

## Violent Beauty in the Bronze Age

*“So the possession of costly bronze daggers, swords, and rapiers consolidated the positions of war-chiefs and conquering aristocracies as did the knights’ armour in the Middle Ages.”*

(V. G. Childe 1941, 133)

In 1941 when Childe published his seminal article “War in Prehistoric Societies”, he was far ahead of his time since more than five decades would pass before archaeology took up this subject area. The opening quote states his cross-period inference that leaders depend on war for their conquests and on beautiful weaponry for their political consolidation. A conceptual rift thereby transpires between war by itself and the chiefly leadership maintained through the splendour of shining weapons. This is ultimately a distinction between on the one hand actions and actors of war and on the other hand those of politics, and thus peace and bodily beauty. The history of Stone Age and Bronze Age research, from early on until today, enfolds versions of this universalist division, which may be boiled down to the perceived opposites of Hobbes and Rousseau with an origin in the Cartesian worldview of the Enlightenment still with us today.

The counterintuitive heading of the present paper “Violent Beauty” proposes to add the violence of war to the aestheticized figure of the beautiful warrior.<sup>1</sup> To reunite past properties of violence and beauty is undeniably a challenging exercise because all researchers customarily operate with categories, which are at least in part products of the pre-understandings we carry with us. By typically either understating or overemphasizing war-related violence, the archaeology of the 20<sup>th</sup> and 21<sup>st</sup> centuries showcases this counterproductive bias of science. It is still a hindrance for insightful interpretation when the beauty of weaponry deposited in sanctuaries or in burials is divorced from the trauma encountered on human skeletons, the material violence done to weapons and the materiality of war more generally. An outline of the history of re-

search and previous publications<sup>2</sup> permit pilot inquiries into the subject area of Bronze Age war and its linkages. The aim is to illustrate that “warfare” and “beauty” were not necessarily the opposites of each other in the Bronze Age, although a universal entanglement may be equally questionable.

### History of research: beauty or violence

The history of research has an intriguing tripartite layout (Fig. 1), which invites a discussion of the interrelationship of warriors, weapons and war



**Fig. 1** Research hallmarks in the archaeological study of warriors and war. Future studies may incorporate components from the three categories of *Kriegergräber-Tradition*, Treherne’s the warrior’s beauty and the archaeology of war since 1996, but it is otherwise an open question which directions future studies will take (graphics by H. Vandkilde)

<sup>1</sup> Treherne 1995.

<sup>2</sup> Vandkilde 2006a; 2013; 2016; 2017a; 2018.

in the Bronze Age world. It is pertinent to begin with the oldest and very persistent tradition of studying *Kriegergräber* with the “warrior’s beauty” as a further development and then proceed to the more recent archaeology of war.

### The tradition of warrior graves

The early culture-historical archaeology praised the Bronze Age for its exquisite items of shining metal, often weapons, and did not address war directly.<sup>3</sup> It was a peaceful Bronze Age inhabited by hard-working peasants and kept in order by mighty warrior aristocrats. This *Kriegergräber-Tradition*, as old as archaeology, lays emphasis on the grandness of rich weapon graves and depositions, whereas it has disregarded the violence implied by the weaponry. As it is woven into our contemporary culture and learning, the Homeric epic is likely influential. The poems, however, deliberately place violence in subtexts to the main story in which the bloodshed on the battlefield and bloody raids for booty are deemed irrelevant. Through nostalgic tales of heroic endeavours of war in a glorious past, the lead intention of the Homeric epic probably was to inspire a Greek identity at a time of crisis with growing social friction.<sup>4</sup> The heroisation effect of the epic has successfully persisted through the ages as the *Kriegergräber-Tradition* of the culture-historical archaeology may exemplify.<sup>5</sup>

By underlining the visual-social effects of superb weaponry, Childe, in the above work,<sup>6</sup> subscribes to the same research trend. Common traits are the absent or underplayed violence and the attention paid to the weapons of noble warrior elites. In the early years of archaeology skeletal trauma was not systematically recorded and, when recognized, treated as anomalies.<sup>7</sup> It is the sociological analysis of the instrumentality of war in conquests and power struggles that sets Childe apart from contemporaries. In alignment with the *Kriegergräber-Tradition* recent publications equip warrior chiefs with fine weapons while making trained fighters do the raids and battles; in this interpretation the warrior is a ruler, not a partaker in war.<sup>8</sup>

### The warrior’s beauty

Treherne’s influential essay<sup>9</sup> is difficult to place in a particular category or trend of research.<sup>10</sup> While acknowledging a debt to the *Kriegergräber-Tradition*, Treherne develops this genre considerably by bringing it in explicit dialogue with the Homeric epic as well as with the masculine body aesthetics of ancient Greece. The Bronze Age warrior thereby emerges as a hero thriving on, and celebrated for, his bodily beauty in both life and death. In Treherne’s analysis, there is notably no violence involved as the exquisite panoplies of weapons and grooming tools serve to keep the body beautiful as befitting a warrior hero.

The attention paid to aesthetics is in fact much more than a hypothesis: the warrior is, speaking cross-culturally, much concerned with the grooming of both body and weaponry and the beauty is routinely measured against the appearance of fellow warriors.<sup>11</sup> Treherne is the first to pinpoint the significance of the warrior fraternity in the Bronze Age stressing how the social cohesion of warrior companionship in life continued into the realm of death. Each warrior was a social individual in a strong community of other beautiful warriors. This analysis is still immensely valuable, albeit the absence of violence is questionable and, at the very least, ideal more than real. Besides, the warrior’s training in coordinating his body and weapons is crucial to ensure survival and victory – an issue that needs attention together with the implied violence.

### The emergence of war

The discovery of a violent prehistory was made only one year after Treherne’s cogent study of the beauty of warriorhood. Keeley’s “War before Civilization” in 1996 marked the onset of an entirely new archaeological field of study as the realization began to dawn that warfare in prehistory was not unusual and therefore could no longer be reduced to rare skirmishes or abnormalities. The number of war studies in books and articles is ever increasing, including in the German-language archaeo-

<sup>3</sup> Hansen 2015, 205; Vandkilde 2006a.

<sup>4</sup> S. Sherratt 2017, 49.

<sup>5</sup> Cf. Hansen 2014.

<sup>6</sup> Childe 1941.

<sup>7</sup> Vandkilde 2006a.

<sup>8</sup> Cf. Kristiansen 1984; Horn/Kristiansen 2018; Vand-

kilde 2018.

<sup>9</sup> Treherne 1995.

<sup>10</sup> Vandkilde 2017a.

<sup>11</sup> Cf. Vandkilde 2006b.

logy and many of these document skeletal trauma from various periods.<sup>12</sup>

This development into the 21<sup>st</sup> century stands in strong contrast to the foregoing long period of research that allowed violence to go unnoticed. The still growing datasets of skeletal traumata, weaponry, weapon trace-wear, hillforts and war iconographies in combination with the sheer focus on the subject of war seem altogether to brand early human society as inherently warlike and very ugly. This would align with the Hobbesian idea of *bellum omnium contra omnes* in which violent anarchy prevailed as there was no Leviathan to provide governance. What happened to the “epic beauty” of the archaeology of the 20<sup>th</sup> century praising the Bronze Age for its artful culture, warrior heroes and peaceful ways?

Keeley’s original manifesto is rhetorically Hobbesian and argues accordingly, through Stone Age examples mainly, that prehistoric communities and periods were in a general state of intrinsic warfare.<sup>13</sup> His own review fifteen years later sustains this line of thought, but with the nuance that the infrequent periods of relative peace will be worth investigating too.<sup>14</sup>

### Divergent Bronze Ages

Overall, two different Bronze Ages emerge from this brief account of the research so far: one beautiful and peaceful and the other bellicose and violent.<sup>15</sup> In their full consequence, each of these scenarios for the Bronze Age is unlikely. There is, on the one hand, enough data to show that encounters were not always peaceful and, on the other hand, current data, for example on metal trading and settlement organisation, do not sustain a state of endemic war. Likewise, warriors and war bands – the focus of this article – typically will have additional social roles not directly tied to warfare.<sup>16</sup> Being stereotypes with variable takes on the data, each interpretation could be *more or less* true depending on precise period, place and circumstances such as coinciding pressures from natural hazards, epidemics, famine, unstable frontiers,

social frictions, rampant enrichment economies or political processes of consolidation.

Here, merely a brief survey is undertaken based on selected weapon burials and weapon depositions, often in water, while using European finds with some emphasis on Southern Scandinavia. The latter region in particular role-modelled the idea of beautiful warriorhood launched by Treherne twenty-two years ago. The source material therefore concurs broadly with the Trehernean archetype, but a closer inspection reveals war-related violence in close association with at least some of these celebrated figures.

The present pilot cannot confirm a division of labour between beautiful warrior chiefs and their staff of fighters doing the wars. However, caution is necessary to summon. First, weapons in burials – so-called warrior graves – need not always imply active warriorhood and can be purely symbolic (for example in children’s burials). Likewise, gender, age, rank and cultural belonging intertwine with the warrior identity. Second, absence or presence of skeletal trauma is, when used isolated, a dubious proxy for warriorhood as well as for non-warriorhood. Much violence does not leave traces on the bones, which may thereto be badly preserved or even cremated, etc. If anything, trauma is considerably underrepresented in the skeletal record and reasons and motives other than strictly warfare produce bone trauma. Third, variation can be expected in the organisation of war and warriors across time and geography in the Bronze Age world – an underexplored theme. It is nevertheless timely to start engaging critically with the subject matter of the warrior and to link the figure of beauty to the warfare testified by the Bronze Age record, advancing beyond the two stereotypes of the history of Bronze Age research.

### Violent beauty in the Bronze Age

In concert with A. Sherratt’s original thesis,<sup>17</sup> the virtual shift to the Bronze Age took place around 2850 BCE when individual display of social status began to substitute old communal ways of funerary and social conduct. Following Treherne’s line of reasoning,<sup>18</sup> the radically different newcomer culture of the Corded Ware in Central and

<sup>12</sup> E.g. Peter-Röcher 2007; Jantzen *et al.* 2011; Hansen *et al.* 2015; Meller/Schefzik 2015.

<sup>13</sup> Keeley 1996.

<sup>14</sup> Keeley 2014, 30.

<sup>15</sup> Cf. Otterbein 2000.

<sup>16</sup> Vandkilde 2006b.

<sup>17</sup> A. Sherratt 1984.

