, compared to the red or brown-slipped near stoneware from the Weser Uplands (Rieger 2010: 176, Fig. 130). When looking at the proportionate weight of the stoneware fragments, it is noticeable that this is very high for the Siegburg stoneware at 12% of the total weight, while the red or brown-slipped near stoneware only accounts for around 1.5% of the total weight of the ceramic finds (Rieger 2010: 176, Fig. 131). The reasons for this discrepancy probably lie primarily in the degree of fragmentation, in addition to the generally much more massive wall thickness of the Siegburg stoneware with the associated higher weight.

The red-slipped near stoneware from the excavation Echternstraße was obviously primarily produced in the Weser Uplands, where it is dated to the late 13th and 14th centuries, but still occurs sporadically in the early 15th century (Rieger 2010: 221). The range of shapes of the red slip glazed near stoneware in Braunschweig exclusively comprises tableware and drinking utensils such as mugs, jugs with spouts and jugs. The brown-slipped near stoneware in Braunschweig is dated to the period from the late 13th to the early 15th century and is found in the form of beakers, jugs with spouts and

miniature vessels (Rieger 2010: 222). The brown near stoneware in Braunschweig was probably mainly produced in the potteries of the Weser Uplands.

Only a small amount of relief-decorated stoneware was recovered from the excavation at Echternstraße in Braunschweig. A well-preserved jug made of Duingen stoneware bears a simple applied relief decoration and probably dates to the late 17th century (Rieger 2010: 242, 417, Pl. 17.7). Stoneware of the 'Westerwald type' was also recovered from the site, including at least one fragment with an oval moulded roundel medallion depicting Jacob the Elder (Rieger 2010: 242, 417, Pl. 17.4). It should be noted that the early modern features in the area under investigation were heavily disturbed by more recent, mostly war-related interventions (Rieger 2010: 233).

The finds from Braunschweig show that stoneware from the Weser Uplands was common pottery in the Hanseatic city, which was around 80 to 100 kilometres overland from the production sites, during the late Middle Ages. This occurrence points to distribution channels that were not exclusively linked to river shipping.

8. Stoneware as a source for contacts between southwestern Norway and the Hanseatic hinterland

The archaeological finds presented in the previous chapters provide access to various aspects of life in the late Middle Ages and Early Modern Period. The objects found reveal a relationship between the regions where the pottery was produced and the places where it was found. The aim of the interpretation is to use the stoneware finds to shed light on various aspects of the economic, social and cultural conditions in these regions. The find material discussed in detail in Chapters 5, 6 and 7 is interpreted against the historical background set out in Chapter 3 and used as a source to answer the questions outlined in Chapters 1 and 2.

The ceramics are the material expression and the material legacy of diverse processes in complex networks in which the pottery was integrated. The vessels provide direct access to the people who were once involved with these objects. Consequently, the archaeological finds can be used as sources for further cultural-historical statements, especially against the background of historical studies on the late Middle Ages and the Renaissance. Questions relating to aspects directly connected with ceramics can be addressed when analysing the finds:

- During transportation from the production site to the final user, the vessels passed through numerous hands - which people may have been involved and why was this particular pottery transported? What trade patterns and transportation routes underlie the distribution of the worked pottery?
- By whom and for what purpose were the stoneware vessels used? Why did the users choose precisely this ceramic ware? Does the use of stoneware represent certain social practices? Can the archaeological material be interpreted as an indicator of a specific set of social practices, in modern social theory often referred to as *habitus* (Arponen 2019)?
- What significance did the decorations on the richly decorated stoneware have for the producers and users of the vessels? What mentalities and cultural identities can be grasped from the decorations? To what extent can decorated ceramics be interpreted as a mirror and mediator of contemporary intellectual life and social aspects?

8.1 Trade and transport in the light of finds of stoneware

The stoneware presented in this work clearly marks the contact between the production and consumption regions - but how was this contact organized, which actor transported the ceramics, and which networks played a role? A central question is also to what extent this exchange was trade or other types of contact? Was the presumed trade primarily in ceramics or rather in other goods (Verhaeghe 1992: 96)? The reconstruction of the trade routes along which the goods may have been transported and the respective actors involved in these events are also important. When discussing the transport routes and trade patterns in detail, the main wares dealt with in this work - stoneware from the Weser Uplands, stoneware from Waldenburg and richly decorated Renaissance stoneware - must each be considered in a different way. Especially in Norwegian historical archaeology, pottery has hitherto often been treated quite sweepingly as an *imported commodity* without taking the complex issues behind the distribution of different wares or even objects into account. Even after the publishing of the epochal book on 'German Stoneware' (Gaimster 1999), which was well received by an expert audience, the difference between the various types of stoneware and their implications on interpretations were not fully considered. The present book will try to take individual aspects of both specific wares, but also objects into consideration, to achieve a comprehensive impression of people and socioeconomic mechanisms connected to use and distribution of stoneware. This approach follows a trend in historic archaeology, as recent studies on early modern earthenware from Iceland show (Lucas, Jónsson and Martin 2021).

8.1.1 Ceramic vessels - commodities, personal possessions or transport containers?

One of the fundamental questions concerning ceramics in an environment far removed from the production area is always whether the vessels could be containers for certain goods. In the case of the stoneware vessels in question, this can largely be answered in the negative, at least for the vast majority of the objects, which can be regarded as jugs, mugs or other types of serving and drinking vessels. In terms of their shape, these are not very suitable for safely transporting their contents over longer periods of time and longer distances. However, the few vessels with a relatively large volume and narrow neck must be explicitly excluded here, in particular the late, bottle-like Bartmann jugs, such as Cat. 1774, from the Dutch shipwreck off the island of Kvitsøy. This was discovered, as already described in Chapter 6.5, together with other similar jars containing 'a foul-smelling yellowish substance' (Molaug 1969: 46). An analysis was carried out that which concluded that the content was mainly animalic fat, most likely from pig, as used in ointments (Mauritzen 1969). The findings suggest that the narrow-necked Frechen Bartmann jugs were containers for lard or ointments on board the Dutch sailing ship that sank in 1677. Regardless of what the contents may have been, it is obvious that in this case the jugs were used as transport containers and not as primary trade or consumer goods. The fact that Frechen Bartmann jugs were used on ships in the second half of the 17th century as containers for both foodstuffs and chemicals such as mercury is also shown by a wreck find off Shetland (Gaimster 1997: 109). The occurrence of stoneware jugs with narrow necks, such as the more recent Frechen Bartmann jugs, is therefore no certain proof of trade in these vessels, but often rather an indication of other substances that were stored and transported in the jugs.

To a certain extent, this may also apply to the Siegburg *Pulle*, which also have a narrow, easily closed neck. In Bergen, only a fragment of a *Pulle* was recovered during the excavations at Bryggen (Cat. 1407). A complete *Pulle*, on the other hand, comes from a presumably Dutch shipwreck in the Bay of Tau near Stavanger (Cat. 1773), and another large fragment of a *Pulle* comes from a harbour on the south coast of Norway (Chapter 7.1.7). These multiple occurrences of *Pullen* in a maritime environment also seems to be confirmed by wreck finds in other regions; apparently the solid vessels with a considerable volume were often used on board Dutch ships (Gaimster 1997: 108-109, Figs. 3.70, 3.72). However, it is more likely that they were used as containers for drinks consumed on board than as packaging for trade goods. In any case, the *Pulle*, which usually only appear as individual pieces, were probably only intended for sale in the rarest of cases, but as harbour finds in Norway are rather an indication of the presence of Dutch sailors.

However, the absolute majority of the stoneware vessels presented in this work are hardly suitable as transport containers for other goods due to their shape and volume. The occurrence in Norway far from the production areas must therefore have other reasons, whereby importation as trade goods and also as personal possessions can be considered. The most significant ware in terms of quantity discussed in this study, stoneware from the Weser Uplands, occurs in such striking numbers in southern Norway that an interpretation of these finds as personal 'souvenirs' seems absurd. In Chapters 5, 6 and 7, the occurrence of this ware in a wide variety of find contexts was described in detail. The dominance of finds from Bryggen, i.e. from the area of the Hanseatic League gateway, over other sites is primarily due to the research situation, as the investigations at this site were much more extensive than at any other site in Norway. However, it is striking that stoneware from the Weser Uplands not only occurs in the Hanseatic Kontor, but also on sites that can be assigned to different social milieus in the city of Bergen. These include residential quarters of presumably ethnic Norwegian citizens such as Lille Øvregate (Chapter 6.11) or Kroken 3 (Chapter 6.13) as well as the castle and residence of the Norwegian king (Chapter 6.1). Stoneware from the Weser Uplands can also be found outside the prominent trading town of Bergen, both on farmsteads (Chapters 6.2 and 6.3) and in the small town of Stavanger (Chapter 6.8). Stoneware from the Weser Uplands can also be found in areas a long sea voyage away from Bergen, such as Trondheim (Chapter 7.1.1), northern and central Norway (7.1.2 and 7.1.3), and the Shetland Islands, which were Norwegian in the Middle Ages (Chapter 7.1.8). The sheer quantity of finds, especially from the area of the Hanseatic trading post, cannot plausibly be explained as the personal 'household equipment' of the merchants, journeymen and apprentices working in the trading post. In Norwegian households in the cities of Bergen, Trondheim and Stavanger, on the various farms, as well as around the royal stewards at Bergenhus Fortress or on the Shetland Islands, the stoneware from the Weser Uplands cannot be regarded as a personal souvenir. On the other hand, the import of these vessels to Bergen to be used there and distributed further is the only realistic explanation for the regular appearance of this ware. The regular occurrence of stoneware from the Weser Uplands in the Swedish trading town of Gamla Lödöse (Chapter 7.2.1) also shows that this pottery was part of the

common pottery range in the eastern area of the North Sea.

8.1.2 Trade routes and distribution patterns of stoneware in the late Middle Ages

The unprecedented discovery of the Egelskär shipwreck in the municipality of Nauvo in the archipelago belt off Turku in south-western Finland proves that stoneware from the Weser Uplands was distributed by sea as a commodity (Tevali 2019: 70). A total of 63 complete or fragmented jugs and quatrefoil jugs made of slip glazed stoneware from the Weser Uplands were recovered from the seabed during the excavation and salvage of the wreck. The researcher estimates the original number of stoneware vessels on board at '... a few hundred' (Tevali 2010: 6). The stoneware was part of the cargo of a smaller merchant ship that called at numerous coastal towns and whose crew traded in various goods. These included blanks of mica schist whetstones, which most likely came from Eidsborg in the south-eastern Norwegian landscape of Telemark (Tevali 2010: 4). It is assumed that the cargo of the ship from Egelskär was purchased in various ports on the southern Baltic coast in order to be resold in Finland or the Baltic states (Tevali 2010: 13). The stoneware from the Weser Uplands could have been acquired in Rostock, Stralsund, Greifswald or Wismar, for example, where slip glazed stoneware from the Weser Uplands was very common around 1300 (Schäfer 1997: 320). In these towns, the whetstones from Eidsborg, which were traded by sea via Skien in south-eastern Norway, were also widely used in the 13th and 14th centuries (Ansorge 2005: 131). Blanks of Eidsborg schist for whetstones served also as tradable ballast both on the Bøle wreck in Skien in Telemark and on the Darss cog, indicating that such goods were part of an extensive coastal trade (Mehler 2009: 101).

The finds from the Egelskär wreck are therefore clear evidence of trade in stoneware from the Weser Uplands in the late medieval Baltic region. A series of other wrecks and natural harbours on the southern Finnish coast, where stoneware from the 13th-16th centuries was recovered, underlines the regularity of the maritime trade in ceramics in general and stoneware in particular (Gaimster 2000: 239). However, the occurrence of this ware in the north-eastern Baltic region is not evidence of direct contact with the production region or with Bremen as an important potter's wheel of maritime trade in stoneware from the Weser Uplands, but rather an indication of the complex nature of long-distance trade and distribution across several stations.

In addition to the archaeological evidence of pottery trade in the Baltic region, there are also a number of archival sources for the trade in pottery from this region from the 15th century onwards (Möller 2008). In the Lübeck pound duty books, the import of 5000 jugs is explicitly mentioned in one case, while in another case the use of barrels as packaging for the vessels is noted for a smaller batch of jugs (Möller 2008: 540-541), although the material of these jugs has not survived. Stoneware, especially from Siegburg, was the dominant ware for pouring and drinking vessels in Lübeck households in the 15th century (Drenkhahn 2015: 224-225). This fact suggests that the jugs listed in the pound duty books were probably made of stoneware. It is noteworthy that the skippers who brought these goods to Lübeck came from other Baltic cities such as Danzig, Wismar or Rostock (Möller 2008: 540-541). As no stoneware was produced in any of these cities, the imported jugs were probably reloaded several times. This distribution pattern can also be demonstrated for Rhenish stoneware in England, where the vessels were evidently shipped on from London or other major ports of import (Verhaeghe 1999: 144-145, Fig. 2).

For the period 'around 1600', there is evidence of numerous exports of pottery from Rostock to Scandinavia and especially to Norway, indicating that the city played an important role as a transshipment port, also for western European ceramics (Möller 2008: 543). This indicates that ceramic vessels were sometimes traded on several times. There therefore appears to have been extensive intermediate trade in ceramic vessels. The delivery of *stenkruse*, i.e. stoneware jugs, from several Wendish Hanseatic cities to various Swedish cities is documented as early as the late 14th and 15th centuries (Möller 2008: 543). Severin van Berchim, who was mentioned in the Lübeck pound duty books in 1493 as the importer of a large quantity of stoneware, very probably came from Cologne (Möller 2008: 547). In the late Middle Ages, Cologne merchants largely controlled the trade in Siegburg stoneware, which was distributed by these closely networked traders across the Rhine to the entire North Sea and Baltic region (Roehmer 2014: 16).

Ceramics were probably not a commodity that could be expected to generate large profit margins, which is why large merchants were probably only active in this segment to a limited extent and Rhenish stoneware in particular was often sold as a by-cargo of the wine trade (Möller 2008: 546). Specialized traders in pottery products in the Baltic region are not recorded in archives until the 17th century and were not very wealthy, which indicates a rather low price for ceramics (Möller 2008: 547). In Denmark, the prices of ceramic vessels are recorded in various documents from the 16th century, which generally show that the price of ceramics was only modest (Linaa 2007: 40-42). Stoneware is clearly the most expensive ware, although its value is clearly lower than that of metal vessels. The

highest price is documented for a stoneware jug with a metal lid, which can also be explained by the material value of the mounting.

Clear archaeological or archival evidence of pottery trade in the North Sea region is rather scarce. From the east English port city of Hull, there are several written references from the second half of the 15th century to the import of various pottery items on ships from the Netherlands and Gdansk (Evans 2019: 98-99, Tab. 2). Most of the documents mentioned rather unspecific vessels or earthenware, but occasionally stoneware (*ollis petrinis*) or forms of the imported goods such as plates or jugs with spouts are explicitly mentioned. The numerous archaeological finds of Rhenish stoneware from Hull are likely to have been imported primarily from Dutch cities (Evans 2019: 117). Although there were also regular trade contacts with Hanseatic cities on the Baltic coast, it is unclear to what extent stoneware was obtained from there, even though archival records repeatedly document the import of a number of 'jugs with spouts' from Gdansk (Evans 2019: 99, 117). From the 16th century onwards, the archaeological finds from Hull also include relief-decorated stoneware from the Rhineland from Cologne, Raeren and Siegburg, which was most likely obtained from Dutch traders, as was the Werraware, which is also documented archaeologically (Evans 2019: 119-120). The distribution of this richly decorated Renaissance earthenware by merchants from the Netherlands is supported not only by the distribution of the Werraware, but also by contemporary written records from the production region, which explicitly mention the purchase and export of the richly decorated pottery by Dutchmen (Stephan 1990/91: 595).

Numerous fragments of relief-decorated Rhenish stoneware discovered in the Dutch town of Bergen op Zoom at the mouth of the Rhine with reference to archival evidence of pottery traders are also very important for the reconstruction of the distribution routes of pottery (Groeneweg and Vanderbulcke 1988). The finds come from a property whose owner is described in the early 16th century as a *kannemann*, i.e. a merchant dealing in stoneware vessels (Groeneweg and Vanderbulcke 1988: 343). The import of stoneware from Bergen op Zoom is mentioned in an import duty list in Newcastle in northern England as early as the early 15th century (Groeneweg and Vanderbulcke 1988: 355).

