Chapter 7
"In the Beginning There Was the Spear": Digital Documentation Sheds New Light on Early Bronze Age Spear Carvings from Sweden

Ulf Bertilsson

Introduction

Depictions of metal weapons such as spears, swords, and axes are frequent in the Swedish Bronze Age rock carvings of Bohuslän, Uppland, Östergötland, and Skåne. Most images are non-representational and mostly portray the object type rather generically. Occasionally, the carvings exhibit details of the objects including the shape of the hilt, ferrule (or butt-spike), and scabbard, so as to suggest that they are images of real objects that existed during the Bronze Age. It is at times possible to determine precisely the type and chronology of the object depicted. This is the case, for example, with the swords shown on the Ekenberg rock carving in Norrköping (Östergötland), which compare to actual Bronze Age swords from the archaeological collections of the Stockholm Historical Museum (Bertilsson 2015b; Hildebrand 1869). It has often been argued that most of the weapons depicted in Swedish rock art are to be dated to the Late Bronze Age, in particular to Period V (*c*. 920–720 BC; Vogt 2011). However, detailed analysis of the carvings, including the digital technology analysis presented here, indicates that this may not be the case, as a number of carvings appear to depict spear types from the Early Bronze Age. In some cases, it appears that carved spearheads were re-engraved to represent new types over a period of several hundred years, as is the case with well-known carvings from Bohuslän. This demonstrates the importance of the spear as the warrior's principal weapon in the Scandinavian Early Bronze Age. This chapter presents previously unknown examples of the practice of re-carving spearheads, which provide unprecedented insights into the close link that must have existed in Bronze Age Sweden between real and represented weapons.

U. Bertilsson (✉)
Svenskt Hällristnings Forsknings Arkiv - Swedish Rock Art Research Archives, University of Gothenburg, Gothenburg, Sweden
e-mail: ulf@shfa.se; ulf.bertilsson@archaeology.gu.se; http://www.shfa.se

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Odin's Spear *Gungnir*

Fighting and weapons are frequent themes in the Nordic sagas; their prominence is due to the notion that the ultimate and most glorious way for a warrior to die was as a result of single combat or in battle. In this way, the fallen would achieve hero status and be admitted to the company of other warriors in Valhall, the hall of Odin described in the Grimnesmal poem cited below. There, the glorious dead were resurrected the morning after a ritual banquet:

> Easy is it to know | for him who to Othin
> Comes and beholds the hall;
> Its rafters are spears, | with shields is it roofed,
> On its benches are breastplates strewn.
> Easy is it to know | for him who to Othin
> Comes and beholds the hall;
> There hangs a wolf | by the western door,
> And o'er it an eagle hovers.
> (The Poetic Edda, Grimnesmal, verse 9–10; translated by Bellows 1923)

The weaponry used by the warriors and gods mentioned in the Nordic sagas encompassed swords, axes, and more rarely spears. The spear was the weapon of Odin, the highest Norse god; he prevailed over the living and the dead, and his spear was called Gungnir – meaning "the swaying one" in Old Norse. The significance of the spear is highlighted in multiple sources including the book of *Gylfaginning* (*The Prose Edda*, Chapter 51), which describes Odin, on the way to the battlefield at Ragnarök, riding his horse Sleipnir above Einherjar (i.e. those warriors who have died in battle and are brought to Valhalla by the Valkyries) wearing a coat of mail and a golden helmet, armed with his spear Gungnir, which he will use to attack Fenrir the Wolf. Gungnir was said to be so well-balanced that it could hit any target.

The Norse sagas, first written during the Late Iron Age, from 500 AD, bear witness to the importance of the spear as a weapon of the highest status. A common view among scholars of Old Norse religion is that the gods appearing in the classic Iron Age mythology would have replaced an earlier belief system based on the sun cult, which had dominated the region since the Bronze Age (Almgren 1927–28; Nordberg 2013). Several strands of archaeological research have convincingly argued that the cult of the sun, and probably also that of a personified sun god, was a widespread religious belief in southern Scandinavia during the Bronze Age (Nordberg 2013; Bertilsson et al. 2014). Until recently, this discourse dominated research into Nordic Bronze Age religion, which is vividly embodied by the story of the sun's journey across the sky during day and night (see, e.g. Flemming Kaul's 1998 book on the subject). Although there is a consensus among researchers that the basic tenets of this model are correct, over-reliance on it has driven alternative hypotheses about cult and religion in the Scandinavian Bronze Age into the background (Kristiansen 2012; cf. also Nordberg 2013).

In an attempt to offer an alternative approach to research in this field, this chapter will shift the focus of the analysis to the rock carvings of Bronze Age weapons,