<sup>18</sup> Treherne 1995.

Northern Europe already entailed an embryonic warrior's beauty. This was to be considerably refined over the centuries of the Bronze Age proper: particular weapons, and sometimes tools for body grooming, placed in close association with the body of a deceased male, a warrior in life and death. This is of course a generalising interpretation of very complex and often-inadequate data, but simultaneously an abstraction that makes sense in terms of the huge burial record where a proportion of males is mediated as weapon-carriers who relatively often possess various other gear and insignia tied to the body. The same goes for the weaponry ritually deposited in or near water, the context of which seems parallel to the funerary domain. Possible war-linkages of the beautiful warrior is the theme explored below.

### Corded Ware

In the Corded Ware culture, half or more of the individual male burials (right-contracted position) highlight a stone battle-axe, unquestionably a weapon with great practical and symbolic value, predominantly placed in the head-shoulder area and often in front of the face while the axe haft is held with both hands.<sup>19</sup> Apart from the obligatory corded beaker probably for an alcoholic beverage, the warrior burial often contained a flint knife perhaps for body grooming, sometimes a mace-head (instead of battle-axe) and in rarer cases even archery equipment. High mobility among dispersed family groups, likely linked by a segmentary tribal organisation, seem to be the scaffold of Corded Ware social order.<sup>20</sup>

The archaeologically much-debated emergence of the Corded Ware culture has recently obtained a new actuality through DNA research,<sup>21</sup> demonstrating in-migrations from the Eurasian Steppe zone by people inclined towards pastoral livelihoods and assumedly bringing new social forms of *inter alia* patrilineal kinship descent and warrior fraternities.<sup>22</sup> The latter is in fine accordance with the burial record in which a group of males emerges as individualised figures within a certain shared idiom of warriorhood, which in-

terprets well as warrior fraternities.<sup>23</sup> Militarily speaking and compared to generalised male *ad hoc* type of warfare, or feuding,<sup>24</sup> the warrior fraternity provides an effective way of waging war, which may help to explain the expansive success of the Corded Ware across wide tracts of Central and Northern Europe.

Accepting that the warrior's beauty is at work already in the Corded Ware period, it is crucial that skeletal traumata occur on and around battle-axe wielding males. Skeletal traumata (and skull trepanations) are regularly observed and the frequent skull lesions accord with battle-axe fighting,<sup>25</sup> while arrows embedded in bone testify to the use of archery.<sup>26</sup> At Wennungen in the Central German region, the warrior male, buried in typical Corded Ware fashion, had a healed head trauma and his battle-axe had been sharpened frequently.<sup>27</sup> The broader source material suggests that axe-wielding men of the Corded Ware were warriors actively engaged in close-range possibly ritualized fights but also remote-range warfare.

The warriors were each other's victims, but violence clearly also involved the rest of society albeit to an unknown degree. The most spectacular case is the trauma burial 99 at Eulau with a man, woman and two children.<sup>28</sup> The warrior status of the traumatized male is marked by the position of the battle-axe in the shoulder area behind his back as he is holding a child in his arms; in a manner of speaking, war and peaceful compassion united as the warrior was also a father and husband. Similarly, the triple grave 3 in the Bavarian Tiefbrunn cemetery shows severe head trauma on the two males and the child.<sup>29</sup>

### *Gjerrild and long-term tensions in Southern Scandinavia*

In northeastern Jutland, on the fringes of the local Corded Ware homeland (Jutlandic Single Grave culture), the stone cist at Gjerrild, at the tip of the Djursland peninsula, contained several interments and grave goods datable to c. 2600 BCE. The finds include a trepanated skull in addition to a hu-

<sup>19</sup> Cf. Vandkilde 2007a, 82-87.

<sup>20</sup> Cf. Meyer *et al.* 2009; Sjögren *et al.* 2016.

<sup>21</sup> E.g. Haak *et al.* 2015.

<sup>22</sup> E.g. Mallory 2007.

<sup>23</sup> Vandkilde 2006b; 2007a, 88 Fig. 19.

<sup>24</sup> Schulting 2013; Peter-Röcher 2011.

<sup>25</sup> Neubert *et al.* 2014.

<sup>26</sup> Cf. Peter-Röcher 2007; Lidke 2008; Conrad/Teegen 2010; Meller *et al.* 2015; Muhl 2015; Schwarz 2015.

<sup>27</sup> Meller *et al.* 2015, 186-188 Figs. 2-4.

<sup>28</sup> Meyer *et al.* 2009.

<sup>29</sup> Sjögren *et al.* 2016, 6.

man breast bone perforated by a pressure-flaked tanged arrowhead (**Fig. 2**): such D-type flint arrowheads are attributed to the Jutlandic Single Grave culture (Corded Ware) with its battle-axe aggrandizing warriors.

It is doubtless significant that the region around Gjerrild was a cultural crossroads between groups of Corded Ware, the Trichterbecher and the Pitted Ware. Thus, the warfare resulting in one or more casualties at Gjerrild may well have been rooted in territorial-ethnic disputes perhaps symptomatic of the heterogeneous cultural landscape in Scandinavia's later Middle Neolithic.<sup>30</sup>

A culturally composite setup continued into the Late Neolithic period during which Corded Ware/Single Grave culture evolved into local versions of Bell Beakers in large parts of Jutland.<sup>31</sup> In the rest of Southern Scandinavia a deep seated communal tradition was reinvented by building gallery graves for the ancestors around 2200-2100 BCE often at the very edge of the sea. This was led by particular people who resided in near-sea *entrepôts* and who for the first time engaged in earnest with copper-based metallurgy and the long-distance voyages it demanded.<sup>32</sup>

A cultural mishmash was still visibly at work during the breakthrough of the Nordic Bronze Age 1600-1500 BCE. The dominant Bronze Age culture – *inter alia* with a renewed and highly visible warriorhood – may thereafter have assimilated deviant groups or rather these survived as a subculture during the rest of the only apparently uniform Nordic Bronze Age.<sup>33</sup> The Over-Vindinge cist and casualty may support the hypothesis of a composite social situation at the dawn of the Nordic Bronze Age (cf. **Fig. 4**, below).

### Bell Beaker

The Bell Beaker culture (ca. 2500-2200 BCE) – genetically affiliated with the Corded Ware and equally as mobile and expansive<sup>34</sup> – reveals a similar pattern of violence while a novel panoply of copper dagger and archery equipment (including bracers) had substituted the iconic battle-axe. The typecast of the Corded Ware warrior is replaced



**Fig. 2** Breast bone perforated by D-type flint arrow attributable to the Jutlandic version of the Corded Ware: the Single Grave culture. The bone piece was found among ten individuals (6 adults, 1 adolescent, 3 children) in a stone cist at Gjerrild in Djursland (national registry 140106-9, Sb 9), an area of north-western Jutland with different cultural presences in the first half of the 3<sup>rd</sup> millennium BCE. The attacker was likely a Corded Ware warrior (due to the arrow type), but the victim, an adult who died immediately, may not have been. The collective burial rite suggests either Pitted Ware culture or surviving Trichterbecher groups perhaps engaged in a territorial conflict. (photo by Rogvi Johansen, © Helle Vandkilde)

by a more varied social setup, which is nevertheless dictated by a culturally embedded canon in which the warrior is an archer.<sup>35</sup>

On average 8% of ca. 2000 burials in the east group of Bell Beakers show trauma or contain weapons for war albeit in Southern Germany the number is as high as 20%. Less than half of the warrior burials however boasts the full panoply for war.<sup>36</sup> The social-material differentiation of Bell Beaker warriorhood adheres to the number and quality of the beautiful weapons, body accessories, pottery and tools, which indicate parallel peaceful roles in life for the buried male, notably metalworking, flintworking, farming and potting in addition to social leadership in cases such as the 35-45 year old man at Amesbury.<sup>37</sup> In terms of the warrior fraternity, the warriors are individually distinct and some form of leadership transpires from the data.

### High-status warriors and war-related trauma

Some Bell Beaker warriors reveal bone traumata associated with war-related violence. The young warrior male buried with arrowheads and his bracer in the ditch at Stonehenge is such a case.

<sup>30</sup> Iversen 2016, 159-170. 166 Fig. 10.

<sup>31</sup> Vandkilde 2007b; Sarauw 2007.

<sup>32</sup> Vandkilde 2017b.

<sup>33</sup> Cf. Vandkilde 2014; 2017b; Bergerbrant *et al.* 2017.

<sup>34</sup> Olalde *et al.* 2017.

<sup>35</sup> E.g. Heyd 2007.

<sup>36</sup> Bertemes 2015, 197.

<sup>37</sup> Fitzpatrick 2011.

He had been hit by barbed and tanged arrowheads of early Bell Beaker type.<sup>38</sup>

Similarly, Heske and Grefen-Peters<sup>39</sup> report non-lethal and lethal injuries, by arrows for example, among particular Bell Beaker warriors north of the Harz. These are adult to mature males whose well-trained fit bodies further testify to their active engagement in encounters of war, while the particular content and separate location of the graves suggest a special status compared to individuals buried in small cemeteries. Here complex mortuary rites were at work with disarticulation of bones and multiple interments of whole and partial bodies.<sup>40</sup> Very good parallels for this distinction exist in Britain where the multiple and multi-phased Boscombe bowmen grave stands in contrast to the two special single burials of warriors at Amesbury.<sup>41</sup> This is not least interesting in the light of the scientifically verified in-migrations to Britain from the Continent.

### Bronze Age

The double being and doing of weapons, warriors and warrior institutions will be pursued below as possibly a characterising feature of the Bronze Age. The socially differentiated typecast of the beautiful warrior continued into the Bronze Age proper now with sword, spear and axe as the principal weaponry – definitely designed to kill human beings. At the same time, however, singular weapons of beautiful craftsmanship were individual creatures animated with a spirit of their own.<sup>42</sup> As in the Bell Beaker culture, “*Überausstattung*”<sup>43</sup> sometimes tuned the warrior cast. This further underpins variations in societal importance and different roles within the warrior group as well as in the broader community. While leadership of the Corded Ware warrior fraternity (see above) was concealed through an ideology of equality or simply absent, candidates for the war leader role are archaeologically visible from the beginning of the Bell Beaker period.

