

Secondary Publication



Schreg, Rainer

Pottery in medieval rural households : archaeological research perspectives in Southern Germany

Date of secondary publication: 20.09.2023

Version of Record (Published Version), Bookpart

Persistent identifier: urn:nbn:de:bvb:473-irb-909115

Primary publication

Schreg, Rainer (2023): „Pottery in medieval rural households : archaeological research perspectives in Southern Germany“. In: Catarina Tente, Claudia Theune (Hrsg.), Household Goods in the European medieval and early modern countryside, Leiden: Sidestone Press S. 223–234, doi: 10.59641/cd27f3b4.

Legal Notice

This work is protected by copyright and/or the indication of a licence. You are free to use this work in any way permitted by the copyright and/or the licence that applies to your usage. For other uses, you must obtain permission from the rights-holder(s).

This document is made available under a Creative Commons license.



The license information is available online:

<https://creativecommons.org/licenses/by-nc/4.0/legalcode>

Pottery in medieval rural households – archaeological research perspectives in Southern Germany

Rainer Schreg*

Abstract

Medieval pottery has long been the subject of archaeological research in southern Germany. Ceramic sherds are present in relevant quantities at most sites. Normally they are used for dating and today there are many publications that enable the recognizing of regional peculiarities and chronological developments. However, when we ask about the role of pottery in medieval households, particularly in rural households, numerous problems and research deficits become apparent. These relate to questions, methods and theoretical reflection, for example in modern social archaeology. Although this paper refers to Southern Germany, similar problems may exist in other regions as well. A digital information platform may provide an opportunity to improve and advance the confusing research situation.

Keywords: *Pottery, Southern Germany, research practice, social archaeology, experimental archaeology.*

Résumé

La poterie dans les foyers domestiques ruraux au Moyen Âge – perspectives de recherches archéologiques sur la céramique dans le sud de l'Allemagne

La poterie médiévale fait depuis longtemps l'objet de recherches archéologiques dans le sud de l'Allemagne. Il est présent en quantité pertinente sur la plupart des sites et est évalué notamment à des fins de datation. Entre-temps, un niveau de recherche remarquable a été atteint, qui permet de reconnaître les particularités régionales et les évolutions chronologiques. Cependant, lorsque nous nous interrogeons sur le rôle de la poterie dans les foyers médiévaux, en particulier dans les foyers ruraux, de nombreux problèmes et déficits de recherche apparaissent. Cela concerne les questions des méthodes et de réflexions théoriques, comme en archéologie sociale. Bien que cet essai fasse référence au sud de l'Allemagne, des problèmes similaires peuvent également exister dans d'autres régions. La mise en place d'une plate-forme d'informations numériques peut être l'occasion d'améliorer la situation confuse de la recherche et ouvrir de nouvelles perspectives.

* Institut für Archäologische
Wissenschaften,
Denkmalwissenschaften und
Kunstgeschichte – Archäologie des
Mittelalters und der Neuzeit
Am Kranen 14, 96047 Bamberg
rainer.schreg@uni-bamberg.de

Mots-clés : *céramique, Allemagne du Sud, pratiques de recherche, archéologie sociale, archéologie expérimentale.*

Zusammenfassung

Keramik in ländlichen Haushalten des Mittelalters – Perspektiven archäologischer Keramikforschung in Süddeutschland

Mittelalterliche Keramik ist in Süddeutschland schon lange Gegenstand archäologischer Forschung. Sie ist an den meisten Fundstellen in relevanter Menge vorhanden und wird insbesondere für Zwecke der Datierung ausgewertet. Inzwischen ist ein beachtlicher Forschungsstand erreicht, der es erlaubt, regionale Besonderheiten und zeitliche

Entwicklungen zu erkennen. Wenn wir jedoch nach der Rolle der Keramik in mittelalterlichen Haushalten, insbesondere in ländlichen Haushalten fragen, sind zahlreiche Probleme und Defizite der Forschung zu erkennen. Diese betreffen Fragestellungen, Methoden und theoretische Reflektion beispielsweise einer modernen Sozialarchäologie. Obwohl sich dieser Beitrag auf Süddeutschland bezieht, sind ähnliche Probleme möglicherweise auch in anderen Regionen vorhanden. Möglicherweise stellt eine digitale Informationsplattform eine Chance, die unübersichtliche Forschungslage zu verbessern und voranzubringen.

Schlagwörter: *Keramik, Süddeutschland, Forschungspraxis, Sozialarchäologie, experimentelle Archäologie.*

Introduction

Ceramics are in most regions the most common category of archaeological finds. Once broken, pottery is hardly reusable and in general quite resistant against weathering. Therefore, pottery is the best-preserved household good in medieval settlements – towns, castles, monasteries and farmsteads. However, when we are looking for relevant studies on ceramics as part of rural material culture, we find a huge number of publications documenting archaeological finds of sherds but few insights into their meaning as household goods.

This contribution pleads for archaeological research on pottery that is more than cataloguing sherds. I will use the situation in Southern Germany to sketch some perspectives and problems in understanding medieval rural households based on ceramics. Archaeological research in medieval pottery in Southern Germany is probably quite representative for many other regions of Germany or even Central Europe. However, it is important to notice that research on medieval ceramics is the topic of a small group of specialists, who are often focused on a single region. Despite the cooperation of ethnographers and archaeologists for more than 50 years in the framework of the *Internationale Arbeitskreis für Keramikforschung*, there is still no relevant interdisciplinary exchange of theoretical approaches or close cooperation across regional and chronological specialisations. One consequence is an inconsistent terminology with many regional terms and varying definitions. There have been several initiatives to establish guidelines and handbooks (e.g. Schreg 1997; Homberger Zubler 2010), but in general, they remain at a typo-chronological perspective and provide little analysis of pottery finds.

Production techniques

Many efforts have been made in the classification of ceramics. Some researchers have tried to define wares,

while others have relied mainly on the typology of rim forms. When investigating medieval ceramics in Southern Germany, Uwe Lobbedey (1968) followed a combined approach, looking at forms, but also at technical aspects. He distinguished three technical groups.

The first one is hand-made pottery, which includes, for example, materials from the Merovingian period (5th–6th centuries), but also a large amount of ‘Slavic’ ceramics in Upper Franconia (7th–10th centuries). The term ‘hand-made’ is not to contrast with industrially produced pottery; it refers to different modes of shaping ceramic vessels without a device like a turntable or a potter’s wheel. Hand-made pottery is not necessarily a coarse irregular ware.

