SCANDIA
Journal of Medieval Norse Studies

ON THE WINGS OF AN AXE: UNDERSTANDING A UNIQUE AXE FROM DENMARK THROUGH INTER-OBJECT CITATION

SUR LES AILES D´UNE HACHE: COMPRENDRE UNE HACHE UNIQUE DU DANEMARK GRÂCE À LA CITATION INTER-OBJETS

Gustav Hejlsesen Solberg[1]

Abstract: Deep in the vaults at Nationalmuseet, Denmark is a unique axe. It was found some 30 years ago, where it was deemed mediaeval and then put in a box. D234/1992, as it is catalogued as, has now finally been properly looked at. Through the theory of inter-object citation, it is possible to determine the purpose and date of this object, by looking at its relations to other axes of different periods. This stray find was removed from its context, but by comparing it to both other finds and iconography, I make the argument that D234/1992 is an axe made for the purpose of warfare, sometime in the 13th century.

Keywords: Inter-object citation, warfare, weapons, mediaeval, axes.

Abstraite: Au fond des voûtes du Nationalmuseet se trouve une hache unique. Il a été trouvé il y a une trentaine d'années, où il a été jugé médiéval puis mis dans une boîte. D234/1992, tel qu'il est catalogué, a enfin été correctement examiné. A travers la théorie de la citation inter-objet, il est possible de déterminer la finalité et la date de cet objet, en s'intéressant à ses relations avec d'autres axes d'époques différentes. Cette découverte errante a été retirée de son contexte, mais en la comparant à la fois à d'autres découvertes et à l'iconographie, je fais valoir que D234/1992 est une hache fabriquée à des fins de guerre, au XIIIe siècle.

Mots clés: Citation inter-objet, guerre, armes, médiéval, haches.

Introduction

In the collection of the National Museum of Denmark is an axe, which seemed odd to me in many ways. This axe was shown to me by Vivian Etting, as I went to look at some axes of Jan Petersens type M, during the studies connected to my master thesis on the so-called "Danish Axe". This axe is filed under Inv. Nr. D234/1992, and will henceforth be referred to

[1] Master of Arts in History from University of Copenhagen and Master level student of Prehistoric Archaeology at the University of Copenhagen. Email: Gustav.hejlesen.solberg@gmail.com Orcid ID:0000-0001-8832-8016

as D234. It was turned in as Danefæ and is therefore without any archaeological context. For this reason, this paper will try to contextualise this axe, to other axe types, to try and date the axe, and figure out the purpose of this strange object. This is done in three parts. One describing the axe, one dating the axe and one estimating its purpose or use. This serves as a trail of methodology in comparative analysis of unique objects, IE. the theory of inter-object citation (Sørensen, 2015, p. 89). Is it possible to date or determine the purpose of an object, by comparing it to ones that aren't of the same type? This paper shows how this can be done.

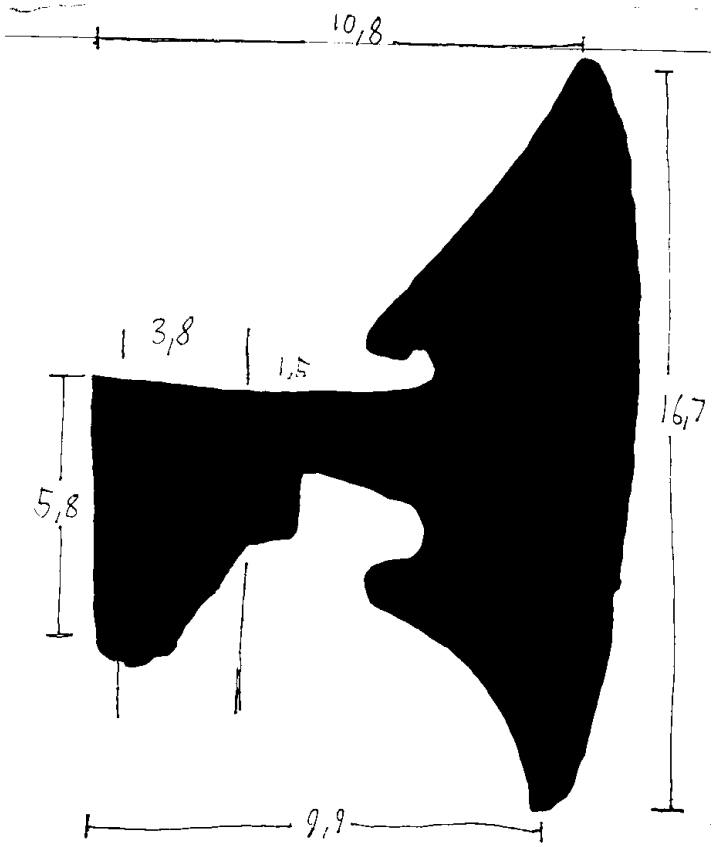

Illustration Nr. 1: Profile view of D234. Drawing by Author.

Inter-object citation

Before we get to the axe itself, an introduction to the theory of inter-object citation is in order. The theory is closely related to the idea of typology, but offers a quite different point of view. It is also not a tool to be used *instead* of typology, but preferably *with* or *in* typology. Perhaps, it is a valuable part of typology. The concept of inter-object citation is described very well by Marie Louise Stig Sørensen in her article "*Paradigme Lost: on the state of typology within archaeological theory*", with a small thought-experiment:

> "The importance of this observation becomes clear if we think about the opposite a world in which all objects are different, each one distinct and unique. Clearly this is not what we experience, most objects are made with knowledge of other objects and they reference them – I shall refer to this quality as inter-object citation" (Sørensen, 2015, p. 89).

These citations are not all equal. Some are more obvious than others - of course, how could typology exist, if this was not the case? The archaeological record is nothing but citations. As Tim Flohr Sørensen also argues, in relation to what he calls *inter-artefactual relations*, in his article on the topic of *copying* Bronze Age weapons and tools, "*We may therefore consider the possibility that (...) there are no originals and no copies, but only 'original copies'*" as the development of types, seem to be part of an ever evolving *prototyping* process (Sørensen, 2013, p. 57). The term *'original copies'* sits very well in this context, as there is no archaeological object that is truly unique, because it is a citation of other objects. There are no true copies either, as every perceived copy is another step on the evolution of the type. Thus one can only conclude that either every archaeological object is a copy, or none are. That every artefact is original, or none are.