Due to the location of the town of Bergen op Zoom at the mouth of the Rhine, the stoneware exported via the Rhine was transhipped onto seaworthy ships there. The staple in Bremen probably had a similar function for ceramics shipped across the Weser. Even if the archival records there have not been processed, place names documented in the 18th century point to a distinct pottery market on the Schlachte, Bremen's medieval and early modern river port (Rech 2004: 331).

The distribution of pottery inland certainly took place to a considerable extent via the river trade routes, which facilitated the transportation of ceramics; in addition, *Kiepenkerle* and traders with carts are also likely to have transported the ceramics via country roads. Customs lists along the course of the Rhine show that ceramics were the only goods on board the river ships in almost half of all documented cases of pottery transportation in the 14th century (van Osten 2019: 64). This fact strongly suggests that inland distribution was often carried out by specialized traders who dealt primarily in ceramics. When ceramics appear together with other goods in the customs lists on the Rhine, it is usually wine. When the purchase of wine in large quantities is documented in written sources, the clients would occasionally order the corresponding stoneware drinking vessels together with the drink (van Osten 2019: 65). Based on the written sources, it therefore seems clear that Rhenish stoneware was transported on the river either as the only cargo or together with wine (le Patourel 1983: 42). However, this applies primarily to inland trade; in maritime trade it can be assumed that very mixed assortments of goods were carried on board the cargo ships (Verhaeghe 1999: 144). The fact that this also applies to maritime trade in the Baltic Sea region can be seen from the wide range of goods traded on Egelskär's ship, which has already been mentioned several times (Tevali 2010, 2019, 2023).

8.1.3 Trade and distribution of pottery from the Weser Uplands to Norway

Against the background of archaeological and historical facts, how can the path of stoneware vessels from the Weser Uplands to the Norwegian distribution areas be traced? Historical sources on pottery from the Weser Uplands are generally very sparse and only became available to any significant extent during the 17th century (Stephan 2012: 13). Customs lists from Rinteln on the Weser contain individual references to the trade in ceramics by people from Duingen from the last quarter of the 16th century (Grohmann 2012: 73). These confirm the obvious conclusion, based on the geographical location, that the Weser played an important role in the distribution of stoneware from the Weser Uplands, even though the river was around 10 to 40 kilometres away from the various production sites. This distance initially had to be covered by land, for which the existing road connections could be used.

Pottery products from Bengerode / Fredelsloh in particular are likely to have benefited from the proximity of the Hanseatic town of Einbeck, just over 10 kilometers away. Since the middle of the 14th century, considerable quantities of beer were regularly exported from there via the country roads and further along the rivers Weser and Leine (Plümer 1987: 20). It is estimated that over 11,000 barrels were exported annually, which corresponds to around 4400 hectolitres (Blanckenburg 2001: 159). The beer was transported on carts, which were grouped together in convoys, and was probably transhipped via the large Hanseatic cities of Brunswick, Hamburg and Bremen to the long-distance trade (Blanckenburg 2001: 158-159; Plümer 1981: 21). Written sources show that Rhenish stoneware was often transported together with wine on riverboats in the late Middle Ages (van Oosten 2019: 64). It is therefore reasonable to assume that the stoneware from the Weser Uplands was exported together with the region's beer. As jugs, mugs and jugs with spouts predominantly appear in the export regions, it can be assumed that the stoneware was associated with the beer trade. In any case, the vessels were primarily designed as tableware and drinking vessels and were certainly mainly used as such.

The assumption that certain vessel types and shapes were associated with certain beverages is not a new theory. The characteristic jugs with spouts and jugs of French Rouen and Saintonge ware regularly appear in port cities where there is also evidence of the import of French wines from these regions (Deroeux, Dufournier and Herteig 1994: 176). These ceramic vessels can therefore be seen as a means of identifying these wines. The vessels may have served wine merchants as 'advertising' for the wines of certain provenances or signaled to the customer the authenticity of the beverage delivered in the barrel (Deroeux, Dufournier and Herteig 1994: 178-179). The richly decorated French earthenware appears mainly in the 13th and 14th centuries, it is part of the upper middle-class table and an indication that certain ceramic vessels may have been associated with certain drinks in the late Middle Ages (Deroeux, Dufournier and Herteig 1994: 175). Even though these wares may also have been appreciated solely for their colourful appearance, a close connection between the import of Gascon wine and Saintonge ware from the same area is striking in English Channel ports (Jervis 2017: 156).

Against this background, it seems reasonable to assume that the jugs, jugs with spouts and mugs of stoneware from the Weser Uplands are to be seen in connection with the well-documented trade in beer. These vessels also have a very characteristic appearance, they are primarily to be regarded as pouring and drinking vessels and they appear very frequently on sites where the consumption of Hanseatic hop beer can also be assumed.

In the case of stoneware from the Weser Uplands, it is noticeable that it obviously appears to a different extent in the immediate vicinity in some cases than in various export regions. In particular, the widespread absence of these wares in the town of Höxter on the Weser, which was close to the production sites, from the middle of the 14th century is striking (König 2011: 130). In Höxter, regional stoneware appears to have been largely replaced by Siegburg stoneware in the second half of the 14th century. During the same period, however, the peak of the appearance of this stoneware can be observed in Bergen. In Brunswick (Rieger 2010: 221-222) and Bremen (Bischop 2008a; Rech 2004: 225), too, stoneware from the Weser Uplands is found in primary finds until well into the 15th century. In Hildesheim, on the other hand, a great deal of stoneware from nearby Duingen is documented in late medieval layers, but vessels from Bengerode, almost 30 kilometers further away, are largely absent (Brandorff 2010: 209). The distribution of goods from different pottery towns therefore appears to have been organized in a variety of ways and influenced by numerous factors.

Obviously, stoneware vessels from the Weser Uplands in the course of the 14th and early 15th centuries are better documented in the more distant sales regions than in some places close to the potteries. It is possible that better prices could be achieved in long-distance trade; the pottery could have had this in common with Einbeck beer, the price of which increased by more than 50% after being transported almost 100 kilometers overland to Braunschweig (Blanckenburg 2001: 159). It seems obvious that the stoneware from the Weser Uplands was transported to Bremen by traders who specialized in the distribution of pottery, comparable to the corresponding distribution patterns of Rhenish stoneware in domestic trade (Oosten 2019, 64). Bremen was the transhipment point from inland to maritime trade for all goods on the Weser. Accordingly, it was also an important export port for Einbeck beer (Blanckenburg 2001: 158). Similarly, stoneware must have been traded in Bremen to a very considerable extent as early as the late Middle Ages, although written sources on the stoneware trade in Bremen only exist from the 17th century. In a council resolution of 1664 regarding complaints from Bremen potters about competition from abroad, the trade in stoneware is expressly excluded, as '...whoever wants to trade in stoneware more than before...' (Grohne 1940: 91). This source clearly indicates a long tradition of trade in stoneware in Bremen. A considerable proportion of the stoneware from the Weser Uplands

that reached Norway in the late Middle Ages was probably traded on this Bremen market. It is unclear how much stoneware from this region reached Lübeck and other important trading towns on the Baltic Sea such as Wismar, Rostock or Stralsund by land. Stoneware from the Weser Uplands is clearly represented in the towns of Mecklenburg and western Pomerania, even in the advanced 14th century, when it hardly appears in Höxter (Schäfer 1997: 326). Stoneware from the Weser Uplands may have reached the ports on the southern Baltic coast either by sea trade as part of the *Umlandfahrt* from Bremen or by land. In the case of overland transportation to the Baltic Sea, a comparison with Einbeck beer, which reached Lübeck, Rostock and Wismar via Braunschweig and Lüneburg, is again obvious (Plümer 1981: 14, Map 1).

In maritime trade, the stoneware will usually have been only a small part of a mostly highly diversified cargo. This is indicated by a number of written examples of ship cargoes between the Netherlands and England (Verhaeghe 1999: 144). The cargo from the wreck of Egelskär in the southern Finnish archipelago is also exemplary of such a mixed cargo with various goods from the late Middle Ages, including numerous jugs and beakers made of stoneware from southern Lower Saxony (Tevali 2010: 6). Also on board were some bronze graphene, whetstone blanks from Eidsborg in Norway, barrels full of small iron ingots, limestone and presumably originally also salt and grain, of which no traces have survived (Tevali 2019: 70). The most valuable item in this highly varied cargo was a Romanesque church bell, otherwise it was primarily cheaper goods that were probably loaded at various ports. Whether the goods belonged to one or more merchants and the extent to which the skipper and crew were involved in the cargo can no longer be determined in individual cases. It is conceivable that seamen carried their own goods and sold them on their own account. The right to carry goods on own account by seamen is regularly documented in the late Middle Ages and Early Modern Period, not least in connection with the trade in *Kramwaren* (Brück 1993: 29). Not only the range of goods, but also the players involved in trade in the port cities of the Hanseatic region were obviously very diverse.

8.1.4 Distribution of stoneware from the Weser Uplands in Norway

Written sources do not directly reveal how the stoneware from the Weser Uplands was sold in Bergen. The significant proportion of this ware in late medieval tableware and drinking vessels, which has been archaeologically proven, especially during the excavations at the BRM 0 / Bryggen site, allows for various possible interpretations. The fact that the vessels were distributed is shown by the finds of this ware in other districts of Bergen and in the immediate and wider surroundings of the city, which were presented in Chapters 6.1 to 6.13.

The Hanseatic trading post on Bryggen probably functioned in many cases as a distribution hub, as the most important imported goods, i.e. grain and grain products such as beer, were also sold there. The trade of imported goods such as grain, beer and clothing, for the stockfish brought to Bergen by northern Norwegian fishermen was conducted on a credit basis, which required long-term relationships between Hansards and Norwegians (Nedkvitne 2013: 170). It was a 'closed market' that offered security to both partners and prevented competition from other actors (Nedkvitne 2013: 171). Stoneware vessels may have played the role of small tokens of appreciation in this exchange of goods, emphasizing the quality of the beer supplied in particular. The fact that Hanseatic beer reached the far north is shown, for example, by the report of the Venetian Querini, who praised the food of the fishermen on the Lofoten Islands, which included German beer, after his rescue as a shipwrecked man in the mid-15th century (Nedkvitne 2013: 155). In any case, this was probably obtained via or in Bergen. On the sea route between Bergen and the fishing grounds of the North lies the *Martnasund*, which means 'marked sound' near the island of Nærøy, which was documented as a marketplace in the Early Modern Period (Nymoen 1994: 21). During underwater prospecting there in 1984, a slip glazed stoneware jug (cf. Figure 261) from the Weser Uplands, already described in Chapter 7.1.2, was discovered, which probably fell into the water while unloading or reloading goods (Nymoen 1994: 26). Obviously, this pottery was also distributed here in the 14th century, although the main goods handled were probably Hanseatic beer, grain and cloth. It is not clear who organized this trade. It is conceivable that skippers from the North stopped in the sheltered harbour on their way back from Bergen. In the middle of the 16th century, the royal bailiff in Trondheim, Evert Bild, sharply criticized the mercantile activities of the parish priests in this region (DN XII no. 660; Nymoen 1994: 22). This may indicate that the clergy of Nærøy stone church also traded in the late Middle Ages and that the recovered stoneware jug indicates such imported beer.

The occasional finds of stoneware from the Weser Uplands on farms in the nearer and further surroundings of Bergen, such as Høybøen on Sotra (Chapter 6.2) or Osen in Sunnfjord (Chapter 6.3), are most likely result of trading trips by the rural population to the city of Bergen. Potentially the vessels may also have been distributed by ped-

dlers from the Bergen market, yet there is no evidence, neither archaeological nor historical for the existence of peddlers in Norway during the Middle Ages. When bought in Bergen, the pottery was very probably a welcome accessory rather than the primary goods purchased. It is reasonable to assume that the vessels were purchased together with Hanseatic beer, which enjoyed great popularity in the North (Blanckenburg 2001: 225). With the imported stoneware vessels, the precious imported beer could be consumed in style.

While stoneware is rather seldom and just in small quantity found on rural sites, this pottery is much more frequent in an urban context. Fragments of stoneware from the Weser Uplands have been recovered from various sites in Bergen. Investigations in the area of the royal fortress *Bergenshus* revealed a number of fragments of this ware (see Chapter 6.1). As beer from Bremen occasionally appeared in the castle's shopping lists (Nedkvitne 2014: 225), it would seem obvious that the jugs may be primarily associated with the consumption of imported beer.

At the Lille Øvregate excavation, several fragments of stoneware from the Weser Uplands were discovered in layers dating to around 1300 (Chapter 6.11). A chess piece made of antlers was also found in the same find horizon, which can be interpreted as an indication of the elevated social position of the users of this site. A soapstone net sinker also recovered there is a strong indication that the inhabitants were of Norwegian origin (Hansen 1995: 31). They apparently occasionally drank from mugs made in the Weser Uplands, but whether this was always imported Hanseatic beer remains speculative. However, they will certainly have already had an opinion about the quality of the imported hop beer from German lands, which is repeatedly described in Scandinavian sources of the Early Modern Period as very good and suitable for special occasions (Wubs-Mrozewicz 2005: 166-167).

Stoneware from the Weser Uplands is also repeatedly recovered from other sites in the Vågsbunnen district of Bergen, which was dominated by German craftsmen, merchants of various nationalities and Norwegian burghers (Chapter 6.9). Due to the uncertain find contexts, it is unclear by which social groups these pieces were used and to what extent they were household inventory or traces of trade in beer or wares.

In the case of the finds of stoneware from the Weser Uplands on the Kroken 3 site (Chapter 6.13) near the Hanseatic Kontor, it cannot be conclusively determined whether they were used there or whether the site was used as a garbage dump (Dunlop 1985: 59). As early as the first half of the 13th century, two bathhouses are mentioned in the area, which offered '... space for 50 with all services ...', including the serving of beer by the *bath women* working there, an obviously lucrative business (Helle 1995: 437). Similar to other European cities, bathhouses in Bergen certainly also served at least as places to initiate prostitution. On February 18, 1569, Absalon Beyer reports, '...Hans Skredder, a married Dane, was in the bathhouse and got drunk on Hamburg beer, on his way home he fell and broke his foot...' (Hemmie 2007: 156). The site is not far from the Øvregate, which is repeatedly mentioned in written sources due to the brothels located there (Hemmie 2007: 141-142). It is not unlikely that the fragments of stoneware from the Weser Uplands at the Kroken 3 site can be explained as material leftover of events in this district.

Beer from Bremen had been strongly represented in Bergen since the 13th century and later faced strong competition from Wendish towns (Blanckenburg 2001: 22); at the same time, Bremen was an important transshipment point for the particularly prestigious beers from Brunswick and Einbeck (Blanckenburg 2001: 11, 147, 158). Hamburg beer, which is very popular and regularly mentioned throughout Norway, also comes from a city in which stoneware from the Weser Uplands accounted for a very significant proportion of the pottery produced in the late Middle Ages (Först 2007: 133). It is conceivable that the stoneware vessels from the Weser Uplands that reached Norway via the same trade routes were associated with these imported beers. The usually much darker, shiny surface and the considerably thinner walls of the vessels may have already made the stoneware from the Weser Uplands distinguishable from Siegburg and other Rhenish stoneware for the people of the late Middle Ages.

That stoneware from the Weser Uplands was not imported into southwest Norway exclusively via Bergen can be inferred from the finds of this ware in the towns of Stavanger and Avaldsnes south of Bergen (Chapters 6.7 and 6.8). In view of the shipping routes to Bergen, it is safe to assume that these places were called at before a ship reached Bergen. This applies in particular to Avaldsnes (see Chapter 6.7). Located on the strategically important passage through Karmsund on the sea route along the Norwegian coast, Avaldsnes was a prestigious fortified royal court in the Middle Ages, which was also heavily involved in maritime trade. After a documented pillaging of the court by Hanseatic forces in 1368, the Hanseatic League evidently gradually assumed a strong role at this location, which is mentioned in numerous written sources in the 15th century under the name *Notau* (Fyllingsnes 2019: 210). Various sources about *Notau* mention and regulate the sale of beer, which shows that the place was not only used as

a waiting harbour, but also as a trading centre, which is also indicated by the wintering of Hanseatic merchants (Fyllingsnes 2019: 211). Underwater archaeological prospections have uncovered numerous animal bones that indicate the organized processing of cattle for slaughter from the surrounding area (Elvestad and Opedal 2019: 226). The ceramics recovered in large numbers from the seabed of the harbour area are dominated by Siegburg stoneware, most of the finds apparently originating from the reloading or unloading of ships in the harbour basin (Elvestad and Opedal 2019: 219). The finds from the harbour also include fragments of a jug and a beaker made of brown slip glazed stoneware from the Weser Uplands (Cats. 1748-1749). Whether these fragments were used on site as bar and drinking vessels and disposed of, or whether they were lost during the unloading of cargo, cannot be conclusively determined. In any case, the vessels are evidence of the distribution of stoneware from the Weser Uplands at this little-known but not unimportant hub in the North Sea maritime trade network. In addition to Hanseatic seafarers and merchants, English, Dutch and Norwegian ships are also repeatedly mentioned in written sources in Avaldsnes / Notau (Fyllingsnes 2019: 211-212). However, the stoneware from the Weser Uplands was probably brought to this location on Hanseatic ships, as it is virtually non-existent in England and the Netherlands.

