The Garbage, the Castle, its Lord and the Queen.
A New View of Boringholm as the Home of a Failed Parvenu

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ABSTRACT

This paper seeks to explore an alternative approach to the interpretation of paradoxal evidence by comparing finds and contexts. It is based upon the theorems of garbology, developed by the archaeologist William Rathje (1945-2012) in the Tucson Garbage Project. While Rathje used archaeological methods for research in garbage reflecting modern consumerism, this paper takes the opposite approach, applying the theorems of garbology to late medieval garbage practices. A case study focusing on Boringholm Castle (lifespan between 1369 and the early 15th century) discusses the paradox of finding artefacts reflecting an outstanding elite culture in a modest environment that resembles a farmstead rather than a late medieval castle. The range of finds at Boringholm is very broad, demonstrating that this was the household of a parvenu who tried to imitate a courtly lifestyle.

Introduction: Social Mobility in the Late Middle Ages

Wernher der Gaertnere wrote his epic poem 'Meier Helmbrecht' around 1250. Its eponymous protagonist is a rich peasant's son. He is not interested in working on a farm and succeeding his father as a rural mayor, but wants to become a knight instead. His family equips him with fashionable clothing and a horse, which enables him to start a career as a robber knight. When he returns home, proud of his stolen wealth, he has developed a pretentious upper-class accent and despises his family's lifestyle. His sister decides to join him. Helmbrecht arranges her marriage with a member of his gang, but the bailiff's intervention ends the celebration, as all the robbers are caught: Nine of them are hanged, and Helmbrecht is blinded and loses a hand and a foot. He tries to take refuge at his father's farm, but his father brokenheartedly rejects his son. Wandering alone through the countryside, Helmbrecht is recognised by peasants as a former robber and is finally hanged (Honemann 2001, 33-39; Wernher der Gaertnere).

This poem is a story of a parvenu's failure to achieve higher social status, and is typical of the 13th or 14th centuries. A parvenu is defined as a person from a humble background who has rapidly gained wealth or an influential social position, but who chooses to behave according to the social norms of their origins in preference to those of more elevated levels of society (OED 2022). This paper uses archaeology to trace the life of a failed social climber who tried to join the upper aristocratic class by imitating their way of life. This is a phenomenon we encounter frequently in late medieval society, which was characterised by a high degree of vertical mobility: In Central Europe, the nobility consisted of several layers with a clear differentiation between the old, upper nobility and the lower nobility. The former comprised princes, counts and free noblemen owning estates and holding a lord's fief. The latter is much more diverse and comprised knights, their families and a lord's unfree *ministeriales* (=servants). Both layers shared a similar military lifestyle and belonged to the court culture. Talented lower noblemen could even assume the roles of the upper no-

bility in war or at the royal court. However, a hard glass ceiling separated the upper free nobility from lower noblemen, since intermarriages were rare between these two groups.

A classic example of vertical mobility starting in a rural retainer context is the originally unfree *ministeriales* of Hagen-Arnsburg-Münzenberg, who succeeded as fighters and counsellors in royal service. The pay-off in return for this service enabled Kuno of Münzenberg (who is mentioned in documents in 1155-1207) to build the most impressive castle in Hesse, Münzenberg. His granddaughter Adelheid married Ulrich, Count of Hanau, who made King Rudolf I free his wife and children in 1273 to ensure that the comital heritage remained in the hands of his otherwise unfree sons. Now the heirs of Münzenberg belonged to the upper nobility (Atzbach 2018, 188-192; Spieß 1992). While Münzenberg's ancestors might have shared Meier Helmbrecht's rural upper-class background, the urban elite also strove to adopt elements of noble lifestyle to increase their chance of becoming a knight and a member of the aristocracy. One example of this is the Vintler family's history: Niklaus Vintler was a successful merchant and burgher who became a bailiff in Bozen, Tyrol. In 1385, he bought Runkelstein Castle close to Bozen, which he formally received as a fief from the Bishop of Trient. During its extensive renovation, Niklaus rebuilt and decorated the castle with one of the most famous series of late medieval paintings, showing classic topics of courtly love, tournaments and knightly lifestyle. His brother Hans translated an Italian poem, 'Fiore di Virtu', praising the nobility of virtue instead of the nobility of ancestry. His grandson and his granddaughter were accepted in the noble sphere and married members of the lower aristocracy in Tyrol. Research has misinterpreted Runkelstein Castle's paintings as a classic example of knightly court culture, but in reality they are the result of a civic self-made man's systematic, visual ascension strategy (Pfeifer 2011; Siller 2011; Wetzel 2000).

Late medieval Denmark resembled the Holy Roman Empire in terms of society and social advancement, but there were also differences: Although no legal differentiation between free noblemen and unfree servants or peasants existed, society was far from being equal. Apart from the large number of (free) peasants and the few urban communities, a new military class of retainers and knights arose, after chivalry and horses had become important in warfare following the Battle of Fotevig in 1134. This new aristocratic group might have been rooted in the early *hirde* or *herremænd* (=herres mænd, a lord's men), who followed their lord into war and were freed of tax in return. Moreover, the upper social sphere of magnates owning large estates (for instance the Hvide or Brok family) took part in Danish rule in conflict or in cooperation with the kingdom. With the central power's decline since 1250, but especially since King Erik Menved's reign (1286-1319), military conflicts had grown in number with a severe impact on everyday life. The Danish kings tried to retain control using expensive mercenary troops, but this policy led to an erosion of royal property and destroyed central power. As a result, local leaders started to fortify their houses in this 'Age of the Castle', which did not end until Queen Margaret I's restoration of central power in the late 14th century (Atzbach 2021; Etting 2004, 2010, 11-20, 29-38; Ingesman et al. 1999, 82-86).

During this period of conflicts and warfare, many people lost their lives or property, while others managed to ascend socially to the status of being a lord's retainer or counsellor – similar to the aforementioned *ministeriales* in the Holy Roman Empire. These self-made men might have been regarded as parvenus by the established magnates and their retainers. We do not hear explicitly about failed parvenus like Meier Helmbrecht in Danish written sources. However, it is possible to spot corresponding biographies: The later Renaissance manor house of Rosenholm in Central Jutland was originally founded as the manor 'Holm' by the magnate Anders Peetz, who was Queen Margaret I's retainer and had his seat there. His sons were fortuneless and sold major parts of this estate. The house finally fell to the Aarhus Bishopric and was let to a peasant as a simple farm (Danske herregårde 2022; Hansen 1909).

This study seeks to explore the potential of archaeology for approaching vertical mobility in the high and late Middle Ages. It proposes that the site of Boringholm Castle (Figure 1) was the home of such a parvenu due to the paradoxal character of the archaeological evidence. The castle was in

Figure 1. Sites mentioned in the text (Graphics: Katrin Atzbach).

use between 1369 (dendrochronology, shortened thereafter as (d)) and the early 15th century and was completely excavated between 1905 and 1916. The excavation results were published in 2005 (Kock and Roesdahl 2005).