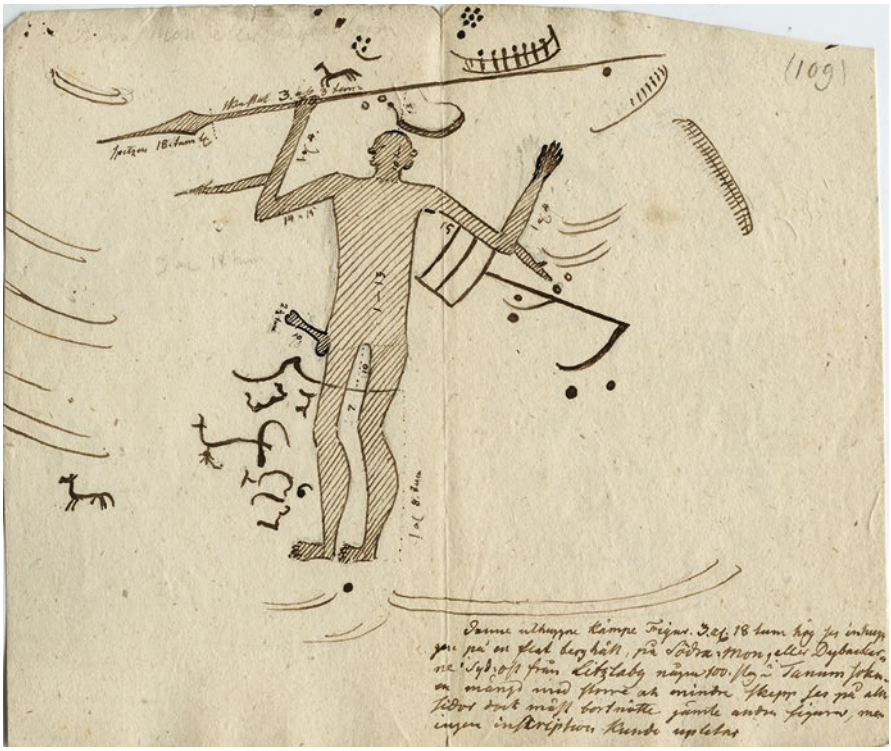

Fig. 7.1 Carl G.G. Hilfelings’ 1792 ink drawing of the rock carving from Litsleby, later named the “Spear God” and now frequently referred to as Odin. (Source: SHFA. Original: Antikvariskt Topografiskt Arkiv, National Heritage Board, Stockholm)

paying particular attention to images depicting spears. One of the ideas underlying this approach is that the weapons and fighting scenes displayed on rock carvings may express cultic or religious beliefs. This chapter will also discuss whether the “warriors and weapons discourse” characterising the Nordic sagas can be traced back to the Bronze Age and its petroglyphs. To explore these problems, I shall analyse a number of images depicted on Swedish rock carvings, namely, the spears engraved on panels from Bohuslän and Uppland. I will not apply quantitative methods of analysis to their study but will instead focus on the qualitative reading and interpretation of selected carvings displaying extraordinarily clear images of spears. These are the panels from Litsleby, Kalleby, and Finntorp (Tanum, Bohuslän), and also from Tuna (Bälinge, Uppland), all of which exhibit spear carvings of unusual type and quality.

Some of these images are of notable historic importance; for example, the Litsleby carving was the first ever documented rock carving from Tanum, as shown by an ink drawing produced by Carl G.G. Hilfelings in 1792 (Fig. 7.1) (Bertilsson 2015b). However, Hilfelings’ drawing does not report all the carvings visible on this rock, whose number is now known to exceed 200 images. Instead, he focused on the

most impressing image, namely, the 238 cm tall, phallic, spear-armed male figure, which he depicted in a detailed "portrait-like" manner. In contrast to the overall quality of his drawing, however, his rendering of the spearhead is not completely accurate, though the length is. The modern three-dimensional images analysed below discuss the differences between Hilfelings' ink drawing and the actual carving (Figs. 7.1 and 7.3).

Three-Dimensional Documentation with Structure for Motion (SFM)

In recent years, a 3D analytical technique known as Structure for Motion (SFM) has seen marked improvements in its accessibility and cost-effectiveness. Such improvements have broadened its uses, which now include the digital documentation of rock art. SFM uses photographs of the rock surface to calculate a high-resolution, three-dimensional model of the engravings. Contrary to traditional two-dimensional methods such as rubbing and tracing, SFM accurately records structure, topography, and texture of the rock panel surface (Bertilsson 2015a and Bertilsson et al. 2017).

One problematic aspect of SFM is that it generates extensive amounts of data, especially when documenting large rock art panels; for example, the Aspeberget carving (Tanum) required 1500 images for a full 3D documentation (Bertilsson et al. 2014). Depending on the computer system utilised, computing this amount of data can take several hours. Despite the time and effort involved, SFM does produce highly accurate 3D models of the carvings, showing more details than rubbing and tracing. A pilot study conducted in Tanum in 2014 compared SFM with other techniques of rock art recording (Bertilsson et al. 2014). The results show that SFM provides a significant advantage over traditional methods including better opportunities for morphological identification and typological dating; it also improves the recognition of superimpositions and is ultimately less time-consuming than rubbing and tracing (cf. Sevara and Goldhahn 2011; De Reu et al. 2012). In the following pages, I shall present examples to illustrate this point.

A challenging factor in the study of rock art is the recent practice of painting carvings red in an effort to make them more visible for the convenience of tourists. The red paint tends to smooth over the engraved lines, blurring important details including superimpositions. For example, the Litsleby carving depicts a wheel directly adjacent to the so-called Spear God discussed below. The wheel is painted in as complete and shows up so in the textured version of the 3D file. However, close examination of the un-textured 3D model shows that the wheel does not have a continuous rim but one that is made from several noncontiguous sections (Fig. 7.2). This demonstrates that regardless of how experienced the modern painter of the carving is, his/her intervention adds another layer of interpretation to the recording process. Nevertheless, as SFM highlights very fine details, this drawback is mitigated to

some degree, in a way that enables us to “see through” the paint (Domingo et al. 2013). Therefore, SFM creates better opportunities to record, describe, and analyse previously unrecognised details that may be of the greatest importance for our understanding and interpretation of the rock carvings.