Stoneware from the Weser Uplands was also discovered in the southernmost medieval city in Norway, Stavanger, which was primarily important as a bishop's see (Chapter 6.8). Of the fragments recovered during the only major excavation in Stavanger, only a few can be placed in a primary finds context (Cats. 1755-1757). These come from a fire layer that is very probably related to a documented town fire of 1272 (Lillehammer 1972: 63). The pieces from Stavanger thus represent an indication of the distribution of this ware as early as the third quarter of the 13th century. The find context is characterized by a great deal of charred grain, which was very probably stored as trade goods in the building located at the harbour. The location in the vicinity of the cathedral church and the bishop's palace indicate that this trading house belonged to a member of the upper social class (Lillehammer 1972: 87). Wealth and participation in networks for the distribution of rare and precious goods are also indicated by fragments of Mamluk gold enamel jars from the same find context (Demuth 2017). Apparently, these upscale circles also obtained and used jugs of stoneware from the Weser Uplands, most likely in conjunction with imported beer. In the 13th century in particular, Bremen was the most important port of production and export of this beverage to Norway (Blanckenburg 2001: 22). The extent to which merchants from Bremen were responsible for transporting and importing the goods to Stavanger, or whether a wealthy Norwegian organized ships for the import himself, cannot be conclusively clarified.

The stoneware from the Weser Uplands was probably distributed to Norway in various ways by a number of actors, with the goods being transhipped several times. The extent to which individual traders organized direct trade between the production region and the distribution area remains to be seen. Direct contacts between the production sites of the stoneware and Bergen can also occasionally be proven on the basis of other archaeological finds. For example, a pilgrim's mark from Gottsbüren was discovered in Bergen as early as the 19th century (Figure 287), which suggests the presence of a person who had previously been on pilgrimage in this place in the Weser Uplands (Grieg 1933: 17-18, Fig. 8a). Following the discovery of a *bleeding host*, which was recognized as a miracle by the church, pilgrimages to the village in the Reinhardswald began in the second third of the 14th century (Köster 1961; Eckhardt 2014).

Figure 287. *Gottsbüren pilgrim mark, old find from Bergen. registration number m.a.101a. Photo: Bergen University museum archive*

The characteristic pilgrim signs were issued there, which were acquired by the pilgrims in Gottsbüren. The fact that such a sign was lost in Bergen can be taken as certain proof of a person's journey between the Weser Uplands and Bergen. During the excavations on Bryggen, another pilgrimage mark was discovered which, despite the illegible inscription, can be regarded as mark of the Gottsbüren pilgrimage due to the characteristic depiction of the crucified Christ with Mary and John (Figure 288). This provides evidence of repeated

Figure 288. *Unusual pilgrim mark from Gottsbüren, formed as a clasp. Found during the Bryggen excavations. Registration number BRM 0 / 2411. Photo: Angela Weigand, University Museum of Bergen*

journeys between the Weser Uplands and Bergen. According to the X-ray fluorescence analysis, at least seven stoneware fragments from Bergen were produced in the potteries of the Reinhardswald near Gottsbüren (Cats. 595, 598, 600, 614, 885, 1138 and 1770). Irrespective of the question of the extent to which individual stoneware vessels reached Bergen directly or via detours and multiple intermediate sales from the Weser Uplands, which cannot be conclusively clarified, it is clear that there was active contact between the two regions in the late Middle Ages. The stoneware finds reveal a regular exchange of goods, manifesting the diverse interactions in the complex networks that existed between these regions. In particular, the stoneware from the Weser Uplands marks the import of Hanseatic beer to Norway, which is otherwise hardly detectable archaeologically.

8.1.5 Distribution of Waldenburg stoneware in Norway

In contrast to stoneware from the Weser Uplands, stoneware from Waldenburg in Saxony could only be identified in very limited numbers in Norway (see Chapters 5.3 and 6.15.5). All Waldenburg pieces in the study area were discovered in Bergen. Only one other piece from Waldenburg has been identified from Norway to date: the remains of a *hedgehog vessel* were discovered in Vardø in the far north (Lahti 2022: 75) (see also Chapter 7.1.3). Given the small number of examples of Saxon stoneware in Bergen, it seems unlikely that these are traces of regular trade. However, the finds of Waldenburg stoneware from the wine cellar in Rosenkrantzgate (Cats. 1354-1369) can possibly be linked to the import and consumption of wine from Guben, which was widely distributed in the Middle Ages (Hartmeyer 1905: 7). Wine from this region was sold in the Bergen wine cellar as one of the cheapest varieties and was '…a substitute if better wine could not be found…' (Ekroll 1990: 86). Guben is connected to the Baltic Sea via the Neisse and Oder rivers, and due to the widespread distribution of Waldenburg stoneware in the Baltic region, this waterway is a likely distribution route for these goods (Schäfer 1993: 119; Möller 2008: 545). It is possible that Waldenburg stoneware was sometimes circulated together with Lusatian wines, just as Rhenish stoneware was often traded together with Rhine wines. In view of the rare occurrence of Saxon stoneware from Waldenburg in Bergen and in the North Sea region in general, however, other distribution mechanisms are also conceivable. The well-crafted vessels, which are quite conspicuous due to their frequent decoration with beard masks, can also be explained as the property of travellers, merchants or migrants. It is also possible that they were sold in small-scale trade by seafarers.

It is striking that the Waldenburg jugs are mostly found in a very limited area. In addition

to the wine cellar in Rosenkrantzgate, most of the fragments of this ware were discovered in the area of the Bugården tenement in the Hanseatic Kontor (cf. Chapter 6.15.5; Figure 249). In Gamla Lödöse in western Sweden, most of the identified Waldenburg fragments were also discovered at one and the same site, near the Dominican monastery. Several published Waldenburg face jugs in the Danish kingdom were discovered in castles, for example at the castles of Skånør (Gaimster 1997: Col. pl. 1, Fig. 3.33) and Rosborg (Linaa 2006: 118, Fig. 45). The singular fragments of the Waldenburg *hedgehog vessel* in Vardø in the far north-east of Norway also come from an environment that was characterized above all by the border fortifications first mentioned in writing there in 1340 (Sørgård 2018: 178). Perhaps the castle garrisons and the friars in Gamla Lödöse were supplied with wine from Guben and the Waldenburg jugs were distributed together with the wine or at least on the same route? However, the finds from the Bugården in the Hanseatic Kontor show that these vessels were not used exclusively in a military or religious context. It is possible that this concentration can be explained by the personal preferences of the people working there, but it is also worth considering whether the Waldenburg jugs there could indicate the sale of wine from Guben or beer from Wismar or Rostock. Two fragments, presumably from the same Waldenburg Bartmann jug (Cats. 1690 and 1691), were recovered during the Kroken 3 excavation. Like the fragments of stoneware from the Weser Uplands from the same site described above, these fragments should probably be seen primarily as the remains of activities in this district, which was characterized by bathhouses, taverns and brothels. The serving and consumption of alcoholic beverages obviously played an important role and the Waldenburg fragments can be interpreted as material evidence of this activity.

8.1.6 Distribution of relief-decorated stoneware in Bergen and southwest Norway

Renaissance relief-decorated stoneware is a special case in many respects and the distribution of these vessels must be considered separately, as it is subject to different mechanisms than the turnover of simple, medieval stoneware. Early modern, richly decorated stoneware is much rarer in terms of total quantity but is nevertheless regularly found on many sites. The discussion of possible distribution channels for these vessels must take these circumstances into account.

The question of whether relief-decorated stoneware was used as containers for other goods can be answered in the negative for the most part due to the fact that the vessel shapes are generally unsuitable as packaging material - with a few important exceptions, which have already been briefly mentioned at the beginning. The simple, narrow-necked Frechen Bartmann jugs from the second half of the 17th century could be used very well as containers for all kinds of liquids due to their robustness and easy-to-close opening. The relief decoration on these vessels is considerably simpler and more carelessly modelled than the older applied relief decorations. The reason for the declining quality of Frechen stoneware is occasionally cited as the demand from customers for cheap, robust vessels (Unger 2007: 21). In particular, finds from maritime contexts prove that narrow-necked Bartmann jugs were used as containers, as shown by a jug filled with 13 kilograms of mercury from the Dutch East Indiaman *VOC Kennemerland*, which was shipwrecked off Shetland in 1664 (Forster and Higgs 1973: Fig. 8). The West India Company regularly ordered flask-like Frechener Bartmann jugs as containers for mercury, as can be seen both from written sources and from various wreck finds from the 17th century (Gaimster 1997: 109). Finds of peach pits in another Frechen Bartmann jug in the wreck of the *VOC Kennemerland* indicate that these robust vessels also served as packaging for other goods (Price and Muckelroy 1974: Fig. 8). The Bartmann jugs recovered from the wreck of the Dutch ship *Stad Haarlem* off the island of Kvitsøy, only one of which was discovered in the Stavanger Museum's storeroom (Cat. 1774; cf. Figure 119), can also be assumed to have been used as containers. A total of eight similar jars were discovered on the wreck, which contained the remains of a 'foul-smelling yellowish substance' when they were salvaged, which was analysed as being the remains of lard or ointment (Molaug 1969: 46; Mauritzen 1969). It is obvious that the jars were not on board the ship for their own sake, but as transport containers. In the case of the simple 17th century Frechener Bartmann jugs, it must therefore be assumed that they can primarily be regarded as containers with various contents.

However, the vast majority of other Renaissance stoneware vessels decorated in relief were largely unsuitable as packaging material and were certainly too valuable to be used as transport containers. There are no written sources from Norway on the prices of early modern stoneware, but documents from Denmark suggest that richly decorated stoneware vessels from this period could certainly be of some value. The highest price is quoted for a stoneware jug with a metal lid in Malmö, although in this case the metal value of the mounting is probably the decisive factor (Linaa 2006: 42).

Above all, the *Schnellen* decorated with elaborate relief applications were probably occasionally given as special gifts. One example of this practice is a Siegburg *Schnellen* presented by Count Simon

VI of Lippe to the Amsterdam city regent Cornelius Hooft as a gift of friendship (Lüpkes 2022). Some of the relief-decorated vessels found in Norway can be regarded as such gifts with a high personal affirmation value, especially the pieces that survived in use for a long time (cf. Chapter 7.1.5). A Siegburg *Schnellen* with the remnants of the pewter lid was recovered together with a globular Bartmann jug of Cologne / Frechen provenance from a presumably Dutch shipwreck near Metskär on the Finnish coast (Edgren 1978: 85-88). It is conceivable that these vessels were the personal property of the skipper, provided that the *Schnelle* was not a special cargo for a specific recipient.

A few relief-decorated stoneware vessels from shipwrecks are also documented in the working area. In addition to the aforementioned Bartmann jugs from the late 17th century, the almost complete Siegburg *Pulle* from the wreck in the Bay of Tau (Cat. 1773; Figures 98-99) is particularly noteworthy here. Similar to the narrow-necked, bottle-like Bartmann jugs, the Siegburg *Pulle* are also robust vessels that can be closed quite well. The *Pulle* from the Tau wreck is the only stoneware vessel from the ship, whose surviving cargo otherwise consisted of Dutch red earthenware cookware and glazed floor tiles (Bang Andersen 1975). While the cooking vessels, which show no signs of use, were certainly intended for sale, the *Pulle* from Siegburg is more likely to have been a serving vessel used on board. The primary aim of the Dutch merchantmen, who sailed to the coasts of southern Norway in large numbers from the 16th century onwards, was to acquire timber.

The fact that Siegburg *Pullen* were not uncommon as part of the ship's equipment, especially on Dutch ships from around 1600, is also shown by an example from the East Indiaman *Witte Leeuw*, which was shipwrecked off St Helena in 1613. Among the finds from the ship, which was loaded with East Asian ceramics, was a Siegburg *Pulle* with a pewter lid (Boiten and van Vuuren 1982: catalogue No. 6.2). This was obviously part of the inventory of the ship on its return voyage. The combination of numerous Dutch cooking vessels and a few narrow-necked stoneware vessels can also be found on another shipwreck from Finland, which was discovered near Esselholm in 1977. In addition to 25 pots and pans made of red earthenware, three narrow-necked stoneware jugs of Frechen type were also recovered from the ship, which sank at the end of the 16th century (Edgren 1978: 78-79; Gaimster 2000: 243). The Siegburg *Pulle* from Tau (Cat. 1773) and other narrow-necked vessels from the period around 1600 from a maritime environment are therefore very likely not to be regarded as trade goods, but as utensils for use on board. This applies, for example, to the fragment of a Siegburg *Pulle* listed in Chapter 7.1.7, which was recovered in the natural harbour of Homborsund, near the town of Grimstad, in southeast Norway (Figures 267 and 268).

The find complex from Strandgaten 55-57 in Bergen shows that, in addition to the described distribution channels such as personal possessions, gifts or containers, relief-decorated stoneware was also used as a regular trade item in Norway. As already explained in Chapter 6.12 of this book and in connection with the processing of Weser and Werra ware from this site (Demuth 2001a: 118), the find complex is in all probability the remains of a warehouse in which pottery was stored or sold. The site is located in the Strandsiden district, opposite the *German wharf* with the Hanseatic Kontor (see Figure 134). In the Early Modern Period, this south-western shore of Bergen's harbour bay was settled by merchants and citizens who were not involved in the Hanseatic trading networks of the Kontor (Fossen 1995: 43). During an excavation in 1986, the remains of wooden warehouses from the second half of the 16th century and the first half of the 17th century were unearthed on this site, which were oriented towards the harbour (Dunlop 1993: 40). The finds from these layers consisted of an unusually large quantity of pottery, mainly glazed Dutch earthenware, which showed no signs of use (Dunlop 1993: 39). In addition to simple utilitarian pottery, the find material also included significant quantities of various decorated earthenwares, especially Weser ware, but also *Double Sgraffito* plates from Beauvais, Ligurian *Berettino* faience, as well as polychrome Dutch majolica and hornpainted slipware from north Holland (Demuth 2001a: 90-92). Among the findings of decorated pottery, however, decorated stoneware was only a very small group, which suggests that these vessels were outstanding within the assortment of goods of a pottery retailer.

Almost half of all relief-decorated stoneware fragments identified in the study area come from the Strandgaten 55-57 site. Just under a quarter of these fragments come from Siegburg *Schnellen*, but fragments of jugs from Cologne or Frechen with elaborate relief decoration are also well represented. Siegburg funnel-neck jugs have only rarely been found but occur both with moulded roundel medallions (Cat. 1520) and with openwork tracery decoration (Cat. 1530). In addition, fragments of Cologne *pinten* (Cats. 1570, 1573, 1633), as well as a grey-blue peasant dance jug (Cat. 1641) and Duingen *beehive tankards* (Cats. 1376 and 1395) were recovered. The composition of the find material and the find location in a part of the city that was clearly characterized by trade during this period clearly indicate that the finds from the Strandgaten 55-57 excavation represent the remains of a pottery

merchant's warehouse. Specialized pottery traders are occasionally mentioned in written sources in the North Sea and Baltic region in the Early Modern Period (Möller 2008: 547). Significant is the archaeological and archival evidence of merchants specializing in the stoneware trade in the Dutch town of Bergen op Zoom (Groeneweg and Vandenbulcke 1988). The finds from the Strandgaten 55-57 excavation consist to a large extent of Dutch utility ceramics and the other ceramic wares found there also all occur in the Netherlands. According to historical tradition, in the 16th and 17th centuries, citizens of Dutch origin and visiting Dutchmen were heavily involved in the trade in a wide variety of goods in Bergen (Fossen 1995: 150). It is therefore logical to interpret the pottery from the Strandgaten excavation as the warehouse of a Dutch pottery trader. The relief-decorated stoneware vessels were certainly among the most exclusive pieces in the range. In the second half of the 17th century, one of the richest citizens of the city of Bergen lived on the neighbouring plot of the investigation area, which may indicate an upscale social situation already at the time when the warehouse was used for pottery (Fossen 1978: 62-64).