Theoretical Framework: Artefacts and Interpretation

Archaeology aims to reconstruct or at least understand past societies and their internal processes. The central basis for this approach is contexts (building structures, layers, graves, cuts etc.) and the finds which are (ideally) embedded in them. Traditionally, finds are regarded as a more or less precise mirror of past life. For instance, a concen-

tration of tools or production waste signifies the presence of a workshop, luxury items such as precious metal, imported cloth or stoneware are regarded as reflecting an upper-class lifestyle with access to trade, and weapons are associated with a military way of life. Since the early days of archaeology, scholars have regarded the selection of objects and formation processes as the most important filter between historical reality and the excavated finds. The key assumption has been that archaeological finds represent past everyday culture proportionally: Hans Jürgen Eggers proposed that source criticism should be applied to archaeological contexts and finds in order to differentiate between 'living culture', 'dying culture' and 'buried culture' (Eggers 1959, 255-267). Michael B. Schiffer, Pär Karlsson and Göran Tagesson contributed the

important identification of de facto, primary, secondary and tertiary contexts reflecting the location and relocation of objects after they go out of use (Schiffer 1987; Tagesson 2003). Recent interpretations of archaeological finds regard materiality as an interaction between an object and its user. Object biographies reveal the changing role of an object in its lifespan and in the hands of different users (Burström 2014; Gosden and Marshall 1999; Hahn 2005). This immediate or proportional relationship, especially between a quantitative presence of objects and past everyday life, has been a central paradigm in research and in archaeological textbooks until the present (cf. Renfrew and Bahn 1996, 195-196, 201; Scholkmann 1998; Scholkmann, Kenzler and Schreg 2016, 101-119; White and Beaudry 2009).

In contrast to prehistory, medieval and later/historical archaeology has largely benefitted from written and pictorial sources that have shed a second and a third light on archaeological contexts. On the one hand, upper-class contexts identified by such additional sources often contain imported tableware, drinking or window glass, precious weapons and luxury items such as jewellery and elaborate riding gear, or simply an exceptionally wide range of objects. Sometimes, however, high-status sites do not contain any remarkable finds. For instance, the imperial palace in Seligenstadt did not provide any object that could have been attributed to a high-status household (Atzbach 2020). This could be explained by erosion or the later removal of occupation layers. On the other hand, a few paradoxal contexts have appeared: One famous example is the golden brooch from Schleswig that was excavated in a fisherman's hut and has been interpreted as booty from the murder of King Eric IV Plovpenning in this town (Atzbach 2010; Radtke 2007). In general, the contrast between a site with modest architecture and a large number of valuable finds needs an additional interpretative framework that goes beyond the paradigm of proportion.

Our theoretical approach will take its point of departure in William Rathje's ideas of '*Garbology*'. William Rathje (1945-2012) was an American archaeologist teaching anthropology at the University of Arizona and Stanford University. Originally working as a Mayanist, in 1973 he started the

Tucson Garbage Project, which studied consumerism by applying archaeological methods to the excavation of modern landfills (Rathje and Murphy 2000; Schiffer and Riecker 2015). His innovative *Garbology* approach compared consumer interviews to excavated landfill finds that originated from these consumers' districts. Some results were expected, while others were surprising and contradictory. This new method provided objective data about modern consumer behaviour – on a huge data basis of more than 1,342 m^3 of excavated stratified material (Rathje and Murphy 2000, 11, 16). Rathje's archaeological results have primarily been used for demoscopic market research in today's society. However, it is also possible to turn his approach around, using his results and principles to explain the relationship between historical waste management and everyday life. This approach has not been used in archaeology before and will be applied in our case study.

The Tucson Garbage Project's results can be condensed into five theorems that characterise general anthropological traits in human behaviour:

1) What we say is not what we do. It is no surprise that people tend to be less than honest in interviews regarding their alcohol or drug consumption and their sexual behaviour (Rathje and Murphy 2000, 53-54).

2) There is no immediate or proportional relationship between garbage and a household inventory: Some valuables or objects with personal value, e.g. an encyclopaedia or a volume of National Geographic, rarely end up in the dustbin because they are handed to followers, friends or relatives as a gift or legacy (Rathje and Murphy 2000, 58).

3) First principle of food waste: The more repetitive your diet – the more you eat the same things day after day, the less food you waste. While ordinary daily meals are scarcely visible in the waste, exotic meals and strange objects with which the members of a household are not familiar tend to be overrepresented in the household waste (Rathje and Murphy 2000, 62). This fact is also reflected by the German saying 'Was der Bauer nicht kennt, frisst er nicht' (What a peasant does not know, he will not guzzle). The project led to the extremely counterintuitive result that in times of shortage the proportion of scarce (and

therefore expensive) goods actually increased in garbage and landfills: Both the sugar shortage and the beef shortage in the USA during the 1970s increased the proportion of discarded sugar and beef (packages) (Rathje and Murphy 2000, 59-60). This was proven once again during the recent covid-19 crisis in 2020: It was almost impossible to buy yeast in Denmark – guess where all the hoarded yeast ended up…

4) First principle of household hazardous waste. This principle is closely related to the previous principle: Cleansers and detergents which are used daily rarely appear in waste, whereas special products bought for a single purpose, e.g. glues and sealants, account for a disproportionately large share of hazardous household waste (Rathje and Murphy 2000, 76).

5) A high proportion of branded goods in waste indicates eagerness to follow a role model. The Garbology Project called this theorem 'the Hollywood Hypothesis': Middle-class families climbing the social ladder tend to discard more branded goods than affluent people do. Latin American immigrants in the USA quickly adopted American consumer patterns buying and discarding even more typical US-American products - such as red meat or expensive toys – than their Anglo-American neighbours. Rathje's team interpreted this phenomenon as an act of integration that imitated the everyday culture visible in American soap operas or Hollywood movies (Rathje and Murphy 2000, 135, 147). From an anthropological point of view, this phenomenon reflects the interest of the lower class in status symbols used by the upper class. It is also known as conspicuous consumption (Veblen 1899, chapter IV) or trickle-down effect: The upper class are constantly forced to change their status symbols in order to distinguish themselves from their lower-class imitators (Durkheim 1887, 57).

The application of this model, albeit rooted in recent consumerism theory, to late medieval society is legitimate because recent studies have revealed the diachronic character of human consumption behaviour that is not driven by a western, medieval or modern mentality: Of course, the consumption patterns of the medieval elite were vastly different from the majority of the population. The latter were mostly limited to consuming goods produced in their local area, and the selection of goods was generally quite confined. In contrast, the elite had wider access to luxury goods fabricated in distant regions. While former economic research discussed a "consumer revolution" not before 1700, today, "modern" consumerism patterns seem to develop already from the 14th century onwards (Dyer 1989, 2005). This transition generated a structure comparable to the upper and middle class in the American society scrutinized by Rathje. Thus, modern consumerism theory provides a framework for understanding how people in the past acquired, consumed, and disposed of goods and materials. Additionally, it allows for the examination of the creation and maintenance of social status through the acquisition, display and consumption of goods, as well as the impact of economic changes on consumption patterns. On the one hand, consumption is primarily ruled by the limits of supply and demand on a given market or in a trading network. Beyond subsistence, acquiring things aims to construct or to maintain status and social relationships throughout all periods and cultures (Jervis 2017; Trentmann 2004). The aforementioned trickle-down effect originates from the 'Reagonomics' of the 1990s but has become an integral part of archaeological theory (Aghion and Bolton 1997; recently e.g. Frieman and Lewis 2021). Thus, it is worth trying to apply Garbology theorems to medieval waste. On the other hand, *nouveau riche* wealth has never been the key to entering the upper class, who uses a distinctive set of symbols, marital networks and (in medieval times) ties of fidelity, honour and hierarchy: Owning a fancy horse and a magnificent armour did not qualify you for access to an aristocratic feast (Hørby 1980, 271).

