

The Scandinavian Battle-Axe: An Assessment

This paper will analyse the use of battle-axes in the battle-axe culture in Scandinavia, also known as the single-grave culture in Denmark, and corded-ware culture in areas of Northern and Eastern Europe. This period c. 2850-2350 BC saw a change of focus from the group to the individual within a group – for example the characteristic single graves of the battle-axe culture buried according to a new set of rules with specific orientation and graves goods. The presence of battle-axes in many of these burials has resulted in a continued interest as well as differing conclusions for their use and significance. Indeed, the presence of battle-axes in a position close to the head in such single inhumations has led many scholars to argue for their significance to that society¹. Across the literature they have mostly been viewed as either weapons, symbols of weapons, or symbols of the elite, although there are also arguments for their functional use. As such this paper will assess the potential uses of battle-axes within the Scandinavian Battle-Axe culture, many of which revolve around the importance of the individual within societies during this period. The assessment will revolve around the main question of use: Were Scandinavian battle-axes functional or symbolic?

C. 2850-2350 BC saw a profound change in Scandinavia. Labelled the Battle-Axe Culture (BAC) the economic, political, and social change can be seen throughout the archaeology. Examples include forest clearance for agriculture and the keeping of domesticated animals, emerging patterns of spatial organisation, the presence of single inhumations, and most of all an increase in the presence of and variety of stone battle-axes, as well as other new tools, weapons, and pottery including cord-decorated beakers. Battle-axes have been found in contexts as early as the Mesolithic, and their use continued into the Bronze Age. However, during the Late Neolithic their presence among the grave goods of this new burial tradition, characteristic of the battle-axe culture, emphasises their almost central role in the changing political and ideological environment, one revolving around individuality. As such BAC is characterised by the appearance of single graves with seemingly prescribed rules on orientation and position, with men lying on their right, and women on their left, in an east-west, orientation. Specific grave goods including the cord-decorated beaker, flint axes, beads, and battle-axes - the latter found only in male burials – were present in set locations (see fig. 1). Battle-axes, for instance, were always placed by the head.

¹ Jørgen Jensen, *The Prehistory of Denmark*. (London: Routledge, 1995).

Individuality and the Elite

A change in ideology meant that no longer was the focus on the group but instead on the individual within a group. It was now important at an individual level to maintain one's social and ideological position whilst being within a society that as a whole strives to maintain networks and the position of the societal group in a broader context. This is not surprising - the increase of agriculture and animal husbandry in the Late Neolithic resulted in an increase of long-term investment which brought with it a degree of vulnerability. At a group level, vulnerability was protected through links with other groups, maintained through a vast trade network of the variety of valuable objects and pottery found in the battle-axe burials. Social integration was needed to protect such investments with the use of a hierarchical society. As such, C. Tilley has pointed out that an essential pre-condition for agricultural production is the establishment of relationships between individuals and groups on a more permanent basis by means of their location at determinate points in an extended network of kin and marriage relations.² The use of objects including battle-axes are seen by many to have been used to maintain links between communities as well as uphold and create status within a community. Indeed, their presence in the single inhumations of BAC can be interpreted as a sign of the elite, as such there is an element of individualism associated with battle-axes.³

Individuality goes hand in hand with ideas of a stratified hierarchical society with an elite group of people controlling the process of and investments made through agriculture and trade. This has led many scholars to argue for the beginning of inequality and the development of an elite. For example, authors such as Gordon Childe and Jørgen Jensen have argued the development of a ranked society can be seen through the construction of graves with specific prestigious grave goods revealing the social position of the buried person - such as battle-axes which are always positioned by the head.⁴

In many cases these people are also thought of as elite male warriors buried with their weapons, including battle-axes and flint arrows. Not least because battle-axes have only been found in male graves but also the knob-buffed battle-axes of a phallic shape can be argued to represent success of a male warrior⁵. This goes hand in hand with the development individuality with specific objects being used to infer status or perhaps even create it.

² Christopher Tilley, *An Assessment of the Scanian Battle Axe Tradition: Towards a Social Perspective* (Lund: CDK Gleerup, 1982).

³ Christopher Prescott, 'Late Neolithic and Bronze Age developments on the periphery of southern Scandinavia', *Norwegian Archaeological Review* 24 (1991), p. 46.

⁴ Gordon Childe, *The Dawn of European Civilisation* (London: Kegan Paul); Jensen, *The Prehistory of Denmark*, p. 110.

⁵ Jan Turek. 'Stone axes in the Bohemian Eneolithic: Changing forms, context and social significance'. In *Stone Axe Studies III*, ed. by Vin Davis, & Mark Edmonds (Oxford: Oxbow Books, 2011), 385-395, 386, 392.



Fig. 1: A typical battle-axe burial assemblage from Bornholm: cord decorated pottery; axes, chisel and arrows made of flint; battle-axes.

Functional or Symbolic?