The Mighty Spearman from Litsleby

Our first case study concerns the extremely large spear carrier depicted on a rock panel from Litsleby, Tanum. The SFM recording has revealed hitherto unrecognised details in the carving, and a careful analysis of the 3D model of the spear has shown previously unnoticed information of great importance. In particular, it was observed that the spear was engraved before the human figure because the arm and hand overlie the spear shaft (Figs. 7.2 and 7.3). The spearhead itself is notable because it may have been re-carved twice after the original engraving, considering that the 3D model highlights three different spearheads on the rock surface (Fig. 7.3). Another noteworthy observation stemming from the SFM documentation is that the wheel is not only interrupted on its upper and left sections but is also overlain by the phallus of the spearman. This means that the phallus was carved after the wheel had been drawn. The absolute chronology of the two engraving episodes is not easy to establish, but their relative sequence is interesting nonetheless.

Fig. 7.2 3D model of the Litsleby carving, textured (left) and untextured (right). (Source: SHFA. Photograph: Ellen Meijer)

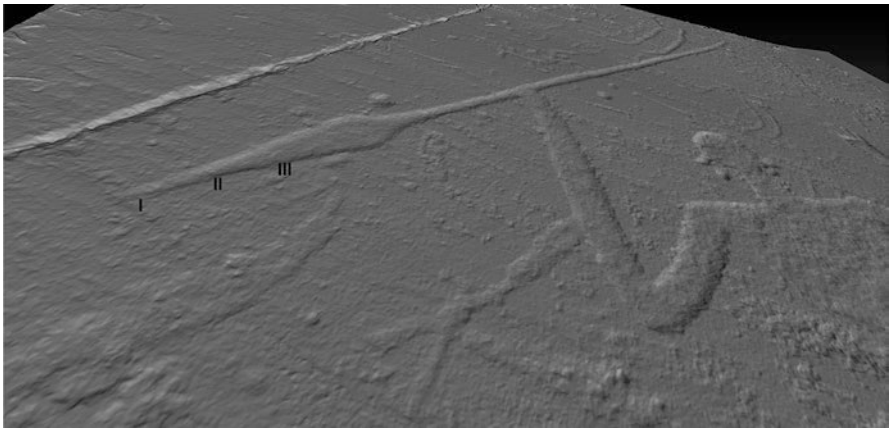

Fig. 7.3 Structure for Motion (SFM) 3D model of the "Litsleby Spear God" marking the three different spearheads discussed in the text (I, II, and III). The SFM picture also shows that the arm and hand holding the spear overlie the shaft, and are thus younger than the shaft itself. (Image editing: Catarina Bertilsson. Source: SHFA. Photograph: Ellen Meijer)

The Chronology of the Litsleby Panel

Before a detailed chronology is proposed for the carving events documented on the Litsleby panel, a discussion of the overall chronology of the panel itself, and of the spearman in particular, is necessary. The spear carrier has long been considered to date to Period V of the Nordic Bronze Age (*c*. 920–720 BC in absolute terms; Maraszek 2015). This proposal is grounded in comparison with other large human carvings such as "Skomakaren" (or "The Shoemaker") at Backa, Brastad. This chronology, however, is solely based on the style of the carving.

For a better appraisal of the chronology of this figure, attention has to be paid to the boats engraved on the panel, since their typology and relative height convey important information concerning the carving sequence and absolute dating of the images (Ling 2008; Kaul 1998, 2003). The earliest boat associated with the spear carrier is a small vessel overlain by the spear shaft. The vessel belongs to the so-called Nag-type, which dates to the Late Neolithic, from 2100 to 1700 BC (Bengtsson 2013). A similar chronology can be suggested for the three-line boat overlain by the left upper arm. The spearman's thighs superimpose on a third boat. This boat is of a type dating to Period II of the Nordic Bronze Age, from 1500 to 1300 BC (Ling 2008:105; cf. Kaul 1998). Based on these considerations, one could say that the large spearman was carved after Period II, when the latest boat was drawn; however, nothing indicates that it has to be assigned to Period V.

On the panel, but not in direct connection to the spearman, are other boat carvings showing significantly lower chronologies. In particular, two large and heavily stylized boats found in the northern section of the panel are overall similar to Hjortspring-type vessels, which are dated to the early fourth century BC by a Danish

bog find of a wooden boat of the same design (Kaul 2003). If we accept this chronology for the three boats carved on the Litsleby panel, this would suggest that multiple carving events took place on the panel over a time possibly extending from the Late Neolithic to the Pre-Roman Iron Age (from about 2100 to 300 BC) – a remarkable 1800 years period. The 3D model also indicates that three different spearheads were carved on the panel, the shorter two spears appearing to overlie the longer. This raises the question as to whether it is actually possible to determine which of the three spearheads was carved first. Analysing the carving in detail will help clarify the complex chronology of the panel and of the spear carrier.