It is striking that the richly decorated Siegburg funnel-neck jugs, of which a total of 22 were identified in Bergen, are only weakly represented in the material from the warehouse at Strandgaten 55-57. Almost all the funnel-neck jugs were discovered in the area of the Hanseatic Kontor, four of them in the wine cellar at Rosenkrantzgate 4. It is possible that these vessels, with their relatively small volume and small opening, were used to accompany the wine sales that took place both in the wine cellar and in the trading rooms on Bryggen. An interpretation as the personal possessions of merchants cannot be ruled out either.

8.1.7 Retail and distribution of stoneware: summary

It should be noted that the routes and mechanisms of distribution of the presented stoneware to and in Norway must be considered in a differentiated manner. Both the ware and the shape of the vessels are of considerable importance in assessing whether the finds are trade goods and how this trade was organized. In the case of late medieval stoneware from the Weser Uplands, there is much to suggest that the distribution of this pottery was linked to the Hanseatic beer trade. The maritime trade and sales in Norway may have been carried out by different actors, not least of which was the trade by seamen themselves. The goods were distributed from Bergen to Norwegian consumers or intermediaries.

Late medieval stoneware from Waldenburg is so rare in Norway that regular trade in this product is unlikely. However, a certain connection with the distribution of Guben wine seems possible.

In the case of relief-decorated stoneware, a distinction must be made between different vessel shapes. The simple, bottle-like Bartmann jugs from the late 17th century from Frechen can be proven to have been used in many cases as packaging in maritime trade. The finds from a Dutch shipwreck in the working area (Cat. 1774) can also be regarded as such transport containers. In the case of a Siegburg *Pulle* from a wreck in the Bay of Tau (Cat. 1773), however, it is most likely that it was used as a serving and storage vessel on board.

A number of pieces decorated in relief can be regarded as treasured personal possessions, sometimes as heirlooms or gifts. In addition, however, there was also a regular specialized trade in relief-decorated stoneware, as has been demonstrated in Bergen on the basis of the finds and features from the Strandgaten 55-57 excavation. In addition to the masses of simple earthenware that were recovered there, also decorated stoneware vessels such as *Schnellen*, jugs, pints and tankards were recovered. The Rhenish production sites of Siegburg and Cologne / Frechen predominated, but relief-decorated stoneware from Duingen, Raeren and the westerwald was also discovered. The complex shows that the trend towards specialization in the ceramics trade, which can be seen in the North and Baltic Sea region in the Early Modern Period, also came to bear in Bergen. Relief-decorated stoneware was likely available there for a reasonable price.

8.2 Consumption patterns, habits and mentalities in the light of the stoneware finds

8.2.1 Introductory considerations

While the previous chapter focused primarily on the economic issues and contexts of the stoneware finds examined, the following section will discuss more general, socio-cultural aspects. In particular, questions about the users' understanding of identity and their consumer behaviour in their interaction with the vessels are the focus here. Since David Gaimster's epoch-making work on late medieval and early modern stoneware highlighted the role of stoneware as an indicator and mediator of social processes, such aspects should be considered as an important part of pottery studies (Gaimster 1997: 115-141). The significance of ceramics as a source for social status issues and the development of social mechanisms in the late Middle Ages and Renaissance has been studied in detail in Scandinavia on the basis of finds from Jutland (Linaa 2006: 157-172). In the course of cultural-historical

research, which is once again increasingly focused on the informative value of objects, stoneware is seen as playing an important role as a benchmark for the spread of a *bourgeois* lifestyle in the 15th and 16th centuries (Gaimster 2010: 136). Ceramics, and stoneware in particular, can be interpreted as *cultural markers* or *type fossils* of a *Hanseatic* or generally bourgeois urban culture and as such represent a specific habitus (Gaimster 2014: 63-65). It is therefore a suitable object of research for investigating the cultural characteristics of Hanseatic merchants and their interactions with the local population (Gaimster 2014: 60).

It is important to note that '...the relationship between material culture, ethnicity and patterns of consumption is not simple and uniform.' (Immonen 2007: 728). Artifacts associated with the Hanseatic League, such as stoneware, should therefore not be simplistically linked to ethnic identities, but also relate to a variety of social, geographical and economic factors (Immonen 2007: 730). Taking these aspects into account, the stoneware finds examined offer the possibility of shedding light on cultural and social complexes in the context of their use. Such ceramics, which were produced in the Hanseatic 'heartland' and entered maritime trade on Hanseatic ships via Hanseatic cities, can in some respects be seen as an indicator of the influence of Hanseatic bourgeois culture on the consumers of these objects (Mehler 2009: 98).

One way of accessing the information inherent in archaeological ceramic finds for further questions is to look at the *biography* of these objects. In a fundamental essay on the 'Biography of Things', a distinction is made between the nature of things as commodities and the nature of things as singular objects, each with an individual history (Kopytoff 1986). The application of such a research approach to archaeological mass material such as ceramic fragments open up new perspectives in the interpretation of this material, even in the case of early historical finds with little accessible background information (Holtorf 2002). Through the *entanglements* of things and people, as well as their respective identities, further scientific narratives and insights into historical circumstances can be deciphered (Hofmann 2015: 88-89). The perception of finds as singular objects takes into account that each find must be considered in its respective context. The same or similar objects can represent processes and events of very different kinds in different contexts (Demuth 2021).

8.2.2 Stoneware from the Weser Uplands as drinking and serving utensils

As already explained in detail in the previous chapter, the stoneware vessels from the Weser Uplands in Norway in particular are to be regarded primarily as serving and drinking vessels, which were mainly used for the consumption of beer. This applies in particular to the large quantities of beer imported from the Hanseatic cities. In addition to the purely economic aspect of the exchange of goods, the vessels also reveal a specific pattern of consumption. In most cases, the ceramic finds are tangible evidence of beer drinking. The context of the find and the circumstances under which it was deposited can allow conclusions to be drawn about the type of consumption and the people involved. The archaeological find material thus becomes a mediator of stories that go beyond the purely chronological-typological determination and provide highlight-like insights into historical events (Hofmann 2015: 106). It is in the nature of the archaeological record that only rarely can conclusively provable facts be identified. The combination of finds, findings and accessible historical sources allows possible, perhaps even probable biographies to be drawn up.

One example is the fact that the numerous finds of stoneware from the Weser Uplands from the largest site in Bergen, the Hanseatic Kontor on Bryggen, are mostly heavily fragmented. It is a typical material characteristic of ceramic vessels that they can break easily for a variety of reasons, which can be proven archaeologically in very few cases. It is therefore not possible to determine the exact causes of the damage and deposition of the finds, but possible or probable scenarios can be developed against the background of the finds and historical sources.

With regard to the numerous finds of stoneware from the Weser Uplands in the Bryggen district, associations immediately arise with the taverns described by Absalon Beyer in the mid-16th century in the area of the Hanseatic Kontor, where various population groups met to drink beer (Nedkvitne 2014: 346). These had a long tradition, as there is evidence of apparently futile attempts to ban these taverns as early as the mid-15th century (Helle 1995: 784-785). To circumvent these bans, the tavern was probably often run by local or immigrant women, who often had a low social status. The number of artefacts which can be associated with female gendered activities in at the BRM 0 / Bryggen site is significantly lower in the late Middle Ages, when the area was dominated by the Hanseatic Kontor, compared to earlier phases (Mygland 2023: 139-164). There is however evidence, that women still were present in the tenements, or at least traces of material culture which are commonly associated with female spheres, even though most of the pottery clearly is tableware used for drinking.

Other drinking establishments in Bergen were the numerous brothels in Øvregate near the Han-

seatic Kontor (Hemmie 2007: 141). As already explained in the previous Chapter 8.1, the finds from the Kroken 3 excavation in Bergen (Chapter 6.13) can most likely be seen as the legacy of the activities in this district, which was characterized by bathhouses and entertainment establishments. Many of the stoneware vessels recovered from Bergen are therefore likely to have once been used in taverns of all kinds. An emerging concentration of fragments in the area of the *Old Church Street* in the Bryggen district (see Chapter 6.15.4.4) could be interpreted to mean that such taverns may have been located along this important street.

However, it is clear from the documentary tradition that beer consumption with the stoneware jugs was presumably not limited to public pubs. The internal organization of the Hanseatic Kontor was largely based on the individual double tenements, whose inhabitants formed a kind of residential community with a common living and recreation room. The oldest surviving statutes containing the internal rules of such a court, dating from 1529, contain numerous measures relating to alcohol consumption and the problems associated with it (Bendixen and Krohn 1895). Particularly relevant to the interpretation of the archaeological pottery finds is the imposition of fines for the wilful or unintentional breaking of another resident's jug (Nedkvitne 2014: 349). This suggests that it was a regular occurrence for drinking vessels to be broken during drinking parties, which may be a not unlikely scenario for the destruction of some of the finds surviving as archaeological pottery fragments in the Bryggen area. The close functional link between the stoneware vessels and the consumption of alcoholic beverages suggests that the finds can be interpreted as material traces of this consumption.

While the jugs and mugs made of stoneware from the Weser Uplands can most likely be regarded as vessels for drinking beer, various vessels made of Siegburg stoneware also presented in this work were certainly intended primarily for drinking wine. This is particularly true of the Siegburg drinking bowls, a considerable number of which were found in the area of the municipal wine cellar at Rosenkrantzgate 4 (see Chapters 5.4.2 and 6.14). These small shallow bowls only held a small amount of liquid and, with their flat rim and small foot, could only be held with pointed fingers, which is likely to have led to careful drinking in small sips (Roehmer 2014: 45). The Siegburg funnel-neck jugs with a narrow neck and small volume were probably also mainly used as drinking vessels for wine (Roehmer 2014: 62). The pieces decorated in relief that were examined in this study were mainly recovered in the area of the Hanseatic Kontor on Bryggen, as well as in the area of the municipal wine cellar, which supports the interpretation as drinking vessels for wine. Other fragments have also been recovered from the investigations of the department store at Strandgaten 55-57 and from other sites in the Old Town area of Bergen. This indicates that wine was not only consumed in the wine cellar, but also by wealthy people in their private or business premises. Due to the high price of wine in Bergen as attested in written sources (Bagge 2000: 56), it can be assumed that it was primarily consumed by people with the appropriate financial means. However, this also included hardy figures whose drinking habits were presumably not characterized by moderation, as an episode from the summer of 1571 recorded in Absalon Beyer's diary shows. Several German sailors were drinking in the wine cellar and initially clashed verbally until one of them jumped up, grabbed an axe and decapitated one of his drinking buddies (Nedkvitne 2014: 392). Educated circles also shared this contemporary mentality of violently defending their honour, especially under the influence of alcohol, as illustrated by another, previously mentioned example recorded by Absalon Beyer in his diary (Ekroll 1990: 83). On March 7, 1563, three Latin students from Bergen's upper class visited the wine cellar for a Sunday drink and were verbally mocked by German merchants. The argument escalated to such an extent that one of the Latin students killed a German outside the tavern (Iversen 1963: 25-26). The written sources tend to document the extraordinary and justiciable events in the wine cellar rather than the everyday occurrences. However, the episodes described show that considerable disturbances of public order seem to have occurred regularly in the Bergen wine cellar, despite the use of drinking vessels that suggest refined drinking behaviour and the partial high class of the clientele. The conclusion that 'Masculinity and its routine expressions were a serious danger to civic peace (...)' seems to apply to large parts of Central and Northern Europe in the Early Modern Period (Roper 1994: 107).

8.2.3 Stoneware vessels, areas of tension and conflict

The examples described above suggest that stoneware drinking vessels were frequently used in a town like Bergen in an environment that was often characterized by alcoholic men. This suggests an atmosphere in the late Middle Ages, that is also documented in many German towns in the 16th century. Drinking culture was both an integral part of social life and a constant cause for trouble, which led to increasing moralist campaigns against excessive drinking. Matthäus Friedrich complained in his pamphlet *Sauffteufel* from 1557 that '...everyone wants to prove his manhood with drinking' (Rop-

er 1994: 111). For the all-male society at the Hanseatic Kontor in particular, this also included the close proximity to women who earned their living as prostitutes or beer sellers. These became increasingly common in Bergen during the Middle Ages (Helle 1995: 463-464). In the Early Modern Period, they increasingly became the target of repression by the authorities, which intensified considerably from the middle of the 16th century onwards (Hemmie 2007: 247, 294). Relationships with women were also heavily regulated in the Kontor's internal statutes; in particular, fathering a child was strictly forbidden and punishable by a fine of a ton of beer (Bendixen and Krohn 1895: 18). It was explicitly forbidden at the Kontor to bring prostitutes into the tenements 'on four holy evenings in winter and when free beer was served', which conversely indicates that this was otherwise quite common (Hemmie 2007: 183). In any case, there were numerous connections between Hanseatic merchants and women in Bergen, some of whom were also mentioned in wills, especially if children were born of the relationship (Helle 1995: 763-764). However, a number of the finds recovered will have been 'entangled' (Hofmann 2015: 112) in one way or another in these stories, with which the presented finds have little to do at first glance. Their function as drinking vessels, which were very probably used primarily for the consumption of alcoholic beverages, predestines these objects to become part of processes in which such consumption took place. While simple, weakly brewed beer was consumed in large quantities as an everyday drink throughout northern and central Europe (Helle 1995: 318; Langer 1979: 66), the imported Hanseatic strong beer was a luxury drink that was mainly served on special occasions (Blanckenburg 2001: 225). On such occasions, it was not uncommon for the drink to be consumed, sometimes to a considerable extent, with corresponding states of intoxication, which led to an increase in written records of excesses (Simon-Muscheid 2000).

The extent to which the stoneware vessels from the Weser Uplands were perceived as indicators of certain superordinate elements, for example as status indicators, can hardly be determined with certainty. However, against the background of historical sources, mostly of somewhat more recent date, it can be assumed that there were occasionally pronounced preferences regarding the drinks consumed, which may have been linked to questions of personal identity. Very revealing in this context is a complaint from 1535 by watchmen at the Hanseatic Kontor who complained about receiving beer from Bremen instead of Lübeck, whereby the historian working on the case presumably wrote: 'One suspects that the dissatisfied watchmen were from Lübeck.' (Nedkvitne 2014: 225). Beer from Lübeck is otherwise far less evident in Bergen, even though Bremen beer faced strong competition from Wendish towns from the late Middle Ages onwards (Blanckenburg 2001: 22, 64. 78). The rejection of the Bremen brew by the guards could possibly also be due to its inferior quality in the early 16th century, as has sometimes been assumed (Bruns 1900: XVII). In my opinion, however, a strong identification of the watchmen at the Kontor with the beer of their hometown or region is also a plausible explanation for the traditional complaint. The preference for alcoholic beverages from their own home region can also be inferred from written sources on the drinking habits of 14th century merchants in Bruges (Irsigler 1996: 383-384).

In this context, drinking and serving vessels may also have had an importance that went beyond their purely practical and aesthetic value. The link between the stoneware vessels from the Weser Uplands and the beers exported via Bremen and Hamburg, already discussed in the previous Chapter 8.1.3, could then also reflect the appreciation of these very beverages.

However, it can be stated with certainty that the imported drinks and the matching stoneware tableware were not only valued by people from Hanseatic areas in Norway. Finds of stoneware from the Weser Uplands from an excavation in the Lille Øvregate in Bergen (Chapter 6.11) show that these vessels were used in a household where a chess set indicates a certain social status and fishing gear indicates an ethnically Norwegian environment. A number of late medieval fragments of stoneware jugs from the Weser Uplands and other production centres have also been documented at the royal castle in Bergen (see Chapter 6.1; Molaug 1980). As the seat of the royal governors, the castle *Bergenhus* was the centre of secular power, which was always in strong conflict of interest with the Hanseatic League and its representatives. However, this did not stand in the way of the appreciation of Hanseatic beer, as can be inferred from documented deliveries of Bremen beer to the castle in the early 16th century (Nedkvitne 2014: 225). One of the few almost complete stoneware vessels from Bergen, a Bartmann jug made in Cologne or Frechen (Cat. 1730; Figure 118), which comes from an unknown find spot at the castle, also dates from this period. Despite the consumption of Hanseatic beer from stoneware vessels, there were repeated serious, violent disputes, sometimes resulting in death, between the castle guards and Hanseatic sailors in the 15th and 16th centuries (Nedkvitne 2014: 397-398). However, these disputes appear to have been primarily due to the well-documented quarrelsomeness of alcoholic young men, while the royal governor and the ruling class at the Hanseatic Kontor endeavoured to settle the conflicts.