The second group is turntable-shaped pottery (*nachgedrehte Ware*), which consists most often of pots with out-curved rims. Decorations are mainly simple wavy lines. By now there are few studies comparing regional variants of turntable wares. Despite a general similarity and a small range of vessel forms, there are regional differences in both tempering and rim typology. A fine sandy turntable ware (*feinsandig glimmerhaltige nachgedrehte Ware*) can be found for example in the surrounding area of the town of Ulm, including Ulm-Eggingen (Fig. 1). It is mainly ascribed to the 11th–12th centuries (Gross 1989). In Southern Bavaria there are similar materials, but they are currently dated much earlier (Schreg 2021). It is hard to establish a reliable and precise chronology, because forms and materials seem to be long-lasting and missing distinct typological characteristics. Turntable wares are present in Merovingian cemeteries and high medieval castles as well, but because stratigraphic evidence or dated finds are very rare between the 7th and 11th centuries there is still no reliable chronology. The latest representatives of turntable wares are present in castles and towns of the 12th and 13th centuries.

Wheel-thrown wares are a third group. Products often show parallel traces from their forming on a fast-turning potter’s wheel, probably driven by a foot wheel.

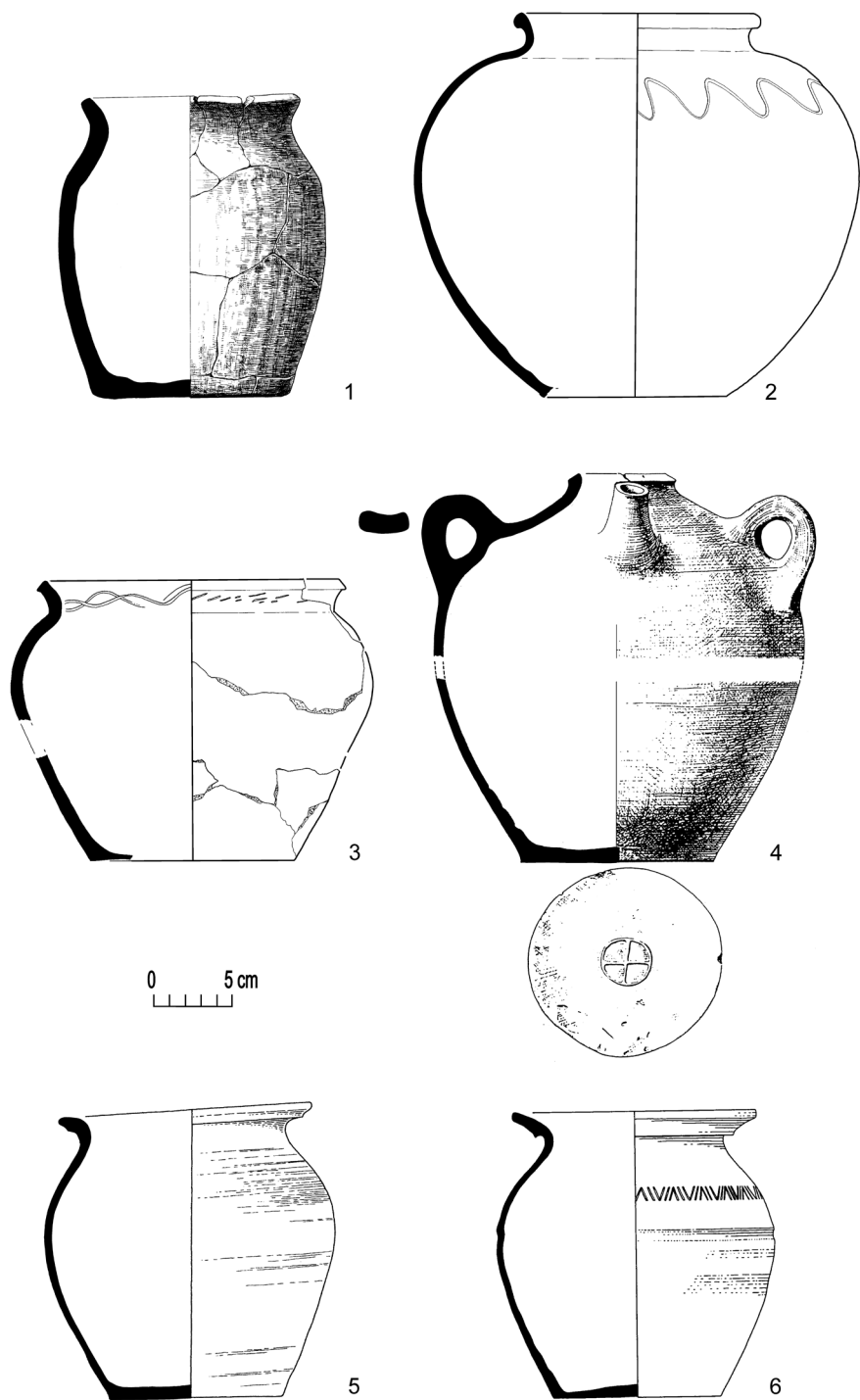


Fig. 1. 1) Hand-made pottery, 2-4) turntable and 5-6) wheel-thrown pots from the region of Ulm (© Redrawn after Lobbedey 1968; Gross 1989; Bräuning et al. 2009).

Examples from Southern Germany are the coarse wheel-thrown ware (*rauwandige Drehscheibenware*) primarily of Merovingian date, earlier yellow wheel-thrown ware (*ältere gelbe Drehscheibenware*) (Fig. 4:1-4) dating from the 8th to 12th century or the later grey wheel-thrown ware (*jüngere graue Drehscheibenware*) (Fig. 1:6), a common late medieval ware.

Based on fragmented sherds present in the archaeological record, it is often very difficult to distinguish these different modes of production. Furthermore, the classification in three technical groups is necessarily a simplification, because every potter may have his own practice. Therefore, there is a transitional field between turntable wares and ceramics produced with a fast thrown potter's wheel (comp. Rogier 2015).

