

Ritual Slaughter Through the Eyes of the Butcher

Perspectives on a Complex Practice

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Ritual slaughter has long been recognised as a significant custom in the archaeological record of Iron Age Scandinavia, but the practice itself has often been treated hastily. This paper aims for a more thorough approach by focusing on the butcher as a craftsperson. It draws on evidence from literary sources and implement use, as well as the zooarchaeological record, which shows specific butchery practices in ritual contexts. The results suggest that ritual slaughter needs to be understood as a collective undertaking with multiple stages. The role of the chieftain as potential performer should be toned down. Instead, the process probably incorporated skilled people from various segments of society.

Keywords: Scandinavia, Iron Age, social zooarchaeology, animal sacrifice

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Introduction

From the Late Roman Iron Age onwards, there is a growing base of evidence for the use of animals in various types of ritual activities in Scandinavia (Carlie 2004; Jennbert 2006; Vretemark 2013). Animal sacrifice and ritual slaughter have become topics of vivid archaeological debate because of their connections to high status feasting and sacral leadership. It has even been proposed that all slaughter practices might have been ritualized (Kaliff 1999:85; Vretemark 2013:52). The practice of ritual slaughter has hitherto mainly been substantiated by Old Norse literary sources and the composition of finds in the archaeological record (Magnell 2012:195–196). Surprisingly few interpretations of ritual slaughter are based on direct observations of the handling of the animals and animal bodies through osteological studies. It is further notable that discussions rarely consider the role and identity of the person performing the act (Kaliff 1999:71; Nilsson 2003:287; Carlie 2004:28; Lindeblad & Petersson 2009:128). Sundqvist (2007) draws attention to the cult leader or chieftain as potential enactor of ritual slaughter, an assumption that is rarely challenged. In contrast to other prehistoric ritual performers, such as rune carvers and (black)smiths, the craft of butchery has so far received little attention. It differs from other Iron Age crafts, since it involves an encounter between living beings, where one has power over the fate of the other. The killing of animals for ritual purposes is thus at the centre of exercising necropolitics, giving important insights into human-animal relationships at the time.

Butchery can be defined as ‘the range of processes, employing implements, by which humans are able to disarticulate a carcass into units depending on ultimate use’ (Seetah 2019:15). It should thus be understood as a series of acts (Binford 1978:48; Lyman 1987:252; Seetah 2019:22). These acts start with the selection and killing of the animal, followed by the subsequent processing, consumption and discard of waste material. Animal parts can be moved or transported to other locations during this process. In zoo-archaeological analyses, the act of butchery may be separated into different stages. The first stage consists of the killing, skinning and evisceration of the animal, the second stage involves the gross dismemberment of the carcass, while the third stage concerns the filleting of the meat (see for example Nilsson 2003:97). Binford (1981:142) and Seetah (2019:154) suggest additional stages, including for instance bone breaking as a separate act towards the end of the butchery process. This paper will evaluate the butchery process in terms of intensity, a concept that will be introduced further down.

Like any practice, butchery is a learned behaviour that is conducted according to preconceived concepts. It is thus intimately linked to, and expressive of, cultural values and norms. Influencing factors on the nature of

the practice are not only social (such as food preferences, religious norms) and economic (consumption, trade or general demand), but they also depend on available tools and the experience and dexterity of the butcher. Iron implements generally give the butcher more freedom of action, since he or she is not as bound to the animal's anatomy when dividing the carcass as with lithic tools (Seetah 2019:126). Butchery practices are often guided by rules of conduct. These rules or norms vary between different contexts and could even have an effect on who would perform the butchery. Well-known examples can be found in Judaism and Islam, where the roles and tasks of a butcher in ritual slaughter are distinct from those in secular commercial slaughter (Greenfield & Bouchnick 2011; Fuseini et al. 2016). A butcher might thus be more than the person dividing the animal carcass into consumable pieces. In the study presented here, the term butcher is used to refer to the person performing the act of butchery as it may be interpreted from the source material; the tasks and conditions surrounding both the process and the butcher may have been complex and diverse.