The application of this model to the archaeological source material excavated in medieval castles presents one particular issue: In an ideal world, we would work with objects that had been carefully excavated by specialists with detailed documentation. However, the site selected here, Boringholm, was not excavated according to modern standards. Nevertheless, it is possible to regard its finds as the relics of one household that existed in a period of two generations. In settlements, households rather than individuals constitute the smallest archaeologically observable social unit.

The analysis of an old excavation on a castle site is a methodological challenge. Find complexes without contexts – not only from castles, but also from urban sites – are one of the most critical issues in modern archaeology. We could choose a radical solution by ignoring this material, which is typically excavated under challenging conditions, usually on the initiative of early enthusiasts. However, a more promising method involves developing new approaches to giving this material a voice. Schmid (2020) demonstrated the possibility of reconstructing even functional contexts on the basis of such finds. Moreover, the special character of castles offers one opportunity: In contrast to a town or village plot, a castle site is less subject to contamination. Castles are usually built in remote areas, on the top of a hill or in a bog, which reduces the impact of any neighbouring households. Agricultural use might have freighted dung containing sherds from farms into the plough layer, but this is not the case at Boringholm, which was located in muddy lowland that was not appropriate for husbandry. All archaeological contexts at this site are assigned to its household, even if besides primary and secondary deposition contexts there may be contexts for which a tertiary origin cannot be completely ruled out. The archaeological record then represents a fragmented picture of all the people of this time who lived here, while internal differentiation of the households, for instance between the owner's family and their servants, and the allocation of archaeological material to certain members, is generally difficult to achieve. In the future, more elaborate, detailed analysis of zones of activity based on archaeological context and the access analysis of rooms may make it possible to identify links to specific groups of the castle household (Friedrich 2006; Handzel and Kühtreiber 2015; Meyer 2006). This means that we have to accept that the material culture of this time might have belonged to different households that had lived on the site within its useful life. Moreover, it is a fact that the temporal resolution of archaeological sources, due to their very nature and available dating methods, remains generally rough – there are only a few cases in which the time span is shorter than one generation/30 years. As a result, we are studying an 'average household' comprising objects both from the master's and servants' householdings that were deposited on this site in a period of one or two generations.

Case Study: Boringholm

The castle was situated north of the small village of Boring in Hvirring Parish, the historical Nim Shire (Danish: *herred*), today Skanderborg Municipality. Christian Axel Jensen, curator at the National Museum of Denmark and a specialist in castle research, excavated the site entirely in 1906-12 according to the standards of the time, only exposing apparent features like wooden beams. Almost one hundred years later, the finds and documentation were analysed in a multidisciplinary research project at Aarhus University (Kock and Roesdahl 2005). The castle is situated close to the borders of the shires Nim, Vrads and Nørvang in wet lowlands far from country roads on a remote site. Such a hidden 'mud castle' was a typical humble fortified house of a rich peasant and his family during the uncertain times in the 14th century (Atzbach et al. 2018, 200 chart 2) (Figure 2). We do not know the site's original owner. According to written sources, Knight Iver Lykke's heirs transferred all of their rights in Boring including holm, house and buildings to Queen Margaret I of Denmark in 1400. Moreover, Knight Mogens Munk assigned his property in Boring, which he had received from Iver Lykke's heirs, to her in 1406, because he was aware that 'my gracious Lady Queen Margaret and the Kingdom are entitled to it' (after Ulsig 2005, 268, original text in *Diplomatarium Danicum* 1406). A few years before, in 1396, the royal law court decided that 'three parts of Boring, Boringholm and its belongings are to be distributed amongst the local peasants, while the fourth part, which was formerly owned by Peder Brok, was conveyed to King Valdemar earlier'. Erik Ulsig interprets this distribution as a restitution of misgotten property. The Brok family had already held some property in Boring since 1323 (Ulsig 2005, 267). It is not clear if this property comprised Boringholm Castle. Taking into consideration that the castle was not built before 1369, this transaction could concern a different site. Nor is it clear how Knight Iver Lykke, who was Queen Margaret I's retainer and counsellor, obtained the site. The cas-

Figure 2. Boringholm on the Royal Danish Academy of Sciences and Letters' map (*Videnskabernes Selskab Kort*, 1787). The castle was not visible on the original map, but was situated in the lake (Rasksø, blue markup) north of the village of Boring. Boring was situated at the dead end of a back road, while the trunk road connecting the market town of Ribe and the royal residence of Skanderborg crosses the map extract from Uldum to Nim (Markup and scaling: Katrin Atzbach; map: Geodatastyrelsen, downloaded from *Historiske kort på nettet*, https://hkpn.gst.dk/ [accessed 20 December 2021]).

tle was probably deserted on the Queen's order, which would fit well with her policy of suppressing adversaries and razing minor fortifications to the ground, because they were regarded as a risk to public peace (Atzbach 2021a; Etting 2004).

The Buildings

In the first construction phase, the castle was erected on a flat, natural mound in the former shallow Rasksø Lake in 1369 (d). This mound was only slightly above the water level, making the site very muddy especially in rainy periods. The inner castle with the main buildings measured about 40 x 40 m (Figure 3). A wooden bridge to the southeast connected the inner castle to the mainland (all subsequent descriptions following Johansen and Nielsen 2005). The central castle mound bore a pile foundation framed by bulkheads. Several layers of timber, branches and soil framed by two bulkheads expanded the natural mound to the north. Four wings surrounded a central courtyard: The north wing was the best preserved, measuring about

30 x 6 m. It consisted of a one-aisled building subdivided into three rooms, erected in 1371 (d). Wooden planks or sections of wattle and daub were notched into sill beams that also bore the posts forming the walls. There is no evidence for Heidi Maria Møller Nielsen's reconstruction of a rafter roof (Danish: *spærtag*) (Johansen and Nielsen 2005, fig. 6.13), since reversed assembly (Danish: *højremskonstruktion*) was widespread in late medieval Denmark, while no rafter roofs are documented on profane buildings in Denmark in the Middle Ages. The building construction documented during the excavation and interpreted by Christian Axel Jensen as well as Johansen and Nielsen (2005) needs to be revised. The floor consisted of planks and clay. A simple fireplace or oven heated the western room, while the central room contained a more elaborated fireplace built in ashlars from a ruined church. One single rim sherd of a vessel tile is documented (Andersen 2005a, 115 fig. 8.20), but this is not enough to conclude that there was a tile stove at this site. The northern building burnt down and was redressed in a similar way around 1374. The western wing measured about

Figure 3. General plan of the Boringholm Castle excavation. The inner castle was built between 1369 and about 1372 on a shallow natural mound in the former Rasksø Lake. Originally, a wooden bridge to the southeast provided access from the mainland. Around 1380, the mound was artificially expanded to the northeast with an outer bailey and some outbuildings, and to the west, where no traces of buildings were found, but a newer bridge provided access to the mainland (Map: Ulla Johansen in Koch and Roesdahl 2005, Folding Plan).

23 x 5.50 m. It seems to be constructed as a two-aisled building with a purlin roof, built around 1370/72, but there is little information about its structure. The southern wing measured about 24 x 5 m; its construction matched the western building. To the east, a small wooden annex in the northern wing enclosed the courtyard. Evidently, the northern building was the main dwelling; the other wings housed the stable or barn.