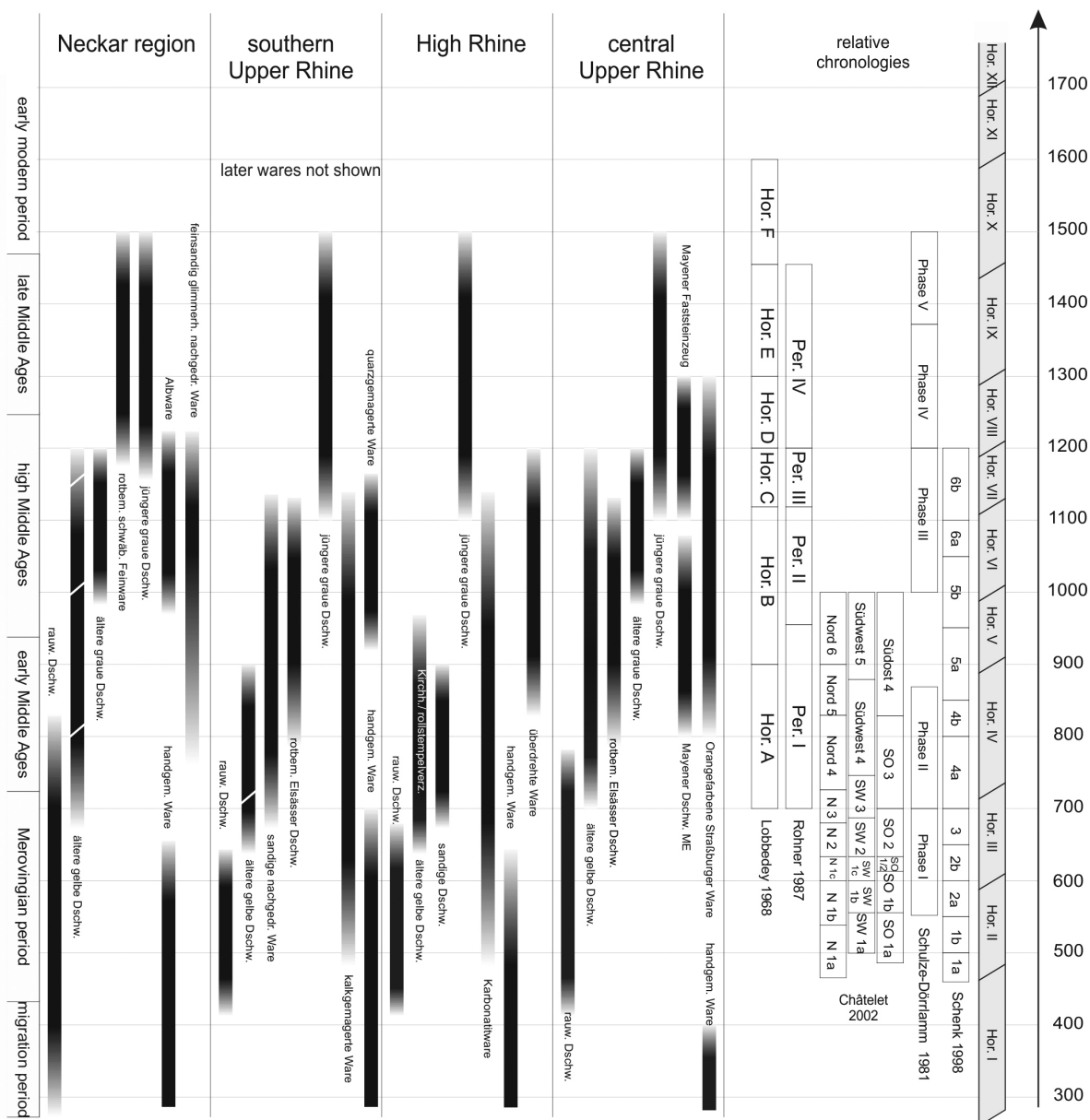


Fig. 2. Development of medieval pottery in Southern Germany: selected wares and relative chronologies (© R. Schreg).

To understand the modes of production, it is, however, necessary to consider not only the forming but also the burning of the pottery. In fact, several furnaces in Southern Germany have been excavated (Weiser 2003; Heege 2007). There are examples of different types of stoves and furnaces, but simple kilns with no archaeological traces left must be considered as well. It has been suggested that early medieval hand-made pottery, the surface colours of which indicate a rather irregular burning atmosphere may derive from such simple kilns (Bücker 1999, 62). High-quality wheel-thrown wares have been connected to updraught stoves, turntable wares with vertical-draught stoves (Heukemes – Gross 1983, 303). Updraught stoves with a

suspended perforated floor (*stehender Ofen mit Lochtenne*) were already used in Roman times, but were in a long process replaced by cross-draught stoves beginning in the Early Middle Ages. New finds indicate that the situation is more complicated. Two updraught stoves with a suspended perforated floor at the deserted settlement of Wülfigen dating to the 9th century and the 11th-12th centuries were used for pots of a bright turntable-shaped ware, though of high quality (Schulze 1981). At Holzgerlingen a cross-draught stove was excavated in 2013 that was used to produce a local variety of *ältere gelbe Drehscheibenware* (Münster – Gross 2013). Methodologically, we need to be cautious about relating 'primitive' hand-shaped pottery

with simple burning techniques such as earth kilns or elaborated wheel-thrown pottery with more-complex furnaces. It is important to note that there is no fixed correlation between forming and firing.

It is necessary to understand production processes and consumption as a *chaîne opératoire* involving not only technical but also social aspects (*Albero Santacreu 2014*). Archaeologists working in other regions and periods have been successful in using fingerprints on the surface of sherds to reconstruct the workflow in a potter's workshop (*Lichtenberger – Moran 2018*). At present, however, no such research has been undertaken related to medieval pottery in Southern Germany.

Chronology

Most of the efforts in ceramic research have been made in establishing a chronology. Ground-breaking work has been done by Uwe Lobbedey (1968), who established a detailed system of a relative chronology in south-western Germany that distinguished six chronological horizons A-F (Fig. 2). His system was based on a couple of different arguments, including stratigraphic evidence, site and complex inventories and vessels used for the deposition of coin hoards. In his documentation of the finds and sites he used, he especially referred to rural settlements, although he was only able to name a few excavated sites. Several studies (e.g. *Scholkmann 1978; Hauser 1985*) have used this approach. In the 1990s, however – in contrast to methodological requirements – a direct dating in absolute chronology was preferred for example by Uwe Gross (1991a) and many others as well (e.g. *Losert 1993; Vychitil 1991; Schreg 2006*).

In Bavaria, Hermann Dannheimer (*Dannheimer 1973*) put forth eight more-or-less dated sites – towns, castles and churches, but no rural settlements – as the basis of his chronological scheme. Researchers dealing with medieval rural sites, for example Kirchheim near Munich, however, were more concerned with the Early Middle Ages and did not refer to high or late medieval sites (e.g. *Geisler 1983*). Hence, there is still a chronological offset between sites in Bavaria and adjacent Württemberg in recent publications (*Schreg 2021*).

Pottery as household goods: aspects of daily life

The pure number of pottery sherds in many archaeological excavations clearly indicates their important role in daily life. It is obvious that ceramic finds reflect daily life activities such as storing, cooking, eating and drinking. In a regional research perspective, this seems obvious, but looking across regions, we learn about different technical solutions. It is remarkable that in Southern Germany we

have not found large storage vessels, cauldrons or even the typical spherical pots that are common in Northern Germany (comp. *Gross 1991b*).