The terminology of 'ritual slaughter' is in itself problematic. In English, the term 'slaughter' commonly only refers to the first stage of killing the animal. In Scandinavian languages, however, the corresponding term for slaughter, *slakt*, refers to the entire butchery process. This leaves us with ambiguity in the literature. Magnell (2012:195) suggests the following definition for ritual slaughter: 'when the killing and treatment of the carcass or bones has a specific meaning and purpose beyond subsistence and simply transforming an animal into food'. This definition incorporates the entire butchery process and seems more suited for investigating a differentiated handling of animal bodies. In this paper the term 'ritual slaughter' will therefore refer to the entire butchery process.

Deploying insights from social zooarchaeology, which investigates human-animal relationships beyond economy and subsistence (Russell 2012), and ritual studies, which choose a practice-oriented approach (Bell 1992; Berggren & Nilsson Stutz 2010), this paper aims to re-evaluate our current knowledge of the phenomenon of ritual slaughter by considering butchery as a craft and practice. By looking into various lines of evidence for ritual slaughter it will also try to illuminate the role and identity of the people killing and butchering animals in ritualized settings.

The focus will be mainly on Middle and Late Iron Age Sweden (AD 200–1050), but also includes examples from other parts of northern Europe. The three main areas of interest are evidence from literary sources, implement use and the zooarchaeological record. Literary sources provide information on situations of ritual slaughter and potential identifications of the butcher; tools provide insights into technological aspects; and the zooarchaeological record provides direct information on slaughter prac-

tices through butchery marks on bones. The datasets complement each other and will be used as a basis for the discussion at the end of this paper.

Possibilities and challenges in the study of ritual slaughter

The main corpus of written sources about Late Iron Age northern Europe is made up of the Old Norse sagas and myths, collected and written down by medieval writers. There are also a smaller number of contemporaneous sources, notably Tacitus' *Germania*, Adam von Bremen's *Gesta Hammaburgensis ecclesiae pontificum* and Ibn Fadlan's travel accounts to the Viking *Rus*, as well as runic inscriptions. The use and reliability of literary sources to infer information about the Iron Age society in general, and ritual activities specifically, has been a topic of lively debate. Few sources, including contemporaneous texts, offer direct observations. Furthermore, most of the literature is written for and about a social elite, describing rather specific events. It can thus be expected that the ritual slaughter depicted reflects official cult activities performed in certain segments of the society (Vretemark 2013:51). Hence, literary sources should not be used to inform the archaeological interpretation in a direct way. They should rather be utilized as a complement and source of inspiration to understand the archaeological record.

The archaeological record is complicated and interpretations need careful consideration. Zooarchaeology, and in this case specifically butchery mark analysis, enables us to trace practices and techniques rather than persons or cognitive processes (see Berggren & Nilsson Stutz 2010). It is through repetitive actions, guided by rules of conduct, that we may find significant patterns of animal handling. The zooarchaeological examples in this study derive from a wide range of ritual contexts, foremost administrative and religious centres in southern and central Sweden, such as Uppåkra, Borg and Helgö. The sites chosen are the ones that offer reports with detailed information on the butchery process. Observations regarding the mid-first millennium productive and ritual complex at Helgö, Uppland, are based on the author's ongoing zooarchaeological analysis of faunal remains from that site. Comprehensive assemblages with information on slaughter patterns are often missing at rural sites. Small-scale and farm-associated ritual activities are thus underrepresented in this study. The selection of sites represents once again mainly public cult activities performed by and for an elite or specific segment of the society.

Zooarchaeological findings imply that animals were predominantly transported alive and killed on site (Magnell 2016:50). Slaughter places are, however, often difficult to identify, perhaps due to the seemingly un-

structured waste management practices that occurred during the Iron Age (Magnell 2017:37, 107). At many of the sites sampled for this study, large concentrations of processed animal bones were found at the religious core of the site. They were deposited in delimited open-air areas that resemble stages, or around natural landmarks, such as boulders. These types of deposition have frequently been interpreted as evidence of on-site ritual slaughter (Fabech 2009:329; Lindeblad & Petersson 2009:102; Zachrisson 2014; Fredengren 2015). However, even here the bones are recovered commingled and without anatomical association.