The most common view in the literature supports the view battle-axes were used by an elite/warrior elite to gain/maintain status, power, and wealth. For instance, Gimbutas' labelling of battle-axes as cult axes suggests an association with status through the threat of violence, or symbols of rank associated with ancestral access to trade networks⁶. While Jensen argues there is 'no doubt' such objects reveal status⁷. It can be seen that there are

⁶ Marija Gimbutas, 'Battle Axe or cult axe?' *Man* 53 (1953).

⁷ Jensen, *The Prehistory of Denmark*, 110.

several connections between battle-axes and individuality within this argument, most notably their use to create and maintain status for the individual owner. These objects may have been used to express an individual's power and warrior prestige through the display of wealth, such as through the addition of specific grave goods in the single inhumations of BAC in Scandinavia.

However, if battle-axes were associated with elite warriors, were they also functional weapons? The idea of battle-axes being interred in the graves of elite warriors stems from their presence only in male burials along with other weapons such as arrows. But this does not prove they were actually used! Even the Scandinavian rock art showing depictions of people engaging in fights with battle-axes as weapons raised as if to strike date slightly later, to the Late Bronze Age, whilst it is also unclear whether stone or metal implements are represented. Conversely other objects deemed as weapons from this period have been found in violent contexts. For instance, arrowheads, a common grave good of the single inhumations across Scandinavia, Germany and the Low Countries have been found in contexts of violent deaths, including a Corded Ware burial from Saxony-Anhalt, Germany, where a transverse arrowhead was found firmly lodged in the fourth lumbar vertebra of a woman aged 25-35.⁸

Indeed, there is evidence for increased violence during the Late Neolithic into the Early Bronze Age as a result of the new character of society; the hierarchical social structure increased competition, on top of outside threats, amplified the production and presence of weapons in the archaeological record. There are also several examples of injuries caused by interpersonal violence in northern Europe, most notably cranial injuries of which several sources mention the wounds were inflicted by a weapon either with a sharp edge or a flat edge, both of which are present on battle-axes.⁹ Examples include traumas from Mecklenburg, Vorpommern; Schleswig, Holstein, and Lower Saxony from the Single Grave Culture in Germany.¹⁰ It is thought that these violent interactions were an important part of maintaining a society, its relations with other groups, and its status within the broad network that existed across Europe.¹¹ However, there is limited evidence for Scandinavia due to poor preservation of human remains and there are no clear examples of trauma that directly match the size and shape of battle-axes found with the victims. As such without further analysis, most notably experimental tests followed by use-wear analysis, the use of battle-axes in Scandinavia as weapons remains unclear.

Another possibility of functional use lies within the realms of agriculture - were they tools used by a new agriculturally dominated community? The expansion of farming

⁸ Christian Meyer *et al.*, 'The Eulau eulogy: bio-archaeological interpretation of lethal violence in Corded Ware multiple burials from Saxony-Anhalt, Germany' *Journal of Anthropological Archaeology* 28 (2009), p. 416.

⁹ Jörg Wicke *et al.*, 'Injured – but special? On associations between skull defects and burial treatment in the Corded Ware Culture of Central Germany' in *Sticks and Stones, and Broken Bones: Neolithic Violence in a European Perspective*. ed. by Rick Schulting & Linda Fibiger (Oxford: Oxford University Press, 2012) p. 168.

¹⁰ Jörg Wicke *et al.*, 'Injured – but special', p. 168.

¹¹ Timothy Earle. 'Culture matters in the Neolithic transition and emergence of hierarchy in Thy, Denmark: Distinguished lecture', *American Anthropologist*, 106 (2004), p. 117.

settlements, evident from numerous graves and habitation sites in Sweden with evidence for cereal cultivation in areas of good agricultural soils and the keeping of domestic animals signifies the farming played a central role. Additionally, the creation of new tools for agriculture, such as chisels and flint scrapers, contemporary and occurring frequently with new typologies of battle-axe could mean that battle-axes were part of this new tool kit. Possibly with multiple uses, as weapon and tool perhaps. However, any functional use is questionable due to the weakness of battle-axes at the shaft-hole, with a considerable amount being found broken at this precise location. It is also questionable whether all typologies were made and could be utilised for functional use without breaking, such as the decorated and fluted examples. Experimental tests are needed to assess the extent this weakness as well as the functionality of more decorated typologies. Experiments at Leiden University by K. Wentink involving the use of replica hafted battle-axes to hit animal skulls revealed only a very small amount of edge grinding during use-wear analysis despite prolonged use.¹² Similarly, their experiments using battle-axes to remove and cut through roots and trees gave the same type of wear. Therefore, without further experimentation there is not enough experimental data to evaluate a functional use, either tool or weapon.

Were Scandinavian battle-axes symbols of the power and wealth of the elite and/or the prestige of a warrior elite? Or were they symbols of the importance of agriculture, and those whom controlled it? Due to the lack of data supporting the functional use of these implements currently the most popular conclusion for their function is purely symbolic, many argue they would have broken if used, with examples given from records of many halves of battle-axes to illustrate their weakness. However, this may have been an intentional act perhaps to end the life of the implement, an act often found in archaeology.¹³ Plus with the rise of the individual within a more hierarchical community it is not surprising that certain objects were used to maintain and express individual power and wealth. We can argue this is seen in the burial assemblages of BAC.