The Litsleby Spearheads: Typology and Chronology

The longest spearhead on the Litsleby panel has rounded shoulders and a long, slender tip (Fig. 7.3, I). The image is deeply carved, and its design is so detailed as to resemble real metal spearheads from the Bronze Age, examples of which can be found in museum collections. Some years ago, the author noticed that the shape of the carved spearhead deviated from the shape of the spearhead that was painted in modern times. This is especially apparent in the bulge at the bottom of the blade, which is clearly rounded compared with the angular blade butt shown in red paint. This interpretation was confirmed by cross-checking existing documentation obtained via *frottage* (rubbing). This spearhead shape is consistent with actual objects belonging to the Valsømagle type, dating to Period IB of the Nordic Bronze Age, about 1600 BC (Horn 2013; Jacob-Friesen 1967; Vandkilde 2011).

A bronze spearhead matching the Litsleby carving almost perfectly was discovered in Falköping, Västergötland. This is 37 cm long overall and has a 9 cm long socket. Both blade and socket are beautifully decorated with spirals forming a running dog motif framed and a continuous band of double arches. Drawings of this object have been published by Montelius (1917: 61, no 917), Jacob-Friesen (1967, Tafel 28:1), and Oldeberg (1974: 303, no. 2373; Fig. 7.5a). A direct comparison of the archaeological and carved spearheads was made using Photoshop (Fig. 7.4, right). Bearing in mind that the drawing of the spearhead had to be scaled down for the comparison to be made, it is noteworthy that the Falköping specimen fits almost perfectly into the carved spearhead. This strongly suggests that the Litsleby carving intended to show a Valsømagle-type spearhead. This interpretation is further supported by a similar comparison, which the author has made using a photograph of the Falköping spearhead obtained from the National Historical Museum (despite the spearhead photograph being slightly turned to the side: Figs. 7.4, centre, 7.5, and 7.6).

A cursory examination of the second carved spearhead based on the SFM 3D model (Fig. 7.3, II) indicates that this may depict a Hulterstad-type spearhead. Spearheads of this kind are shorter and more compact than those of the Valsømagle type and of Period II spearheads in general (Jacob-Friesen 1967). The eponymous Hulterstad spearhead was found in a burial mound excavated in the 1920s on the

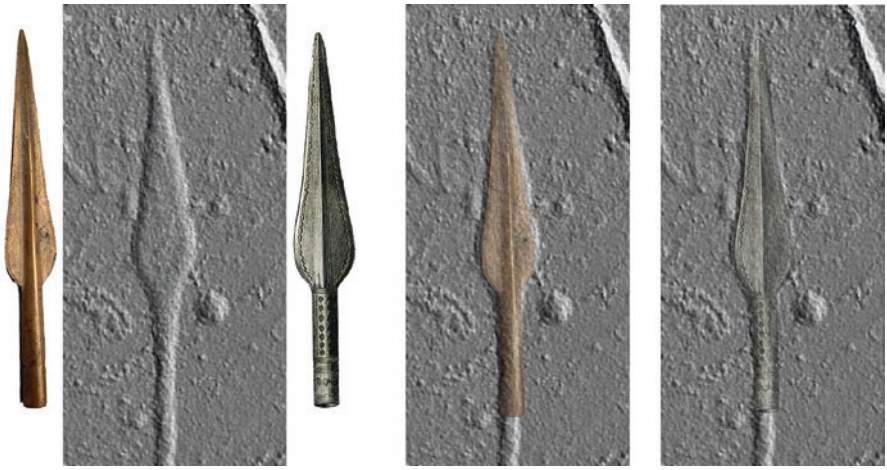

Fig. 7.4 Left: Photograph of the bronze spearhead from Falköping next to an SFM 3D model of the Litsleby spearhead carving. Centre and right: drawing of the Falköping spearhead from Montelius (1917: 61, no 917) and superimposition of the photograph and drawing on the 3D model (Comparative analysis by Christian Horn, Gothenburg University)

Fig. 7.5 Photograph of the bronze spearhead from Falköping; the object belongs to the Valsømagle type, which is dated to Period IB of the Nordic Bronze Age. (Photograph: The Swedish History Museum – SHM)

island of Öland. The burial assemblage can be dated to Period III of the Nordic Bronze Age, 1300–1100 BC. Further comparisons were carried out to validate the initial hypothesis, using the method discussed above. These comparisons have confirmed that the second spearhead belongs to the Hulterstad type, while also firming up the idea that the longer spearhead was carved first and the shorter two second (Fig. 7.3, I–III and Figs. 7.7, 7.8, and 7.9).

The near-perfect matches between carved and archaeological Bronze Age spearheads discussed above demonstrate that the Litsleby rock carvers must have had access to actual bronze spearheads from their time and intended to depict them as realistically as possible. Moreover, the exceptional craftsmanship of the spearheads from Falköping and the Valsømagle hoard, as well as their unusually rich and artful decorations, suggest that these were not ordinary weapons but objects that presumably belonged to great warriors and quite possibly prominent members of their communities. This consideration sheds new light on the Litsleby carvings, which, I argue, depict spearheads of special value and importance. This proposal is hampered to some extent by the fact that the Litsleby spearheads were seemingly