This is especially true when it comes to Bronze Age weaponry, as the process of casting lends itself very well to the act of copying, but the concept is just as applicable for tools or weapons of steel or iron. If we consider not just the artefacts, but also how they came to be, then the explanation is obvious. Throughout history, and prehistory, weapons and tools are produced for long periods of time, without much change, and with remarkable similarity. When the apprentice has learned from the master how to produce an axe, they seem to *stay*

true to this way of producing objects. Thus the tradition lived on, while only small adjustments were made to each instalment in the lineage. The types were *copied* but also developed. It is a great rarity that the apprentice ventures outside of what the master taught him, as is evident in the similarity of, for example, axes through long periods and across great distances (Apel, 2006: p. 22; Lyngstrøm, 2020, p. 54; Lyngstrøm, 2022: p. 3; Høgseth, 2013; p. 69-75). But even when this happens, and objects show up that aren't easily plotted into the tradition of tool or weapon production, elements of it will always show its heritage. The smith cannot rest of what he has been taught (Høgseth, 2013, p. 75). As the proverbial man, who is no island, neither is the smith, and therefore neither is the archaeological record. What this means is, that when looking at any archaeological object, it will reflect other contemporary objects. Therefore studying similarity, IE. Citations between objects, is a valuable way of determining age, but perhaps also the meaning or purpose of objects.

Description of D234

D234 was found south of Højby lake, Holbæk Amt, Denmark in 1992, as a stray find. One could perhaps try and look, at what has been done of archaeological research of this part of Denmark, but this is not fruitful, as with most parts of Denmark, it seems that Højby has always been great place to live, as there is evidence of almost continues settlements all the way back to Mesolithic. The axe was also found without any context, so context can't tell us anything either. For this reason, the study of D234 must be done solely on the axe itself, which will be described in this part.

D234 is in many ways a strange axe. It is not described by any typology or work on European axes (Jahn 1825; Blom 1861; Petersen 1919; Cederlöf 1951; Petersen 1952; Paulsen 1956; La Cour 1959-1961; Dostal 1966; Kirpičnikov 1976; Aleksandrovich 1985; Heindel 1992; Atgäzis 1997; Jørgensen 1999; Kotowicz 2014; Luňák 2018; Ätgazis 2019; Zykov, Koksharov & Maslennikov 2020). Some parts are rounded, some parts are very angular, creating the kind of confusing axe type, which I'm going to do my best to describe in this chapter.

The axe is thick on the backside, while the blade is relatively thin (5mm). The broad blade of the axe is 16,7 cm long and slightly tilted forward. The forward-tilted angle of the blade results in there being 9,9 cm from the back of the hammer to the bottom tip, while there

is 10,8 cm from the back of the hammer to the uppermost tip of the axe. The blade itself is also slightly warped and uneven, which made it difficult to determine whether this was a bill-like axe (from Danish *Bredbil* and German *Beil Axt)*, where the edge is ground exclusively on one side. On the back of both the horn and the beard of the axe, are located two wings with small gaps between them and the neck of the axe. The bottom one is angled further away from the neck, than the top one. The top horn of the axe also seems to be slightly larger than the bottom one, while the bottom one has a more pronounced curvature.

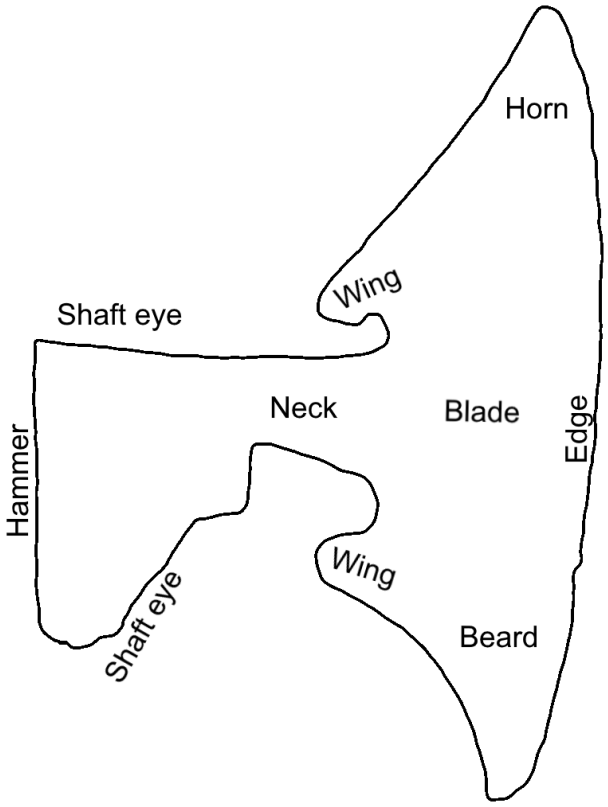

Illustration Nr. 2: D234 with terminology. Drawing by Author.

The neck is extremely narrow, measuring only 1,5 cm at its most narrow point while growing increasingly larger moving towards the blade itself. The neck is quite thick though and tapers as it transitions into the blade. It looks like the axe might have been constructed with a fold on the right side of the axe. The transition from the neck towards the shaft construction is quite distinct, being close to a 90-degree angle.

The construction around the shaft reaches back further on the hammer side than on the blade side, reaching downwards 5,8 cm. This whole part of the axe is very square and angular, in particular the hammer itself which is not rounded at all. The hammer is not exaggerated in terms of thickness, it is instead the same thickness as the sides of the shaft eye. The shaft eye is both 3,8 cm on both its top and its bottom, which means the shaft has been straight and not tapered in one way or the other, not around the axehead itself at least. The shaft eye itself is D-shaped or triangle-shaped, but very angular towards the hammer side. The shaft eye is also quite thin measuring only 3,8 cm at its longest.

Dating of D234 and its Relation to Other Axes

The dating of this axe will be done on the 3 principles put very nicely by Anne Nørgård Jørgensen in her 1999 book "*Waffen und Gräber*". The first is that grave finds are proper weapons, the second that the shape of weapons are determined by chronology and thirdly that similarity in shape means similarity in dating (Jørgensen, 1999, p. 176). This third point is important, as this axe seems to be one of a kind, and therefore can't be compared directly to more precisely dated axes of the same type. This is what Sørensen refers to as inter-object citation. No object is truly unique, as every object is composed of citations to other objects. Morphology is for this reason subject for the study, and not characteristics like weight or size, as there seem to be a tendency to construct axes of the same shape but in a variety of sizes (Liebgott, 1976, 18-9; Schietzel, 2013; Petersen, 1919, p. 41). Thus, analysis of the similarities in different morphological elements of the axe will take priority, as these show links to other axe traditions, which must be assumed to be contemporary.