In the second period, the castle mound was artificially expanded to the north, east and west, comprising about 10,000 m², in 1380. Around the central mound, a channel of about 6-7 m in width was not filled up, forming a wet moat between the older inner castle and the outer areas. The western area did not seem to have any buildings, and a younger wooden bridge to the north connected the castle to the mainland. The northern and eastern expansion might be regarded as an outer bailey with several half-timbered outbuildings. A bridge over the wet moat connected this area to the central mound. A palisade or even a rampart probably enclosed the castle, at least in its second period. The last repairs were made in 1401, before the castle was abandoned and torn down in the early 15th century.

The Finds

The wet ground preserved a large number of organic and inorganic finds at Boringholm: The excavations brought 1,407 objects to light, of which 42 % were organic. Else Østergård and Penelope Walter Rogers have analysed textiles, ropes and cords (Østergård and Rogers 2005), and Hanne Dahlerup Koch has analysed shoes (Koch 2005), while most of the finds have been scrutinised by Charlotte Boje H. Andersen in her PhD dissertation (Andersen 2003, 2005a). In an additional study based on Andersen's first registration, Boringholm's wide range of objects has been quan-

tified by means of the *number of artefact types* (NAT), which was compared to twelve Danish medieval castles (Atzbach 2021c; Atzbach and Radohs 2021; summarized here in Appendix 1). This method was originally developed as a measurement for the wealth of grave goods: Instead of counting the number of *objects*, the number of *types* is registered, e.g. five sherds of greyware, two sherds of stoneware and a knife are not counted as eight *objects*, but as three *artefact types*, generating a NAT value of 3. The castles in that study were excavated between 1887 and 2000 with different methods following different collection strategies, which is not without problems. Lilleborg, Næsholm, Boringholm, Lykkesholm and Hedegård were excavated entirely more or less according to contemporary or modern standards. Ravnsborg was completely exposed by his owner without any archaeological supervision. Gurre, Nørrevold and Sandgravvold were excavated to a large extent. Thus, the absolute number of finds does not correlate to the degree of excavation but reflects the collection strategy. Interestingly, the NAT value is independent of the sheer number of objects. Evidently, the NAT method reduces the excavation or collection bias since even a single collected sherd/vessel of redware gives a count and documents the presence of this artefact type at a site: At Ravnsborg Castle, the excavator was scarcely interested in finds and collected only 562 objects; he barely wanted to expose his castle's walls. However, these objects make a NAT of 43, matching the range from Næsholm that was entirely excavated by professionals with the threefold number of finds. Hedegård Castle was completely excavated and generated more than 3.000 objects, which represent only 25 number of artefact types. Consequently, NAT is an effective way of sampling the range of objects even on a partially excavated site.

Another issue is differences in preservation conditions across the sites. To reduce the bias created by the favourable impact of wetland conditions on preserving organic objects that would not have survived in dry contexts, only the NAT of inorganic finds ought to be considered. The former study had two significant results: The number of artefact types is independent of the overall number of collected finds, but tends to correlate with the status of the castle's owner. For instance, the royal castle of Gurre has only been excavated partly but has a NAT value of 44 based on a total of 364 objects; whereas the knightly castle of Egholm has been fully excavated but only reaches a NAT value of 15 despite producing a larger number of objects (560). In other words, even partially excavated sites can be used as a sample. However, this hypothesis needs confirmation based on modern excavations with clear standards of context recording, sieving and controlled metal detecting.

Applying this method to Boringholm, all the inorganic artefact types totalled a NAT value of 42. 245 objects belonged to 23 artefact types that characterise an upper-status household, i.e. riding gear, precious weapons, jewellery, imported tableware or gaming pieces (Andersen 2004, 16; Atzbach and Radohs 2021; Goßler 2005, 2009, 2015; Krauskopf 2006, 2021, 230). Instead of presenting all finds again, a few exquisite objects will serve to illustrate the high standard of material culture at Boringholm: Imported pottery demonstrates the presence of widespread contacts, with the Italian Archaic Maiolica that served as a spice container perhaps documenting that the inhabitants enjoyed refined meals (Blake 2021, 31, fig. 2.4.2; formerly identified as Saintonge in Andersen 2005a, 116, fig. 8.23). There is also a remarkably large number of Rhenish stoneware artefacts (Andersen 2005a, 116-118, fig. 8.26). A brass-damascened sword from Passau with a discoid pommel and triangle guards, found in its scabbard 'in deep layers' to the west of the western fireplace, is an outstanding weapon (Andersen 2005a, 141-143, fig. 8.80). Its quality matches the bronze spur with engravings and the quatrefoil-decorated bronze stirrup (Andersen 2005a, 156-158, fig. 8.104, 155, fig. 8.101). Two small wooden shields with a coat of arms (which looks rather like a house mark, Andersen 2005a, 152, fig. 8.97) are also rare, and were probably used for decorative purposes in the hall in the main building. A set of chessmen documents that there was also time for courtly leisure activity (Andersen 2005a, 176, fig. 8.142) (Figure 4).

The majority of the objects found can be associated with ordinary householding activities such as cooking and farming, and there is a broad range of tools and equipment (Andersen 2005a, 158-162). Moreover, there are finds with a clear military character documented by 106 parts of weapons or
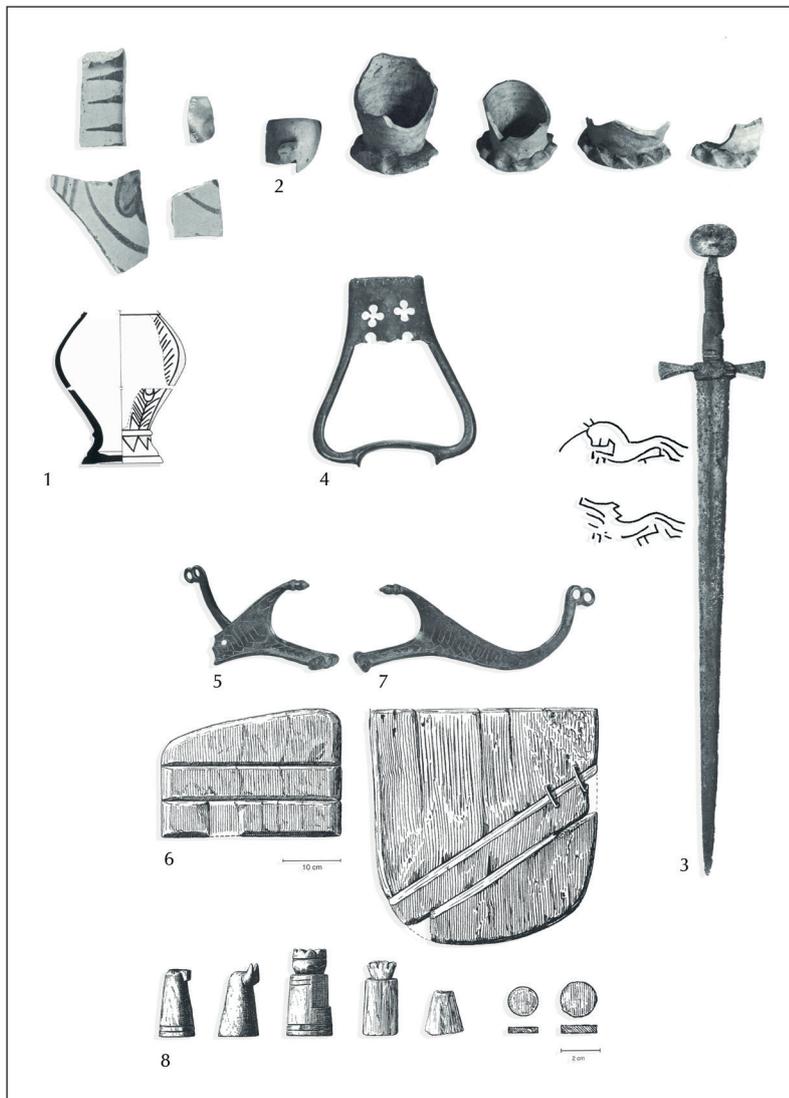
Figure 4. Outstanding single objects illustrate the elite culture at Boringholm:
1) Italian Archaic Maiolica (Blake 2021, fig. 2.4.2 and 2.6).
2) Rhenish stoneware (117, fig. 8.26).
3) A sword from Passau (141, fig. 8.80).
4) A bronze stirrup (155, fig. 8.101, NM).
5) A bronze spur with engravings (158, fig. 8.104).
6) Two shields with a coat of arms (or more likely a house mark, 151, fig. 8.97).
7) An engraved spur (155-158, fig. 8.104).
8) A set of chessmen (176, fig. 8.142).
(Graphic composition: Katrin Atzbach, drawings: Peter Linde, photographs: National Museum of Denmark).