Figure 289. *Map of the diocese of Stavanger in southern Norway from 1636, with the inland region of Telemark shown as a 'white spot'. Map: Johannis Janssonius (ed.), National Library of Norway.*

Considerably fewer material or written sources from the Middle Ages and Early Modern Period are known from rural regions of Norway. However, as explained in Chapters 6.2, 6.3, 7.1.2 and 7.1.3, fragments of imported stoneware vessels are repeatedly found along the coast, albeit in small quantities. These indicate regular contact with the relevant trade networks, in which grain products, including Hanseatic hop beer, very probably played an important role for Norwegian consumers. Finds of stoneware from the Weser Uplands at rural sites such as Høybøen (Chapter 6.2) or Osen (Chapter 6.3) certainly arrived there as part of regional trade from Bergen, which was easily accessible by water. The discovery of a complete jug made of stoneware from southern Lower Saxony in a natural harbour on the island of Nærøy, north of Trondheim (Chapter 7.1.2; Figure 261), which is documented as a trading place, illustrates the trade routes along which Hanseatic goods reached the North. As already mentioned in Chapter 8.1, the local parish priests in this region were sometimes heavily involved in trading activities, which may have included the sale of Hanseatic beer and matching drinking vessels. The great appreciation of beer, especially in very rural central Norway, has already been mentioned in Chapter 3.4. Correspondence between Pope Gregory IX and Archbishop Sigurd of Trondheim from the 13th century refers several times to the liturgical use of beer (Wubs-Mrozewicz 2005: 157). Although the pope explicitly disapproves of the use of beer as a substitute for both wine as a communion drink and for holy water at baptism, the sources show the Norwegians' strong affinity for this drink. Particularly on the coast, where economic ties with the Hanseatic merchants were close and there were good opportunities to purchase the Hanseatic luxury product beer, it is obvious that drinking customs and tableware were adopted. It is certain that these goods were mainly consumed in wealthier circles. But even simple households could occasionally afford imported beer, as is documented in writing for northern Norwegian fishing families in the 15th century (Nedkvitne 2014: 548). In this context, the fragments of stoneware vessels from Høybøen (Chap-

ter 6.2) on the island of Sotra are of particular importance, as they prove that the inhabitants of this simple farmstead also used stoneware. The use and appreciation of imported drinking vessels and the associated beverages was therefore evidently not restricted to high-ranking social classes or to certain ethnic or rural groups but was quite widespread. However, the adoption of these consumption patterns, which can be traced back to a considerable extent to economic, technological and cultural phenomena from the Hanseatic cities, should not be equated with the comprehensive adoption of a *Hanseatic culture*.

Rather, various written episodes convey the impression that conflicts in late medieval and early modern Norway could well develop along ethnically related dividing lines. As already mentioned in Chapters 3.1.3 and 3.4, historical research has repeatedly investigated and documented tensions of various kinds between Norwegians and Germans. A revealing episode that took place in the district of Bø in the interior of the Telemark region is recorded in a source from 1498 (DN I, no. 961; Opsahl 2013: 84-85; Særheim 2019: 133). In the letter, the sub-bailiff of the region reports the circumstances leading to the death of a farmer named Arne to King Hans. The victim had gotten into an argument with a guest named Lidvard at a feast, which was sparked by the guest replying Lidvard's welcome drink with the Low German blessing 'Got synth jw!' (Særheim 2019: 153). Remarkably, similar Low German toasts are also regularly documented as characteristic decorations on 16th-century jugs from Cologne and Frechen (Unger 2007: 66-67) (see also Chapter 8.3). The host Arne, however, was not very fond of the use of Low German and responded with a long tirade in which he objected to the use of 'foreign' expressions. The defendant Lidvard was evidently a fellow countryman of Arne's from the Telemark region, but he may have worked as a Landsknecht on the continent and learned Low German there (Opsahl 2013: 84). The event ended in a fight in which Lidvard first used his axe and then mortally wounded the host Arne with a knife. The event illustrates the strong emotions that the Low German, which was perceived as foreign, triggered in the rather remote inland region. Obviously, the region was not only geographically but also mentally less integrated into the intellectual and political networks of the time, which is still reflected in a map from the early 17th century in which Telemark is depicted as a white spot on the map (Figure 289).

International contacts were not completely insignificant for this region either, as the numerous finds of whetstones from Eidsborg mica schist quarried here in Hanseatic towns on the Baltic coast suggest (Ansorge 2005: 131). In several stone churches along the inland waterways of this region there are fresco paintings that obviously show seaworthy ships, which must therefore have been familiar to the inhabitants of the inland areas in one way or another (Hansen 2015, 136; cf. also Figure 290). It is striking, however, that no medieval pottery finds are known from inland regions in Norway. Partly, this may be caused by the challenging research situation, as mentioned in Chapter 4.1.2. However, it is likely that this also reflects a historic reality, as there were no pottery finds at all from various minor excavations and surveys in Inland Norway (Martens, Martens and Stene 2009). This is an obvious difference to rural sites along the coast, from where pottery is known, even though in small numbers, as shown in Chapter 6.2 and 6.3, reflecting a general trend (Demuth 2019c: 128). Presumably, contact between the population of Inland Norway and people of other origins was very limited and therefore the rejection of everything foreign was very pronounced. The hostile reaction of the local peasants to King Christian III's attempts to establish a mining industry there using Saxon miners may also indicate a slightly xenophobic mentality (Berg 1999: 38-40).

However, the Low German language was probably generally considered prestigious in medieval Norway and had a strong influence on the development of modern Scandinavian languages (Opsahl 2013: 84). This influence is particularly evident in Bergen (Særheim 2019: 154-155). It is also noteworthy that the modern Norwegian term *krus* for *jug* is also a loanword from Middle Low German and, together with other loanwords, suggests the influence of everyday aspects through contact with Hanseatic merchants and their utensils (Særheim 2019: 157). The influence of the Hanseatic League obviously threatened the power of the traditional elites in particular, which is why they often agitated and took action against Hanseatic influence (Opsahl 2013: 87). In Bergen, these disputes escalated in the mid-15th century with the murder of the distinctly anti-Hanseatic Norwegian nobleman Olav Nilsson by Hanseatic merchants, which resulted in a protracted feud between Nilsson's family and Hanseatic ships (Helle 1995: 766-768). Nevertheless, these upper classes were probably also the main consumers of Hanseatic beer, even if one nobleman claimed that he wanted to chase the Germans away with all his might, even if he then had to drink water for the rest of his life (Opsahl 2013: 74). Against this historical background, the archaeological stoneware finds provide ambivalent testimony. The close links between the Hanseatic heartland and Norway in economic and cultural matters can be clearly seen in the ceramic material. However, these must also be seen against the background of and in relation to the contemporary con-

Figure 290. *Fresco painting in the medieval stone church of Kviteseid, in the interior of the Telemark region. Depicted is a sailing ship and an armed man. Probably late Middle Ages / Early Modern Period.*

flicts, which are only reflected in the material culture to a very limited extent. What is certain, however, is that the ceramic stoneware vessels in most cases represent evidence of the consumption of beer, which must be regarded as a popular beverage in the late Middle Ages and Early Modern Period (Ring 2016: 133).

8.2.4 Special case of Waldenburg stoneware in Norway

As described in Chapter 5.3.1, a total of 67 fragments of Saxon stoneware from Waldenburg were identified in Bergen. Although these finds are inconspicuous in terms of quantity, they are extremely interesting from a cultural history perspective, as the main distribution area of this ceramic ware is otherwise clearly located in the Baltic region (Schäfer 1993: 118-119; Gaimster 1997: 280-281). A strikingly large number of finds of slender Waldenburg jugs, often decorated with hand-moulded beard masks, have been discovered in the area of medieval Denmark at castle sites such as Rosborg near Vejle (Linaa 2006: 118) or Skånor in Scania (Gaimster 1997: 177). The hitherto unique discovery of fragments of a Waldenburg 'hedgehog vessel' in Vardø in the far north-east of Norway also comes from an environment that is characterized above all by an important border fortification (see Chapter 7.1.3). In the western Swedish town of Gamla Lödöse, on the other hand, the few finds of Waldenburg stoneware come mainly from site *M*, which is located in the area of the former Dominican monastery (see Chapter 7.2.1). Is it possible that late medieval Waldenburg stoneware was mainly used by certain social groups, such as the military and monks, in the medieval Danish kingdom and the North Sea region?

Chronologically, the Waldenburg stoneware in Bergen can be clearly dated to the late 14th and 15th centuries, with a focus on the period around 1400 (Chapter 6.15.5). Most of the stratified fragments originate from a fire layer correlated with a raid by the Victual Brothers in 1393 and were found in a spatially limited area of the Hanseatic contour. Remarkably, one of the few published examples of a similar Waldenburg jug from the southern North Sea area was discovered at the castle of tom Brok in Aurich (König and Hüser 2019: 420, Fig. 1). This was the seat of the tom Brok chieftain dynasty, who were known in the period around 1400 not least for their alliance with the Victual Brothers. A younger scion of the

family is even said to have been involved in an attack by the Victual Brothers on Bergen in 1429 (Clarus 2012: 207). Irrespective of the question of the veracity of this source, it is in any case worth noting that some of the few finds of Waldenburg stoneware, which is rare in the North Sea but common in the Baltic region, appear in contexts associated with the Victual Brothers This privateering group had moved its main area of operation from the Baltic to the North Sea in the period around 1400 (Jahnke 2014: 178). The consideration of the activities of these pirates in the evaluation of the distribution of artifacts in the North and Baltic Sea area has already been called for by other scholars, especially in distinction to the Hanseatic trade (Mehler 2009: 96). Even if a direct link between the Waldenburg stoneware jugs and the privateers is speculative, such an interpretation represents a thoroughly appealing and possible explanation for the appearance of these vessels in Bergen. In this context, the decoration of a number of jugs with bearded faces fits perfectly with the text of a Flemish folk song about privateers who must be *men with beards* (de Coussemaker 1856: 260). A more detailed appraisal and an attempt to interpret the decoration of stoneware vessels with beard masks is provided below in Chapter 8.3.

8.2.5 Special case of miniature vessels and costrels with two strap handles in Norway

The previous models refer to the objects that were obviously used as drinking vessels for wine and beer, which represent the vast majority of the finds recovered. However, the shape of some finds makes them less suitable for this type of use. The functional areas of these vessels will therefore be discussed separately and the pieces interpreted with regard to their socio-cultural implications.

A total of 10 finds of stoneware from the Weser Uplands in Bergen come from small globular costrels with two strap handles (cf. Chapter 5.1.4.3). Five of these were discovered during the excavations in the area of the Hanseatic Kontor on Bryggen and five more in the ruins of the wine cellar at Rosenkrantzgate 4. These are vessels from which liquids could be poured in rather small quantities (cf. Figure 291). Due to their small volume, it is unlikely that they were used for serving beer. The finds from the wine cellar in particular may have been used as serving vessels for special wines. The bottles could also have been used to store and possibly serve cooking oil. Last but not least, it is also possible that they were used as serving vessels for brandy. The distillation of grape or pomace brandy has been archaeologically proven in Stuttgart's Old Palace on the basis of pomace remains from the 12th/13th century (Rösch 2014: 325). Even though there is no written or archaeological evidence for brandy from Norway in the late Middle Ages, it is possible to consider the costrels with two strap handles as being serving vessels for brandy. The fact that half of these pieces were discovered in the wine cellar supports the assumption that they were tableware. While no certain stratigraphic dating is available for the pieces from the wine cellar, two fragments from the excavations on Bryggen can be related to fire layers from 1393 and 1413 (Cats. 76, 696). If the assumption that these vessels were used for brandy is correct, this would be an early reference to brandy in Norway. So far, however, this interpretation is merely a working hypothesis that is difficult to verify.

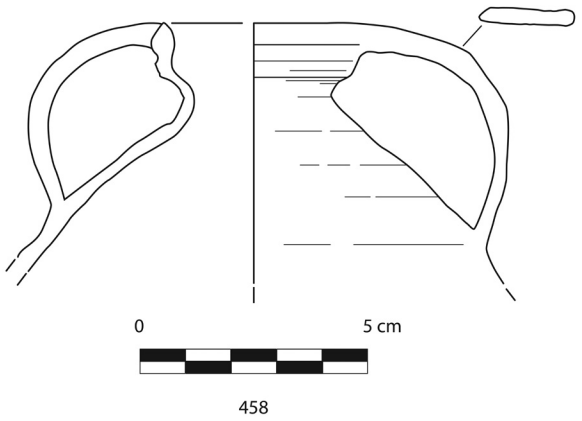


Figure 291. Drawing of costrel Cat. 458.

A further find which, due to its shape, does not fit into the interpretation pattern of the serving and drinking vessels listed above is the miniature vessel from Utstein Abbey near Stavanger (Cat. 1750; Chapter 5.1.4.7). The small, single-handled jug is a typical product of the stoneware potteries in Coppengrave and Duingen (Stephan 1981: 44, Pls. 59-61); an X-ray fluorescence analysis confirmed the macroscopic provenance determination. Due to its small size, the vessel, unlike other stoneware vessels, is unlikely to have been used for the consumption of beverages. The intended use of medieval miniature stoneware vessels was discussed very controversially in Norway at an early stage and the present vessel was published for the first time in this context (Petersen 1941). Recently, possible uses of medieval miniature vessels, including the piece from Utstein Abbey, have been discussed from an object biographical perspective (Demuth 2021: 27-36). Particular emphasis was placed on the circumstances under which the individual objects were found, which can provide important clues as to the former use of the vessels. Traditionally, miniature stoneware vessels were used as children's toys and as dipping cups for moistening fingers during spinning (Stephan 1981: 44). However, due to the rather numerous occurrences of these vessels, a primary use of miniature stoneware vessels as toys is justifia-

bly doubted (Oltmanns 2018: 25). The use of miniature vessels as 'spinning pots' is known in particular from the two-eared Raeren miniature vessels (Mennicken 2013: 142). However, it remains to be seen whether the lively discussion about these vessels in Norway since the beginning of the 20th century can be considered closed (Stalsberg 2005, 43). Nevertheless, there is a remarkable accumulation of miniature vessels in a clerical environment, such as the present piece (Cat. 1750) from Utstein Abbey. Fragments of four such vessels were also discovered in the well of St John's Monastery in Lübeck (Oltmanns 2018: 19). In Norway, relics have been discovered several times in stoneware vessels in medieval churches (Reed 1992b). A relic was also hidden in the village church of Ringstedt in the Elb-Weser triangle in Lower Saxony in a miniature vessel probably from Coppengrave (Thier 1993: 244). The treasure finds already mentioned in Chapter 5.1.4.7 in such a miniature vessel from the Weser Uplands near Lynge, on the Danish island of Zealand, was found on the property of the parish priest (Liebgott 1978: 72).

It can therefore be strongly assumed that miniature stoneware vessels were regularly used in a religious context. One obvious interpretation is that the vessels were containers for holy water or holy oil, the so-called *chrysma*, which were used on ritual or pastoral occasions. A further possible area of use for miniature vessels from clerical contexts is revealed by finds from Scotland, where such vessels are regularly documented in monasteries and are referred to as ink pots (Hall 2017: 47, 62, Cat. 80; Cruden 1953: 167). The Scottish pieces are apparently replicas of Raeren stoneware vessels in local glazed redwares.

Special inkwells made of slip glazed near stoneware were also produced in the late medieval potteries of the Weser Uplands (Heege 2002: 258, Fig. 541) (cf. also Figure 285). It is possible, however, that the multifunctional miniature stoneware vessels were also used as temporary containers for ink. A copperplate engraving by Pieter Bruegel from 1567 depicts an ink container attached to a belt, which could be a Raeren miniature vessel with two eyelet handles (Höltken and Steinbring 2017: 740). This pictorial source could indicate that miniature stoneware vessels were often used as ink pots.