The social and political significance of the warrior fraternity, from the Corded Ware into historical times, is probably underrated. Indeed, warrior

fraternities are known cross-culturally as robust durative male institutions with minor variations in their organising principle usually with a war leader; to paraphrase Tacitus, the warriors of the fraternity fight for their chief, who fights for victory. Fraternities may have lived their lives at the margin of society, while being brought into the very centre of the political scene in times of crisis and external pressure.<sup>44</sup> Data from the Neckarsulm warrior cemetery are in good accordance with both a fraternity organisation as well as times of conflict and change at the turn to the Late Bronze Age (Ha A1), in particular when linked to the Tollense battlefield.<sup>45</sup>

Violence certainly is innate to the warrior – in terms of sociological definition and the cross-cultural record – but the values of beauty, cunning and bravery are very important too. The rituality of the “*Gefolgschaft*”, deeply embedded in the fraternities and continuing beyond death, opens for roles and significances in the religious sphere of the broader society. Bronze Age ritual hoards in some cases preserve outlines of warrior organisation, as first realised by Randsborg,<sup>46</sup> underpinning a linkage between war and ritual sacrifice with the warriors as lead figures in both these domains.

The bulky central Únětician hoards contains, among other things, martial gear of bronze clarifying embedment in a militant hierarchy. This is, by Meller, boldly interpreted as armies of soldiers and officers reinforcing a state apparatus.<sup>47</sup> However, the material hierarchy – double-headed battle-axes in the top (1), daggers (2), halberds (3) and flanged axes (4) – could alternatively be understood as several warrior fraternities united because of political centralisation; unification was then stated symbolically through lavish acts of sacrifice.

### *Valsømagle and Over-Vindinge: beauty as well as violence*

The two outstanding Valsømagle hoards deposited near each other ca. 1550 BCE in Nordic Bronze Age IB at Lake Haraldsted (Sorø, Sealand) invite a similar interpretation (**Table 1; Fig. 3a,b**); each hoard may represent a warrior fraternity with a sword-carrying war leader, two spear wielders,

<sup>38</sup> Evans 1984; Osgood/Monks 2010, 20 Fig. 2.6.

<sup>39</sup> Heske/Grefen-Peters 2014.

<sup>40</sup> Heske/Grefen-Peters 2014; Kießner 2006.

<sup>41</sup> Cf. Fitzpatrick 2011.

<sup>42</sup> Pearce 2013.

<sup>43</sup> Hansen 2002; Fitzpatrick 2011, 226-227.

<sup>44</sup> Vandkilde 2006b; Steuer 2006.

<sup>45</sup> Knöpke 2009; Jantzen *et al.* 2011; 2014; cf. Vandkilde 2018.

<sup>46</sup> Randsborg 1995.

<sup>47</sup> Meller 2015, Fig. 3.

VALSØMAGLE 1 (Ke 1097)	warrior fraternity	VALSØMAGLE 2 (Ke 1098)
Sword (blade)	war leader	Sword (metal-hilted)
Spearhead (large undecorated)	companion 1	Spearhead (large decorated)
Spearhead (smaller undecorated)	companion 2	Spearhead (smaller undecorated)
Shafthole-axe (decorated)	companion 3	Y-palstave (bevelled sides)
Shafthole-axe (undecorated)	companion 4	Shafthole-axe (undecorated)
Flanged weapon axe (bevelled cutting-edge)	companion 5	
Fish hook	companion 6?	

**Table 1** The content of the Valsømagle hoards listed in an ordered fashion. It is suggested that the two weapon panoplies were the property of two war leaders and their entourage of warrior companions. The weapon collections were deposited in each other's neighbourhoods and are so strikingly similar that the two fraternities must have been related, likely through kinship. Weapon pairs regarding types, sizes and presence/absence of decoration, furthermore, point in the direction of partnerships within (and even across) the war bands, in which one warrior was the wingman of his superior partner.

and two or three axe wielders. As quite typical for the Nordic Bronze Age and very distinct at Valsømagle, each weapon appears as a being in its own right as if enriched with a special life-force and probably symbiotically tied to an individual warrior. The bird and bull warriors presented in imagery mostly datable to Nordic Bronze Age V can be seen to further develop such animistic symbiosis between warrior and weapon. At Valsømagle, a firm ritual-cosmological link emerges through the fishhook, the eight fish on the socket of the 40 cm long spearhead from Hoard 2, the fish imitation of the spearhead shape and the prevalence of sacred spirals in the decoration.<sup>48</sup>

Later on, in Nordic Bronze Age II-III, the number of sword-carrying males reaches 10-20% and of these 7-10% possess particular insignia such as gold bracelets.<sup>49</sup> These percentages strengthen the hypothesis of the sword carrier as fraternity leader; a position quite possibly linked to other leadership roles. Because of the dispersed kin groups residing in single farms and hamlets, the warrior fraternities would have crucial roles in maintaining both territorial boundaries as well as the internal network of each tribal segment.

Beautiful warriors, such as those at Valsømagle, were among the first to be buried in large mounds the building of which commenced when the Bronze Age had its final breakthrough in the 16<sup>th</sup> century BCE. The single-grave interments with beautiful weapons in prominent mounds contrast with the concurrent tradition of interring the dead more

anonymously in ancestral megalithic tombs and communal stone cists. The Over-Vindinge gallery grave (Sværdborg, Præstø, Sealand) demonstrates that this social transition to the Nordic Bronze Age, quite possibly with ethnic undertones, cannot have been entirely peaceful (**Fig. 4**). The tip of a Valsømagle-type spearhead is embedded in the lower back of a mature male who had turned to escape a spear wielder; a beautiful warrior who may have been a fellow of a warrior fraternity similar to the locus classicus of Valsømagle.

#### *Shipborne fraternities, beauty and violence on Nordic rocks*

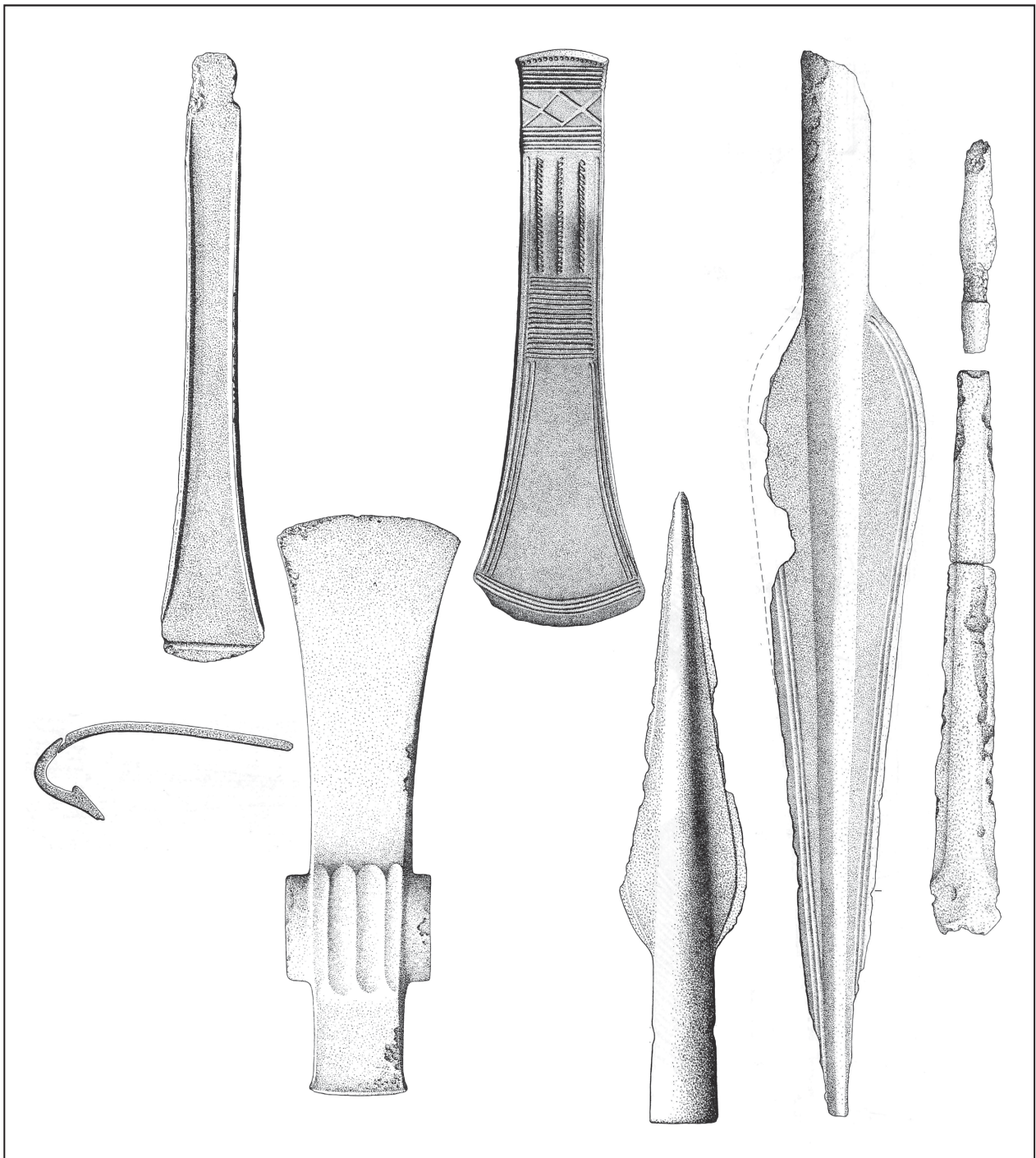
The high density of settlements along the Scandinavian coasts would furthermore suggest that warrior fraternities were often shipborne with piracy, raiding and trading as primary tasks. At sea, fame, prestige and companionship evolved around the fraternity leader as the captain and navigator.<sup>50</sup> The combination of beauty and war is distinctly evident in the highly ritualized sphere of Nordic rock carvings.

Ling notably calculates Nordic maritime-led warrior fraternities with on average seven to eleven companions per war canoe, including the war leader sometimes made prominent as captain of ship; some vessels could contain a crew of more than thirty. High mobility and the ability to move with unexpected speed were surely crucial properties of the warrior institution. The warrior scenes on rock comprise postures of beautiful appearance in which the opponents' weapons barely touch as well as violent scenes recently revealed

<sup>48</sup> Vandkilde 2014, see also Aner/Kersten 1976, Ke 1097-1098.