Most ceramic sherds from rural sites probably belong to cooking pots. The best evidence comes from use wear. Limescale for example can be an indicator for a cooking pot. From my experience, encrustations are more often on pottery sherds than is mentioned in archaeological reports. The same is true for black residues, often present on the inside but also on the outside of pots. Experimental cooking (Fig. 3) shows zones of adherence of soot and such of scorched leftovers (*Klumpp 2017*). One needs some experience to distinguish them with the naked eye – or even better with the help of microscopy. There has been remarkable methodological progress in recent years, for example in the analysis of fats or lipids (*Evershed 1993; Skibo 2013*). By the way, these black encrustations contain carbon, which provides important possibilities for radiocarbon dating (*Casanova et al. 2020*) and other isotopic studies. Leftovers may also contain phytoliths, which help in the reconstruction of foods. Though the first archaeometric studies on medieval ceramics in Germany go back to the 1990s (*Tauber 1998*), they have not become standard or routine.

Other aspects that are completely understudied are damage patterns such as cracks, abrasion and crop marks. Rather horizontal cracks at the shoulder of a cooking pot result from heat tension when the vessel is only partially filled during cooking. Horizontal cracks close to the bottom combined with a linear tangential break across the bottom are probably evidence of freezing. This kind of fragmentation is sometimes present in archaeological find complexes. It raises the question of whether winter temperatures in medieval houses were often below the freezing point. Some other crack patterns are typical of failures during production. Flaking at the surface, mainly in the lower part of the vessel, refers to insufficient drying before firing.

Ongoing research by Andreas Klumpp (2017) follows an interdisciplinary approach by using written and pictorial sources as well as experimental archaeology (Fig. 3). His focus is on late medieval cooking and receipts, representing a period when there was a remarkable change in and extension of pottery forms reflecting an increasing functionality, but also new cooking practices represented by tripod bowls and pans. This roughly corresponds with the separation between the kitchen and living room as a result of the invention of the tile stove. Furthermore, the invention of beakers made of glass or pottery is another innovation that began to reach rural households in the Late Middle Ages. At the current state of research, it is hardly possible to establish a precise chronology that enables the correlation of these innovation processes. It is a methodological challenge to recognise a small chronological discrepancy between urban and rural contexts, especially when pottery itself is used for dating.



Fig. 3. Experimental archaeology: smoke residues on a replica of a late medieval cooking pot. In the experiment, the pot was positioned near the fire and permanently turned for even heating (© A. Klumpp).

Pictorial and written evidence provide important information about the functional and social contexts of material culture. Their study is mainly the domain of ethnographers. Archaeologists have only used them by chance. Whereas some studies exist from Northern Germany and Austria (*Lobbedey 2001*), little systematic work has been done in Southern Germany. Similarly, written sources related to pottery have only been analysed in few cases (e.g. *Eules 1991*).

Research deficits

This short sketch of the state of research on medieval pottery in Southern Germany already pointed to several problems and deficits, even in basic topics such as terminology and chronology. However, another problem is the documentation and statistical analysis of find complexes. Many publications only present a selection of finds; nearly never is there a note about the number of sherds that remained undetermined. In most ceramic complexes, this is not an ignorable number. For many sites, there are only preliminary reports available that only show some single pieces – if ceramic gains any interest at all. While on sites in the state of Baden-Württemberg there is at least a number of modern monographic publications, the situation is quite bad in Bavaria, where

basic ceramic studies have been done for only a few towns, for example Ingolstadt and Regensburg. There is a lack of archaeometric data and experimental archaeology as well as the occasional use of written and pictorial evidence.

Aspects of traditions, identity and social practice

In light of these deficits, it is not surprising that studies on the social interpretation of ceramics are also rare. The comparative study of medieval households by Eva Svensson (2008) that also considered ceramics from rural settlements in Southern Germany did not find any reception by regional researchers.

It is worth considering the reasons for this unsatisfactory situation in more detail. The methodological and theoretical deficits of past and current archaeological research in medieval pottery – at least in Southern Germany – probably point towards a structural problem. There is no research institution in Germany dedicated to medieval and post-medieval archaeology with the research capacities for structuring and coordinating research. In Bavaria as well as in Baden-Württemberg most excavations are funded by the costs-by-cause principle, which does not cover detailed processing. Mostly academic theses are engaged in analysis and publication of excavations. This means, in fact, that primarily young green scholars do the most challenging work that requires a lot of experience.

Another problem we face is the lack of theoretical reflection in German medieval and post-medieval archaeology, which is deeply rooted in heritage management practice. It is remarkable that the important introduction to medieval archaeology first published by Günther Fehring in 1987 paid little attention to artefacts in general. To him pottery is only of any consequence in relation to chronology and is to be analysed by typological, stylistic and technology-related methods (*Fehring 1987*, 42-43). The lack or even rejection of theory results in the adherence to conventional ideas of 19th-century historicism. This conception of history emphasises the agency of individuals, the importance of state organisations and the singularity of historical situations. The consequences are on the one hand a scepticism towards comparative approaches and traditional paradigmatic ideas about societies on the other. Anthropological or sociological approaches were therefore labelled as 'antihistorical' (*Fehring 1987*, 236).

One of these old paradigms is deeply related to the concepts of cultures and ethnic interpretation. Especially in prehistoric archaeology they were firmly connected with ceramic styles. Many prehistoric cultures and early medieval groups as well are defined by their ceramics. Researchers tried to distinguish Frankish, Alamannic, Thuringian, Burgundian or Bajuvarian wares. In Upper