The former use of these vessels, which could also be used by potters as pull samples to determine the degree of firing in the kiln, can often only be deduced from the context of the find. Reference should also be made here to a previously cited parallel find of a miniature vessel made of stoneware from the Weser Uplands, which was discovered in a destruction layer from around 1400 in the deserted village of Marsleben near the Harz mountains (Demuth 2012: 358). This piece lay next to the remains of an iron oil lamp, so it is likely that the miniature vessel was used to pour oil from a larger container into the lamp that lit the cellar. This example once again demonstrates the use of miniature vessels for small quantities of liquids. For the complete vessel from Utstein Abbey (Cat. 1750; Figure 39), I would most likely assume that it was used for sacred liquids or as an ink container. However, it cannot be ruled out that it was presumably used by healers to store ointments or other medicines. The use of the object as a spinning bowl cannot be ruled out but seems less likely in this context. In any case, the find is further evidence of the frequent occurrence of miniature stoneware vessels in clerical contexts in Norway.

8.2.6 Case study: relief decorated stoneware jugs as long-used family heirlooms

A special insight into the contemporary reception of stoneware vessels is provided by individual pieces in museum collections that have been preserved (see Chapter 7.1.5). These objects sometimes make it possible to trace their development in the sense of a biography and to pursue '… questions about the links between people and things….' (Gosden and Marshall 1999: 172). The relief-decorated stoneware jugs presented in Chapter 7.1.5 were obviously of considerable importance to their owners, as the vessels were fitted with valuable silver mounts engraved with the family coat of arms many decades after they were made. A Siegburg *Schnelle* from the Bogstad estate near Oslo (cf. Figure 262) shows three different coats of arms and the date *1574*, which suggests that the vessel was made in the last quarter of the 16th century, as *Schnellen* were no longer produced in the 17th century (Roehmer 2014: 140). The coat of arms of the Leuch family, who owned the manor house from 1665 to 1768, is engraved on the silver lid of the manor house inventory. During this period, the *Schnelle* was already at least 70 years old and was obviously of such high sentimental value to the owner(s) that the piece was provided with a personalized silver mount. The first owner from the Leuch family, Peder Nielsen Leuch, had worked his way up from journeyman tailor to merchant and had become a landowner through marriage to the widow Anne Mortensdatter (Collett 1915: 22). The relief applications on the *Schnelle* showed not only the coat of arms of Jülich-Kleve-Berg but also those of the English and Spanish royal houses, symbolizing the pinnacle of society at the time. Perhaps Peder Leuch, who came from simple, petty bourgeois circles, wanted to move closer to these upper circles through the personalized ownership of the *Schnelle*? It is conceivable that not all contemporaries accepted a landowner from a humble background without reservation, and a precious vessel with a royal coat of arms may well have been help-

ful as a 'reference'. Last but not least, richly decorated Siegburg *Schnellen* are documented as gifts of friendship from nobles to commoners in prominent positions, as the example of a *Schnellen* given by Simon IV, Count of the Lippe to the Amsterdam city regent Cornelius Hooft shows (Lüpkes 2022). It is possible that the *Schnelle* from the Bogstad estate was also once a special gift, or that the owner acquired the vessel in trade and made up a story to go with it? In any case, the discovery of fragments of Siegburg *Schnellen* decorated in relief in the remains of the department store at Strandgaten 55-57 in Bergen (Chapter 6.12) show that Siegburg *Schnellen* were commercially available in Norway. The subsequently added silver mount clearly indicates that this vessel was not just a simple utensil for the owner but was regarded as an object of status. This piece is therefore a good example of the transformation of an object from a commodity to an individualized object (Kopytoff 1986: 64). In the perception of the merchant, the same vessel was a product that promised sales, but in the possession of the *end user* Peder Nielsen Leuch it was very likely an object that symbolized his social advancement.

Another vessel made of relief-decorated stoneware with a later silver mount and a partially identifiable biography is a cylindrical tankard kept in the Maihaugen museum in Lillehammer with the inventory number SS-14495 (Figure 292). The vessel, most likely made in Raeren, is made of light grey stoneware with blue painting and shows a Vanitas relief application with a skull above crossed bones and the inscription in capitals: 'ACH MEYN LYEBER (L)ESER BESYCH M(I)CH AL WAS DOW NOW (B)YST DAS BEN YCH GEWST UND WAS YCH NOW BEN DAS MOS DOWE AUCH NOCH WERDEN', which has a close parallel in Raeren (Mennicken 2013: Pl. 25). The relief application is dated to 1637, and the initials EM probably refer to the master potter Emund Mennicken from Raeren (Mennicken 2013: 223). The piece from Lillehammer lacks the original handle, but this was elaborately reproduced in silver and supplemented with a carefully executed silver lid. The lid is engraved with the coat of arms of the Monrad family with the initials FM and the date 1689. The initials FM most probably refer to Fredrik Monrad, who was parish priest in the parish of Øyer north of Lillehammer in the last third of the 17th century. Fredrik Monrad was the son of Erik Monrad, who married in 1637 and took up his first position as parish priest in Middelfart, Denmark, becoming Bishop of Ribe in Denmark in 1643 (Bricka 1897: 461). Against this background, it is reasonable to regard the Vanitas tankard as a gift on the occasion of Erik Monrad's wedding or when he took up his first pastorate. The piece then apparently passed to his son, who had the heirloom fitted with the silver mount around 50 years after it was made. In the 17th and 18th centuries, the members of the Monrad family held high ecclesiastical and secular positions in the Kingdom of Denmark-Norway and belonged to its social elite (Bratberg 2019). The Raeren stoneware tankard with the vanitas motif obviously illustrated the family's close ties to the Lutheran faith and possibly represented a symbolic connection for the son Fredrik Eriksen Monrad with his father, the late Bishop of Ribe, Erik Monrad.

Figure 292. *Raeren tankard with 'Vanitas' motif and later silver mounting, from the property of Fredrik Monrad, parish priest in Øyer near Lillehammer at the end of the 17th century. Photo: Maihaugen Museum, Lillehammer.*

A Raeren peasant dance jug from the Stavanger Museum's storeroom (Cat. 1775; Figure 106) also seems to indicate that stoneware vessels with rich relief decoration were kept and passed on for a long time in upper-class families. The piece was drawn by one of the museum's founders, the teacher and artist Bernhard Hansson, in the late 19th century and bequeathed to the museum (Figure 293). The scarce documentation on the piece states that it *belonged to Provost Dahl*. This Provost Dahl was a well-known cleric and politician from west-

ern Norway, whom Bernhard Hansson certainly knew at least by name. It is likely that the peasant dance jug was a family heirloom of Niels Griis Alstrup Dahl, who came from a family of officers (Randal 1995: 1). After his death in 1853, his estate was auctioned off, and the jug may have come to Hansson in this way; unfortunately, only the whereabouts of his more valuable possessions have been published (Kleiva 1956: 87-89).

Figure 293. *Drawing of the Raeren peasant dance jug (Cat. 1775) by the artist and museum donor Bernhard Hansson from the 19th century. Archive Archaeological Museum, University of Stavanger.*

The large numbers of stoneware vessels with rich relief decoration produced by potteries in the Rhine and Meuse region in the 16th and 17th centuries were evidently status-marking objects for the aspiring bourgeois elites of the 17th and 18th centuries in the North. For the potters and traders, the stoneware vessels were presumably primarily goods for high-end consumption, with which solid profits could be made due to the quality of the vessels and depictions. The first owners, who often came from bourgeois circles, may have seen the richly decorated relief applications as an expression of their education and participation in the intellectual and political currents of their time. For the heirs' generations, the vessels then symbolized their ancestry and the increased status of their ancestors. For this reason, the surviving pieces were not disposed of as unfashionable in the 19th century, but were placed in museum collections, where they have survived to this day. These vessels are therefore rare examples of objects whose biography can be traced, at least in part.

8.3 Mentality and spiritual life as reflected in the imagery of the decorated stoneware

In the previous section, an attempt was made to explore immaterial aspects of the reality of life in the late Middle Ages and Early Modern Period on the basis of the occurrence of stoneware vessels. In the following, the significance of the decorated pottery itself will be interpreted. The prominent role of decorated stoneware as a medium for social, religious and political aspects has been emphatically established by David Gaimster (1997: 142-155). The interpretation of the symbolism of the pictorially decorated vessels is based on art historian Aby Warburg's iconographic concept of *picture vehicles*, which attempts to capture the transformation of images and their meaning in time and space (Krispinsson 2015: 245). The pieces examined from Norway therefore offer a deep insight into the imagination of contemporary users and illustrate a transfer of thoughts and ideas in the North and Baltic Sea region. The technique of relief decoration enabled Renaissance potters to transfer and reproduce pictorial motifs from contemporary graphic art onto stoneware (Gaimster 1997: 142). The woodcuts and engravings of the Early Modern Period were a medium through which ideas prevalent in the middle and upper classes were communicated to the masses (Moxey 1989: 3). Such cultural sign systems contain an ideological component and thus play an active role in the development of social relations (Moxey 1989: 8). The present archaeological finds are used to open up parts of this source archive and discuss its significance for the intellectual history of the area. Various motif complexes are considered separately.

8.3.1 Bartmann jugs and face jugs

One of the most widespread decorative motifs on stoneware vessels are facial depictions, especially in the form of bearded male faces, which occur in various models. In Norway, face masks can be observed as early as the late 13th and first half of the 14th century, particularly on jugs of Grimston type ware, a glazed earthenware from the area around Kings Lynn in eastern England (Green 2018: 318). The hand-formed beard masks are usually applied in opposite directions to the rim of the globular vessels, but this decoration only appears on a small

number of these wares, which were mass-produced for export.

There is no evidence of face jugs made of stoneware in Bergen before the end of the 14th century. In the potteries of the Weser Uplands, however, individual stoneware face jugs were already being produced in the late 13th century, as a find from a well at Lippoldsberg Abbey shows (Stephan 1992b: 129). Fragments of face masks are repeatedly found in the material of the Coppengrave pottery workshop, mainly made of glazed earthenware, but in individual cases also of stoneware (Stephan 1992b: 131-135). In the Rhineland, a rare find of a face jug made of Mayen stoneware is dated to the late 13th or early 14th century (Grunwald 2015: 141).

The oldest identified stoneware vessels with beard masks in Bergen are the Waldenburg fragments with handmade beard masks (Cats. 1313, 1334, 1353, 1690), which have already been mentioned several times (Chapter 5.3.1; Chapter 8.2). The pieces Cats. 1334 and 1353 (cf. Figure 248) are stratigraphically well dated to around 1400, as the fragments lay under fire layers associated with fires of 1393 or 1413. As already mentioned, the Waldenburg jugs with face masks occur on numerous sites in the Baltic region and occasionally also on the North Sea (Gaimster 1997: 177; Linaa 2006: 118; König and Hüser 2019: 420). In Gamla Lödöse in western Sweden, a fragment of a Waldenburg bearded jug was identified in the find material from the vicinity of the Dominican monastery (see Chapter 7.2.1; G.Lod-006; Figure 275). Although beard masks are characteristic, they are generally only found on a few Waldenburg stoneware jugs (Scheidemantel 2005: 107). The popularity of Waldenburg face jugs is also shown by the fact that these jugs were copied in glazed earthenware in the southern Baltic region (Russow 2004) and such an earthenware copy of a Waldenburg jug was also recovered in Bergen (Cat. 1746; Figure 58).

Stoneware vessels with hand-moulded faces or anthropomorphic depictions of a bagpiper have been identified at three sites in Bergen (Cats. 1545-1547; see Chapter 5.5.2). These pieces were made in potteries in Aachen or Raeren around 1500 (Gaimster 1997: 224-225; Roehmer 2001: 508; Mennicken 2013: 200). Face jugs with freely modelled faces were also made in Duingen (Löbert 1977: 21-23; Stephan 2010: 45) but have not yet been found in Bergen or Scandinavia.

Masks with bearded faces appear regularly on Renaissance relief-decorated stoneware from around 1500. From around the second quarter of the 16th century, these classic Bartmann jugs were produced in Cologne and Frechen, whereby the motif may have been inspired by the Waldenburg vessels with bearded masks (Unger 2007: 72). In Frechen in particular, vessels with beard masks were produced in various models in very large numbers until the end of the 17th century. The 16th century jugs from Cologne or Frechen were mostly very carefully crafted drinking vessels. In the course of the 17th century, simple beard masks were increasingly applied to the mass-produced Frechen vessels, which were often exported as transport vessels (Gaimster 1997: 210). Beard masks are also occasionally found on Siegburg *Pullen*, jugs and jugs with spouts from the second half of the 16th century (Hähnel 1992: 142-151). Bartmann jugs from Siegburg are rather rare, however, and were probably only produced in small numbers (Roehmer 2014: 173-180). Bartmann jugs were evidently a very popular form of Renaissance stoneware and were consequently also produced in Raeren (Mennicken 2013: 201-203) and Duingen (Stephan 2010: 45-50; Löbert 1977: 23-26). All fragments of relief-decorated Bartmann jugs identified in Bergen and the rest of south-western Norway are from Cologne or Frechen production (see Chapter 5.5.4). Presumably, many other fragments of Cologne / Frechen stoneware from Norway with relief decoration, on which no beard masks are recognizable, come from Bartmann jugs, but on which no traces of the beard mask have survived. An almost complete Bartmann jug comes from the castle area in Bergen (Cat. 1730; Figure 118), but fragments of Bartmann jugs are also documented from Bryggen and other parts of the city (e.g. Cat. 1597; Figure 117).

The beard masks of Renaissance jugs are repeatedly associated with the symbolism of the *Wild Man* (Gaimster 1997: 209; Grunwald 2015: 145; Orser 2019: 95). As mentioned in Chapter 3.4.1, the *Wild Man* is an important figure in medieval iconography (Bernheimer 1952; Husband 1980). He symbolized an archaic power that also included the uninhibited acting out of urges (White 1972: 2, 21). Contrary to social constraints, the *Wild People* seem to lead a free and happy life (Husband 1980: 125-127). The hand-formed beard masks on the jugs of 13th/14th century East English Grimston type ware are also interpreted as an indicator of sexual potency and associated with the *wild man* motif (Green 2018: 127, 138). Important here is the link between the bearded masks and their masculine symbolism with communal beer consumption as a consolidating aspect of male networks (Green 2018: 139). The jugs of Grimston type ware with beard masks no longer appear in Norway from the second half of the 14th century (Green 2018: 140). At around the same time, the first stoneware jugs with a similar iconography appear in Bergen in the form of Waldenburg jugs with hand-moulded beard masks. As already mentioned, these jugs were certainly also primarily used for the consumption of alcoholic beverages. The occurrence on castles or in buildings used by seafarers, such as

Bryggen, makes it likely that the masculine symbolism of the decoration also played an important role here.

The fact that the beard was regarded as an outstanding sign of male agility and sexual strength in the 16th century is well documented in contemporary written sources (Roper 1994: 67). In this context, the important role of the sometimes excessive and, above all, communal consumption of alcohol also belongs (Roper 1994: 111). Against this background, the finds of the Bartmann jugs can certainly be regarded as material evidence of a masculine mentality characterized by intensive alcohol consumption, which shaped everyday life and society. The fact that this was also accompanied by certain joie de vivre and exuberance is shown not least by the hand-moulded depiction of a bagpipe player on the stoneware jug Cat. 1546 (Figure 104), which was appropriately discovered in the wine cellar. A life-affirming attitude is also evident in a French poem from around 1500 with an accompanying graphic, in which the life of the *wild people* is contrasted with the constrained situation of the poor, workers and nobles as the human ideal (Husband 1980: 16, 128-131, Cat. 32). The ambivalent figure of the *Wild Man* possibly symbolized a state of joy and archaic power perceived in alcohol intoxication for the reveller who drank from a Bartmann jug. These tankards were widespread in all social classes in the Early Modern Period (Grunwald 2015: 146) and the motif of the *Wild Man* was valued and used even in royal circles (Heimbürger 2014: 309-311).

8.3.2 Peasant dance jugs

A total of five Raeren baluster jugs decorated with a peasant dance frieze were found in the study area. These depictions were among the most popular and widespread motifs on Raeren relief-decorated stoneware (Mennicken 2013: 160). Depictions of peasants were a popular subject in graphic art in Germany from the mid-15th century onwards (Moxey 1989: 35). However, realistic-looking depictions of peasants at work in the forest were also a popular motif on precious tapestries for the Burgundian ducal court in the second half of the 15th century (Warburg 1907: 7). Copperplate engraving series by Dürer's pupil Hans Sebald Beham served as a direct model for the model cutters of the Raeren peasant dance jugs (Mennicken 2013: 162-164). The dancing couples were used by this artist in larger works such as the print 'Das große Kirchweihfest' and integrated into a detailed pictorial composition (Moxey 1989: 37, Fig. 3.1). A woodcut with a text by Hans Sachs on the 'Nasentanz bei Gimpelsbrunn' features dancing peasant couples and bagpipers as grotesque, crude figures of fun (Moxey 1989: 44-45, Fig. 3.4). Pieter Bruegel the Elder also created numerous paintings in which dancing and celebrating peasants are depicted in a similar manner, with Raeren stoneware jugs as remarkable details (Gaimster 1997: Col. Pl. 4.4; Mennicken 160-161, Figs. 431-434).