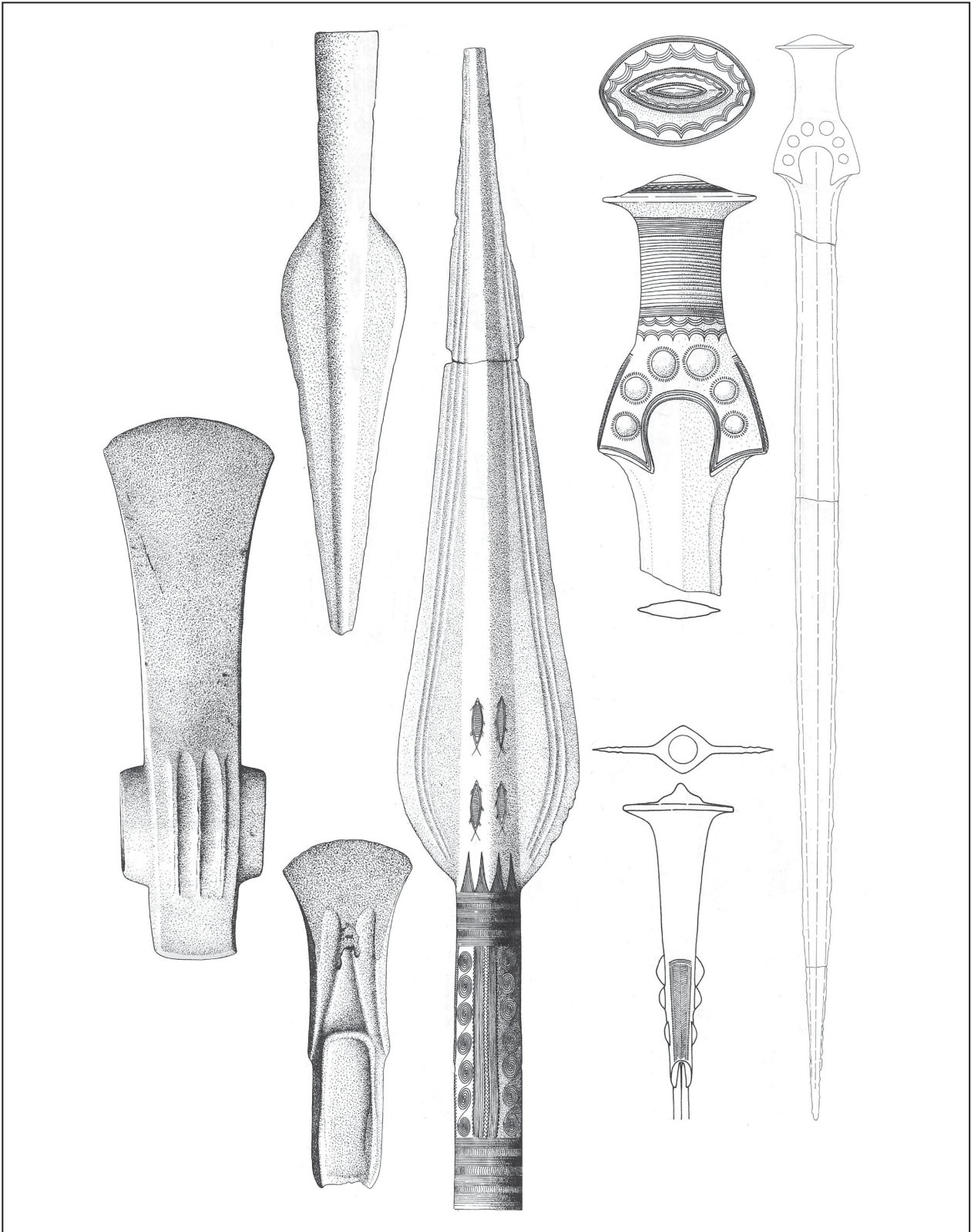
<sup>49</sup> Bunnefeld 2016, 272.

<sup>50</sup> Cf. van de Noort 2012, 233-235.

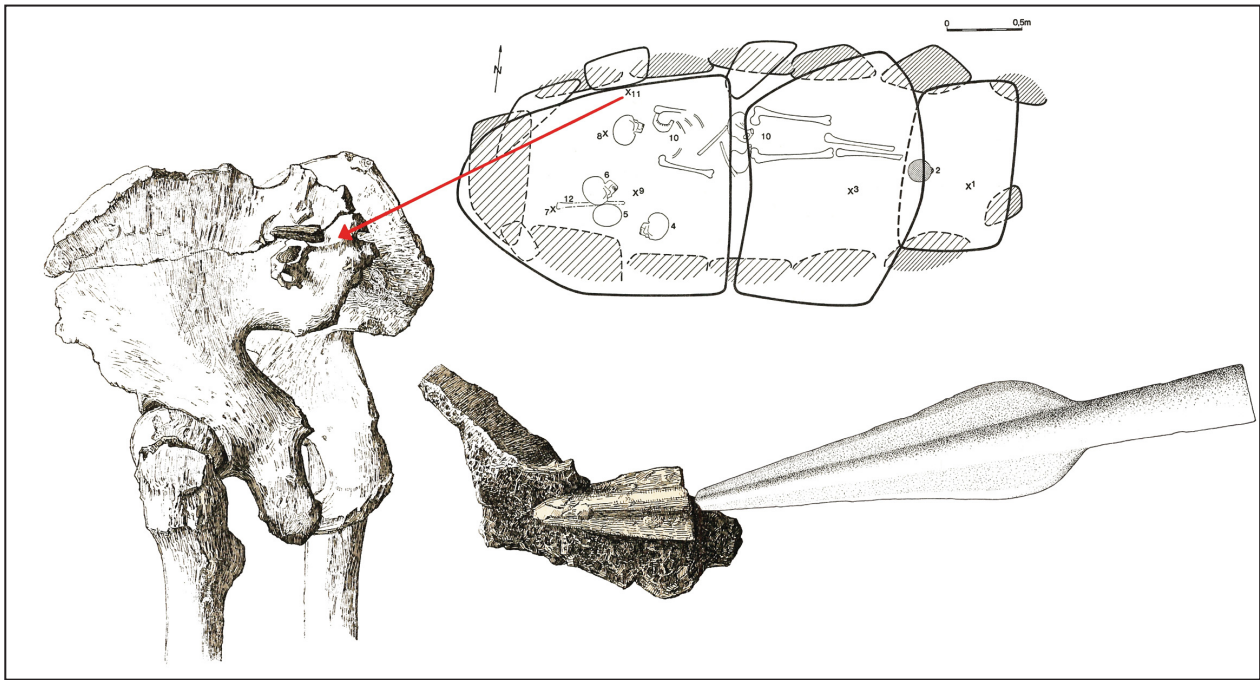


**Fig. 3a** Hoards I and II from Valsømagle (Haraldsted Parish, Ringsted County, Sorø District). Nordic Bronze Age IB, mid-16<sup>th</sup> century BCE (after Aner/Kersten 1976, Ke1097)





**Fig. 3b** Hoards I and II from Valsømagle (Haraldsted Parish, Ringsted County, Sorø District). Nordic Bronze Age IB, mid-16<sup>th</sup> century BCE (after Aner/Kersten 1976, Ke1098)



**Fig. 4** Trauma case from Over-Vindinge (Over-Vindinge, Sværdborg Parish, Hammer County, Præstø District; Sb 8, NM A 26 881-86). The skeleton of the 50-year-old man hit from behind with a spearhead, the tip (length 4,2 cm, width 2,4 cm) *in situ* in his pelvis (left). His internment in an old-school communal gallery grave (right, above) could suggest social-ethnic opposition to the spear wielder, representing the emerging social group of mound builders at the onset of the Nordic Bronze Age (c. 1550 BCE). The spearhead of Valsømagle type (right, below) has a characteristic angular socket recognisable in the tip fragment (after Kjær 1912; Aner/Kersten 1976, Ke 1292 I: 184-185 fig. 68, pelvis bone 11 at the north wall of cist)

(**Fig. 5A-C**).<sup>51</sup> Rock carvings with warrior scenes accommodate an epic dimension weighing the presentation of warriorhood and, clearly, the lethal violence of war formed part of both tales and reality in the Bronze Age world.

#### *Bronze Age trauma and the weapon link*

Bronze Age war-related traumata are quite well known,<sup>52</sup> especially if special mortuary sites are taken into account, notably Wassenaar,<sup>53</sup> Tormarton,<sup>54</sup> Nižná Myšľa,<sup>55</sup> Sund-Toldnes,<sup>56</sup> Velim,<sup>57</sup> Cliffs End Farm,<sup>58</sup> Plötzkau,<sup>59</sup> River Thames<sup>60</sup> and Tollense.<sup>61</sup> Clearly, the databank of skeletal traumata is increasing.<sup>62</sup>

Over the last decades questions have been raised about the weapon types involved and, in repercussion, the impact on the weapons themselves, resulting in a new research field. This has boosted both first and second generation results.<sup>63</sup> On the one hand, wear and damage done to weapons (armour, shields, swords, spears, knives) through fighting are examined, while on the other hand, experimental work is now routinely carried out to assess the impact of various bronze weapons on different sections of the human body and skeleton (using polyurethane plastic bone). Grounded in increasingly elaborate scientific protocols, the outcome of these studies of details on bone and bronze is in concert with the argued tight relationship between beauty and violence.

The trauma record for the earlier Bronze Age is usually deemed rather silent, but this could be due to underexplored skeletal data. The Late Bronze Age poses a source bias because of the cremation rituals, especially from the 13<sup>th</sup> century BCE and onwards. For this reason, Late Bronze Age evi-

<sup>51</sup> Ling 2012; Skoglund *et al.* 2015; Toreld 2015; Ling/Cornell 2017.

<sup>52</sup> Peter-Röcher 2007; Osgood/Monks 2010.

<sup>53</sup> Louwe-Koojimans 1993.

<sup>54</sup> Osgood 1998; 2006.

<sup>55</sup> Jakab *et al.* 1999.

<sup>56</sup> Fyllingen 2006.

<sup>57</sup> Harding 2013.

<sup>58</sup> McKinley *et al.* 2014.

<sup>59</sup> Hubensack *et al.* 2015.

<sup>60</sup> Schulting/Bradley 2014.

<sup>61</sup> Jantzen *et al.* 2011; Brinker *et al.* 2015.

<sup>62</sup> Cf. Meller/Schefzik 2015.

<sup>63</sup> E.g. Bridgeford 1997; Kristiansen 1984; 2002; Lewis 2008; Smith 2009; Mödlinger 2011; Horn 2013; 2017; Downing/Fibiger 2016; Molloy *et al.* 2016; Dolfini/Crellin 2016.