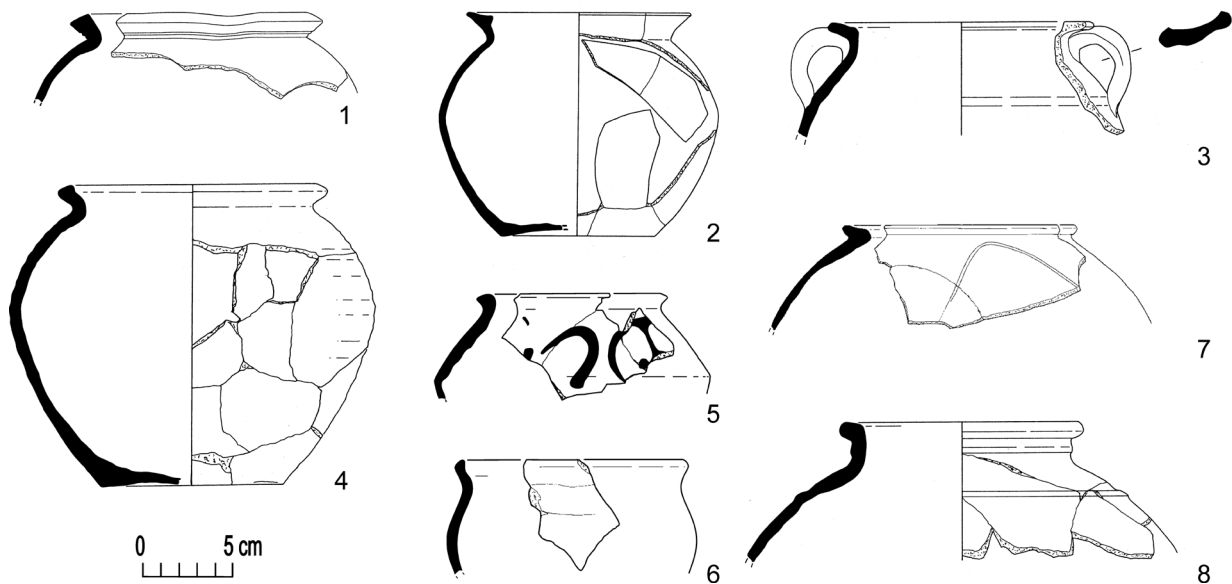


Fig. 4. Renningen: rural settlement with predominantly early wheel-thrown wares and 7) some turntable wares (© Redrawn after Schreg 2006).

Franconia, a type of hand-made pottery has been labelled ‘Slavic’, because both written sources and place names refer to people mentioned as ‘Wends’. When working with late medieval pottery from the *spital* of Bad Windsheim in Central Franconia, Walter Janssen observed a specific variant of the cornice-shaped rim in late medieval wheel-thrown ware. As an aspect of cultural history, he concludes there was a consistent cultural area (Janssen 1995, 30-31). Apart from the problematic concept of ethnicity, nations or tribes itself, there are very different ways that material culture reflects identity. It is, however, necessary to emphasise that traditions are not bound to ethnic groups, but are much more complex in their sociological background.

Identity

We need to consider different social networks, social practices and a specific habitus (comp. Schreg et al. 2013). As Pierre Bourdieu proposed, people with a high amount of cultural capital – non-financial social assets, such as education or personal networks – are most likely to establish distinctions from other social groups and to invent their own identity. Ulrich Müller (2006) demonstrated the application of this sociological theory related to medieval aquamaniles and bronze bowls used for hand washing in elite contexts. However, several ceramics also refer to a trickle-down effect of technological inventions and lifestyle. In the Late Middle Ages tiled stoves were an integral part of the farmhouse parlour. Rare finds of beaker forms of *ältere gelbe Drehscheibenware* at Renningen may date to the 9th-11th centuries

(Schreg 2006, 139-140) (Fig. 4:6). They may either belong to early tile stoves and thus present a manorial element in the Renningen settlement or are drinking vessels that are also seldom found in rural contexts (Gross 2019).

During the late and early modern period peasants’ wars, acts of insubordination, manifestos and petitions such as the Twelve Articles of Memmingen from 1525 show the assertive and proud manner of peasants. We may assume that in the Late Middle Ages and early modern period peasants developed their own identity. Ethnographers have cited many objects that refer to a specific rural habit. Despite of a huge amount of glazed earthenware labelled as peasants’ ware (*Bauernkeramik*), we do not have much information about their role within the daily life of households. Most objects don’t come from archaeological contexts, they come from collections and museums’ collections. In recent decades, research in this field has been rather strong in Bavaria, as many local styles and pottery workshops have been recognized. Regional identity has thus become a popular interpretation for early modern pottery, but a supporting theoretical argumentation seems to be absent (Endres 1995; Endres et al. 2005).

Regional communication networks

Medieval ceramics in Southern Germany also show remarkable regional differences. Wares, vessel forms or even typological details were characteristic for specific areas, sometimes just for single settlements, but also for large landscapes. For example, a local variant of stamped *ältere gelbe Drehscheibenware* has been found at the production site near Holzgerlingen (Münster – Gross 2013), but not

at contemporary surrounding settlements. Spherical pots and pots with flat bottoms, however, mark large landscapes of different cooking habits. Spherical pots were common during the High Middle Ages in the Rhineland around Cologne and in the regions north of the German middle range mountains, but they only appear in relatively small numbers at the upper Rhine region. Some of them were locally produced, as in some workshops at the lower Main area. Typical for Southern Germany were cooking pots with a flat bottom. In many cases, we deal with distribution areas of around 50 km in diameter, characterised by distinct wares or at least specific typological attributes. Examples are the lime-tempered *Albware* made in the central Swabian Alb and its northern foreland or the fine turntable-formed ware tempered with mica and characterised by specific rim forms from the region around the town of Ulm (Fig. 1).

Labelling such distribution areas as distinct 'cultural areas', as Walter Janssen (1995, 30) did, does not help the understanding of the underlying social processes. In some cases, distribution areas of medieval wares correspond with territories of feudal possessions: for example, early stamped *ältere gelbe Drehscheibenware* is associated with the possessions of Wissembourg monastery (Schreg 2012a, Abb. 5) and the distribution of Swabian red-painted fine wheel-thrown ware (*rotbemalte schwäbische Feinware*) reflects the early modern territory of the duchy of Württemberg (Schreg 2012b).

Traditions

We may not understand regional distributions as an expression of identity or genuine tradition, but rather as communication networks. However, identity and tradition that may be reflected in typological comparisons and spatial analysis are an important element of understanding the sociality within the framework of a family or a household. It is a theoretical potential of historical archaeology to use ethnographical evidence for a better understanding of pottery as household goods. In this context traditions have to be examined more closely. Yet traditions need to be a research question and not a paradigm. We need to understand how traditions were passed on, from one generation to the next and from one region to another. Learning and teaching is crucial for the life of a community. If we understand ceramic wares not only as a classification of things, but as a group of artefacts that share traditions in form, decoration and production, we can use them to investigate traditions across time and space. For this purpose, we need to be aware of the differences between wares, provenance, formal types or material groups. It is not useful to understand wares as the products of a specific workshop with a specific portfolio, because a ware is not a matter of classification, but rather

a group of ceramic products that share traditions in form, decoration and production. Typological groups are descriptive, whereas a ware includes an interpretation.

A model of socio-economic change

It may be helpful to present a model of socio-economic change, as it illustrates some possible lines of traditions (Schreg 2012a). This model distinguishes three different ways of ceramic production and distribution. To a certain degree, they represent three chronological phases that may be correlated with economic and social history. It is important to note that these phases do not represent a relative chronology, but are a simplifying model with a rather heuristic function. It will be necessary either to modify it on the basis of future findings – or to replace it with a better model.