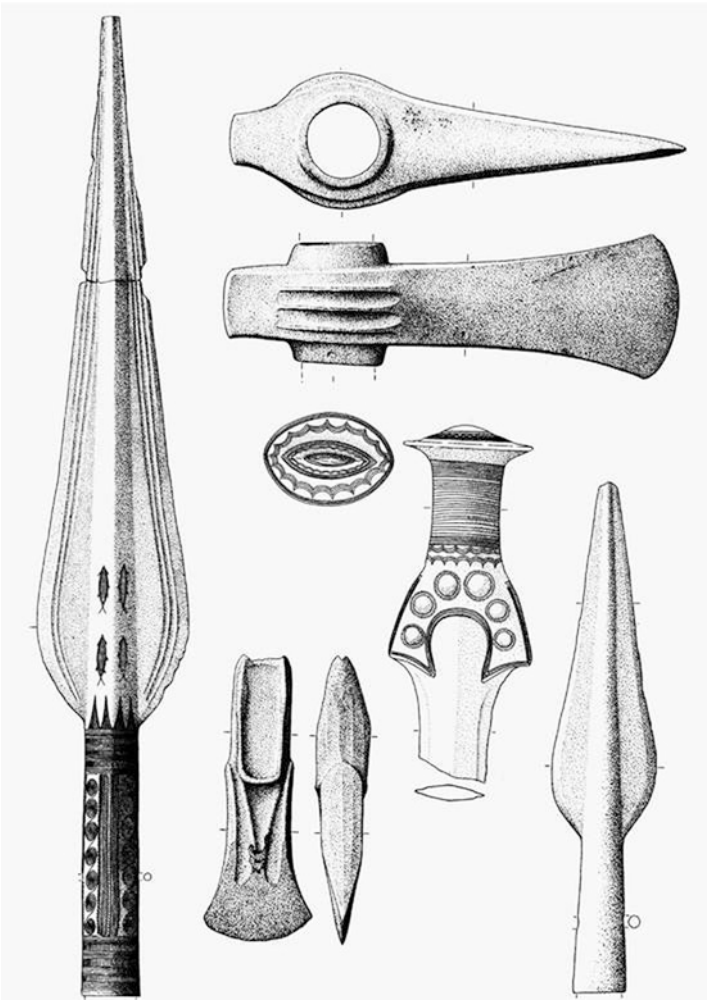

Fig. 7.6 The Valsømagle hoard from Denmark; note the spearhead on the left and the cast-hilt sword in the centre. (After Aner and Kersten 1976, plate 79–80 no. 1098)

redrawn over a period of several hundred years. A possible explanation for this is that the carvers belonged to a leading warrior dynasty that dominated the area during a period of nearly a millennium; they would have used the carving and recarving of the Litsleby panel as a social strategy to manifest and consolidate their power (Kristiansen and Larsson 2005; Ling and Cornell 2015).

There are, however, several factors making this hypothesis problematic. At Litsleby, there are no images depicting opposing warriors armed with swords, axes, or spears, which are commonly found in many other carvings from Tanum including Bro Utmark, Aspeberget, Vitlycke, and Fossum (Ling and Bertilsson 2016). The Litsleby carving is instead dominated by a single, supernaturally large human fig-

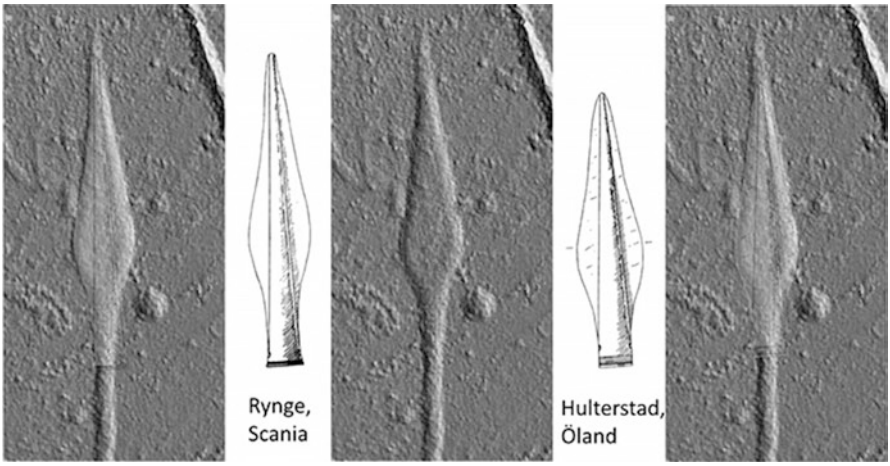

Fig. 7.7 Bronze spearhead of type Hulterstad from Rynge, Scania (left), and Hulterstad, Öland (right), scaled down proportionally to fit the carved spearhead from Litsleby. Both objects match the carving reasonably well but the Hulterstad-type spearhead provides a better fit, suggesting that this was the template used for the re-carving of the Litsleby spearhead. (Comparative analysis by Christian Horn, Gothenburg University)

Fig. 7.8 Period III spearhead found in a Bronze Age burial mound at Hulterstad, Öland. (Photograph: Swedish History Museum – SHM)

Fig. 7.9 Period V spearhead from Nynäsvägen, Kalmar. This provides a possible template for the third spearhead from the Litsleby carving (Photograph: Swedish Historical Museum – SHM)

ure – the "Spear God", which is unparalleled in Scandinavian rock carvings. As pointed out above, the figure is likely to date to Period V of the Nordic Bronze Age (920–720 BC) by analogy with the so-called Shoemaker from Backa, Brastad, as well as other large figures of the same type. I have argued above that since the figure's hand overlies the spear shaft, which dates to Period I (1750–1500 BC), the entire human figure must necessarily be later. This indicates that the Period V chronology proposed for it may actually be correct; in fact, the "Spear God" figure might have been carved in Period V together with the third spearhead (Fig. 7.3, III). This suggests that the first spearhead and shaft (i.e. the Valsømagle-type spear) were carved much earlier, presumably in late Period I, and that this spear was the most important and prominent image on the panel as it was originally engraved on the rock individually, without a human figure holding it. But how can we explain the apparent paradox of a weapon without its bearer? It could be suggested that this spear was conceptualised as a unique weapon of great power and symbolic importance, which would justify its depiction in "splendid isolation". We could perhaps push this reading a little further to suggest that the carving intended to represent the most important spear of all: Odin's "Gungnir" or its Bronze Age precursor.