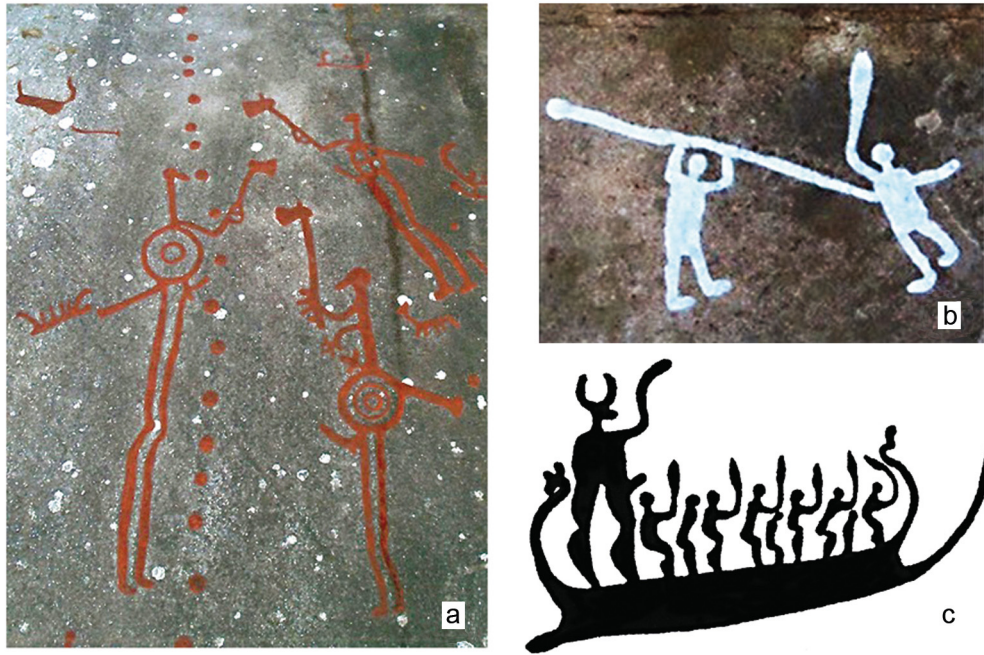


Fig. 5 Rock carving scenery of beauty and violence. A Beautiful warriors in mock fighting? Vitlycke, Tanum; B The killing. Brastad 617 Panel B.); C The maritime warrior fraternity. Tanum RAA 325 Northern Bohuslän. (A after Torrelid 2015, 172 fig. 14.10; B (after Toreld 2015, 166 fig. 14.1; C after Ling 2008, 203)

dence has been dubbed “circumstantial” in the light of the many deadly weapons.<sup>64</sup> In 1998, Osgood interpreted this seeming difference in terms of ritualised face-to-face combat in the earlier Bronze Age changing radically in the Late Bronze Age into militant violence.<sup>65</sup>

This often-repeated interpretation could well be an oversimplification: the formal fights between warrior opponents with battle-axes in the Corded Ware<sup>66</sup> seem to continue into the Bronze Age forming part of rituals, or simply training, as some rock carvings imply. However, lethal forms of warfare continued too, as exemplified by the Over-Vindinge casualty, grave 122 at the Hungarian Early Bronze Age cemetery of Hernádkak, also with a spearhead embedded in the pelvis, and a Tumulus culture burial at Klingst in Thuringia with a bronze arrowhead in a vertebra.<sup>67</sup> Several war-related injuries occur on warriors and other people in the Olmo di Nogara Middle Bronze Age-Late Bronze Age cemetery near Verona,<sup>68</sup> amongst others cases.

Recent discoveries provide a window into the life and death of the warrior. Three examples in

chronological order appear below to bolster the argument made above that beauty and violence were allies and that so-called elite warriorhood did not necessarily mean retirement into peaceful rulership.

#### *The Gristorp warrior*

The Early Bronze Age Gristorp man was buried in a log-coffin in Northern Yorkshire ca. 2000 BCE inserted in a mound overlooking the sea. He was accompanied by an unusual metal dagger with a whale-bone pommel, three flint knives, bark container, wooden tools, and a portrait carved into the opposite narrow side of the coffin. In effect he was perhaps looking at his own beautiful self.

He had died at a mature age - well fed since childhood. Intake of rich terrestrial food and the lean well-trained body suggest a combination of long-term social privilege and active warriorhood. Healed fractures on the ribs confirm martial activities during his lifetime.<sup>69</sup> The male burial at Racton in Sussex ca. 2300-2200 BCE with an elaborate bronze dagger provides a very similar case, with healed as well as unhealed injuries, the latter fatal and caused by, in fact, a dagger.<sup>70</sup>

<sup>64</sup> Thorpe 2006, 153. 155.

<sup>65</sup> Cf. also Osgood 2006; Harding 2007.

<sup>66</sup> Meller *et al.* 2015.

<sup>67</sup> Osgood/Monks 2010, 74-75 Figs. 4.2-4.3.

<sup>68</sup> Cupitò *et al.* 2015.

<sup>69</sup> Melton *et al.* 2010; Knüsel *et al.* 2013.

<sup>70</sup> Needham *et al.* 2017.



**Fig. 6** **A** The young beautiful warrior's burial in the mound of Borum Eshøj (Aarhus, Eastern Jutland). Head trauma is hidden beneath the thick hair; **B** The preserved section of the originally very large mound was cleaned and studied in 2011-2012 (A after Boye 1896 pl. X; B photo Helle Vandkilde ©)

### *The young warrior in Borum Eshøj*

Excellently preserved in a water-logged oak coffin, the young male's grave in Borum Eshøj, a giant mound built around 1375 BCE in eastern Jutland, makes a good parallel to Gristorp.<sup>71</sup> The warrior's outfit of beauty comprised fine woollen dress of mantle and kilt, dress pin and button, comb to tame the curly blond hair, bark container, wooden sword sheath, but, for some reason, merely holding a bronze dagger (**Fig. 6A-B**).

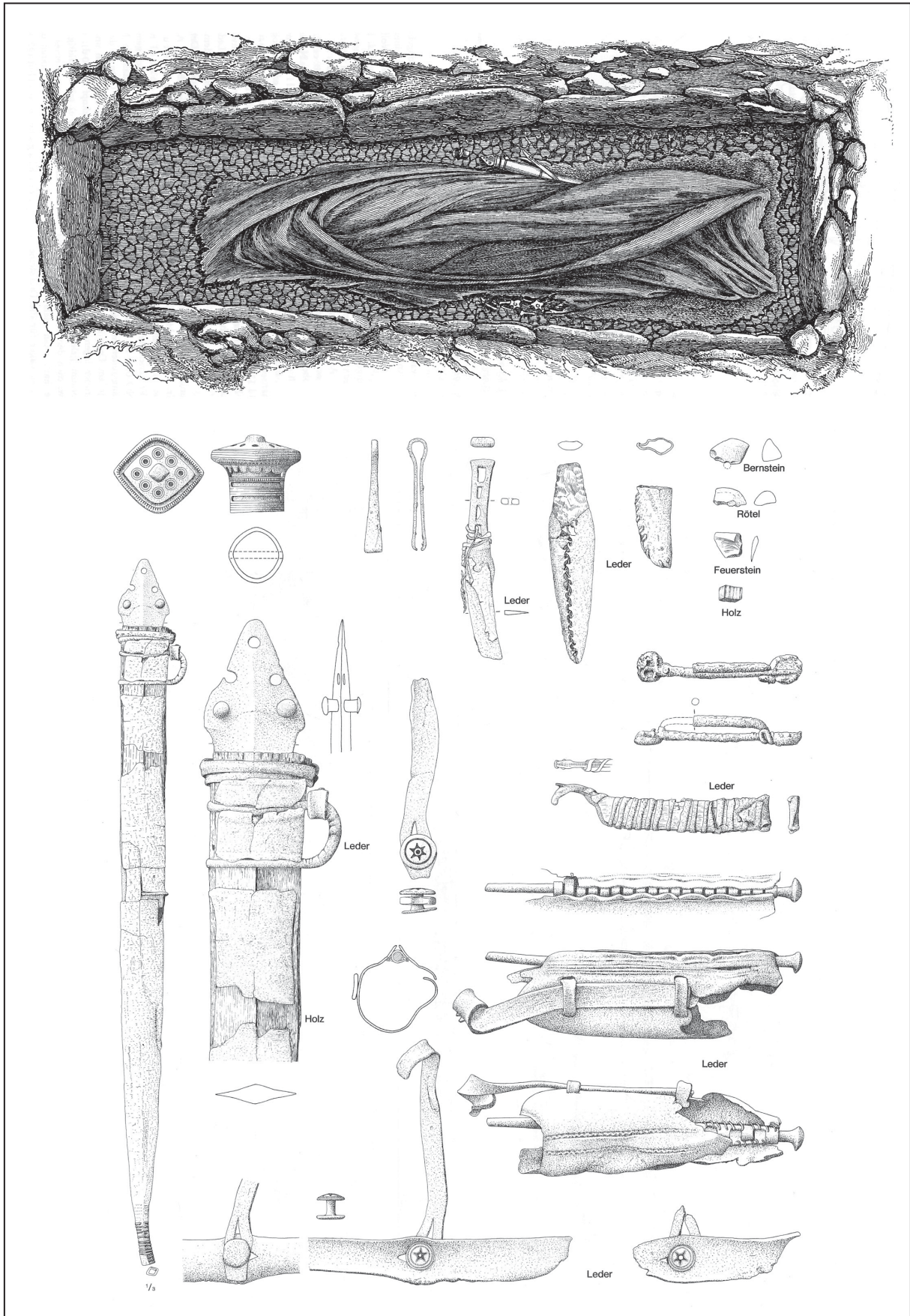
When moving the log-coffin to Moesgaard Museum's new Bronze Age exhibition in 2014, trauma

was revealed beneath the thick hair. The left cranial side showed a marked depression the shape and depth of which was similar to the head trauma on Neolithic skulls.<sup>72</sup> The patterned pathology of the large sample of well-examined Neolithic head injuries points to regular male engagement in non-fatal violence.<sup>73</sup> The Eshøj young male may then not have died from his head wound, which could be a result of forceful training or the formal face-to-face fights mentioned above.

<sup>71</sup> Cf. Boye 1896.

<sup>72</sup> Varberg 2014, 82.

<sup>73</sup> Cf. Fibiger *et al.* 2013.