The shape of the axe blade is the most eye-catching part of this axe. It's made out of 3 parts, where each part pulls the date in different directions. The blade itself seems to be quite broad, but rather thick compared to the dominant battleaxe type, Jan Petersen type M. These

are thicker at the beginning of the period, around the 950 to 1000 (Solberg, 2021, p. 32), but these all have the same kind of spurs on the side of the shaft, which D234 lacks. The shape of the blade also is taller and more symmetrical, which is more common in later axes of the M-type, than the earlier ones. If D234 is related to the M-type, then it seems more probable that it is related to the examples from the 12th or 13th century than those from the 10th or 11th century, due to its more symmetrical nature and pointed beard and horn.

The *wings* on the blades are highly unusual. This is one of the most defining features of D234. This design element is not something you see all that often on axes from Denmark. It is instead highly common on central European axes and axe-like weapons from the 15th century and onwards (Waldman, 2005, p. 172-5). But depictions of similar elements show up on German church paintings, for example in the church of Naumburg, which is dated to the 13th century (See Illustration Nr. 6). These wings all seem to be positioned more symmetrically on the axes though, and not as close to the neck as seen on D234. Therefore it is not certain that the wings on D234 have anything to do with those found in central European weapon axes, as they are placed differently and more pronounced (Ibid.).

Wings are also present on a number of miniature axes from Eastern Europe and the Baltics, but they are usually pointed, and not rounded as the ones on D234. They are also curved outwards, and not as straight as D234's. It is also unclear whether these miniature axes are citing full size functional examples, or they serve some different role (Paulsen, 1956, p. 193-6). Other miniature axes do cite full size types, but this type is not yet confirmed to do so, which also points to the fact that these wings probably don't serve as the inspiration for D234.

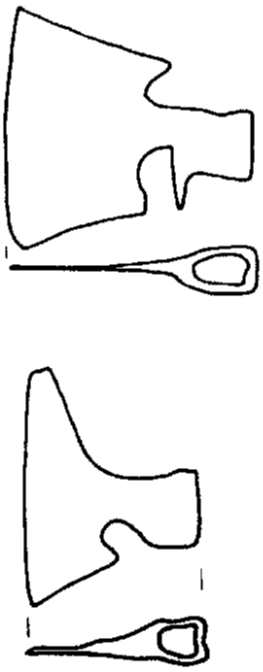

Illustration Nr. 3: West-slavic Breitaxt.(Heindel, 1992, p. 37)

A category of West-slavic and German broad axes from the 12th to the 16th century might give some answers for the wings and blade of D234. They tend to have only one wing on either the bottom or the top, or one of them being more pronounced than the other. Their blades also tend not to be to not be pointed, as is clearly the case with D234 (Heindel, 1992, p. 36-38). While this category of axes might be the closest overall analogy to D234, it is still not a sufficient explanation for D234, as it clearly cites other axes than these in terms of shaft construction and pointedness of the blade.

The extremely thin neck is something you rarely see on many types of axes. This is something you see on axes of the T-shaped Lunow-type, which are primarily dated to the late 10th century or 11th century (Kotowicz, 2014). The Lunow-type is primarily found in southern Sweden, Denmark and northern Poland (Ibid.). So in terms of place, this tradition fits. But the neck of these axes seem to be longer. Thus this design element might just be a coincidence, rather than a direct connection.

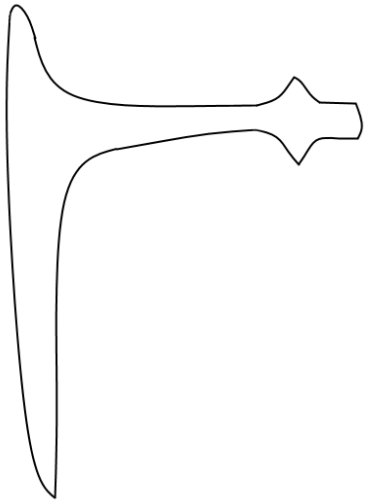

Illustration Nr. 4: The Lunow-type. Drawing by Author.

The part of the axe that seems the most comparable to other axes is the construction around the shaft. The spurs reaching below the hammer and its sides, instead of just on the sides, is a trait of axes found at Grathe Hede, which is usually dated to the battle there in 1157 (La Cour, 1959-61, p. 38-42; Liebgott, 1976, p. 17-20; Christensen, 2015, p. 11). Its beard is also quite similar to the beard of D234. This shaft construction is also visible on axes found in the ruins of Næsholm, which is dated between 1240 and 1340 based on the coins found there (La Cour, 1961, p. 303). The shaft construction and the thickness of the shaft eye is also remarkably similar to one of the axes from Næsholm, as both of them have a triangle shaped shaft eye with sharp corners. If the top part of D234 is ignored, the shape of the blade also seems to be kind of similar to a pointed bearded axe from Grathe Hede.

There is also an axe from the fortress of Hedegård D1028/1977 which has a longer pipe-like shaft construction that also extends further back on the hammerside, like D234. D1028/1977 is probably from the 14th century but the much longer shaft pipe seems like a

different category than D234. The shaft eye of D1028/1977 is also oval, while D234's is a sharp triangle shape.[2]

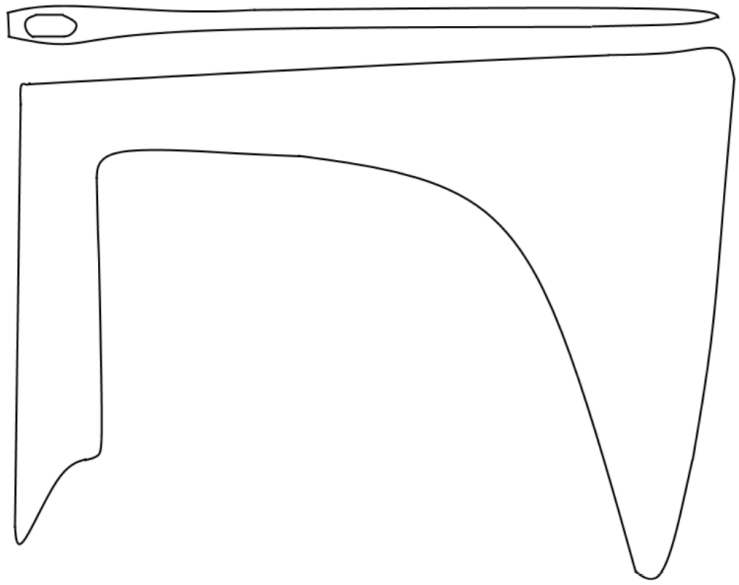

Illustration Nr. 5: D1028/1977, original drawing by Michael Rotvig Kristiansen, Redrawn by Author.