armour. 83 items are associated with horses (horse gear, horseshoes, currycombs, spurs, stirrups) and signify chivalry. The aforementioned outstanding objects reflect an affluent way of life with international connections and the time for leisure and gaming. Thus, Boringholm resembles an aristocratic household rather than a peasant household. This fact is also supported by the castle's demography, which can be identified based on the leather shoes that were found here. Willy Groenman-van Waateringe (1978, 1984) developed a graphical-statistical method based on the phenomenon that each collection of shoe soles shows two characteristic peaks for women and men (in today's Denmark 43 in French stitches for men and 40 for women, TV-Østjylland 2021) (Figure 5). Hanne Dahlerup Koch's data about Boringholm's shoes provide a proxy for the residents at this castle (Figure 6): 113 of the 192 soles could be identified as adult men's (Koch 1990, 33-55, fig. 15 and 26).

Only 79 soles belong to the small-sized groups, i.e. children, adolescents and women. 'Male shoes' constitute 59%, which is an astonishingly large proportion in comparison with other late medieval sites, where children's soles usually represent the biggest proportion (Atzbach 2012, fig. 10). This demonstrates that Boringholm housed not only its owner's family, but also a group of male individuals, probably retainers (Andersen 2005a, 167, fig. 8.126; Koch 2005, 217-218, fig. 217, 10.23).

Discussion

According to the written sources, Boringholm was involved in the conflict between Queen Margaret and the Jutlandic aristocracy. We do not know its former owner, but it is clear that the castle was handed over to Queen Margaret via her retainer Iver Lykke and his heirs. Shortly afterwards, it was

Figure 5. Distribution of shoe sizes in Germany in French stitches (2017). The female peak is located at size 38, the male peak at size 42 (Graphics: Rainer Atzbach, data: Neumann 2022).
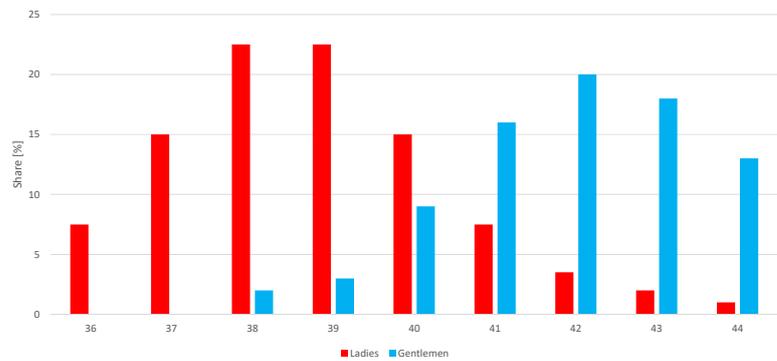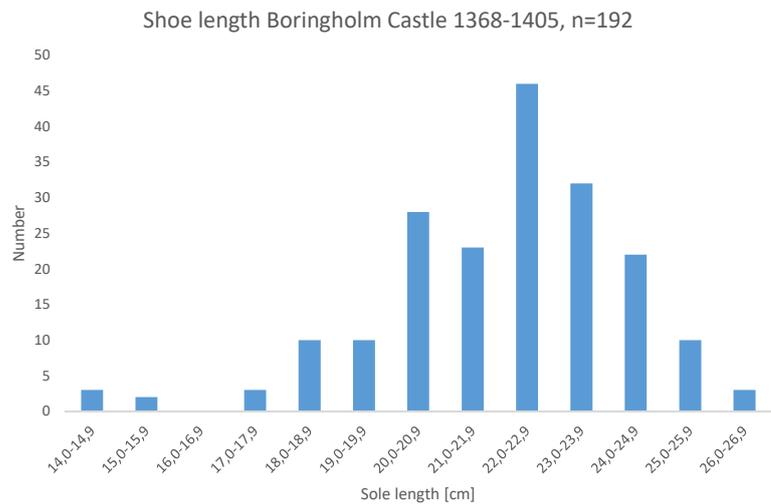

Figure 6. Distribution of shoe lengths at Boringholm: 113 of 192 soles seem to belong to the male peak, while 79 soles are left for children, adolescents and women (Graphics: Rainer Atzbach, based upon data from Koch 1990, 33-55, fig. 15 and 26).

deserted. Moreover, all former possessions of the Brok family – who had been an opponent to the Danish Kingdom – in Boring were distributed among the local peasants in the late 14th century. This supports the hypothesis that Boringholm was one of the illegal fortifications that were the 'origin of injustice' banned by the Queen in 1396 (Kroman 1971, 334-344, No. 35, article 3).

Boringholm was situated close to the border with the neighbouring shire, a typical position for Danish castles. One previous study showed a relationship between the view that a castle provided and its owner's rank. Boringholm occupies a middle position between royal and ducal castles, which tend to take central positions as a landmark and even more remote fortified refuges of peasants (Atzbach et al. 2018, 200-201). Boringholm was not able to control the important trunk roads drawn on *Videnskabernes Selskab*'s map in 1787 because of its remote position at the dead end of a back road that only accessed Boring (Figure 2). This humble and hidden type of fortified farm is described in *Chronica Sialandie* in the year 1359, when the Jutlanders started their uprising against King Valdemar Atterdag, who had built 'castles of