**Fig. 7** The mound burials of Hvidegården I. The cremated bones of three individuals were wrapped into the cloak of a warrior interred with full equipment of weapons, grooming tools and things referring to the worlds of cosmos. The 20-40 year old man was also a shaman spirited by multiple personhood, animals and tokens. Warfare formed part of the events that led to the death of the three individuals according to Goldhahn (2009, 2012). (after Aner/Kersten 1973, Ke 399)

The Eshøj young male belonged to the same privileged section of society as the other warriors buried in mounds with full or partial weapon panoply and grooming equipment. Skeletal parts are rarely preserved. However, the war-efficiency of the beautiful bronze weapons is testified by the massacre pit at Sund-Toldnes in Nord-Trøndelag also from the 14<sup>th</sup> century BCE.<sup>74</sup> Healthy and wealthy people at Sund buried their dead in the large cairns erected to be visible from the sea. At inland Toldnes, however, the mass grave held 22-30 individuals likely belonging to two or three families. The intensive traumata, healed as well as unhealed, were attributable to bronze weapons (swords, spears and even axes or clubs) seemingly used in a state of frenzy. Skeletons further show signs of long-term malnutrition and, all in all, the data can be interpreted in terms of social inequality: war was waged by socially superior people in possession of effective bronze weapons attacking people alienated as inferiors.<sup>75</sup>

*Hvidegården mound I-II:  
warriorhood, war and rituals*

The burials in the two mounds at Hvidegården I-II in Kongens Lyngby (Copenhagen, Sealand) exemplify complex burial rites in Nordic Bronze Age III of the 13<sup>th</sup> century BCE and, importantly, the potential of extracting knowledge from cremated bones.<sup>76</sup> The rich equipment and the 2 m long stone cist in Hvidegården I, excavated in 1846, conform to the inhumation script of warrior males in the earlier Nordic Bronze Age.<sup>77</sup> This tradition however blends intriguingly with the novel cremation practice and there are adds-on of other unusual features in the cist. The cremated bones were wrapped in a woolen cloak arranged on a cow's hide, as if the body was still intact. The bronze sword was placed in its leather-wooden sheath in the "left hand area" together with leather strapings and bronze double buttons to enable the carrying of the weapon as befitting a warrior of high standing, in addition to a fibula, a horse-headed razor and tweezers for grooming and the famous belt-purse containing ritual gear (**Fig. 7**).<sup>78</sup>

Anthropological examination has lately revealed a composite presence of multiple burial, trauma, and the switching of bones – and thus parts of individuals – between the two trapezoidal cists at Hvidegården I and II during a single funerary event. The cremated bones inside the cloth of Hvidegården I comprised an adult man (20-40 years of age), an adolescent and a child. A fragment of a spiral ring and a bronze tube (from a female cord skirt) confirm the presence of more than one person. Furthermore, among the interchanged bones of two of the individuals deposited at Hvidegården II, a skull bone had a sword-cut.<sup>79</sup>

The intertwined cases at Hvidegården allow the following assumption: first, the warrior in his outstanding beauty was also a powerful shaman spirited by multiple personhood. Second, warfare formed part of the events that led to the death of the three individuals.<sup>80</sup> Third, the link between warriorhood, violence and rituals at Hvidegården aligns with the selection of data presented above.

### Summary and concluding words

A short outline of the research history revealed two contrasting Bronze Ages, one peaceful and the other war-like with a Hobbesian twist. In extension of this rift, the beautiful warrior *sensu* Treherne separates from the increasing number of war-related data and the warriors often end up as rulers rather than performers of war. By contrast and through examples from the funerary and sacrificial record, this article pinpoints the double being and doing of weapons, warriors and warrior fraternities as quite possible a characterising trait from the onset of the Corded Ware period well into the mature Bronze Age and beyond.

Exquisitely crafted weapons of bronze – many spirited with a life-energy of their own – were used to wage war and sometimes to hack victims into pieces (frenzy) with strong indications that the beautiful warrior with his trained well-groomed body was capable of extreme violence. The companionship of warrior peers in the fraternity was a social construct enabling effective waging of war as well as fulfilling other roles in Bronze Age society, contributing to rituals and social interaction.

<sup>74</sup> Fyllingen 2003.

<sup>75</sup> Fyllingen 2003; 2006; cf. Bergerbrant *et al.* 2017.

<sup>76</sup> Goldhahn 2009.

<sup>77</sup> Cf. Bergerbrant 2007.

<sup>78</sup> Aner/Kersten 1973, Ke 399.

<sup>79</sup> Goldhahn 2009; 2012, 245-246.

<sup>80</sup> Goldhahn 2012, 246.

Worthy of note, however, is the apparent predominance of trauma caused by the obviously safer and thus lower-ranking weapons of arrows in addition to wooden clubs.<sup>81</sup> This may stress the considerable complexity of the subject matter of Bronze Age war including the still unexplored variation in geographical space and historical time. Next-generation research with tight data coordination and control has the potential to provide deeper knowledge about Bronze Age wars as well as about the linkage between war and destruction through sacrifice.

## References

- Aner/Kersten 1973  
E. Aner/K. Kersten, Die Funde der älteren Bronzezeit des nordischen Kreises in Dänemark, Schleswig-Holstein und Niedersachsen. Vol. 1. Fredriksborg und Københavns Amt (Copenhagen/Neumünster 1974).
- Aner/Kersten 1976  
E. Aner/K. Kersten, Die Funde der älteren Bronzezeit des nordischen Kreises in Dänemark, Schleswig-Holstein und Niedersachsen. Vol. 2. Holbæk, Sorø og Præstø Amter (Copenhagen/Neumünster 1976).
- Bergerbrant 2007  
S. Bergerbrant, Bronze Age Identities – Costume, Conflict and Contact in Northern Europe 1600–1300BC. Stockholm Studies in Archaeology 43 (Stockholm 2007).
- Bergerbrant *et al.* 2017  
S. Bergerbrant/K. Kristiansen/M. E. Allentoft/K. M. Frei/T. D. Price/K.-G. Sjögren/A. Tornberg, Identifying commoners in the Early Bronze Age: burials outside barrows. In: S. Bergerbrant/A. Wessman (Hrsg.), *New Perspectives on the Bronze Age. Proceedings of the 13<sup>th</sup> Nordic Bronze Age Symposium held in Gothenburg 9th to 13th June 2015* (Oxford 2017).
- Bertemes 2015  
F. Bertemes, Krieg und Gewalt zur Zeit der Glockenbecher-Leute. In: Meller/Schefzik 2015, 193-200.
- Boye 1896  
V. Boye, Fund af egekister fra bronzealderen i Danmark: et monografisk Bidrag til Belysning af Bronzealderens Kultur (København 1896).
- Bridgford 1997  
S. Bridgford, Mightier than the pen? An edgewise look at Irish Bronze Age Swords. In: J. Carman (Hrsg.), *Material Harm: Archaeological Studies of War and Violence* (Glasgow 1997) 95-115.
- Brinker *et al.* 2015  
U. Brinker/A. Schramm/S. Flohr/J. Orschiedt, Die menschlichen Skelettreste aus dem Tollensetal. In: Meller/Schefzik 2015, 347-350.
- Bunnefeld 2016  
J.-H. Bunnefeld, Reiche Bauern, arme Bauern - Zur sozialen Differenzierung in der älteren nordischen Bronzezeit. In: H. Meller/H. P. Hahn/R. Jung/R. Risch (Hrsg.), *Arm und Reich - Zur Ressourcenverteilung in prähistorischen Gesellschaften* (Halle/Saale 2016) 243-272.
- Childe 1941  
V. G. Childe, War in Prehistoric Societies. *Sociological Review* 33, 1941, 126-39.
- Conrad/Teegen 2010  
M. Conrad/W.-R. Teegen, Gewalt und Konfliktaustragung im 3. Jahrtausend v. Chr. Ein Fallbeispiel aus Sachsen. *Archaeo* (Dresden) 6, 2009, 48-53.
- Cupitò *et al.* 2015  
M. Cupitò/M. L. Pulcini/A. Canci, Waffen und Wunden – das bronzezeitliche Gräberfeld von Olmo di Nogara. In: Meller/Schefzik 2015, 333-335.
- Dolfini/Crellin 2016  
A. Dolfini/R. Crellin, Metalwork wear analysis: the loss of innocence. *Journal of Archaeological Science* 66, 2016, 78-87.
- Downing/Fibiger 2016  
M. Downing/L. Fibiger, An experimental investigation of sharp force skeletal trauma with replica Bronze Age weapons. *Journal of Archaeological Science: Reports* 11, 2016, 546-554.
- Evans 1984  
J. G. Evans, Stonehenge – The environment in the late Neolithic and Early Bronze Age and a Beaker-age burial. *Wiltshire Archaeology and Natural History Magazine* 78, 1984, 7-30.
- Fibiger *et al.* 2013  
L. Fibiger/T. Ahlström/P. Bennike/R. J. Schulting, Patterns of violence-related skull trauma in Neolithic Southern Scandinavia. *American Journal of Physical Anthropology* 150, 2013, 190-202.
- Fitzpatrick 2011  
A. P. Fitzpatrick, The Amesbury archer and the Boscombe bowmen. Bell Beaker burials at Boscombe Down, Amesbury, Wiltshire. *Wessex Archaeological Report* 27 (Salisbury 2011).
- Fyllingen 2003  
H. Fyllingen, Society and violence in the Early Bronze Age: an analysis of human skeletons from Nord-Trøndelag, Norway. *Norwegian Archaeological Review* 36, 2003, 27-43.
- Fyllingen 2006  
H. Fyllingen, Society and the Structure of Violence. A Story Told by Middle Bronze Age Human Remains from Central Norway. In: Otto *et al.* 2006, 319-329.

<sup>81</sup> E.g. Brinker *et al.* 2015.

Goldhahn 2009

J. Goldhahn, Om krig och minnen och att minnas krig – Hvidegårdsgraven revisited #2. Kalmar Studies in Archaeology V (Kalmar 2009).

Goldhahn 2012

J. Goldhahn, On war and memory and the memory of war – the Middle Bronze Age burial from Hvidegården on Zealand in Denmark revisited. In: R. Berge/M. E. Jasinski/K. Sognnes, N-TAG TEN. Proceedings of the 10<sup>th</sup> Nordic TAG conference at Stiklestad, Norway 2009. British Archaeological Reports, International Series 2399 (Oxford 2012) 237-250.