As shown above, dating this axe is not an easy or simple task, especially as this axe is quite unique and therefore defies typology. As all elements of the axe seem to point in different directions, and all archaeological context being missing, dating the axe must be done on the similarities that seems the most convincing. And some of them do seem more reasonable than others. This being the shafteye and the construction around it. Dating the axe exclusively on this seems to point in the directions of the 13th century, a period where the earliest wings also make their appearance in central Europe. This also falls in line with being the period where the later forms of the type M axe, is the most popular, which the blade might be citing.

[2] Kristensen, Ulla, Kock, Jan. "Herregårde og voldsteder i Aalborg Kommune", 2017. Extracted from: https://trap.lex.dk/Herreg%C3%A5rde_og_voldsteder_i_Aalborg_Kommune

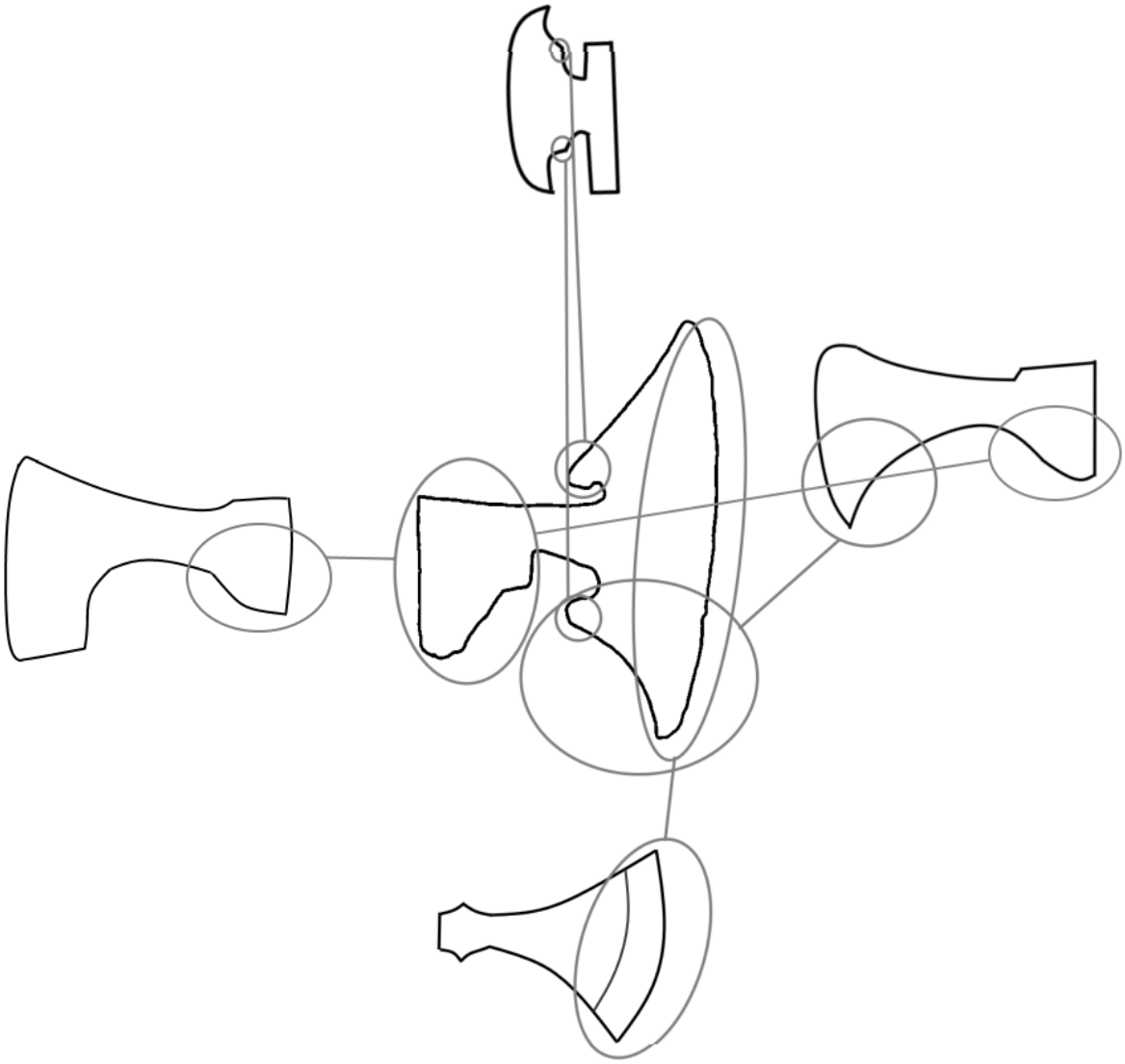

Illustration Nr. 6: Design elements of D234 compared to other axes types. The bottom and the right axe are types from Grathe Hede. The top axe is the one depicted in the hands of Saint Mattheus in the church of Naumburg. The leftmost is from Næsholm. Drawing by Author.

The Purpose of D234

Axes have been used as both weapons and tools as long as they have been around. Every axe made as a tool can be used as a weapon, and every weapon axe can be used as a tool. But from the Viking Age and onwards, we see an increasing distinction between tool and weapon axes (Solberg, 2021, p. 29). Jan Petersen Type M is an example of a type that can be shown to be a weapon axe, as it is only shown in iconography as a weapon, and mentioned in sources in the context of warfare. This is sadly not the case for D234. As this axe is *unique*, its purpose cannot be crosschecked with either written sources or iconography. The purpose of the axe must instead be told by the axe itself, and how it relates to other axes from the period. This is what I will try to answer in this chapter.

As with the dating of the axe, similarities in shape seem to coincide with a likeness in dating, so must be the case with purpose (Malmer, 1963, p. 264). I shall not speak of use of objects, as no clear signs of use were visible on the corroded axe. But instead, purpose, as this seems much more likely to determine, on archaeological material. Now that we know the axe is probably from some time in the 13th century, then this can be used to narrow down the search, and look at the similarities and differences in different axe types from this period. The problem with this is, that the field of studies on mediaeval axes is quite lacking. Where the Viking Age has been blessed by many different typological tools to determine time and purpose of the objects, this has sadly not been the case of mediaeval axes, neither as tools or as weapons. Thus the purpose of the D234 will be determined on the likeness to other axes, and what those axes' purpose has been estimated.

The first thing that seemed to tell the story of D234's purpose is the fact that it might have been constructed in this bill-like-fashion mentioned earlier. This is something that I would usually use to argue for the point that D234 is a tool and not a weapon, but it is difficult to say for sure whether or not it was created this way intentionally. Heavy use or post depositional damage can also warp the blade, to make it seem like it meant to be a bill-like construction. Thus the weapon category cannot be dismissed.