The symbolic significance of peasants in late medieval and Early Modern iconography was discussed in Chapter 3.4.1. These interpretations are controversial and range from the idea of crude, immoral and drunken peasants as the antithesis of the civilized and educated bourgeoisie, to the peasant as the archetype of the *common man*, who stands in opposition to the decadent Catholic Church (Moxey 1989: 38-39, 54-58). Similar to the topos of the *wild man*, the depiction of the peasant dance contains both an affirmation of the identity of an educated, upper class in contrast to the peasantry, as well as a longing for a less restrictive and regimented life (Moxey 1989: 66). This level of meaning, which can already be found in the precious tapestries of the Burgundian nobility (Warburg 1907), found its way into the bourgeois parlour with the prints of the Renaissance and was conveyed to wide circles with the peasant dance friezes of the Raeren jugs. In Bergen, peasant dance jugs or fragments of them were found both in the area of the Hanseatic Kontor and in the Vågsbunnen and Stranden districts inhabited by the *non-Hanseatic* bourgeoisie (Cats. 1740 and 1742). The Raeren peasant dance jugs were obviously not only known and loved by the inhabitants of the Hanseatic district, but also by many citizens of Bergen. There are also fragments of Raeren peasant dance jugs from Oslo (Grieg 1933: 184-185, Figs. 144-145). It can be assumed that the levels of meaning conveyed by the peasant dance depictions outlined above found their way into the cultural canon of the emerging Norwegian bourgeoisie. The fact that a complete peasant dance jug from the Stavanger Museum (Cat. 1775) was probably owned as an heirloom by the Norwegian priest and politician Niels Dahl in the early 19th century illustrates the role of such vessels for the bourgeoisie (cf. Chapter 8.2). Remarkably, Dahl was strongly committed to the development of agriculture and was very zealous in the fight against brandy and immoral 'night revelry' (Kleiva 1956: 84-86). Dahl is most likely to have seen the wild and boisterous goings-on at the Raerener Krug from his estate as a deterrent example of a lifestyle that contradicted his pietistic views. It was therefore fitting for the cleric Dahl to keep a peasant dance jug, the message of which was probably primarily one of social distinction from the debauched and unbridled celebrations of the peasants (Mennicken 2013: 160-162).

8.3.3 Religious motives

Renaissance printmaking was an important medium for the dissemination of Protestant ideas in the course of the Lutheran Reformation (Gaim-

ster 1997: 148; Moxey 1989: 3). Despite the town's Catholic ruler, Reformation efforts also increasingly spread in the town of Siegburg in the 16th century, not least among the craftsmen and potters (Roehmer 2017: 5). The relief applications on Siegburg stoneware inspired by printmaking therefore occasionally show clear Protestant propaganda, such as the depiction of the pope and the devil as a picture puzzle (Gaimster 1997: 149; Roehmer 2014: 198-203; 2017: 7-9.) Another prominent example is the 'Interim Schnelle' with their sharp rejection of a law issued by Emperor Charles 5 after the Schmalkaldic War (Gaimster 1997: 151; Roehmer 2014: 166; 2017: 6-7). No finds with this rare, clearly Protestant-motivated applied motif have yet been identified in Norway.

Figure 294. *Redrawing of the relief application on a Siegburg Schnellen, found during the Strandgaten 55-57 excavation. Clearly recognizable is Jesus being tempted by the devil in a monk's robe. Drawing: Archive of the University museum, Bergen*

Among the finds from Bergen, there are relief applications depicting the temptation of Jesus in the desert on a *Schnelle* (Cat. 1529; Figure 294) and a funnel-necked jug (Cat. 1734; Figure 92). In each case, the devil is depicted in a long monk's robe, which is a clear sign of the rejection of the Catholic Church and a Protestant attitude. A model-like *Schnelle* with this motif can also be found in the city-museum Siegburg and was probably made by the potters specifically for Protestant customers (Roehmer 2017: 6). The piece from Bergen was discovered in the department store at Strandgaten 55-57, where it was apparently available to interested buyers. Remarkably, a fragment of a Cologne *pinte* with a depiction of Mary with the Child (Cat. 1633; Figure 126), which was rather popular in Catholic circles in the late 16th century, was also recovered in the same stratigraphic horizon. Did the pottery dealer on Strandgaten offer vessels with religious motifs for customers of all denominations? It is possible that the Catholic faith still had its followers, even though the Lutheran Reformation had been introduced in Bergen and Norway since 1536/1537 and the destruction of the Catholic Church by Christian III (Holmsen 1977: 397-400; Fossen 1995: 9). A small oval relief application depicting the Virgin Mary on a fragment of a 15th-century funnel-neck jug (Cat. 1532) can also be regarded as a Catholic symbol (Roehmer 2014: 61). It therefore dates from a pre-Reformation phase of settlement. This piece also comes from the Strandgaten 55-57 excavation, where a small statue of Mary with the Child made of white pipe clay was also found (Demuth 2001 a: 90-91, Fig. 9). Such statues were a popular art genre in the late Middle Ages, especially in the Rhineland (Neu-Kock 1992). These finds from the Strandgaten clearly represent the transition from Catholicism to Protestantism in the 16th century and the religious conflicts of the time.

The funnel neck jug with the roundel medallion depicting the temptation of Christ by the devil in a monk's robe (Cat. 1734) is an old find from the site of the *Kjøbmandsstuen*, in close proximity to the Wine cellar, where the organization of the Hanseatic Kontor met (Ekroll 1990: 81). Some merchants from the Hanseatic cities were obviously very close to the Lutheran doctrine. This can also be seen in another old find from the area of the Hanseatic Kontor, a *Schnelle* with a relief application containing the Reformation pictorial program of *Law and Grace* (Cat. 1735). The complex representation depicts some fundamental elements of Lutheran theology (Buckholm 1998; Krueger 1994: 306). A *Schnelle* with the same relief application from the Hetjens Museum can possibly be regarded as a commission for a secret society (Roehmer 2014: 173, Fig. 427). It is likely that the Bryggen *Law and Grace* swift was used in the leading circles of the Hanseatic League, where it probably expressed close ties to Protestant doctrine.

Relief applications with biblical motifs are very strongly represented on the 23 funnel-neck jugs decorated with round medallions from Siegburg that were found in Bergen (Chapter 5.5.1). This finding is consistent with the situation in the production region, where biblical depictions also dominate the figurative scenes on funnel-neck jugs (Roehmer 2014: 191). Episodes from the Old Testament Book of Tobias are depicted several times in Bergen, the significance of which cannot be inferred here for historical viewers. However, the figure of the God-fearing Tobias underlines the im-

portance of the Bible for people in early modern Northern and central Europe.

The story of the Fall of Man and the Expulsion from Paradise, which is depicted in Bergen on a *Schnelle* (Cat. 1408) and a funnel-neck jug (Cat. 1745) from Siegburg, as well as a Cologne *pinte* (Cat. 1573), obviously played a special role and was very popular. The detailed depictions on the *Schnellen* and *Pinten* were probably produced mainly in the second quarter or third of the 16th century (Roehmer 2014: 160; Unger 2007: 269-272, 368-373, 414-417). The fact that such vessels could have been in use in Scandinavian cities for a very long time is shown by the discovery of a Cologne *pinte* with the motive of the *fall of man* from Tornio, in northern Finland, which was recovered in a mid-17th century context (Nurmi 2011: 115-116, Fig. 27). In addition to the theological significance of the story of the Fall of Man and the expulsion from paradise, the possibility of depicting the unclothed Eve in an innocuous way may also have been a reason for the popularity of this motif. The fall of man as a central episode of Christianity was also of great importance for Lutheran doctrine, according to which only the grace of God could redeem man from his sinfulness. Accordingly, depictions of Martin Luther and Melanchton in combination with Fall of Man applications can occasionally be found on relief-decorated stoneware from Saxony (Jarecki 2004). The depictions of the Fall of Man from Bergen can therefore be interpreted as an expression of a religiosity associated with Protestantism.

There is no doubt that the numerous religious depictions on the relief applications reflect the penetration of various aspects of Christian doctrine into broad sections of society. The pictorial realization of the biblical episodes also made their message accessible to less literate consumers, who were able to recognize familiar stories from church services in the illustrations. In the Early Modern Period, which was characterized by massive religious wars and profound religious upheavals, these images were able to give people support and reassurance. Individual depictions also conveyed clear anti-Catholic propaganda or important elements of Protestant theology.

8.3.4 Allegorical iconography of the Renaissance

The numerous depictions of ancient or Old Testament figures on the relief applications of Renaissance stoneware also impressively convey certain values of the contemporary mentality. The *Good Heroes*, which had been widespread since the late Middle Ages, were obviously of particular importance; they are regularly found on relief-decorated stoneware and accordingly also appear several times on the finds from Norway. In Bergen, relief applications were identified with depictions of Hector (Cat. 1728) and Alexander the Great (Cats. 1400, 1563). A moulded roundel medallion depicting Julius Caesar, who was also one of the *Good Heroes*, is found on a Siegburg *Pulle* in the southern Norwegian natural harbour of Homborsund (Chapter 7.1.7). All three of these good heroes of antiquity are depicted on the three relief applications of a Siegburg *Schnelle*, which was used as a liturgical device in the chapel of the remote fishing settlement of Medfjord in the far north (Nicolaisen 195, 24, Fig. 2; see also Chapter 7.1.3). Female *good heroines* also adorned the relief applications; a fragment of an impressive depiction of Judith (Cat. 1418; Figure 74) was recovered in Bergen, which often occurs as an applied motif in Siegburg (Roehmer 2014: 152). Two fragments of Raeren jugs (Cats. 1711, 1720; Figures 103, 104) from Bergen show the relief applications produced in large quantities in Raeren with the story of the *Susanna the Virgin* (Mennicken 2013: 191). All of these depictions have countless models in Renaissance representational art and were understandable to contemporaries as embodiments of valued qualities. This also applies in particular to the allegorical depictions of virtues or mortal sins, as they appear several times in the find material. The relief applications functioned as broadly effective media for conveying moral values and their figurative representation derived from the fine arts. The spread of relief-decorated stoneware in Norway can therefore be interpreted as material evidence of the prevalence of this canon of values among the users of these vessels.

8.3.5 Coat of arms applications

Coats of arms appear in various forms on a number of stoneware vessels decorated in relief (see section 5.5). In some cases, the coats of arms are merely an element of a more complex pictorial composition, for example on the fragments of a *Schnelle* Cats. 1413 and 1418 show parts of the coats of arms of Spain and Jülich-Kleve-Berg, which framed the central depiction. Coats of arms served as the main motif on numerous other vessels. A Siegburg funnel-neck jug from Bergen shows a round medallion with the coat of arms of the Kingdom of Poland (Cat. 1414; Figure 97), while several fragments of Bergen *Schnellen* show large coats of arms of various European ruling houses. These include the coats of arms of Denmark (Cat. 1402; Figure 81), England (Cat. 1398; Figure 80 and Cat. 1542) and Emperor Maximilian II (Cat. 1524; Figure 83).

Relief-decorated stoneware from Raeren is also often decorated with coats of arms (Chapter 5.5.3). The coat of arms of the Swedish royal house can be found on the central roundel medallion of a jug fragment (Cat. 1551; Figure 114). The body of an almost complete cylinder-neck jug bears a frieze with eight coats of arms (Cat. 1743;

Figures 115 and 116). A body fragment of a Raeren Straight-sided tankard shows the coat of arms of the city of Bremen as a central medallion (Cat. 1396; Figure 105).

The few fragments of relief-decorated Duingen stoneware from the Renaissance that could be identified in Bergen are also regularly decorated with coats of arms (Chapter 5.5.6). A total of four fragments of Duingen stoneware from Bergen show the coat of arms of Electoral Saxony (Cats. 1376, 1395, 1718, 1731, Figures 129-130). The Saxon coat of arms is generally a frequent motif on richly decorated Duingen stoneware (Stephan 2012: 55).

The decoration of stoneware with the coats of arms of contemporary political powers can be interpreted as a sign of participation in political events by both the potters and the consumers, who were primarily located in bourgeois circles (Gaimster 1997: 153). However, the political or ideological significance attributed to the respective coats of arms cannot always be clarified beyond doubt. Nevertheless, depictions of coats of arms on stained glass windows, which were installed in Scandinavian churches by Hanseatic merchants in the late Middle Ages, show that coats of arms could express the feelings of identity of these groups of people (Jahnke 2019: 25, Fig. 1).

The coat of arms of the Duchy of Jülich-Kleve-Berg frequently depicted on Siegburg stoneware is probably due to the fact that the town of Siegburg belonged to this Duchy and this coat of arms was regularly used on various commissioned pieces (Roehmer 2014: 157-158). Especially in the case of vessels made to order, political sympathies are presumably associated with the depictions of coats of arms. These are not always easy to recognize; for example, the primarily Catholic potters in Raeren used the Swedish royal coat of arms (cf. Cat. 1551) in reference to John III as a supporter of the Catholic Church in an already largely Protestant Sweden (Mennicken 2013: 175). The Saxon coats of arms on the Duingen vessels, on the other hand, are not only an expression of the connections between the Duingen potters and Saxony, which can also be seen in the shapes of the vessels, but also of the connection with the Saxon electors as the protective power of Lutheranism (Stephan 2012: 55).

The coats of arms on the vessels in Norway can therefore be interpreted as a sign of the political life of contemporaries, even if the political attitudes of users and producers cannot always be clarified in detail. In any case, these coats of arms show that political events were widely received and were presumably perceived and certainly discussed by relatively broad sections of the population. This circumstance may also explain why coats of arms of supposed political opponents, such as England and Spain, were sometimes combined on stoneware vessels, as on the *Schnelle* from the Bogstad estate (Chapter 7.1.5). Often, therefore, the coats of arms are probably dedicated to the commemoration of political actors and events rather than a direct expression of political convictions (Gaimster 1997: 154). Furthermore, the use of coat of arms applications on stoneware vessels may also be explained by the early modern custom of toasting famous personalities at festive banquets (Thier 2012: 148). Attempts by the authorities to ban this custom due to the alcoholic excesses associated with it were largely ineffective. The social customs associated with '… drinking to excess… ', which were closely linked to ideas of honour, could both strengthen social ties and lead to serious, often violent conflicts (Simon-Muscheid 2000: 54-55). As decorations on drinking vessels, the apparently politically connected coats of arms are therefore also closely linked to the drinking customs and associated social phenomena discussed in more detail in Chapter 8.2.

8.3.6 Script friezes

A special type of relief decoration is represented by inscribed friezes with toasts, which were used in considerable numbers and variety, particularly in the stoneware potteries in Cologne and Frechen (Unger 2007: 66-67). This form of decoration was also used in Duingen, where jugs and jugs with spouts in particular were occasionally decorated with a frieze (Stephan 2012: 49-52).

In Bergen, a total of 14 pieces of Cologne / Frechen stoneware could be identified on which parts of an inscription frieze are recognizable. These include an almost complete Bartmann jug from the royal castle in Bergen (Cat. 1730), on which large parts of the inscription frieze have been preserved. This is the repeated toast WAN: GOT: VIL: SO: IST: MIN: ZEIL, which is also documented in a similar form on Bartmann jugs from the holdings of the Cologne City Museum (Unger 2007: 143-144, Cats. 32 and 33). Fragments of the same saying can also be found on four other fragments of Cologne / Frechen stoneware from Bergen (Cats. 1586, 1598, 1605 and 1614). The Low German phrase with the meaning: *If God wills it, my time is (...over)* conveys a certain fatalism and is a common representative of the diverse toasts that lent a moral component to the social occasion of communal drinking (Gaimster 1997: 151-153).