Haak *et al.* 2015

W. Haak/I. Lazaridis/N. Patterson/N. Rohland/S. Mallick/B. Llamas/G. Brandt/S. Nordenfelt/ E. Harney/ K. Stewardson/Q. Fu/A. Mittnik/E. Bánffy/C. Economou/M. Francken/S. Friederich/R. Garrido Pena/F. Hallgren/V. Khartanovich/A. Khokhlov/M. Kunst/P. Kuznetsov/H. Meller/O. Mochalov/V. Moiseyev/N. Nicklisch/S. L. Pichler/R. Risch/M. A. Rojo Guerra/C. Roth/A. Szécsényi-Nagy/J. Wahl/M. Meyer/J. Krause/D. Brown/D. Anthony/A. Cooper/K. W. Alt/D. Reich, Massive Migration from the Steppe is a Source for Indo-European Languages in Europe. *Nature* 522, 2015, 207-211 [doi:10.1038/nature14317].

Hansen 2002

S. Hansen, "Überausstattung" in Gräbern und Horten der Frühbronzezeit. In: J. Müller (Hrsg.), Vom Endneolithikum zur Frühbronzezeit: Muster sozialen Wandels? Tagung Bamberg 14.-16. Juni 2001. Universitätsforschung zur prähistorischen Archäologie 90 (Bonn 2002) 153-154.

Hansen 2014

S. Hansen, Der Held in historischer Perspektive. In: Link/Peter-Röcher 2014, 159-167.

Hansen 2015

S. Hansen, Krieg in der Bronzezeit. In: Meller/Schefzik 2015, 205-212.

Hansen *et al.* 2015:

S. Hansen/C. Jansen/M. Eickhoff, Tagungsbericht: Archäologie und Krieg. Ein neues Arbeitsfeld. H-Soz-Kult 12-01-2015, 1-4.

Harding 2007

A. Harding, Warriors and Weapons in Bronze Age Europe (Budapest 2007).

Harding 2013

A. Harding, Velim and Violence. *Cuadernos de prehistoria y arqueología de la universidad de Granada* 23, 2013, 165-182.

Heske/Grefen-Peters 2014

I. Heske/S. Grefen-Peters, Gewalt im Detail. Bestattungen der Glockenbecherkultur in Niedersachsen mit Hinweisen auf Dimensionen der gesellschaftlichen Auseinandersetzung. In: Link/Peter-Röcher 2014, 203-216.

Heyd 2007

V. Heyd, Families, Prestige Goods, Warriors and Complex Societies. Beaker groups of the 3<sup>rd</sup> millennium cal. BC along the Upper and Middle Danube. *Proceedings of the Prehistoric Society* 73, 2007, 327-379.

Horn 2013

C. Horn, Weapons, fighters and combat: spears and swords in Early Bronze Age Scandinavia. *Danish Journal of Archaeology* 2, 2013, 20-44.

Horn 2017

C. Horn, Combat and ritual — Wear analysis on metal halberds from the Danish Isles and the Cimbric Peninsula. *Journal of Archaeological Science: Reports* 14, 2017, 515-529.

Horn/Kristiansen 2018

C. Horn/K. Kristiansen, Warfare in Bronze Age Society (Cambridge 2018).

Hubensack *et al.* 2015

V. Hubensack/N. Nicklisch/K. W. Alt, Getötet und verscharrt? Eine frühbronzezeitliche Mehrbestattung aus Plötzkau. In: Meller/Schefzik 2015, 319-320.

Iversen 2016

R. Iversen, Was there ever a Single Grave culture in East Denmark? Traditions and transformations in the 3<sup>rd</sup> millennium BC. In: M. Furholt/R. Grossmann/M. Szmyt (Hrsg.), Transitional Landscapes? The 3<sup>rd</sup> millennium BC in Europe. *Universitätsforschungen zur prähistorischen Archäologie* 292 (Bonn 2016) 159-170.

Jakab *et al.* 1999

J. Jakab/L. Olexa/J. Vladár, Ein Kultobjekt der Otomani-Kultur in Nižná Myšľa. *Slovenská Archeológia* 47, 1999, 91-127.

Jantzen *et al.* 2011

D. Jantzen/U. Brinker/J. Orschiedt/J., Heinemeier/J. Piek/K. Hauenstein/J. Krüger/G. Lidke/H. Lübke/R. Lampe/S. Lorenz/M. Schult/T. Terberger, A Bronze Age battlefield? Weapons and trauma in the Tollense Valley, north-eastern Germany. *Antiquity* 85, 2011, 417-433.

Jantzen *et al.* 2014

D. Jantzen/J. Orschiedt/J. Piek/T. Terberger (Hrsg.), Tod im Tollensetal. Forschungen zu den Hinterlassenschaften eines bronzezeitlichen Gewaltkonfliktes in Mecklenburg-Vorpommern. Teil 1: Die Forschungen bis 2011. Beiträge zur Ur- und Frühgeschichte Mecklenburg-Vorpommerns Band 50 (Schwerin 2014).

Keeley 1996

L. H. Keeley, War Before Civilization. The Myth of the Peaceful Savage (Oxford 1996).

Keeley 2014

L. H. Keeley, War Before Civilization—15 Years On. In: T. K. Shackelford/R. D. Hansen (Hrsg.), The Evolution of Violence. *Evolutionary Psychology* (New York 2014) 23-31 [DOI 10.1007/978-1-4614-9314-3\_2].



- Kjær 1912  
H. Kjær, Et mærkeligt arkæologisk-antropologisk fund fra stenalderen. Aarbøger for Nordisk Oldkyndighed og Historie (Copenhagen 1912) 58-72.
- Knöpke 2009  
S. Knöpke, Der urnenfelderzeitliche Männerfriedhof von Neckarsulm. Forschungen und Berichte zur Vor- und Frühgeschichte in Baden-Württemberg 116 (Stuttgart 2009).
- Knüsel *et al.* 2013  
C. J. Knüsel/V. Wastling/A. R. Ogden/N. Lynnerup, Gristhorpe Man: An Osteobiography. In: N. D. Melton/J. Montgomery/C. J. Knüsel (Hrsg.), Gristhorpe Man. A Life and Death in the Bronze Age (Oxford 2013) 253–78.
- Kristiansen 1984  
K. Kristiansen, Krieger und Häuptlinge in der Bronzezeit. Jahrbuch des Römisch-Germanischen Zentralmuseums Mainz 31, 1984, 187-208.
- Kristiansen 2002  
K. Kristiansen, The tale of the sword – swords and sword-fighters in Bronze Age Europe. Oxford Journal of Archaeology 21, 2002, 319–332.
- Küßner 2006  
M. Küßner, Ein reich ausgestattetes Grab der Glockenbecherkultur von Apfelstädt, Ldk. Gotha – Vorbericht. Neue Ausgrabungen und Funde in Thüringen 2, 2006, 55-62.
- Lewis 2008  
J. E. Lewis, Identifying sword marks on bone: criteria for distinguishing between cut marks made by different classes of bladed weapons. Journal of Archaeological Science 35, 2008, 2001-2008.
- Lidke 2005  
G. Lidke, Untersuchungen zur Bedeutung von Gewalt und Aggression im Neolithikum Deutschlands unter besonderer Berücksichtigung Norddeutschlands (Dissertation Ernst-Moritz-Arndt-Universität Greifswald 2005).
- Ling 2008  
J. Ling, Elevated rock art. Towards a maritime understanding of Bronze Age rock art in northern Bohuslän, Sweden (Gothenburg University 2008).
- Ling 2012  
J. Ling, War Canoes or Social Units? Human Representation in Rock-Art Ships. European Journal of Archaeology 15, 2012, 465-485.
- Ling/Cornell 2017  
J. Ling/P. Cornell, Violence, Warriors, and Rock Art in Bronze Age Scandinavia. In: R. J. Chacon/R. G. Mendoza (Hrsg.), Feast, Famine or Fighting? Studies in Human Ecology and Adaptation 8 (New York 2017) 15-33.
- Link/Peter-Röcher 2014  
T. Link/H. Peter-Röcher (Hrsg.), Gewalt und Gesellschaft. Dimensionen der Gewalt in ur- und frühgeschichtlicher Zeit. Internationale Tagung vom 14.–16. März 2013 an der Julius-Maximilians-Universität Würzburg. Universitätsforschungen zur prähistorischen Archäologie 259 (Bonn 2014).
- Louwe-Koojimans 1993  
L. P. Louwe-Koojimans, An Early/Middle Bronze Age multiple burial at Wassenaar, the Netherlands. Analecta Praehistorica Leidensia 26, 1993, 1-20.
- Mallory 2007  
J. P. Mallory, Indo-European Warfare. In: T. Pollard/I. Banks (Hrsg.), Warfare & Sacrifice. Studies in the Archaeology of Conflict (Leiden 2007) 77–98.
- McKinley *et al.* 2014  
J. I. McKinley/M. Leivers/J. Schuster/P. Marshall/A. J. Barclay/N. Stoodley, Cliffs End Farm. Isle of Thanet, Kent. A mortuary and ritual site of the Bronze Age, Iron Age and Anglo-Saxon Period. Wessex Archaeology Report 31 (Salisbury 2014).
- Meller 2015  
H. Meller, Armeen in der Frühbronzezeit. In: Meller/Schefzik 2015, 243-252.
- Meller/Schefzik 2015  
H. Meller/M. Schefzik (Hrsg.), Krieg - eine archäologische Spurensuche. Begleitband zur Sonderausstellung im Landesmuseum für Vorgeschichte Halle (Saale) vom 6. November 2015 bis 22. Mai 2016 (Darmstadt 2015).
- Meller *et al.* 2015  
H. Meller/N. Nicklisch/J. Orshiedt/K. W. Alt, Rituelle Zweikämpfe schnurkeramischer Krieger. In: Meller/Schefzik 2015, 185-189.
- Melton *et al.* 2010  
N. Melton/J. Montgomery/C. J. Knüsel/C. Batt/S. Needham/M. Parker Pearson/A. Sheridan/C. Heron/T. Horsley/A. Schmidt/A. Evans, Gristhorpe Man: An Early Bronze Age Log-Coffin Burial Scientifically Defined. Antiquity 84, 2010, 796-815.
- Meyer *et al.* 2009  
C. Meyer/G. Brandt/W. Haak/R. A. Ganslmeier/H. Meller/K. W. Alt, The Eulau eulogy: Bioarchaeological interpretation of lethal violence in Corded Ware multiple burials from Saxony-Anhalt, Germany. Journal of Anthropological Archaeology 28, 2009, 412-423.
- Molloy *et al.* 2016  
B. Molloy/M. Wisniewski/F. Lynam/B. O'Neill/A. O'Sullivan/A. Peatfield, Tracing edges: A consideration of the applications of 3D modelling for metalwork wear analysis on Bronze Age bladed artefacts. Journal of Archaeological Science 76, 2016, 79-87.
- Mödlinger 2011  
M. Mödlinger, Ritual object or powerful weapon – the usage of Central European Bronze Age swords. In: M. Mödlinger/M. Uckelmann (Hrsg.), Bronze Age Warfare: Manufacture and Use of Weaponry. British Archaeological Reports, International Series 2255 (Oxford 2011) 153-166.