The first phase is characterised by early wheel-thrown wares and related to large manorial organisations that oversaw their production and distribution. Uwe Gross for example has pointed out the relations between Wissembourg monastery and the decorated early yellow wheel-thrown ware (*ältere gelbe Drehscheibenware*). In fact, a comparison between the distribution of this type and the possessions of Wissembourg monastery shows a rough correlation. At Renningen, 18 km west of Stuttgart and 78 km east-south-east of Wissembourg, the monastery held more than 20 farmsteads. The spectrum of early medieval pottery finds is dominated by early *ältere gelbe Drehscheibenware*, including some slightly later red-painted Alsatian fine ware (*gelbe rotbemalte Elsässer Feinware*) (Fig. 4). In detail, this correlation may be problematic, as most distribution maps miss any quantification and there are some sherds found outside the areas where Wissembourg monastery owned estates.

A second phase, which approximately spans the 10th-12th centuries, is characterised by an increased importance of turntable-shaped pottery. In comparison to the earlier and contemporary wheel-thrown wares, this pottery is of relatively poor quality. It is low fired and often has a porous ceramic body. Nevertheless, vessels of turntable ware were often repaired, which may be an indication that there was no constant supply, but rather seasonal production. On first sight, turntable-wares seem quite uniform, with simple rim forms and a sandy tempering. In fact, there are some regional characteristics that reflect local craft traditions. The *Albware*, distributed not only in the Swabian Alb but also in the adjacent central Neckar region (Fig. 4:6), shows regional differences in tempering, indicating several production sites. As a hypothesis, we may think about changes in the feudal system where labour duties and taxes in kind were replaced more and more by money payments. The distribution of household goods through the manorial system changed towards a money economy.

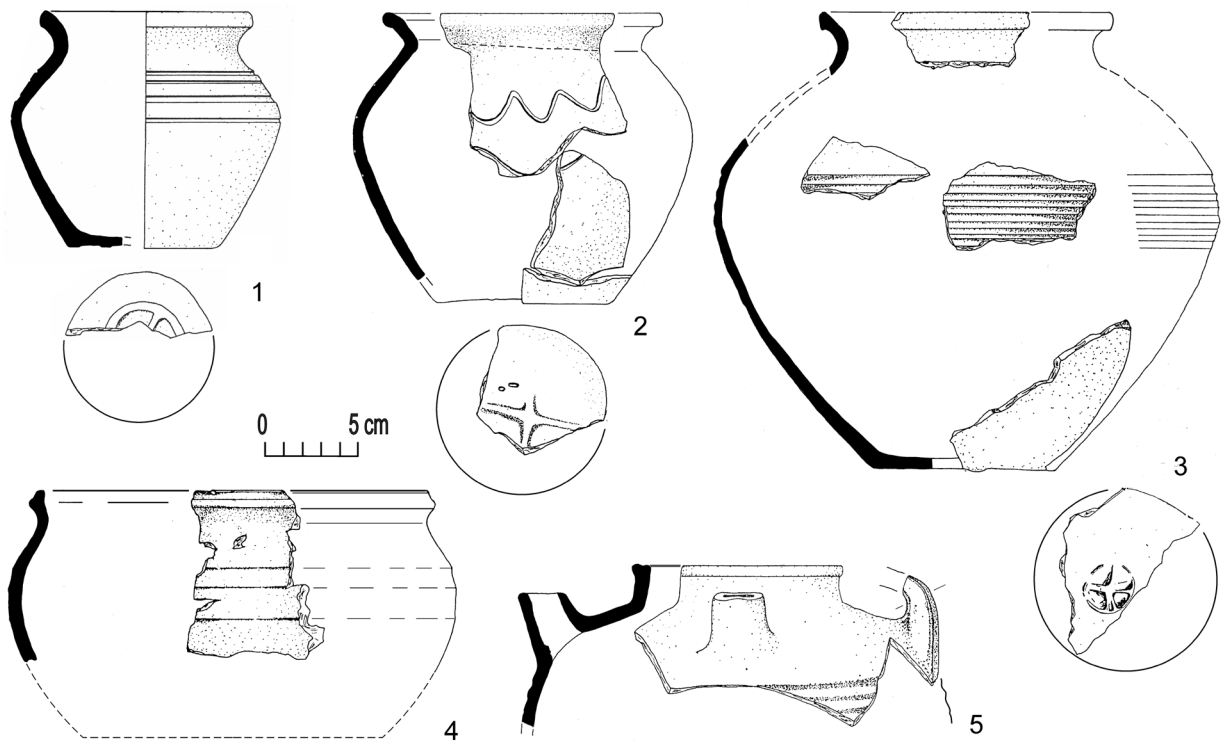


Fig. 5. Zuchering, a rural settlement with predominant turntable wares (© redrawn after Weid 2000).

However, many households preferred less-professional but probably cheaper products. This explains why turntable wares gained in importance in relation to wheel-thrown wares. As the site of Renningen shows, wheel-thrown wares were not completely substituted, but next to late *ältere gelbe Drehscheibenware* there is an increasing amount of different turntable wares.

When in the third phase – in the 12th-13th centuries – towns became more and more important and attracted population, pottery production was often oriented towards the town market. Typical are later wheel-thrown wares, the quality of which is often improved in comparison to turntable-shaped wares. There is on the one hand an increased spectrum of vessel forms, but on the other we can recognize long-distance relations. Some vessel forms as well as, for example, the cornice-shaped rims, were distributed over nearly all of Central Europe. Specialised potters producing for a regional market now represent an urban craft, even if only a few towns had specialised potters' guilds.

This model points to the question of how the supply of daily life products and household inventories was dependent on socioeconomic conditions such as the feudal system. However, the proposed model can only be valid for regions where there were:

1. some continuities of Roman wheel-thrown pottery technologies,
2. an early medieval feudal system and
3. urbanisation in the 12th-13th centuries.

In fact, we already recognize that the model is not consistent overall, because for example in the Late Middle Ages, when this model points to more commercial production, there are still feudal structures. The rental of the bishop of Bamberg dated 1323-1328 shows for example at Forchheim as well as at Stadtsteinach special feuds that had to deliver bowls and pots (Scherzer 1972, 100, 163) to the bishop. However, the proposed model is based on the situation in the southwest of Germany. Developments in Bavaria and Franconia was different. In Southern Bavaria, the proposed early phases cannot be confirmed, because early wheel-thrown wares never played an important role. With the exception of the area around Regensburg, they are missing and instead turntable wares are very common – probably since Merovingian times. Turntable wares in Bavaria show technical and typological variety, but resist the establishment of a classification. Rural settlements, for example Zuchering near Ingolstadt (Weid 2000), were characterised by such turntable wares (Fig. 5). In general, the variety of forms is largely limited to rather simple pots.