mud and tile, and they did not even have straw left' (*in luto et latere castra edificarunt, nec palea eis dabatur*, translated by the author after *Chronica Sialandie* 1359, 141 = 51v), a reference to *Vulgata*, Exodus 5,7, where bricks had to be produced by the Israelites in Egypt, who even had to provide their own straw. Stefan Magnussen identified such a remote position as characteristic of minor private castles in Southern Jutland, while important ducal or royal fortifications were typically located in the vicinity of centres of communication (Magnussen 2019, 147). A study of King Erik Menved's fortifications in Jutland supports this hypothesis: His strongholds were always erected close to transport nodal points (Atzbach 2021b, 171-172). Its remote position puts Boringholm in the group of minor private castles built during the 14th century. Its architectural layout, a three- or four-wing set of half-timbered buildings without any evidence of a second storey or even a tower, resembles a farmstead far more than a castle. Our knowledge about late medieval farms is limited, but known examples like Tårnby and Store Valby on Zealand and Kyrkheddinge or Ilstorp in Scania show dimensions similar to Boringholm's inner
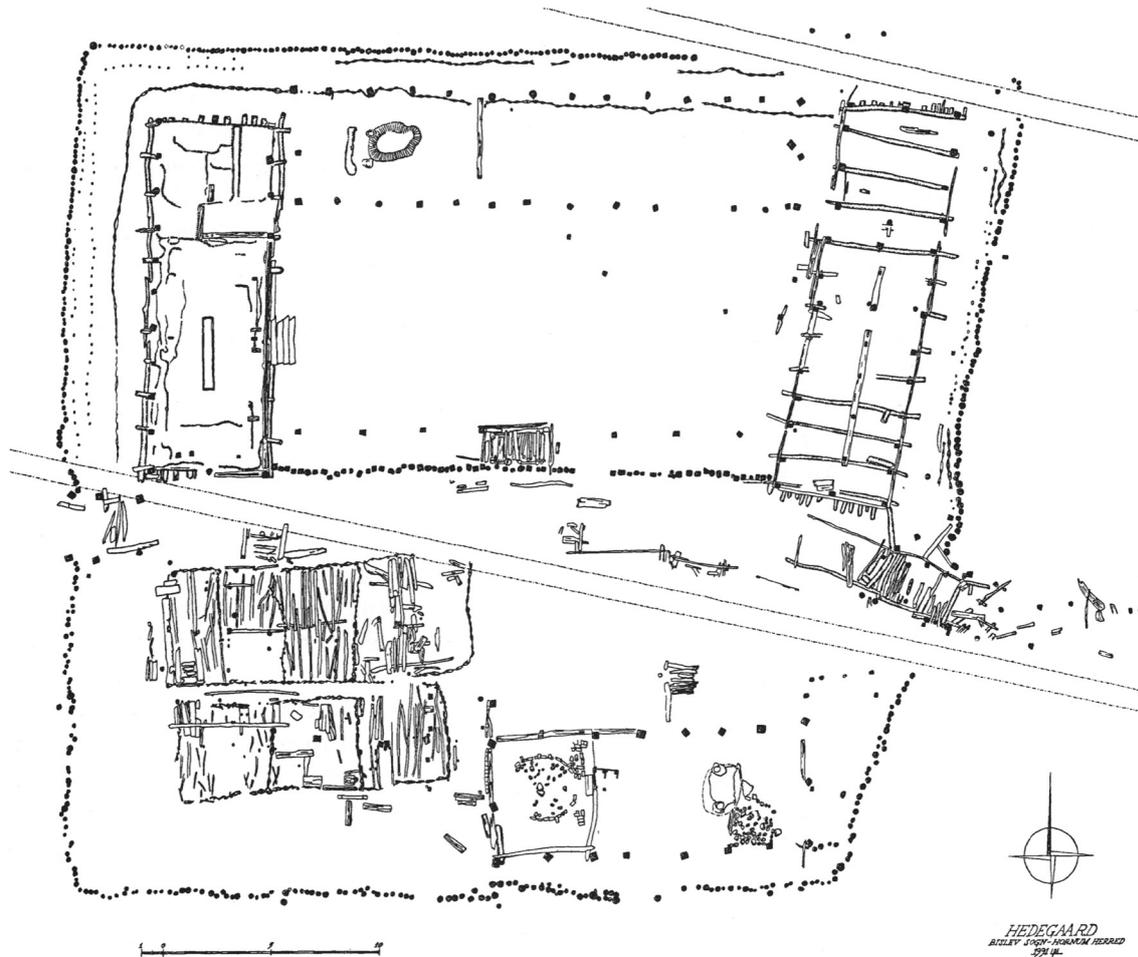
Figure 7. Hedegård Castle in Himmerland, Northern Jutland. It looks like Boringholm's twin. The castle existed between 1363 and 1390, was erected in wet lowlands and consisted of three half-timbered buildings (Reproduced after Nielsen and Johansen 2005, 282 fig. 15.6).

castle. They also comprise a main building with at least two fireplaces (Tårnby: Kristiansen 2005, 175-185; Kristiansen and Roland 2005, 132-135; Store Valby: Kristiansen 2006, 157, 163; Kyrk-heddinge: Sabo 2001, 19-21; Ilstorp: Tesch 1996). However, Boringholm's compact and enclosed structure differs from the more open farmsteads and corresponds to its function as a castle. Wooden castles are known in 14th-century Denmark: The minor castle of Hedegård in Himmerland (1363-90) looks like Boringholm's twin and is similar in topography, dating, construction, size and shape, but its material culture bears witness to a corresponding agricultural lifestyle rather than an aristocratic one (Figure 7) (Hyldgård 1988; Nielsen and Johansen 2005, 282-283). Egholm or Nørre Kongerslev, for example, were also positioned in wet lowlands on natural or artificial mounds like Boringholm, but have a wooden tower (discus-

sion of further examples, cf. Nielsen and Johansen 2005, 280-283). There is no doubt that wood was a less prestigious building material than stone or brick: The small royal Bygholm Castle was built in a hurry by King Erik Menved on a mound of about 35 m in diameter west of Horsens during the Jutlandic uprising in 1313/14. It consisted of three (or four?) small wings – but was completely erected in brick (Atzbach 2021b, 169-170 with further references). In the 14th century, all castles built by the crown or magnates were erected (at least in the central parts) in brick or stone, frequently equipped with a donjon or at least a keep (Etting 2010, 67-79, 111-189). Nørrevold alias Arnsholm Castle close to Arrild in Southern Jutland has a more or less similar range of prestigious and aristocratic objects. Valdemar Sappi, who belonged to the ducal family of Schleswig, built his seat on three mounds between 1351 and 1368. Al-

though its dimensions are only slightly larger than Boringholm's, a central brick tower outclasses Boringholm's architecture (Atzbach and Radohs 2021, 143-144).

Overall, Boringholm Castle provides only a few fortification elements: Its remote position in a muddy wetland, its compact layout enclosed by a wooden palisade and a structure reminiscent of an "outer bailey". If we want to argue for military relevance, we will have to put Boringholm on the lower end of the scale between a fenced farmstead in a village and a stone-built royal castle on a hill.

On the European level, there are various examples of the prestigious character of stone-built castles: In Switzerland, the wooden castle of Rouelbeau close to Genève was erected between 1334 and 1339, but replaced by a stone version only ten years later (Terrier and Regelin 2009). In Hesse, Münzenberg Castle north of Frankfurt am Main and Romrod Castle were protected by a prestigious and impressive stone wall facing the country road, while the other side was only enclosed by a fence (Atzbach 2018, 190-192; Friedrich 2008). In England, Bodiam Castle, Sussex, also had doubtful military value. Its excellent preservation has made it one of the best-researched fortifications in Europe. Apart from its masonry, it shares some traits with Boringholm: Located in low wetlands close to a regional border, it was erected by a parvenu in the last quarter of the 14th century. However, its patron, Sir Edward Dallinridge, managed to keep his seat and to make his family part of the English aristocracy (Johnson 2002).