Muhl 2015

A. Muhl, Ein Steinzeitgemetzelt – Hintergründe und Analysen. In: Meller/Schefzik 2015, 191-192.

Needham *et al.* 2017

S. Needham/J. Kenny/G. Cole/J. Montgomery/ M. Jay/M. Davis/P. Marshall, Death by Combat at the Dawn of the Bronze Age? Profiling the dagger-accompanied Burial from Racton, West Sussex. *The Antiquaries Journal* 2017, 1-53 [doi:10.1017/s0003581516000688].

Neubert *et al.* 2014

A. Neubert/J. Wicke/H. Bruchhaus, Mit der Axt – durch die Axt. Der Zusammenhang von Schädeldefekt und Waffenbeigabe in Bestattungen des schnurkeramischen Kulturkreises. In: Link/Peter-Röcher 2014, 217-224.

Olalde *et al.* 2017

I. Olalde *et al.*, The Beaker Phenomenon 1 and the Genomic Transformation of Northwest Europe. *bioRxiv preprint* May 9, 2017 [doi: <http://dx.doi.org/10.1101/135962>].

Osgood 1998

R. Osgood, Warfare in the Late Bronze Age of North Europe. *British Archaeological Reports, International Series* 694 (Oxford 1998).

Osgood 2006

R. Osgood, The dead of Tomarton – Middle Bronze Age combat victims? In: Otto *et al.* 2006, 331-340.

Osgood/Monks 2010

R. Osgood/S. Monks with J. Toms, *Bronze Age Warfare* (Stroud 2010).

Otterbein 2000

K. F. Otterbein, A History of Research on Warfare in Anthropology. *American Anthropologist* 101, 2000, 794–805.

Otto *et al.* 2006

T. Otto/H. Thrane/H. Vandkilde (Hrsg.), *Warfare and Society. Archaeological and Social Anthropological Perspectives* (Aarhus 2006).

Pearce 2013

M. Pearce, The Spirit of the Sword and the Spear. *Cambridge Archaeological Journal* 23, 2013, 55-67.

Peter-Röcher 2007

H. Peter-Röcher, Gewalt und Krieg im prähistorischen Europa. Beiträge zur Konfliktforschung auf der Grundlage archäologischer, anthropologischer und ethnologischer Quellen. *Universitätsforschungen zur prähistorischen Archäologie* 143 (Bonn 2007).

Peter-Röcher 2011

H. Peter-Röcher, Gewalt und Sozialstruktur. Wann beginnen institutionalisierte Konfliktlösungsstrategien? In: S. Hansen/J. Müller (Hrsg.), *Sozialarchäologische Perspektiven: Gesellschaftlicher Wandel 5000–1500 v. Chr. zwischen Atlantik und Kaukasus. Internationale Tagung* 15.–18. Oktober 2007 in Kiel (Darmstadt 2011) 451-463.

Randsborg 1995

K. Randsborg, Hjortspring: Warfare and sacrifice in early Europe (Aarhus 1995).

Sarauw 2007

T. Sarauw, On the Outskirts of the European Bell Beaker Phenomenon - the Danish Case. *Journal of Neolithic Archaeology* 2007, 1-61.

Schulting 2013

R. J. Schulting, War without warriors? The Nature of Interpersonal Conflict before the Emergence of Formalized Warrior Elites. In: S. Ralph (Hrsg.), *The Archaeology of Violence. Interdisciplinary Approaches* (New York 2013) 19-36.

Schulting/Bradley 2014

R. J. Schulting/R. Bradley, Of Human Remains and Weapons in the Neighbourhood of London: New AMS 14C Dates on Thames 'River Skulls' and their European Context. *Archaeological Journal* 170, 2014, 30-77.

Schwarz 2015

R. Schwarz, Die Krieger der Streitaxtkultur. In: Meller/Schefzik 2015, 181-184.

Sherratt, A. 1984

A. Sherratt, Social Evolution: Europe in the later Neolithic and Copper Ages. In: J. Bintliff (Hrsg.), *European Social Evolution: Archaeological Perspectives* (Bradford 1984) 123-134.

Sherratt, S. 2017

S. Sherratt, Homeric Epic and Contexts of Bardic Creation. In: S. Sherratt/J. Bennet (Hrsg.), *Archaeology and Homeric Epic. Sheffield Studies in Aegean Archaeology* 11 (Oxford/Philadelphia 2017) 35-52.

Sjögren *et al.* 2016:

K.-G. Sjögren/T. D. Price/K. Kristiansen, Diet and Mobility in the Corded Ware of Central Europe. *PLoS ONE* 11(5), 2016, 1-33 [e0155083. doi:10.1371/journal.pone.0155083].

Skoglund *et al.* 2015:

P. Skoglund/J. Ling/U. Bertilsson (Hrsg.), *Picturing the Bronze Age. Swedish Rock Art Series* 3. (Oxford 2015).

Smith 2009

S. K. Smith, Skeletal evidence for militarism in Mycenaean Athens. *Hesperia Supplements* 43, 2009, 99-109.

Steuer 2006

H. Steuer, Warrior Bands, War Lords and the Birth of Tribes and States in the First Millennium BC in Middle Europe. In: Otto *et al.* 2006, 227-236.

Thorpe 2006

I. J. N. Thorpe, Fighting and Feuding in Neolithic and Bronze Age Ireland. In: Otto *et al.* 2006, 141-165.

Toreld 2015

A. Toreld, Sword-wielders and manslaughter. Recently discovered images on the rock carvings of Brastad, western Sweden. In: Skoglund *et al.* 2015, 165-174.

Treherne 1995

P. Treherne, The warrior's beauty: the masculine body and self-identity in Bronze-Age Europe. *Journal of European Archaeology* 3, 1995, 105–44.

Van de Noort 2012

R. van de Noort, *North Sea Archaeologies. A maritime biography 10,000 BC – Ad 1500* (Oxford 2012).

Vandkilde 2006a

H. Vandkilde, Archaeology and war: presentations of warriors and peasants in archaeological interpretations. In: Otto *et al.* 2006, 57–73.

Vandkilde 2006b

H. Vandkilde, Warriors and warrior institutions in the European Copper Age. In: Otto *et al.* 2006, 393–422.

Vandkilde 2007a

H. Vandkilde, Culture and Change in Central European Prehistory, 6<sup>th</sup> to 1<sup>st</sup> millennium BC (Aarhus 2007).

Vandkilde 2007b

H. Vandkilde, A Review of the Early Late Neolithic Period in Denmark: Practice, Identity and Connectivity. *Offa* 61/62, 2004/05, 75–109 (also *Journal of Neolithic Archaeology* 2005,1–51).

Vandkilde 2013

H. Vandkilde, Warfare in northern European Bronze Age societies: 20th century presentations and recent archaeological research inquiries. In: S. Ralph (Hrsg.), *The Archaeology of Violence: Interdisciplinary Approaches* (Albany 2013) 37–62.

Vandkilde 2014

H. Vandkilde, Breakthrough of the Nordic Bronze Age. Transcultural warriorhood and a Carpathian crossroad in the 16<sup>th</sup> century BCE. *European Journal of Archaeology* 17, 2014, 602–633.

Vandkilde 2016

H. Vandkilde, Bronzization: The Bronze Age as pre-Modern Globalization. *Prähistorische Zeitschrift* 91(1), 2016, 103–223.

Vandkilde 2017a

H. Vandkilde, The Beautiful Warrior Twenty-one Years After – Bronze Age Warfare and Warriors. *European Journal of Archaeology* 20, 2017, 55–59.

Vandkilde 2017b

H. Vandkilde, The Metal Hoard from Pile in Scania, Sweden. Place, Things, Time, Metals, and Worlds around 2000 BCE. *The Swedish History Museum, Studies* 29 (Aarhus 2017).

Vandkilde 2018

H. Vandkilde, Body Aesthetics, Fraternity and Warfare in the long European Bronze Age – postscriptum. In: Horn/Kristiansen 2018, 229–243.

Varberg 2014

J. Varberg, *Fortidens slagmarker. Krig og Konflikt fra stenalder til vikingetid* (København 2014).

### **Helle Vandkilde, Violent Beauty in the Bronze Age**

This article pinpoints the double being and doing of weapons, warriors and warrior fraternities as quite possibly a characterising trait from the onset of the Corded Ware period well into the mature Bronze Age and beyond. Exquisitely crafted weapons of bronze – many spirited with a life-energy of their own – were used to wage war and sometimes to hack victims into pieces with strong indications that the beautiful warrior with his trained well-groomed body was capable of extreme violence. The companionship of warrior peers in the fraternity was a social construct enabling effective waging of war as well as fulfilling other roles in Bronze Age society, contributing to rituals and social interaction.

### **Helle Vandkilde, Gewalttätige Schönheit in der Bronzezeit**

Dieser Artikel zeigt das doppelte Sein und Tun von Waffen, Kriegern und Kriegergefolgschaften als möglicherweise charakteristisches Merkmal vom Beginn der Schnurkeramik bis in die fortgeschrittene Bronzezeit und darüber hinaus auf. Vorzüglich gearbeitete Bronzewaffen – viele von einer eigenen Lebensenergie beseelt – wurden verwendet, um Kriegszüge zu unternehmen und manchmal um Opfer in Stücke zu hacken, mit starken Anzeichen, dass der schöne Krieger mit seinem trainierten, gepflegten Körper zu extremer Gewalt imstande war. Die Kameradschaft in der Kriegergefolgschaft war ein soziales Konstrukt, das eine effektive Kriegsführung und die Erfüllung anderer Rollen in der bronzezeitlichen Gesellschaft ermöglichte sowie zu Ritualen und sozialer Interaktion beitrug.