Due to the high degree of fragmentation, it is difficult to identify other sayings on stoneware fragments from Bergen. In the case of two fragments from Strandgaten 55-57 (Cats. 1617 and 1623), however, the surviving letters indicate that the relief applications contained a variant of the saying *DRINCK UND EST GOD NIT VERGEST*. This toast can be found, for example, on vessels from Maximinenstraße in Cologne (Unger 2007: 344-346). However, the widespread distribution and presumable popularity of the phrase is also

shown by the fact that this written frieze was copied in Duingen and applied to numerous vessels (Brandorff 2010: 154; Löbert 1977: 25, 66-67).

In Bergen, fragments of inscribed friezes can be found in the area of the Hanseatic trading post on Bryggen, in the vicinity of the city wine cellar and, as mentioned, at the royal castle, which suggests that people of different origins used these vessels. A particularly large number of fragments of the Cologne / Frechen jugs, also with inscribed friezes, were found during the excavation of the presumed department store at Strandgaten 55-57, where they were apparently sold together with other ceramic goods. These vessels must therefore have been reasonably familiar in the urban environment, which indicates not least that both the potters or pattern makers and at least some of the consumers were literate (Gaimster 1997: 151). That not all individuals were literate is shown by Cat. 1604 from the Bergen wine cellar, whose written frieze consisted of an obviously incomprehensible sequence of letters. Maybe the person who attached the moulded frieze on the vessel in the pottery workshop, did not fully understand the sentence and thus put together parts in an arbitrary manner. Several fragments of Bartmann jugs are known from the pottery waste from the Streitzeuggasse in Cologne, which show a section of the alphabet in the frieze (Unger 2007: 464-466). The creator of the piece Cat. 1604 had models with letters but did not put them together in an order determined by words or the alphabet, which can possibly be seen as an indication of illiteracy.

The written friezes on the Bartmann jugs can be interpreted in a certain way as a 'saying of the Beardmask' (Unger 2007: 60). They place the social process of communal drinking in a moral framework, which is explicitly codified by the toast. The vessel thus establishes a clear reference to values and the inanimate object becomes a direct 'actor' in the cultural process of the influence of Low German on the Norwegian language, which is particularly pronounced in Bergen (Særheim 2019: 154-155). The important social act of drinking together and making toasts was certainly an important part of this acculturation process. The fact that Low German toasts in late medieval Norway could occasionally lead to conflict has already been mentioned in Chapters 3.4 and 8.2. The episode described there of a banquet in rural Telemark in inland southern Norway illustrates the potential for conflict arising from linguistic influence (Opsahl 2013: 85; Særheim 2019: 153). A guest's Low German blessing ignites a fierce argument that ends in a knife fight with a fatal outcome. It is possible that the occurrence of jugs decorated with friezes in Bergen can be interpreted as an indication that the local population was rather open to linguistic and other influences from the Low German region. In any case, the characteristic Norwegian still spoken in Bergen today is strongly influenced by Low German (Særheim 2019: 155). The richly decorated stoneware vessels were part of this complex cultural exchange in the trading city of Bergen, which was strongly influenced by its multicultural population (Figure 295).

Figure 295. *Coloured copperplate engraving by Hieronymus Scholeus from around 1580, the oldest known view of the city of Bergen. Source: National Library of Norway, Oslo.*

9. Summary

This work has shed light on several ceramic wares that have been largely ignored in Norway until now. Almost 1800 finds from over 15 different sites were recorded in detail. Most of the finds were stoneware from the Weser Uplands, which had previously not been recognized as a separate ware type in Norway. Stoneware from Waldenburg was also not previously known in Norway and was presented here for the first time. In addition, there were finds of relief-decorated stoneware, for which there are also no recent studies in the working area. Accordingly, very little reliable information was available regarding the occurrence of the investigated wares in Norway.

By examining the finds from Bergen, but also from Stavanger and Avaldsnes, it was possible to clearly demonstrate that stoneware from the Weser Uplands was widespread in coastal southwest Norway in the late Middle Ages. By far the most finds come from Bergen, which is not only due to the research situation, but above all to the fact that Bergen, as Norway's largest city, had close ties to the international Hanseatic League network.

In Bergen and the other sites, jugs of different volumes are dominating, although a certain number of beakers were also found. Costrels with two strap handles occur regularly but tend to be rarer. Jugs with spouts, lids, spouted pitchers and miniature vessels can only be found in individual pieces and are considered rare forms in Norway. Except for the miniature vessels, the stoneware vessels from the Weser Uplands in Norway can be classified entirely as tableware and drinking vessels.

The majority of the stoneware from the Weser Uplands is not fully sintered and can be technologically classified as near stoneware, which is waterproof due to a molten sinter engobe. The slip glazed surface shows different shades of red and brown, the variations of which are primarily due to the position of the respective vessel in the kiln. About a tenth of the stoneware from the Weser Uplands in Bergen is not slip glazed and shows a light brown firing skin with some clear iron efflorescence. The technological properties of the stoneware from the Weser Uplands provided an important basis for determining the provenance of the finds. In addition, the typological characteristics of the stoneware from this region, such as thin walls, characteristic forming of the base, flat strap handles and typical shaping of vessel details. The macroscopic approach was confirmed by an X-ray fluorescence analysis of around 80 selected fragments.

The chronology of the processed finds is largely aligned with the stratigraphic dating of the find layers. The forms and types of stoneware from the Weser Uplands in Norway are very similar from the late 13th to the early 15th century, and the observed types occur throughout the entire period. However, there are clear variations in the proportion of different ceramic wares during the late Middle Ages. The earliest finds of stoneware from the Weser Uplands in Norway occur in the second half of the 13th century. Individual fragments from Stavanger are documented in a fire layer credibly dated to 1272. However, the majority of the finds date to the 14th century, especially the second half of the 14th century. The period around 1400 seems to be the peak of the occurrence of stoneware from the Weser Uplands in Bergen, but there are also significant finds from the 15th century.

In the first half of the 14th century, Bergen was still dominated by tableware made of glazed earthenware, mainly of eastern English provenance. Stoneware made up only around a tenth of the pottery from this phase, with around a fifth of the stoneware from the Weser Uplands. This picture changes significantly towards the end of the 14th and beginning of the 15th century. Around 1400, stoneware dominated the pottery in Bergen, especially in the form of Siegburg stoneware, which made up almost three quarters of the pottery from this phase. Stoneware from the Weser Uplands is still well represented, however, and accounts for around 5% of the pottery. It is remarkable that the use of stoneware from the Weser Uplands on a larger scale began apparently later than in the im-

mediate vicinity of the production areas but lasted for quite a long time. Obviously, this ware was continuously transported to Norway in considerable quantities, presumably mainly via Bremen, where stoneware from the Weser Uplands was also regularly found until the 15th century. For reasons of research history, many finds from the area of the Hanseatic League gateway are documented in Bergen. However, the occurrence of numerous smaller sites throughout the city shows that this pottery was used by inhabitants of different origins.

Stoneware from the Weser Uplands was also distributed from Bergen to rural and northern regions of Norway. Finds south of Bergen, however, such as in Stavanger and Avaldsnes can be traced back to ships on their way to Bergen. Due to the clear area of application of the stoneware vessels for beverage consumption and the documented import of beer from the Hanseatic cities, the stoneware in general and especially that from the Weser Uplands can be seen as a material indicator of this beer trade. It stands to reason that the characteristic stoneware vessels were widely used as drinking vessels for the esteemed Hanseatic hop beer. It is argued that the characteristic stoneware vessels from the Weser Uplands thus may have been regarded by contemporary consumers as adequate drinking vessels for the valuable and prestigious beer. The link to the beer trade is also made clear by the proximity of the production sites to the important beer town of Einbeck, which suggests that the distribution of beer and stoneware from the Weser Uplands was largely parallel.

The archaeological finds are tangible evidence of close economic and cultural contacts between the Weser Uplands and Norway. These two regions are located on the southern and northern edges of the Hanseatic region, which otherwise tended to follow an east-west axis. The stoneware bears witness to the networking of these distant regions within the framework of an exchange carried out by various actors. While the main trade goods, grain products and dried fish, have largely disappeared without trace, the stoneware finds show that people in the rural coastal regions of Norway were also involved in this network via the Bergen hub.

A special case is the Waldenburg stoneware, which, although there is only very limited evidence of it in Norway, is highly significant in terms of cultural history. Waldenburg stoneware was not previously known from Norway, which is probably also due to the problem of separating fragmented pieces from Siegburg stoneware. The few finds of this ware are concentrated at a small number of sites in Bergen and western Scandinavia. This can possibly be interpreted as an indication of the distribution of Waldenburg stoneware in connection with specific historical events or groups of people such as warriors or privateers. A distribution in connection with the documented import of wine from Lusatia can also be considered. With the beard masks on Waldenburg stoneware jugs, an iconographic topos appears in Bergen around 1400, which is later of great importance, especially for stoneware vessels of the 16th and 17th centuries.

With the relief-decorated stoneware, another group of finds with great cultural-historical significance was included, which is rather small in quantity and has not yet been studied in detail in Norway. Only a small proportion of the early modern stoneware in Bergen was relief-decorated; these pieces were not mass-produced like the late medieval stoneware. There are mainly *Schnellen* and funnel-necked beakers from Siegburg, as well as jugs from Cologne / Frechen and Raeren. Some fragments of relief-decorated *beehive tankard*s from Duingen and relief-decorated stoneware of the Westerwald type have also been identified.

A significant proportion of the recorded finds of relief-decorated stoneware came from the Strandgaten 55-57 site, which is highly likely to be the location of a warehouse of a merchant dealing in ceramics. At this site, relief-decorated stoneware makes up only a very small proportion of all ceramic finds, which illustrates the exclusive character of the wares. At the same time, the findings show that relief-decorated stoneware was for sale to everyone in Bergen. Accordingly, fragments of Renaissance relief-decorated stoneware can be found scattered across various sites in Bergen, but also in other towns and rural areas. The high esteem in which these objects were held, some of which had been in family ownership for many decades as treasured status objects, can be deduced from the partially complete relief-decorated vessels from museum archives in various regions of Norway.

The interpretation of the ceramic finds examined was able to shed light on three cultural-historical aspects. These relate to trade and distribution, aspects of consumer behaviour and mentality, and the role of ceramic decoration as a carrier of meaning and medium.

Regarding the distribution of stoneware from the Weser Uplands, the large number of items is a clear indication that this pottery was traded in various ways. It is very likely that there were different distribution mechanisms and actors involved in the distribution of the stoneware. The parallelism of the trade in beer and stoneware has already been mentioned, which may have been similar to the documented combination of the trade in Rhenish wines and stoneware. From the places of production, the stoneware from the Weser Uplands was first transported overland for some distance before

being shipped further north on the north German waterways, in particular the Weser.

The Hanseatic city of Bremen at the mouth of the Weser acted as the most important hub between inland and maritime trade for stoneware from the Weser Uplands, while Hamburg's role in this context remains largely unclear due to the poor state of research. Based on analogies from other regions of the Hanseatic area, it is assumed that the sea trade involved widely varying cargoes, whereby stoneware was probably only ever a small part of the cargo, as a wreck found in Finland shows. Those involved in the maritime trade in stoneware to southern Norway were probably not only merchants but also seamen who exercised their right to trade for themselves. In Bergen, the stoneware was most likely purchased by consumers from the city and the surrounding countryside in conjunction with Hanseatic beer. Stoneware from the Weser Uplands reached the North as part of the trade with northern Norway, in which dried fish from the North was sold on Norwegian boats in exchange for grain and grain products from the Hanseatic hinterland.

Renaissance relief-decorated stoneware, on the other hand, was sometimes sold by specialized ceramic dealers. These richly decorated vessels were also used as prestigious gifts. In a maritime environment, the narrow-necked Siegburg *Pulle* seems to have been used on board ship, possibly as brandy containers for the ship's officers. The simple Frechener Bartmann jugs of the late 17th century, which were regularly used as transport containers for various goods, can be clearly distinguished from the older vessels decorated in relief.

Beyond the economic aspects, the characteristic stoneware also makes specific drinking customs and mentalities tangible. The vessels can be seen as a kind of *cultural carrier* whose use indicates certain cultural values and norms. Of particular importance here is the role of stoneware in the communal consumption of alcohol, which is evident from its close connection with the trade in beer or, in the case of Rhenish stoneware, wine. The finds are material evidence of complex social processes in which a wide variety of people were involved in late medieval and early modern Norway. In the city of Bergen in particular, these people met and often interacted with each other over beer or wine, as can be seen from numerous written documents. From an object-biographical perspective, the archaeological stoneware finds were both witnesses and participants in these social contacts. Social aspects such as gender relations; political or social conflicts and the development of cultural customs are clearly evident in the lively mix of communal mining.

The motifs of the decor provide a direct insight into the intellectual world of the people of the era, whose ideas are expressed in the decorations. The jugs decorated with handmade beard masks are interpreted as a reference to a link between masculinity and alcohol consumption. In the Early Modern Period, this form of decoration was continued with the widespread Bartmann jugs, which are reminiscent of the art-historical topos of the *wild man*.

Relief-decorated stoneware, with its iconography derived from Renaissance printmaking, was a medium with which ideas prevalent in upscale circles could be communicated to a wide audience. The numerous religious motifs on the relief applications were an expression of the pronounced and sometimes controversial beliefs of the Reformation era. Contemporary values and norms were depicted with motifs such as the *peasant dance* and allegorical representations, while the numerous coats of arms reflect the political situation of the period. Low German toasts on stoneware jugs were a direct expression and mediator of the strong Low German influence on the Scandinavian languages. The spread of Renaissance relief-decorated stoneware illustrates Norway's close integration into the cultural, economic and political fabric of the North Sea and Baltic Sea regions.

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Through detailed and thorough processing of archaeological mass material such as the stoneware finds presented, fundamental insights can be gained into both individual event histories and overarching social developments. The imported material from the Norwegian sites illustrates the close connection between regions such as the Weser Uplands and the Norwegian coast during the late Middle Ages and the Early Modern Period. However, the knowledge gained is of general relevance for Northern and Central Europe and can thus contribute to the historical archaeology of the former Hanseatic region.

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Supplementary materials

Supplementary materials are found here:
DOI 10.15845/bryggen.v11.2025

Supplementary material 1: Catalogue
Catalogue of 1780 artefacts, many with photos. The introduction to the catalogue and catalogue text is in German.

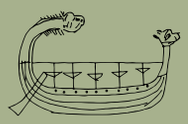
Supplementary material 2: Drawings of selected finds and forms
Drawings of 43 finds, with reference to Cat. No. found in the Catalogue in Supplementary material 1.

Supplementary material 3: Appendices 1-3

Appendix 1
Tabular catalogue of around 300 fragments of stoneware from the Weser Upland and Waldenburg stoneware, which were viewed and identified by the author in the stores of the Lödöse Museum/ Western Sweden in 2013.

Appendix 2
Tabular data from the X-ray fluorescence analysis of around 80 stoneware finds from Bergen and Stavanger, compiled by Detlef Wilke, Delligsen.

Appendix 3
Evaluation of the results of the X-ray fluorescence analysis of around 80 stoneware finds from Bergen and Stavanger, prepared by Detlef Wilke, Delligsen.



THE BRYGGEN PAPERS

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This volume analyses archaeological discoveries of stoneware pottery, mostly from Bergen, but also from other locations in the vicinity, such as Stavanger and the Royal manor & Hanseatic harbour site of Avaldsnes. The findings yield novel information regarding the period between circa 1250 and 1700 in southwestern Norway and the North- and Baltic Sea regions. The material traces offer a window into the lives of the people of the time and their multiple entanglements with the material.

Stoneware from the Weser Uplands, from Saxony and the relief decorated stoneware of the Renaissance are examined in detail and presented in the context of the discovery. The distribution of stoneware is linked to the trade networks of the Hanseatic League. The use of the imported vessels in Norway provides insight into contemporary socio-economic networks and cultural relations in the North Sea and Baltic regions. The stoneware finds are a direct reflection of trade mechanisms and drinking habits and thus give a multifaceted impression of how people in northern and central Europe interacted. The imagery of relief decorated stoneware reflects the mentality of the Early Modern Period and gives telling expression to a visual world inspired by contemporary graphic art.

The book combines an analysis of the find material with a broad cultural-historical interpretation of the pottery. It shows that archaeological material such as pottery is not just of antiquarian interest, but a rich source of information about the lives of people in the Middle Ages and Early Modern Period, telling a vivid part of our history.

The author

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ISBN 978-82-93904-05-2 (print)
ISSN 0805-4487 (print)

ISBN 978-82-93904-06-9 (online)
ISSN 2704-0682 (online)
DOI 10.15845/bryggen.v11.2025