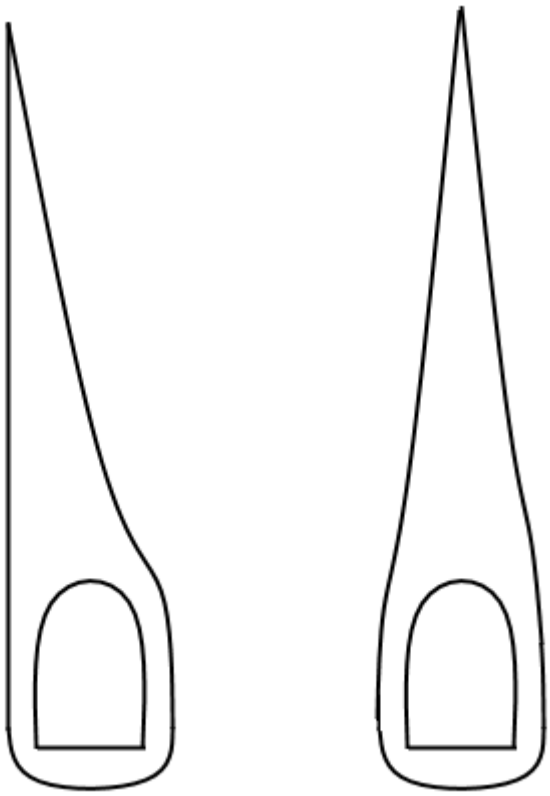

Illustration Nr. 7: Bill-like and non-bill-like axes. A bill-like axe has its edge dominantly on one side, and not centered.(left) where most other axes have its edge centred. This difference is usually much more subtle than shown here. Drawing by Author.

There seems to be a preference to ornament weapons rather than tools (Christiansen, 1992, p. 32-3). Thus the wings of D234 might tell us that this axe is probably a weapon and not a tool. This is something that is very evident in especially the type M axe from the the 11th century which is one of the most common axe types to see ornamented with silver and gold or with variations like the examples where the axe has been simplified to a frame, to make space for a cross in the middle. The depiction of Saint Mattheus with a similar looking axe, is also a weapon axe, as it is the one he was beheaded with, and the shaft is far too long to be suitable for woodworking. Some later german sources from the 15th century also make mention of a *Mordaxt (Murder Axe)*, which seems releated to this type carried by Saint

Mattheus, though sometimes with a spike on the hammer. These are no doubt for the purpose of warfare (Waldman, 2005, p. 156-61).

This argument can only be used to argue for D234 being a weapon axe, if the wings on it are for looks only, and don't serve a purpose. It does not seem like these have been all that useful, for the simple reason that they are this rare. Thus, it cannot be part of some widespread mediaeval woodworking technique, as the owner of D234 would've been the only to be able to use this technique. But they could've served as attachment points for a sheath. At Næsholm an axe sheath has been found for one of the axes (La Cour, 1961: p. 195). It's made of wood, and has a hole in the end, where string was put to allow the user to tie it around the axehead. Tieing sheath to axes can be difficult, because the shape of the head is lacking points for the string to latch onto, and will therefore slide off. This can easily be avoided on D234, because of the wings. But axe sheaths are also known to be used on weapon axes, so this does not determine the purpose of the axe (Schietzel, 2013, p. 579).

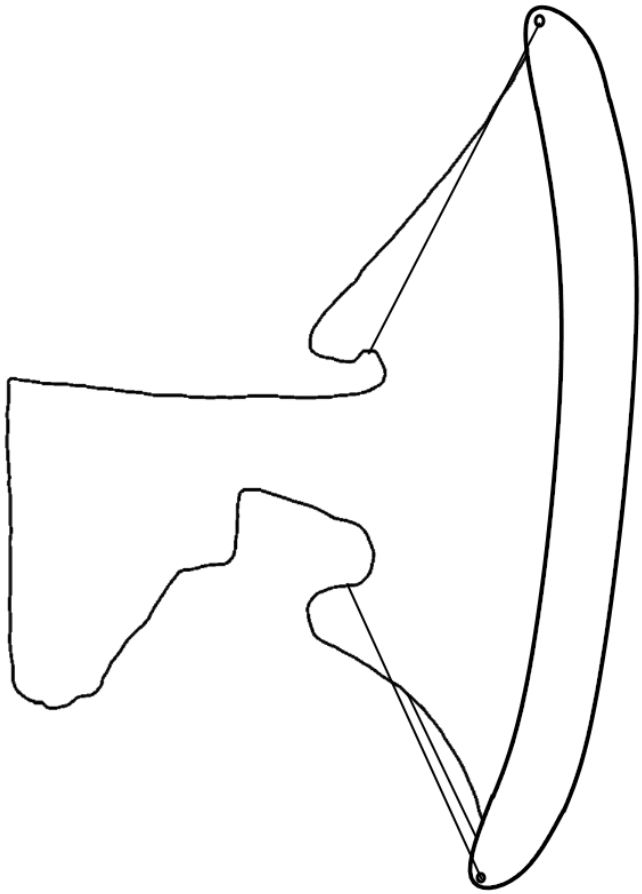

Illustration Nr. 8: Possible purpose of D234's wings. Drawing by Author.

All these similarities to other axes that have historically been categorised as weapons, seem to point in the direction of this axe being a weapon axe too. The purpose of the wings might have been purely decorative, or they might have been used to attach a sheath for safekeeping. As a weapon, this axe type holds up as well as others of the period. It has a broad edge, as the type M, but it's quite a bit thicker. This might have been the reason for the construction of this axe. To have a weapon that has a broad edge, and a point from the Type M and have the weight and impact of the bearded axes.

Place of origins

While this study has argued for contextualisation of the axe to be done, on the morphology of the axe itself, a geographic contextualization is also in order. What has been found in an area is usually what contextualises an archaeological artefact and is usually the focus of study (Nørlund, 1948; La Cour, 1961; Pedersen 2014). As mentioned, the area around Højby Lake is home to a lot of historic and prehistoric activity. Just from the area of the lake itself, there are finds from the Roman Iron Age onwards, and this only expands as the search is widened in range.[3] But now that it has been argued not by the context of where it was found, but on the artefact itself, that it might be from the 13th century, then it is possible to look at other related material from the same place, when one can exclude the irrelevant findings. This is what will be tried in this part.

The first place to look, is ofcourse the lake itself. Højby Lake hasn't been home to any proper archaeological surveys, but it has been searched by metal detectorists since 1989. A lot of material has been found but perhaps most important, for the purpose of dating at least, a number of coins have been found. There are coins from Valdemar II, Christoffer I and Christoffer II dating 1219-1332. This coincides very well with the date given to the axe through inter-object citation. But even older fibulas have also been recovered from the area, thus dating the axe cannot solely on the other material of the lake.