The finds from Boringholm demonstrate the presence of a high-status lifestyle that is characterised by typical 'barometer objects' such as imported pottery, precious personal items and weapons, armour and riding gear as well as unique building elements – in this case a fireplace made of ashlars, perhaps a tile stove that was torn down (Goßler 2015, 355; Hundsbichler et al. 1982, 53). Andersen's qualitative analysis attributed a knightly status to the castle's inhabitants (Andersen 2003, 69, 2004, 2005b, 2012, 7). Kasper Terp Høgsberg reviewed the finds and confirmed the presence of an aristocratic culture at Boringholm (Høgsberg 2014). He identified a broad range of standard equipment (keys, lockers, furnishings, greyware and redware pottery, kitchen

equipment, ordinary linen and wool textiles, shoes, knives, scabbards, combs, riding gear and tools). Moreover, he classified some objects as luxury items (ashlars, imported pottery, brass jars, jewellery, a sword, a specially decorated spur and stirrup, hunting equipment, coins and toys) (Høgsberg 2014, 24-29). A comprehensive analysis of material culture comparing 13 Danish medieval castles revealed that Boringholm with its NAT value of 48 belongs to the group with the widest range of objects (Figure 8 and Appendix 1). Disregarding organic finds – which might be biased due to different preservation conditions – Boringholm still comprises 42 artefact types, which is only outmatched by the royal castles of Lilleborg (53), Gurre (44) and Næsholm – which is ascribed to the king or one of his retainers – and the comital Ravnsborg (43). Variety matters as an indicator of affluence in the Middle Ages: Boringholm's twin, Hedegård, provided only 25 artefact types (Atzbach and Radohs 2021, 148, Tab. 10), although it contained twice the number of finds (3,505 objects). Boringholm clearly represents an aristocratic lifestyle in terms of both the quality of its single objects and the range of its material culture. Goßler identified riding gear as a central signal of an aristocratic lifestyle, and the strong presence of objects related to horse keeping underlines the aristocratic character of Boringholm (Goßler 2005, 141-142). If we only look at the number of artefact types that fall into the category of barometer objects, Boringholm belongs to the top group together with Lilleborg, Gurre and Ravnsborg.

A further strong aristocratic signal is visible in the use of stoneware. Recently, the relevance of stoneware as an indicator of upper-class contexts has been confirmed for the Baltic region: Boringholm's proportion of stoneware (12 %) is higher than the most scrutinised Danish private castles including the ducal Nørrevold. Moreover, this proportion outmatches all Danish towns. Only the upper-class castles (Gurre, Næsholm, Ravnsborg) outnumber Boringholm with a proportion of up to 82 %, whereas Boringholm's twin, Hedegård, only contains 2 % (Atzbach and Radohs 2021, 152-155). The supply of Rhenish and Saxon stoneware depends on access to the Hanseatic market – and in Hanseatic towns such stoneware is ubiquitous with a proportion of about 17-36 % (Atzbach and Radohs 2021, 155, fig. 15;

Castle	Number all finds	NAT all	Number inorganic finds	NAT inorganic	NAT barometer	Stone-ware (%)	Status after Andersen
Lilleborg	4000	55	3998	53	26	3	royal
Gurre	364	48	334	44	23	53	royal
Næsholm	1531	46	1510	43	19	17	royal (?)
Ravnsborg	562	43	562	43	23	82	comital
Boringholm	1407	48	814	42	23	12	knightly
Nørrevold	1961	45	1502	39	17	6	ducal family
Lykkesholm	398	30	397	29	9	4	peasant
Sandgravvold	517	28	513	26	12	1	knightly
Hedegård	3505	31	3270	25	12	2	peasant
Absalons Skanse	372	20	365	19	9	8	watch tower
Heigned	171	18	171	18	5	5	peasant
Egholm	560	22	478	15	5	0	knightly
Nørre Kongerslev	262	14	259	12	6	2	unknown

Figure 8. Number of all finds, number of all artefact types (NAT), number of inorganic finds, number of inorganic artefact types, number of object types regarded as barometer objects, and the proportion of stoneware pottery at selected Danish castles. Status according to Charlotte Boje Andersen's qualitative analysis (Graphics: Rainer Atzbach, compiled from Atzbach and Radohs 2021, table 9-11. Data basis: Andersen 2003).

Müller 1996, 131). However, the supply in the hinterland seems to be limited, with Demuth's study of Hanseatic pottery in Norway revealing its restriction to the coastal region, especially in harbours. Ben Jervis discussed a similar phenomenon in relation to imported pottery in the coastal region in medieval Southern England. Both studies identified the use of imported tableware as an expression of a certain lifestyle, i.e. a conscious decision to acquire – or not to acquire – imported pottery (Demuth 2019; Jervis 2017). Further studies are required to find an explanation of why stoneware is only represented in Danish towns on a limited scale: Even the important harbours of Ribe, Aarhus, Holbæk and Næstved do not contain more than 6% (Atzbach and Radohs 2021, 154 f.). Consequently, the strong presence of stoneware at Boringholm, 17 km (half a day's journey) from the sea, is clearly indicative of an affluent way of life.

Christof Krauskopf's study of noble culture in Central Europe showed that all castles contained standard equipment, while luxury items, hunting equipment, toys and specially decorated personal items belong to an upper-class lifestyle, which is also characterised by the absence of agricultural tools (Krauskopf 2006, 2021). In other words,

Boringholm's strong agricultural element places it on the lower level of the aristocratic social echelon.

Its affluent material culture is in complete contradiction with the modest type of architecture. Boringholm has almost the same NAT value as the castles of Ravnsborg and Næsholm (both have a NAT value of 43); but these two castles had an elaborate and differentiated stone architecture with a massive keep and a curtain wall. This becomes clearer when looking at the architecture of castles that have a significantly lower NAT value than Boringholm. Lykkesholm on Langeland (NAT 29) comprised two half-timbered buildings as well as a central brick tower. We have no building evidence from Sandgravvold (26); but as mentioned above, Hedegård in Northern Jutland (25) features a similar structure. Absalons Skanse (19) had only a wooden watchtower, Heigned on Langeland (18) was a brick-built towerhouse, and Egholm in Northern Jutland (15) consisted of a wooden tower surrounded by a palisade. Nørre Kongerslev in Northern Jutland featured a wooden main tower on the inner castle and a second one in the outer bailey (Atzbach and Radohs 2021, 140-144 with further references).

What is the explanation of this obvious contrast between modest wooden architecture and an affluent material culture representing an aristocratic lifestyle?