Conclusions

This paper presented a tour d'horizon on the state of ceramic research in Southern Germany with special attention on rural settlements. It was hardly possible to point to a specific rural material culture; instead we identified various deficits in the current research practice as well as in theoretical reflections. To understand pottery as household goods we need to consider the approaches of social archaeology that go beyond traditional questions of social status and social topography. Of special interest is the field of household archaeology, which focuses, for example, on daily life organisation, including aspects of space, division of work, gender roles and subsistence (Allison 1999; Steinborn 2016). It prepares the ground for more interdisciplinary cooperation that includes archaeometry or experimental archaeology.

Today there is a broad but dispersed – and in many regions still insufficient – knowledge about ceramic chronology that is based on many studies of single sites that, in all their details, are only comprehensible for experts. We urgently need to improve the terminology, presentation and documentation of medieval (and post-medieval) ceramics to overcome the current uncoordinated and unsystematic research practice. A cooperative online platform could help by coordinating research, clarifying definitions and making materials clearer and more accessible. Currently, we are testing a first version of the Bamberg system for teaching and researching medieval and (early) modern ceramics (*Bamberger Lehr- und Informationssystem zur mittelalterlichen und neuzeitlichen Keramik BaLISminK*). This is a wiki-system technically similar to the well-known Wikipedia. BaLISminK invites all experts to participate. It will systematically present lemma on pottery technology and materials, technical terms, definitions and descriptions of forms and wares and important finds. For now, it focuses on Southern Germany and primarily uses updated content from the author's 25-year-old handbook on ceramics in Southwestern Germany (Schreg 1997), covering the time from the 4th-5th centuries up to the 18th-19th centuries. However, in the future it will digitally provide references for the classification of ceramic finds, as the integration of photographic, graphic and digital 3-D documentation of archaeological finds is planned. To overcome the methodological deficits, BaLISminK will also address students and will therefore introduce scientific methods. They are well described in various English handbooks (e.g. Hunt 2016), but obviously little reflected in German research. Setting up BaLISminK requires the reconsideration of many terms and definitions. A systematic terminology needs to refer to spatial and chronological variations and will probably need to come back to a scheme of relative chronology (Fig. 2, Hor. I-XII). Hopefully, BaLISminK will improve understanding of the role of pottery in medieval rural households.

References

- Albero Santacreu, D. 2014:
Materiality, techniques and society in pottery production. The technological study of archaeological ceramics through paste analysis. Berlin, Warsaw.
- Allison, P.M. (ed.) 1999:
The archaeology of household activities. London.
- Bräuning, A. – Schmidt, U. – Schreg, R. 2009:
Ulm. Arch. Stadtkataster Bad.-Württ. 35. Esslingen.
- Bücker, C. 1999:
Frühe Alamannen im Breisgau. Untersuchungen zu den Anfängen der germanischen Besiedlung im Breisgau während des 4. und 5. Jahrhunderts n. Chr. Sigmaringen. Archäologie und Geschichte 9.
- Casanova, E. – Knowles, T.D.J. – Bayliss, A. et al. 2020:
Accurate compound-specific ¹⁴C dating of archaeological pottery vessels. *Nature* 31, 276.
- Dannheimer, H. 1973:
Keramik des Mittelalters aus Bayern. Kallmünz/Opf. Kat. Prähist. Staatssammlung 15.
- Endres, W. (ed.) 1995:
Zur Regionalität der Keramik des Mittelalters und der Neuzeit. Beiträge des 26. Internationalen Hafnerei-Symposiums, Soest 5.10. – 9.10.1993. Denkmalpflege und Forschung in Westfalen 32. Bonn.
- Endres, W. – Grieshofer, F. – Plöckinger, V. (eds.) 2005:
Keramik als Zeichen regionaler Identität. Beiträge des 36. Internationalen Hafnerei-Symposiums des Arbeitskreises für Keramikforschung vom 21. bis 26. 9. 2003 in Kittsee. Wien. Kittseer Schriften zur Volkskunde 16.
- Eules, S. 1991:
'Der hafner gesellen lobliche bruderschaft'. Organisation der Hafnerbruderschaft und Erzeugnisse der Hafner des 15. bis 18. Jahrhunderts im Elsaß, Sundgau und Breisgau. Frankfurt am Main. Artes populares 22.
- Evershed, R.P. 1993:
Biomolecular archaeology and lipids. *World Archaeology* 25:1, 74-93.
- Fehring, G.P. 1987:
Einführung in die Archäologie des Mittelalters. Darmstadt.
- Geisler, H. 1983:
Studien zur Archäologie frühmittelalterlicher Siedlungen in Altbayern. Straubing.
- Gross, U. 1989:
Das Fundmaterial, in Kind, C.-J. (ed.), Ulm-Eggingen. Die Ausgrabungen 1982 bis 1985 in der bandkeramischen Siedlung und der mittelalterlichen Wüstung. Stuttgart. Forschungen und Berichte zur Vor- und Frühgeschichte in Baden-Württemberg 34, pp. 332-361.