The actual traces of the butchery process, the cut marks, have been undervalued and underutilized in interpretations of ritual slaughter. Sometimes the presence of butchery marks has only been used to identify the remains as food or slaughter waste, leaving no information on the actual slaughter practices. Other times, the mere presence in itself of bones in ritual settings has been taken as evidence for ritual slaughter. This is problematic, since the deposition of animal remains in ritual settings does not necessitate a preceding ritual butchery. An interpretation of ritual slaughter should never be based on the context alone. To take this thought even further, not all steps in the butchery process were necessarily ritualized.

Unfortunately, our current possibilities to gain knowledge about ritual slaughter and the person(s) conducting the craft of butchery through zooarchaeology are hampered in several ways. The documentation and interpretation of cut marks is not yet standardized, resulting in an inconsistent degree of detail and incomparable results (Nilsson 2003:291; Seetah 2019:121, 123). Even with a proper recording system, small sample sizes, fragmentation and weathering of the bone surface often hamper cut mark analyses. Knife marks are generally more difficult to detect than chop marks, potentially leading to biased results. Furthermore, the first stage of butchery, the killing of the animals, is rarely visible on faunal remains, partly due to fragmentation, partly due to non-traceable killing methods such as strangulation and cutting the carotid artery.

At the sites sampled for this study, the butchery process has been described through quantitative and qualitative features such as the frequency of marks, the force and implements applied to induce them, and the precision and uniformity of the cuts. Sometimes, the butchery process is described as intense, referring to elevated levels of one or all of the above stated features. Intensity emerges as a promising concept under which all of these observations can be gathered. The term will be used to compare butchery practices throughout this study.

Most reports focus primarily on the presence of cut marks, overlooking the fact that their absence might say at least as much about the treatment of the animals, the process of butchery and the proficiency of the butcher.

According to Morris (2012:17), an experienced butcher is potentially able to dismember an animal body without leaving any marks. Butchery techniques that resulted in the absence or scarcity of marks on the bones will in this study be denoted as *low intensity slaughter*.

Another issue concerns the identification of ritual slaughter. One criterion that Magnell (2012:198) uses for ritual treatment is the divergence of butchery methods from those of ‘ordinary slaughter’. Vretemark (2013:52) mentions unusual treatment too, as a criterion for identifying ritual bone deposits. However, our current lack of knowledge about ‘ordinary slaughter’ and a possible overlap between ordinary and ritual slaughter methods poses a difficulty in identifying ritual slaughter (Kaliff 1999:76; Seetah 2019:116). As a practice, butchery probably also varied locally or regionally. Slaughter practices can also be ritualized by means that are invisible in the archaeological record, such as adornment and prayer, not affecting the butchery techniques. Moreover, it is important to study cut mark data together with the implements present locally or regionally (Seetah 2019:91).

Reasonably, the status of meat and the frequency of its consumption are linked to the significance of butchery and butchers in a society. For instance, this affects training and mediation of the butchery process. Meat is usually ascribed as high status in studies on Late Iron Age food culture. The English term ‘slaughter’, as well as the Scandinavian ‘*slaktare*’, are related to the Old Norse word *slatr* referring to the meat of the animals (Hellquist 1948). There are, however, diverging opinions on the frequency of meat consumption. It has been suggested by Magnell et al. (2013:119) that meat was foremost consumed on special occasions, while others (Pettersson 2006:256) argue that meat was probably part of the daily nutritional base.

The critical review presented here demonstrates that the investigation of ritual slaughter is not a straightforward task. Social zooarchaeology may be a way to move forward. It elevates cut mark data beyond mere identification and quantification and encourages the incorporation of different fields of research, as for example religious studies. In this study, social zooarchaeology has been deployed both methodologically, in order to combine different lines of evidence that will be presented below, and as a framework for the subsequent discussion, since it calls attention to the role of butchers as social agents and butchery as a social process and strategy.