Such a mismatch between the social status according to written documents and the excavated material culture did not become visible until the excavations of 19th-century poorhouses. Firgårde poorhouse (1880-1916), close to Skanderborg, brought a surprising range of finds to light, resembling a manor's household rather than an almshouse, comprising e.g. gilded porcelain plates, iceskates, crystal glass, porcelain tobacco pipes and a porcelain doll (Mauritzen et al. 2007, 49-52; Nielsen and Hansen 2017, 80-84). The poor and criminal Olof Petterson lived in a forest in the Swedish countryside, in a humble dugout cabin that was in use in the first half of the 19th century. Its excavation revealed horseshoes, porcelain sherds and a range of objects that were similar to a quite well-off nearby croft (Svensson et al. 2020, 173). Both examples reveal the attempts of the poor to follow contemporary consumption patterns, which is a link to William Rathje's garbology. Theorem (1), '*What we say is not what we do*', cannot be applied to Boringholm, as we lack certain evidence about the founder's social status apart from the fact that he – and it was probably a man – belonged to the medieval group of *bellatores*, as proven by the site's clear military character. Theorem (2), *There is no immediate relationship between garbage and a household inventory*, argues that valuables or valued personal objects were absent in a household's garbage because they had been given to friends and relatives. One possible explanation for the broad range of valuable or at least symbolic objects discarded at Boringholm is the lack of potential gift receivers: Marcel Mauss's theory about gifts from 1925 (new translation 2016) introduces the idea that each gift is meant to impose an obligation on the receiver. In particular, the precious sword from Passau which was buried might have been a highly symbolic object that the castle founder received himself as a pledge for some kind of feudal or military loyalty. Discarding or simply leaving this object (and the other valuables) on the site seems to indicate a lack of appropriate followers who would be pleased to receive such an object. Theorem (3), *First principle of food waste*, and theorem (4), *First principle of hazardous waste*, paraphrase the fact that rare, expensive or exotic objects tend to be overrepresented in a household's garbage. Applying these theorems to Boringholm, the mismatching upper-class garbage was *not* part of the inhabitants' traditional daily life. Together with theorem (5), *Branded goods in waste indicate eagerness to follow a role model*, the presence of excellent aristocratic objects belonging to the contemporary military elite's lifestyle, but ending in this household's garbage, underlines that the inhabitants originally were not accustomed to noble courtly culture. Naturally, the objects were owned by the inhabitants; their sheer number gives the lie to the interpretation that they were stolen goods like the golden brooch in the Schleswig fisherman's hut. Theorem (5) is driven by the interest of the middle class in imitating upper-class culture. Consequently, the luxury items might have been used to emulate a courtly way of living, as documented by the prestigious, big fireplace made of ashlars.

Building a castle is always a large investment. Boringholm's building process took at least three years: It started with the pile foundation, whose trees were cut in winter 1368/69, i.e. used in summer 1369. The main building's first phase was erected in summer 1371, but the western and southern wings were not built until 1372. Taking into consideration the bellicose period in the second third of the 14th century, this surprisingly slow process reflects a lack of resources. Its modest result ended up with neither a tower nor at least one brick building or even timber frames filled with bricks. Boringholm's builder was a man who had the power to fortify his home and was experienced in military service. He gathered horses and armoured retainers on this site, where his family also lived, and where the only female inhabitants were members of this family, striving to achieve an upper-class lifestyle. The clear military character made Charlotte Boje H. Andersen ascribe this castle to a knight (Andersen 2003, 69, 2012, 7), who evidently strove to achieve aristocratic status, but was not affluent enough to create the appropriate high-class framework to display his objects. Late medieval Denmark is characterised by the crisis of the lower aristocracy: Individuals who had once been successful social climbers in the service of the king or a magnate did not manage to compete with

the more powerful and richer magnates who profited both from the ox trade and their allegiance to the king/queen. The new organisation of land use, characterised by the presence of a small number of manors, destroyed the lower nobility's economic basis and limited the opportunities for social climbers. These minor aristocratic landowners had to become the retainers of a magnate – otherwise their fortunes declined, and they became ordinary peasants. This phenomenon has been described as 'the Fall of the Danish gentry' (Dahlerup 1969; Hørby 1980, 243 f.).

Modern sociology has shown that individuals who strive for a certain status try to compensate for a lack of knowledge, experience, position or power by using prestigious goods and status symbols. The weakest students of economics wear the most expensive shoes and watches, and have the most expensive briefcases (Stihler 1998, 58-59; Wicklund and Gollwitzer 1981, 89-90). This kind of self-promotion by means of objects is also known from traditional societies in the Global South, where ethnological research on the one hand has found that strange or exotic objects are assigned the role of status symbols. On the other hand, these mismatching objects tend to go into oblivion or are discarded if they are not integrated into the daily household processes (Hahn 2005, 76). Objects and their owners act interdependently: Single, special, exotic objects might acquire a special meaning for their owner. But this meaning cannot be transferred to a new owner, so they end up as waste when their owner has to leave them behind (Hahn 2015, 11-12).

Conclusion

A rose is a rose is a rose, but no castle is like another one. Each castle, manor or fortification ought to be studied as a single case and not as an example for a type or a function. In this sense, Boringholm is also an exceptional site that should not be regarded only as a wealthy peasant's temporal refuge during a time of crisis. Its construction began in 1369, in the 'Age of the Castle', when several waves of warfare hit Denmark. Without doubt, its founder belonged to the military aristocracy of this period. He was able to equip his building with the neces-

sary attributes to show off his aristocratic rank, emulating some elements of courtly culture. What we see here is an ambitious knight rather than a settled nobleman: Formally free, experienced in military service, wearing a coat of arms and a sword, enjoying luxury items and living in a castle. However, his seat resembles more a moated farm than a fortress. William Rathje's garbology helps to explain and to understand the contradiction between the presence of affluent finds and modest buildings: This man was a social climber who was not yet able to leave his peasant background behind. Boringholm was probably inhabited by a dedicated retainer of the Brok family, a parvenu on his way upwards, who simply chose the wrong side during the fight between the Kingdom of Denmark and the Jutlandic opposition. He lost at least his property, maybe even his life, and his castle was subsequently handed over to the Queen's followers, the Lykke family, in the late 14th century, before it was torn down at the Queen's command. Robber knight Meier Helmbrecht was executed for his deeds by his former victims. Our anonymous knight was punished for his uprising against the royal vision of public peace. His castle was destroyed – we do not know what happened to him but, probably, his social climbing ended with his aristocratic householding in Boringholm.

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Declaration of Interest Statement

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Supplement:

Castle	Number of all finds	Number of inorganic finds	NAT all finds	NAT only inorganic	Extent of excavation	Status	Dating
Lilleborg	4000	3998	55	53	The majority of walls exposed	royal	1100-1300
Gurre	364	334	48	44	Partially exposed and excavated.	royal	c.1365- before 1534
Næsholm	1531	1510	46	43	Completely exposed walls	royal (?)	1278-1340
Ravnsborg	562	562	43	43	Completely exposed	comital/royal	1334-1510
Boringholm	1407	814	48	42	Completely exposed	knightly/unknown	1368-1401
Nørrevold	1961	1502	45	39	Partly excavated in trenches and fields	ducal family	1351-68
Lykkesholm	398	397	30	29	Partially excavated	peasant	2nd h. 13.-mid 15th c.
Sandgravvold	517	513	28	26	Destroyed. Partially excavated	knightly	13th/14th c.
Hedegård	3505	3270	31	25	Completely exposed	"not a knight", peasant	1362-1406
Absalons Skanse	372	365	20	19	Partially excavated	watch tower	1st h. 14th c.
Heigned	171	171	18	18	Partially excavated	peasant	14th/15th c.
Egholm	560	478	22	15	Completely excavated	knightly	1335-1340/50
Nørre Kongerslev	262	259	14	12	Poor preservation, completely excavated.	unknown	2nd h. 14th c.
Sum	**15610**	**14173**					

Appendix 1. Distribution of finds at 13 Danish castles. 'NAT'= Number of artefact types; excavation method: 'Excavated'= modern, stratigraphical excavation; 'exposed'= digging out obvious contexts such as walls and wooden beams without documentation of soil contexts and the relationship between finds and contexts. Extent of excavation and status according to Charlotte B.H. Andersen (2003), data compiled from Atzbach and Radohs 2021, table 7 and 9 with further sources and references.