This reading chimes with current interpretations of the human figure as Odin, the supreme Norse god. However, the spear carving may also be interpreted as an illustration of a non-anthropomorphic religious belief dating to the Late Neolithic and Early Bronze Age, which focused on weapons made of new shiny materials: copper and bronze. These new materials may have been thought to radiate so much power that the objects were perceived as divine or as gifts from the gods. During the Late Bronze Age, new mythological ideas may have been established, which would have called for the depiction of a god-like bearer of metal weapons, along with other, less exalted figures (e.g. heroes and warriors) armed with simpler, more schematically depicted spears as well as other weapons. Seen from this perspective, the spear engravings may suggest that a "weapon cult" would have emerged in the Late Neolithic and Early Bronze Age; this would have evolved into a fully articulated warrior ideology in the Late Bronze Age and Iron Age. This ideology seemingly informs the myths and tales of the Nordic sagas, which narrate heroic deeds and supernatural feats that may have emerged from a body of mythological beliefs ultimately dating to the Late Bronze Age, *c*. 1100–550 BC (Bertilsson 1987).

The Spear and Warrior from Finntorp (Tanum, Bohuslän)

A question arising at this point is whether the redesign of the spearhead on the Litsleby panel is unique. Interestingly, an examination of southern Scandinavian rock art shows that this is not the case, for other examples of spear carvings and recarvings can be identified, although none are identical to the remarkable Litsleby panel. In particular, a rock carving from Finntorp, Tanum, shows a spear with a head not unlike the one from Litsleby. Recent research carried out using reflectance

Fig. 7.10 Photograph of the central section of the rock carving from Finntorp (Tanum, Bohuslän) showing the great spearman and the so-called Wismar warrior. The human figure overlies a spear with slightly curved shaft and an angular arrow-like head. (Source: SHFA. Photograph: Bertil Almgren)

transformation imaging (RTI) shows that the spearhead from Finntorp was redesigned on three occasions and was also carved before the human figure which is now its bearer (Horn and Potter 2017). Both the carving process and the engraved motifs display striking similarities with the Litsleby panel. However, both weapon and human figure differ stylistically from the Litsleby ones as the spear has a curved shaft and its heads most likely represent flint points (Figs. 7.10, 7.11, and 7.12). In his discussion of the "pagan" antiquities from Tanum, Montelius (1874–1879: 354–8) describes flint spearheads from Early Bronze Age cairns at Arendal, a village in northern Tanum. These objects may date to the end of the Late Neolithic or the beginning of the Early Bronze Age (*c*. 2100–1700 BC) and are thus several hundred years older than the spearheads carved on the Litsleby panel. Moreover, the body of the Finntorp spearman consists of concentric circles representing a shield akin to that depicted on the Wismar horn, which, according to Kristiansen and Larsson (2005), dates to Period I of the Nordic Bronze Age (Fig. 7.10). This means that the Finntorp spearman could be significantly older than the Litsleby "Spear God". Based on a recently performed recording using RTI (Fig. 7.11), however, Horn and Potter (2017) suggest that the Finntorp shield resembles Watenstedt-type shields, for which several *comparanda* exist in Spain and the British Isles. These are overall dated to Periods II–III of the Nordic Bronze Age (1500–1100 BC), which would be consistent with the chronology of the Wismar Horn as proposed by Kristiansen (2012). The Wismar Horn shows ships with stem bows turned inwards as well as ships with stylized horse-headed bows. Based on the palaeodating of the North Sea