[3]" Fund og Fortidsminder - Højby" Extracted from: https://www.kulturarv.dk/fundogfortidsminder/Lokalitet/129284/

Illustration Nr. 9: Valdemar II coin (Roskilde, Hbg. 28). Drawing by Author.

Expanding the search, two Mediaeval fortifications are located nearby the lake, which could be related to this axe. The first is the fortifications called *Borren* and the other is the aforementioned Næsholm. They both have in common that neither of them are mentioned in any historical sources (La Cour, 1961, p. 303). Borren has also not been subject to proper archaeological survey yet, but is through detector finds dated till around 1150-1200, but perhaps reused sometime in the 14th century.[4] It is located at the north part of Højby Lake. Næsholm on the other hand has been well excavated, and is dated 1240-1340 (La Cour, 1961, p. 303). Næsholm is located less than 2 kilometres away from Højby Lake. The similarity of D234's shaft construction to the ones at Næsholm seems to also point in the direction that it could be related to this site. The relation of D234 to the fortifications seem to not just strengthen the dating of the axe, but also its purpose, as both sites are related to warfare, though one should be careful equateting axes found in fortifications, to weapons used in combat, as tool axes are also used in construction work.

The wings of D234 also might point to it being a foreign axe. As is argued by Ewart Oakeshott, the location of where a weapon has been found can be seen as meaningless as attribute to its origin (Oakeshott, 2018, p. 3). As West-slavic or German axes might have more in common with this axe, than any Scandinavian axe, it could be argued to be imported instead. The 13th century is also a period where Denmark is establishing itself as a proper European kingdom and is getting more integrated with broader European connections (Hybel, 2011, p. 209). This is also a period where battle axes with Scandinavian origins become very

[4] Pavón, Martin. "Borren Voldsted" Extracted from: https://trap.lex.dk/Borren_Voldsted

popular throughout Europe, one can only expect some import as well in this cultural exchange (Solberg, 2021, p. 31-6). But D234's citation of other local examples seem to point to it being locally produced, perhaps with a foreign inspiration.

Illustration Nr. 10: Picture of D234 held by Nicolai Skovlund Fobian, BA in History. Photo by Author.

On how Mediaeval Battle Axes were used

Now that I've argued that D234 has been made for the purpose of warfare, some comments on the nature of weapon axes in general are in order. The dominant weapon of choice in the 13th century seems to have been the sword, but as a remnant of the Viking Age, where axes were more popular, the axe still had a place in the warriors arsenal (Näsman, 1991, p. 166-9). The warrior here, being anyone fighting with an axe. Who specifically this is, I will comment on in the next section.

Considerations about how axes are used or how they behave are usually questions that are being ignored, in favour of ones about grave customs, typology, chronology, ceremony and symbolic use (Petersen, 1919; Nørlund, 1948; Näsman, 1991; Jørgensen, 1999; Halpin, 2005; Kotowicz, 2014; Mäntyla, 2005; Pedersen, 2014). More recently, a wave towards putting weapons back into their martial context has been explored (Warming, 2018; Pommer & Ravn, 2019; Short & Óskarson, 2021). For this reason, how axes behave as weapons will be commented on here, as the choice between axe and sword is a very important one, as these weapons serve different roles and behave quite distinctly from each other.

The biggest difference between fighting with swords and fighting with axes, is the difference in weight distribution. Put simply, most of the weight of an axe is located in the axehead, while the shaft is relatively light. Contrary to this, the construction of the sword locates more of the weight, closer to the hand of the warrior, which allows for quicker movements. In practice, this means that while a sword might be heavier overall, than an axe, the sword will feel lighter when moved. Now, a faster weapon might seem like the obvious choice, but one should also remember that the heavier end of the axe also increases striking power, and makes the strike harder to block. Thus there is a trade off between power and speed.

Another factor where the use of the axe varies greatly from the sword, is in what techniques are possible during combat. While the study of mediaeval sword combat has been blessed by fencing manuals like I.33, that shows how this was done, this is sadly not the case for axe combat (Forgeng, 2018). One can then only talk about possibilities when it comes to the use of the battle axe. While the axe might lend itself to be a primarily striking weapon, other

possibilities are also viable. An axe like D234 is also very suitable for stabbing, as its horn is pointed at such a perpendicular angle to the shaft. This is ofcourse not possible with all axes, but it is also possible with *The Danish Axe*, IE Jan Petersen Type M, which D234 is related to. The beard, and in the case of D234 its bottom wing, also allows the warrior to *hook* opponents shields or weapons and move them around to the advantage of its wielder. The hammer on the back of the axe is also quite useful in combat, as this can serve as a great tool against armoured opponents. Especially as Danish law dictated that every soldier should at least be wearing mail and helmet (Arup, 1915, p. 150). A cutting edge might not be able to penetrate this protection, but a strike from the hammer might still break the bones underneath. For these reasons, the axe should not be understood as a simple or primitive weapon, its techniques might have been just as sophisticated as the ones for the sword.

The axe also wasn't constrained to use in one hand as the sword was in this period. From the end of the Viking Age we see clear signs in iconography, that the axe was not limited to be used in a single hand along with a shield, but also in two hands, disregarding the use of a shield (Solberg, 2021, p. 19). This is not the case for the sword, as the use of one sword in both hands, seems to be something that doesn't appear until the end of the 13th century or start of the 14th (Cederlöf, 1951, p. 30). As most axes are preserved only in form of the axe head, and missing the shaft, it is difficult to make a judgement on whether they were used in one hand or both, which is a crucial factor in understanding the weapon. But as shown by the surviving axe handle lengths, there is no clear relation between size of axehead and length of shaft. For example an axe from Vorma, Norway has a shaft of 107 cm, while the cutting edge isn't any longer than the axes from Oseberg measuring only 71,5-78,5 (Vike, 2016, p. 107). But while D234 might not be that big, compared to some of the more obvious type M axes that can easily be determined to have been used in both hands, it is still believable that D234 might also have been used in both hands. This is for the simple reason that the axehead is quite heavy compared to the type M, which results in an unwieldy weapon, if used in just one hand.

D234, as well as other weapon axes, are fundamentally different combative tools than the sword. The different weight distribution and the ability to use the axe in two hands being the biggest factors in this equation. A weapon that is so different from what might be the

standard, also points to the question, to who is using this type of weapon? Who used D234? Which is what I will discuss in the next section.

Illustration Nr. 11: Axe wielding warrior from Sønder Nærå Church. C. 1175-1200. Photo by Kirsten Trampedach, Nationalmuseet.