But what were battle-axes symbolic of? I have presented the argument for these implements signifying an elite or warrior elite however there are other possibilities for symbolic use. For instance, H. Knutsson and K. Knutsson suggest a process whereby the grave goods are actors in ancestral stories linking the dead with their ancestral histories and thus maintaining links with the land.¹⁴ Here an agricultural or land clearance role is assumed. Additionally, as P. Lekberg's recent PhD thesis at Uppsala University exploring the biography of Scandinavian battle-axeheads argued, battle-axeheads were about 20 – 35 cm when produced but got smaller throughout their lifetime. They were deposited at various stages of life, and thus also length, in various locations. Really short axes, shorter than 9cm, were rare in hoards, while the really long ones - longer than 17cm - were rare in graves. When Lekberg mapped find spots of axes and their lengths he found they

¹² Annelou Van Gijn, 'The many interconnectivities of things: contributions of experimental archaeology and microwear analysis', (Research Seminar, Newcastle University, Thursday 29th April 2016).

¹³ Per Lekberg, *Yxors Liv Människors landskap: En Studie av Kulturlandskap och Samhälle i Mellansveriges Senneolitikum* (Uppsala: Institutionen för arkeologi och antik historia, 2002).

¹⁴ Helena Knutsson & Kjell Knutsson, 'Stone age transitions: Neolithisation in central Scandinavia', *Documenta Praehistorica*, 30 (2003), p. 66.

marked specific areas with short, grave-indicating axes generally exhibited linear distributions patterns, marking paths and roads along ridges, eskers or waterways, while the long, hoard or offering indicating axes were most often placed in coastal zones or at places along the inland paths, marking nodal points in the landscape and indicating multiple use.¹⁵ Battle-axes may have been used to connect those who placed them to specific areas, with a range of axes used for differing areas. Perhaps higher value axes being used for locations of significance, perhaps of agricultural importance.

But, are battle-axes even prestigious items? Tilley's assessment of BAC revealed battle-axes were not the most frequent artefact found in graves, and are in fact only present in a quarter of all known burials. While D. Olausson evaluated that their production did not require any skills so they could have been self-manufactured for individual possession, and therefore were not of high value.¹⁶ However, it is unlikely certain typologies, such as the fluted and decorated examples, took little or no skill to produce (see fig. 2). Equally, C. Damm has argued the associated status was not from the axes themselves but instead from a status acknowledged through other means, such as through their trade which maintained vast networks.¹⁷ Thus battle-axes could have held a significance created through other means, not purely from an elite or warrior link.



Fig. 2: An example of battle-axes that may have required a degree of skill to produce.

For a more accurate assessment of the uses of battle-axes experimental tests and use-wear analysis must be undertaken. Analysis of this kind has come on leaps and bounds in the last few years, particularly with stone tools, with the pioneering work of Jenny Adams. As such, it is now clear just how important the analysis of wear processes is in working out the activities and behaviour of past societies; extensive and intensive use can be

¹⁵ Per Lekberg, *Yxors Liv Människors landskap: En Studie av Kulturlandskap och Samhälle i Mellansveriges Senneolitikum* (Uppsala: Institutionen för arkeologi och antik historia, 2002), p.307.

¹⁶ Deborah Olausson, 'Battle Axes: Homemade to order or factory products?' in *Proceedings from the Third Flint Alternatives Conference at Uppsala, Sweden. October 18-20, 1996, OPLA 16*, ed. by Lena Holm, & Kjell Knutsson, (Uppsala: Uppsala University, 1998), p. 136.

¹⁷ Charlotte Damm. *Continuity and Change. Analysis of social and material patterns in the Danish Neolithic*, (PhD Thesis, University of Cambridge, 1991), p. 65.

assessed, along with wear management, the strategy of tool maintenance, the pressures, motions, and directions of wear, the softness or hardness of the contact material and the type of material. The use of this technique can therefore hold an advantage, and will allow us to not make assumptions on the use of battle-axes. Only then will we be closer in answering whether they were functional or symbolic.

Overall it is clear that there are several potential uses for Scandinavian battle-axes. Currently, with a lack of information to back up their use as functional objects it seems more plausible to say battle-axes held a more symbolic value. The rise of individuality and the presence of battle-axes in the new burial tradition means they must have been part of some aspect of the individual, whether it be to show status, power, or warrior success. Or perhaps their presence symbolises multiple aspects of this new economy, along with the other objects present in battle-axe culture burials. Thus battle-axes may have held multiple uses and multiple significances to represent multiple social environments and that perhaps differ between individual and group use. However, the significance implied by their position close to the head of males interred in the single inhumations of the BAC must not be ignored.

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Fig. 2: from Archäologisches Landesmuseum Brandenburg. Photocredit: Wolfgang Sauber <https://commons.wikimedia.org/wiki/File:ALB_-_Neolithikum_Bootsaxt.jpg>

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