- Gross, U. 1991a:
Mittelalterliche Keramik zwischen Neckarmündung und Schwäbischer Alb. Bemerkungen zur räumlichen Entwicklung und zeitlichen Gliederung. Stuttgart. Forschungen und Berichte der Archäologie des Mittelalters in Baden-Württemberg 12.
- Gross, U. 1991b:
Vom Versuch, einen tönernen Kochkessel nachzuahmen. Denkmalpflege in Baden-Württemberg 20, 120-123.
- Gross, U. 2019:
Kacheln der Älteren gelben Drehscheibenware aus Südwestdeutschland und dem Elsaß. Heidelberg. Beiträge zur mittelalterlichen und neuzeitlichen Keramik in Südwestdeutschland. DOI:10.11588/ARTDOK.00006620.
- Hauser, G. 1985:
Beiträge zur Erforschung hoch- und spätmittelalterlicher Irdenware aus Franken. Bonn. Zeitschrift für Archäologie des Mittelalters, Beiheft 3.
- Heege, A. (ed.) 2007:
Töpferöfen – Pottery kilns – Fours de potiers. Die Erforschung frühmittelalterlicher bis neuzeitlicher Töpferöfen (6.-20. Jh.) in Belgien, den Niederlanden, Deutschland, Österreich und der Schweiz. Basel. Basler Hefte zur Archäologie 4.
- Heukemes, B. – Gross, U. 1983:
Ein Töpferofen der 'älteren gelbtonigen Drehscheibenware' aus Wiesloch, Rhein-Neckar-Kreis, in Forschungen und Berichte der Archäologie des Mittelalters in Baden-Württemberg 8. Tübingen, pp. 301-318.
- Homburger, V. – Zubler, K. (eds.), 2010:
Mittelalterliche und neuzeitliche Keramik der Region Schaffhausen. Beiträge zur Schaffhausen. Schaffhauser Archäologie 3.
- Hunt, A. (ed.) 2016:
The Oxford handbook of archaeological ceramic analysis. Oxford. Oxford University Press.
- Janssen, W. 1995:
Der Windsheimer Spitalfund aus der Zeit um 1500. Nürnberg. Wissenschaftliche Beibände zum Anzeiger des Germanischen Nationalmuseums 11.
- Klumpp, A. 2017:
Garmethoden und zugehöriges Gerät in der mittelalterlichen Küche. Experimentelle Archäologie in Europa 16, 148-154.
- Lichtenberger, A. – Moran, K.S. 2018:
Ancient fingerprints from Beit Nattif. Studying Late Roman clay impressions on oil lamps and figurines. Antiquity 92:361, 19.
- Lobbedey, U. 1968:
Untersuchungen mittelalterlicher Keramik vornehmlich aus Südwestdeutschland. Berlin. Arbeiten zur Frühmittelalterforschung 3.
- Lobbedey, U. 2001:
Mittelalterliche Keramik in zeitgenössischen Bildquellen, in Lüdtkke, H. – Schietzel, K. (eds.), Handbuch zur mittelalterlichen Keramik in Nordeuropa. Schriften des Archäologischen Landesmuseums Schleswig 6. Neumünster, pp. 633-698.
- Losert, H. 1993:
Die früh- bis hochmittelalterliche Keramik in Oberfranken. Köln. Zeitschrift für Archäologie des Mittelalters, Beiheft 8.
- Müller, U. 2006:
Zwischen Gebrauch und Bedeutung. Studien zur Funktion von Sachkultur am Beispiel mittelalterlichen Handwaschgeschirrs (5./6. bis 15./16. Jahrhundert). Zeitschrift für Archäologie des Mittelalters, Beiheft 20. Bonn.
- Münster, K.-H. – Gross, U. 2013:
Reste einer hochmittelalterlichen Töpferei in Holzgerlingen. Archäologische Ausgrabungen in Baden-Württemberg 2013, 313-316.
- Rogier, M. 2015:
Mittelalterliche nachgedrehte Keramik. Überlegungen zur Definition, Bestimmung und Interpretation am Beispiel Baden-Württemberg. Lehr- und Arbeitsmaterialien zur Archäologie des Mittelalters und der Neuzeit. Tübingen.
- Scherzer, W. 1972:
Das älteste Bamberger Bischofsurbar 1323/28. Bericht des Bamberger Historischen Vereins 108. Bamberg.
- Scholkmann, B. 1978:
Zum Stand der Erforschung mittelalterlicher Keramik in Baden-Württemberg. Zeitschr. Arch. Mittelalter 6, 149-159.
- Schreg, R. 1997:
Keramik aus Südwestdeutschland. Lehr- und Arbeitsmaterialien zur Archäologie des Mittelalters und der Neuzeit. Tübingen.
- Schreg, R. 2006:
Dorfgenese in Südwestdeutschland. Das Renninger Becken im Mittelalter. Materialhefte zur Archäologie in Baden-Württemberg 76. Stuttgart.
- Schreg, R. 2012a:
Keramik des 9. bis 12. Jahrhunderts am Rhein. Forschungsperspektiven auf Produktion und Alltag, in Pantermehl, H. – Grunwald, L. – Schreg, R. (eds.), Hochmittelalterliche Keramik am Rhein. Eine Quelle für Produktion und Alltag des 9. bis 12. Jahrhunderts. RGZM-Tagungen 13. Mainz, 1-19.
- Schreg, R. 2012b:
Landschaft im Wandel – Perspektiven der Archäologie des Mittelalters, in Müller, H. – Ochs,

- H. – Felten, J. (eds.), *Der Begriff der Landschaft in der landeshistorischen Forschung. Geschichtliche Landeskunde* 68. Stuttgart, 63-86.
- Schreg, R. 2021:*
Ein Dorf bei München – südbayerische Keramik-chronologie und das vergessene Spätmittelalter. *Archaeologik*, 16 November. <https://archaeologik.blogspot.com/2020/08/rezension-ein-dorf-bei-munchen-und-die.html>.
- Schreg, R. – Zerres, J. – Pantermehl, H. et al. 2013:*
Habitat – ein soziologisches Konzept in der Archäologie. *Archäologische Informationen* 36, 101-112.
- Schulze, M. 1981:*
Die mittelalterliche Keramik der Wüstung Wülfigen am Kocher, Stadt Forchtenberg, Hohenlohekreis, in *Forschungen und Berichte der Archäologie des Mittelalters in Baden-Württemberg* 7. Tübingen, 4-148.
- Skibo, J.M. 2013:*
Understanding pottery function. *Manuals in archaeological method, theory and technique*. New York, NY.
- Steinborn, M. 2016:*
Soziale Fragestellungen und die Archäologie des Haushalts, in Scholkmann, B. – Kenzler, H. – Schreg, R. (eds.), *Archäologie des Mittelalters und der Neuzeit*. Darmstadt, 263-265.
- Svensson, E. 2008:*
The medieval household. Daily life in castles and farmsteads. Scandinavian examples in their European context. *The medieval countryside* 2. Turnhout.
- Tauber, M. 1998:*
Chemische Analysen von Nahrungsmittelrückständen an mittelalterlicher Keramik. Möglichkeiten und Grenzen der Identifikation, in Morgenroth, S. – Tauber, M. (eds.), *Analysen und Interpretation. Arbeiten zur Urgeschichte des Menschen* 21. Frankfurt am Main, 217-293.
- Vychítal, P. 1991:*
Keramik des 8. bis 13. Jahrhunderts aus Siedlungen am Maindreieck. Beiträge zur Anwendung quantitativer Methoden. *Antiquitas*, Reihe 3, 31. Bonn.
- Weid, E. 2000:*
Die Kleinfunde der mittelalterlichen Siedlung von Zuchering bei Ingolstadt. *Arbeiten zur Archäologie Süddeutschlands* 10. Büchenbach.
- Weiser, B. 2003:*
Töpferöfen von 500 bis 1500 n. Chr. im deutschsprachigen Raum und in angrenzenden Gebieten. *Zeitschrift für Archäologie des Mittelalters*, Beiheft 15. Bonn.