On who used mediaeval Battle Axes

In mediaeval Scandinavia weapons were not just practical tools for waging war, other dimensions played a factor in choice of weapons. Economic, cultural and social aspects also played a role. Weapons are more than tools, who and how they are used in symbolic and social contexts, gives us insight to what relations the people of the past had with this material, IE. what they thought about them. Here I look at the question in two parts, the first, trying to argue who used them, and the second what this tells us about the axe. Because of the sometimes questionable reliability of the written sources, it can be problematic to determine who actually used axes in combat, but the fact that the use of the battle axe has been recorded tells us a great deal about how the weapon was viewed.

In March 1241 at the castle at Vordingborg in the southern part of Zealand, Denmark, King Valdemar II put into effect the first law to apply for all of the Kingdom of Denmark, *Jyske Lov.(*Arup, 1915, p. 190) In these regulations, are listed the previously mentioned requirements for what a soldier must provide when he is called to arms. This source is *normative* in nature, meaning that its only real testimony, is of a wish for the soldiers to provide the stated material, and not a source saying that they did (Olden-Jørgensen, 2013, p. 76-7). Contrary to this source, iconographic sources show plenty of weapon axes contemporary to this law, as well as the archaeological material telling the same tale (Solberg, 2021, p. 58-62; La Cour, 1959-61, p. 35-40). This then leads to the question, of whether or not this means that the axe was an accepted replacement for the sword? Or was this law a wish to impose a more central European arsenal upon the Danish soldiers? Was the axe fighting tradition from the Viking Age too strong to be broken by this law? Or were the axe wielders perhaps not the soldiers called upon through *leding*, but instead specialised units? This is all unsure, but the use of the axe as a weapon is evident.

Illustration Nr. 12: An axebearer is striking a shield in battle. Hornslet Church, C. 1225-50.
Photo by: Kirsten Trampedach, Nationalmuseet.

The axe requires much less material to produce, compared to the sword. This can lead one to conclude that the axe was a weapon for the poor, and a weapon like the sword was a weapon for the rich (Liebgott, 1976, p. 19-29; Nicholson, 2004, p. 100-1; Grinder-Hansen, 2002, p. 66). This could not be further from the truth. Written sources from the 12th to the 14th century instead tell of plenty of knights, kings and holy men, who are praised for their use with the axe as a weapon, both inside and outside of Scandinavia (Solberg, 2021, p. 49-58). The axe should not be understood as some barbaric or primitive weapon in neither the Viking Age nor the Middle Ages. This is also the reason why many axes are decorated, some with precious metals, in the case of D234 with wings. They were easily compared to the sword when it comes to questions of status. For example Danish historian Sven Aggesen writes in the 12th century: "O*nly those men who honoured the king and adorned the force of warriors by shining resplendent with gilded axeheads and sword-hilts were to approach the clement king with the privilege of a closer association"(*Christiansen, 1992, p. 32-3). Here he is not making a distinction between axes or swords, in terms of status, but whether or not they are gilded or not. Thus the ungilded sword and the ungilded axe, should also be treated as equals.

These generalites on the use of the axe as a weapon in the 13th century, gives context for how D234 should be viewed. While it may not be clear who has used it, it should be clear that this does not seem to be a peasant's weapon. There is no reason this axe could not easily belong to a knight for example. The martial and cultural aspects around the weapon seem to value it greatly, on par with the sword. These sources on the topic of axes usually refer to the Danish Axe, the type M, so this should be taken into account, when making statements on the topic of D234, it is not certain that this type was given the same value.

Conclusions

D234 is a very strange axe. Combining elements from many different mediaeval axe types seems to tell us that this axe is probably from the 13th century and has been made for the purpose of warfare. Its elements are both confusing and interesting. Every part of it pulls in different directions. This is also the reason why this axe was so interesting as the subject of this method of study, showing how objects that are unique and found without much context, should not be dismissed, but instead requires more effort, than just looking at existing

typologies and deciding which type it is. Especially for the mediaeval period, iconographic sources also serve as a great tool, especially for determining the purpose of an object, but this too is complicated, as a unique object won't appear in iconography.

Speaking more specifically about this axe, it seems like it might have tried to combine different elements from other axe types, but this might have led it to being a jack of all traits, but master of none. If this was a shot at a new axe type, then it was a miss, as this axe type didn't catch on. D234 now stands as either a point on individualism in the 13th century, as the wielder tried to stand out, or as a failed experiment in the mediaeval weapons race.

Bibliography

ALEKSANDROVICH. Древняя Русь. Город, замок, село. Отв. ред. Б.А. Колчин, Москва. 1985.

ARUP, Erik. "Leding og Ledingsskat i det 13. aarhundrede". *Historisk Tidsskrift* Bind 8. Række 5 1915, pp. 142–238.

ATGÄZIS, Märis. "Ävas cirvji Latvijä". *Arheologija un etnogräfija* XIX, 1997, pp. 53–63.

ATGÄZIS, Märis. *Tuvcinas ieroci Latija 10.-13. gadsimta, Riga.* Riga, 2019.

APEL, J.K. *Skilled Production and Social Reproduction. Aspects of Traditional Stone- Tool Technologies. Proceedings of a Symposium in Uppsala,*

August 20– 24, 2003. Uppsala: Societas Archaeologica Upsaliensis. 2006.

BLOM, Otto. *DEN TIDLIGE MIDDELALDERS VAABEN, (omtrent 450-1050.)*. Kjøbenhavn: C. C. Lose & Delbancos Forlag, 1861.

CHRISTENSEN, Arne: "Slaget på Grathe Hede". *P-Nyt* 23. Årgang Nr. 2, Juni 2015 (2015).

CHRISTIANSEN, Erik. *The Works of Sven Aggesen: Twelfth-century Danish Historian.* University College London: Viking Society for Northern Research, 1992.

CEDERLÖF, Olle. *Våbenes historie*. Høst og Søns Forlag, 1951.

DOSTAL, B. *Slovanská pohřebiště ze středni doby hradištní na Moravě*. Praha, 1966.

GRINDER-HANSEN, Poul. *Danmarks Middelalder og Renæssance*. København: Nationalmuseet, 2002.

HEINDEL, Ingo. "Äxte des 8. bis 14. Jahrhynderts im westslawischen Siedlingsgebiet zwichen Elbe/Saale und Oder/Nieße". *Zeitschrift für Archäologie,* 1992, Vol. 26, h. 1.

HYBEL, Nils. *Danmark i Europa 750-1300*. København: Museum Tusculanums Forlag, 2011.

HØGSETH, Harald Bentz. "Knowledge Transfer: The Craftsmen's Abstraction". *Archaeology and Apprenticeship: Body knowledge, identity, and communities of Practice*. University of Arizona Press, 2013.