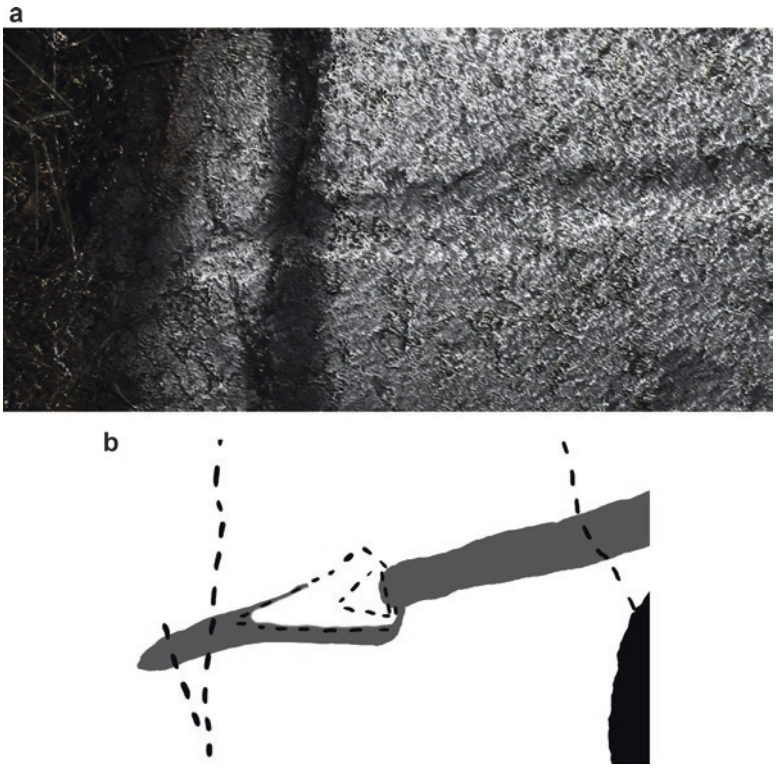

Fig. 7.11 RTI-image (**a**) and drawing (**b**) of the Finntorp spearhead showing three spearheads of different length and design (Photograph and drawing courtesy of Richard Potter and Christian Horn)

and Baltic Sea shorelines, ships with horse heads were first carved in Bohuslän and Uppland around 1400 BC, in the advanced Period II (Ling 2008, 2013). This type of ship is also displayed on the Finntorp panel, thus suggesting that the carving may date to this period, although the ships could have been engraved later than the human figure with the shield-shaped body. Moreover, the spear with its original point appears to have been carved earlier because the human figure overlies it (Fig. 7.10).

Regardless of the chronology of the Finntorp spearman, the early chronology of the spear seems supported by the nearby depiction of an anthropomorphic figure driving a plough drawn by a pair of oxen. Similar engravings are found at other European rock art locales including Monte Bego, France, and Valcamonica, Italy (de Lumley et al. 2003: 350, 381; Anati 1976: 74, 84–85). Here, they have been dated to the III and early II millennia BC (circa 2900–1700 BC), in the local Chalcolithic and Early Bronze Age (Arcà 2010: 21–23).

Fig. 7.12 Flint spearheads of different types that could have provided templates for the re-carved spearheads from Finntorp. All objects shown here are dated to the Late Neolithic/Early Bronze Age, *c*. 2100–1750 BC (cf. Montelius 1917). (Photographs: Swedish History Museum – SHM)

The Waving Spear from Kalleby (Tanum, Bohuslän)

Another relevant example has been discovered on a rock art panel from Kalleby showing three human figures playing bronze lures and two additional, larger figures above them on the panel. The first is horned and carries a scabbard with an artfully designed winged chape (i.e. the metal point of the scabbard) dating to Period V of the Nordic Bronze Age (920–720 BC) based on comparisons with archaeological objects (cf. Coffey 1913, Fig. 67). The second, and larger, human figure holds a hammer-like weapon in his raised right hand. To the left of this figure, an upstanding spear has been carved comprising a well-designed spearhead and a long, narrow shaft (Fig. 7.13). The analysis of the 3D model of the scene obtained using SFM shows that this spearhead resembles the largest spearhead from Litsleby. The comparison was made using the same methodology applied to the Litsleby spearhead carvings including their proportional downscaling. To carry out the comparison, a Långaröd-type spearhead from Scania was first superimposed on the Kalleby carving, but its shape proved to be more slender than the carved spearhead on the lower part of the blade (Fig. 7.14, left). A Valsømagle-type spearhead was then superimposed on it, and this matched the carving extremely well (Fig. 7.14, right). As for the spear shaft, it could be argued that it was intentionally carved as thin and undulating to illustrate the ability of the spear to sway, perhaps as a reference to Odin's spear "Gungnir", or "The Swaying One".

Fig. 7.13 3D model of the rock carving from Kalleby (Tanum, Bohuslän) showing an axe bearer and a spear with a slender, waving shaft. (Source: SHFA: Photo: Ellen Meijer)

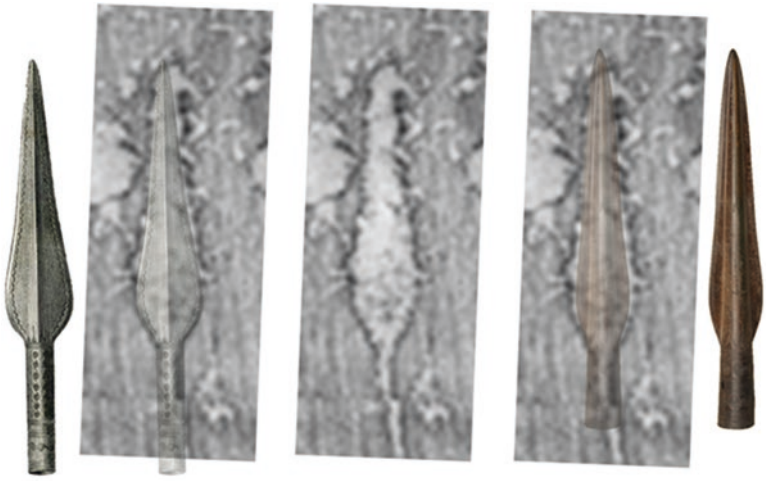

Fig. 7.14 From *left* to *right*: The Valsømagle-type spearhead from Falköping; the same spearhead scaled down and superimposed on the carved spearhead from Kalleby; the carved spearhead, and a spearhead of the Långaröd type from Scania superimposed on the carved spearhead. (Comparative analysis by Christian Horn, Gothenburg University)

The Spear Outlines from Tuna (Bälinge, Uppland)

Another example of the spear's significance during the Nordic Bronze Age is the spear carvings from Tuna (Bälinge, Uppland). On this panel a number of natural striations exist, to which spearheads have artfully been added, if in a rather coarse manner (Janson 1960) (Fig. 7.15). It is noteworthy that two of the spears appear to be held by previously unrecognised human figures with raised arms (Fig. 7.16). The spearheads are simply outlined and show a relatively wide base and rounded shoulders, which overall give them a roughly triangular appearance (Kjellén 1976; Kjellén and Hyenstrand 1977); however, they lack ferrules or any other features that could aid comparison with archaeological objects. It is, therefore, difficult to identify the kind of spearhead that the carvers intended to depict with any degree of certainty.

Fig. 7.15 The spear carvings from Tuna (Bälinge, Uppland). (Photograph: Harald Faith-Ell, after Kjellén 1976)

Fig. 7.16 Rubbing of the central section of the Tuna panel with the spearheads. (Source: SHFA. Rubbing: Dietrich Evers)

Modern recording using SFM has not yet been attained for the Tuna carvings. The sole documentation available consists of black-and-white photographs dating to the late 1940s, as well as rubbings made by Dietrich Evers in the 1970s. Due to heavy overgrowth of lichens, the rock face would now require extensive cleaning prior to documentation with SFM or any other method. Although the weapons are highly stylized, the four spearheads engraved to the right of the panel are reminiscent of Early Bronze Age objects, with the one sitting at the bottom resembling Valsømagle-type spearheads from Period IB of the Nordic Bronze Age, *c*. 1600 BC.

As for the two spearheads to the left of the panel, the bottom one has a rather short shaft and a head shaped differently from the others, which may be taken to represent a Late Bronze Age weapon of the kind schematically depicted on a rock art panel from Åby (Tossene, Bohuslän). It has been suggested that this might be the depiction of a real spearhead found in a nearby tomb (Goldhahn 2014). The carved spear from Tuna seems to be superimposed on one human figure and held by another figure with a horned head. The spear above this scene has an extension added to the shaft that appears to be held by a third human figure (Fig. 7.16). The head of this spear differs from the others in that its shoulders are straighter and a short crossbar has been depicted where one would expect to see a socket. Such a type of spearhead is unknown in Scandinavia and could be later than the four spears to the right of the panel (see above). Objects of this kind are called “barbed spearheads”, and date to 900–800 BC in the British Isles (Davis 2015, Nos. 1301 and 1370). Pending a more detailed documentation using modern methods, it can preliminary be suggested that at least four, and possibly five, of the spears were engraved on the Tuna panel before any of the human figures were added. This is, thus, another example illustrating our hypothesis that “in the beginning there was the spear”.

Concluding Remarks

The four case studies discussed here constitute remarkable examples of the life histories of ideologically and materially important Bronze Age spearheads and of the complex, long-lived biographies of their rock carvings (Kopytoff 1984; Gosden and Marshall 1999; Melheim 2013; Ling and Bertilsson 2016).

Rock art is an expression of the social value of the objects being engraved, and it may signify a desire to possess the objects. Although warrior scenes can be complex and the message that the carver(s) is trying to convey may not always be immediately evident, it is still possible to suggest that carvings do not merely depict mundane representations of everyday objects. Instead, the act of carving objects on rock surfaces may indicate that they held special significance in cult practices. If we examine carving practices from a historical perspective, we may conclude that the objects displayed on Bronze Age rock art panels reflect core ideological values of the society that expressed them, such as a weapon cult, ideas of warfare, and perhaps the glorification of conflict and violence. Importantly, such values were still dominant in the Viking Age (Bertilsson 1987). It can perhaps be suggested that this ideology became

Table 7.1 Periodisation of the Nordic Bronze Age (Montelius 1917; Olsen et al. 2011)

Period I	1750/1700–1500 BC
Period II	1500–1300 BC
Period III	1300–1100 BC
Period IV	1100–920 BC
Period V	920–720 BC
Period VI	720–550 BC

institutionalized over time and informed both social hierarchies and religious beliefs to which all members of early Scandinavian society would have been exposed from birth. Such ideas would have been reaffirmed through recurrent social action and the recounting of mythological narratives.

If we accept that the rock art reflects a new ideology introduced in southern Scandinavia in the Early Bronze Age, and further developed with the establishment of personified deities during the Late Bronze Age, we must also presume that society would have felt the need to affirm the new ideological order most acutely during the initial phase, and also at later, significant junctures in the evolution of the belief system. This may be the reason behind the abundance of images of weapons and warriors on the rock carvings, which mark the Early Bronze Age beginnings and Late Bronze Age developments of a cultic tradition spanning the best part of two millennia. I argue that it is this tradition that gradually morphed into the mythological narratives related in the Nordic sagas – narratives that remained influential long after the practice of carving weapons on rock panels had ceased to exist.

It so seems that the cult of weapons discussed in this chapter preceded the materialization of the gods wielding them – gods that, if we accept the chronology proposed above, only began to appear in the Late Bronze Age, hundreds of years after the introduction of bronze spears in Scandinavia. It is also possible that ideas of a supernatural spear-bearer may have formed in this early period, only to coalesce into the 'classic' image of Odin as the spear-god *par excellence* from the Late Bronze Age onwards (Table 7.1).

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