JAHN, F. H. *Almindelig Udsigt over Nordens, især Danmarks Krigsvæsen i Middelalderen, indtil Krudtets Anvendelse i de nordiske Krige*. Kjøbenhavn: H. F. Popp., 1825.

JØRGENSEN, Anne Nørgård. *Waffen und Gräber: Typologische und chronologische Studien zu skandinavischen Waffengräbern 520/30 bis 900 n.Chr. /*. Nordiske fortidsminder. Serie B, vol. 17. Kbh: Det Kongelige Nordiske Oldskriftselskab, 1999.

KIRPIČNIKOV, Anatolij Nikolaevič. *Voennoe delo na Rusi v XIII-XV vv*. Nauka, 1976.

KOTOWICZ, Piotr N. *Topory Wczesnosredniowieczne z ziem polskich*. Rzezow: Cellectio Archaeologica Ressoviensis, 2014.

KRISTENSEN, Ulla, Kock, Jan. "Herregårde og voldsteder i Aalborg Kommune", 2017. Extracted from: https://trap.lex.dk/Herreg%C3%A5rde_og_voldsteder_i_Aalborg_Kommune

LA COUR, Vilhelm. *Næsholm*. Nationalmuseet, 1961.

LA COUR, Vilhelm. "Havnebondens Våben". *Våbenhistoriske Årbøger*, 1959-61.

LIEBGOTT, Niels-Knud. *Middelalderens Våben*. Nationalmuseet, 1976.

LUŇÁK, P. *Velkomoravské Sekery.* Unveröffentlichte Kandidatendissertation. Masaryk-

Universität. Brno 2018.

LYNGSTRØM, Henriette. "Early Iron and Ironworking in Denmark " In *"The Coming of Iron"* Verlag Marie Leidorf: 2020.

LYNGSTRØM, Henriette. *Håndværkerens Viden og Kunnen i forhold til materialet - jern*. Københavns Universitet, 21 March, 2022.

MALMER, M. P. *Metodproblem inom järnålderns Konsthistoria*. Lund: Acta Archaeologica Lundensia, series altera 3, 1963.

SHORT, William R., og Reynir A. Óskarson. *Men of Terror: A Comprehensive Analysis of Viking Combat*. 1st edition. Westholme Publishing, 2021.

NICHOLSON, Helen. *Medieval Warfare: Theory and Practice of War in Europe 300-1500.* New York:

2004.

NÄSMAN, Ulf. "Grav og økse: Mammen og den danske vikingetids våbengrave". I *MAMMEN: Grav, Kunst og samfund i vikingetid*. Jysk Arkæologisk Selskab, 1991.

NØRLUND, Poul. *Trelleborg*. København: Nordisk Forlag, 1948.

OAKESHOTT, Ewart. "Introduction to the Viking Sword". In *Swords of the Viking Age*. The Boydell Press, 2018.

OLDEN-JØRGENSEN, Sebastian. *Til Kilderne*. Gads Forlag, 2013.

PAVÓN, Martin. "Borren Voldsted" Extracted from: https://trap.lex.dk/Borren_Voldsted

PAULSEN, Peter. *Axt und Kreuz in Nord- und Osteuropa.* 2. erweiterte und verbesserte Aufl. Bonn, 1956.

PEDERSEN, Anne. *Dead Warriors in Living Memory: A Study of Weapon and Equestrian Burials in Viking-Age Denmark, AD 800-1000.* Publications from the National Museum. Studies in Archaeology & History 20. Copenhagen: Publications from the National Museum, 2014.

PETERSEN, Jan. *De norske vikingesverd: En typologiskkronologisk studie over vikingetidens vaaben.* Kristiania: Videnskapsselskapets Skrifter, 1919.

PETERSEN, Jan. *Vikingetidens redskaper*. Skrifter utgitt av Det Norske Videnskaps-Akademi i Oslo. 2, Hist.-Filos. Kl. 1951. Oslo, 1952.

POMMER & RAVN. "Den sene vikingetids amfibiske militæroperationer:

Eksperimentalarkæologiske forsøg med landsætning og kampformationer". *Kuml* 68, nr. 68 2019. https://doi.org/10.7146/kuml.v68i68.126046.

SCHIETZEL, Kurt. *Spurensuche Haithabu ; Dokumentation und Chronik 1963-2013 /.* Neumünster: Wachholtz, 2013.

SOLBERG, Gustav Hejlesen. "Den Danske Økse: En analyse af Den danske Økses udbredelse, udvikling, brug og symbolvirke". Københavns Universitet, 2021.

SØRENSEN, Marie Louise Stig. "'PARADIGM LOST' – ON THE STATE OF TYPOLOGY WITHIN ARCHAEOLOGICAL THEORY". I *Paradigm Found*. Oxbow Books, 2015.

SØRENSEN, T.F.. "Original Copies: Seriality, similarity and the simulacrum in the Early Bronze Age". In Danish Journal of Archaeology, 1(1): 45-61. 2013.

VIKE, Vegard. "'Det er ikke gull alt som glimrer' -- bredøkser med messingbeslått skaft fra sen vikingtid ["All that glitters is not gold" -- broadaxes with brass banded hafts from the late Viking Age]". *Viking: Tidsskrift for norrøn arkeologi* 79 (2016): 95–116. https://doi.org/10.5617/viking.3906.

WALDMAN, John. *Hafted Weapons in Medieval and Renaissance Europe: The Evolution of European Staff Weapons between 1200 and 1650*. Leiden, NETHERLANDS, THE: BRILL, 2005. http://ebookcentral.proquest.com/lib/kbdk/detail.action?docID=280581.

WARMING, Rolf. "Praksistilgangen i Kamparkæologi: The Practice Approach Og Vikingetidens Krigeriske Praksisser". *Arkæologisk Forum 38*, 1. januar 2018. https://www.academia.edu/39961800/Praksistilgangen_i_kampark%C3%A6ologi_The_Practice_Approach_og_vikingetidens_krigeriske_praksisser.

ZYKOV, A.P., S.F. Koksharov, og E.R. Maslennikov. "Typology of the medieval axes from the north of Western Siberia". *VESTNIK ARHEOLOGII, ANTROPOLOGII I ETNOGRAFII*, 28. august 2020, 74–84. https://doi.org/10.20874/2071-0437-2020-50-3-6.

"Sankt Matthias | Bildindex der Kunst & Architektur - Bildindex der Kunst & Architektur - Startseite Bildindex", Extracted from: https://www.bildindex.de/document/obj20597613?part=0&medium=mi02470g10

" Fund og Fortidsminder - Højby" Extracted from: https://www.kulturarv.dk/fundogfortidsminder/Lokalitet/129284/