The butcher in literary sources

Several literary sources include passages on ritual slaughter and animal sacrifice that may give indications of the identity and status of the butcher in ceremonial contexts. Previous text-based discussions on ritual slaugh-

ter (Näsström 2002; Sundqvist 2007) have been used as starting points for the present inquiry. While they have been directed towards religious rulers and ritual activities in general, this study focuses on compiling information about the practice and performers of ritual slaughter. Sometimes inconsistencies were noted between translations. In such cases, it proved to be valuable to return to the original source to determine the precise terminology. The review is by no means complete, but still provides interesting patterns. In the literary sources, the craft of butchery is placed on a broad scale, ranging from anonymous enactors to being a highly valued skill, conducted by individuals of the uppermost elite. It is commonly mentioned in connection to communal events, such as burials and feasts. The following sections will provide examples of how butchers are mentioned in connection with ritual activities.

BUTCHERS AS ANONYMOUS ENACTORS

Often the butcher remains completely anonymous, either by the use of passive tense or by referring to an unknown collective. In *Óláfs saga Helga* (chapter 107), for example, it is mentioned that at winter feasts ‘cattle and horses had been slaughtered’ (*at þar væri drepit naut ok hross*) (Somerville & McDonald 2014:395; Sundqvist 2016:321). Similarly, in the U-version of *Hervarar saga* it is told ‘A horse was led to the meeting place, dismembered and distributed for eating’ (*Þá var fram leitt hross eitt á þingit ok hoggvit í sundr ok skipt til áts*) (Sundqvist 2016:327). It should be noted here that the constellation *hoggvit í sundr* means ‘to hew asunder’. The verb *hoggvit* even refers to the beheading or execution of a living being, giving quite a violent picture of the slaughter process. In fact, many of the butchery scenes mentioned in the sources display elements of high-intensity slaughter, which will be discussed below in relation to the bone record.

In some sources, butchery is mentioned as a collective undertaking with shared responsibilities. Here too the butcher or butchers remain anonymous. When Ibn Fadlan observes the Rus burial around AD 920 he notes: ‘They then brought two mounts, made them gallop until they began to sweat, cut them up into pieces and threw the flesh onto the ship’ (Montgomery 2000:16). Since his description of the burial includes other key persons, such as the slave woman and the so-called ‘angel of death’, it can be assumed that no particular person was identified as the main performer of the butchery process. Further, Adam of Bremen describes the offering of heads at the temple of Uppsala (Sundqvist 2016:112, 340), with no reference to the preceding process or performer of the slaughter. Considering the frequent occurrence of animal crania in archaeological excavations of ritual contexts, it should be noted here that rituals including animal heads are also mentioned in other literary sources (Magnell 2019:313).

THE CRAFT OF SLAUGHTER – A DESIRABLE KNOWLEDGE?

Some passages in the Old Norse texts present a positive image of the practice of animal slaughter, connecting it to high status and prestige of the butcher. In *Egils saga* (chapter 68) it is told: ‘To the field was led forth a bull, a large and old ‘sacrificial beast’ such was termed, to be slain by him who won the victory’. (*Þar var leiddr fram graðungr mikill ok gamall. Var þat kallat blótnaut. Þat skyldi sá hoggva, er sigr hefði*) (Anonymous 2011). The fact that the killing of the animal is reserved for the winner of the battle might indicate that it was an honourable task. It might, however, equally well have a non-literal meaning of the bull and its meat being reserved for the winner. A positive connotation of the craft of butchery is also found in a famous verse of *Hávamál* 144, where Odin asks his people: do you know how to sacrifice? Do you know how to send? Do you know how to slaughter? (*Veistu, hvé blóta skal? Veistu, hvé senda skal? Veistu, hvé sóa skal?*). Both *blóta* and *sóa* have been connected to the killing of animals for ritual purposes. While *blóta* appears in various texts and may refer to ritual or sacrificial practices in general, the word *sóa* is rare in the literature (Abram 2011:92). It has been suggested to refer to the (ritual) killing or butchery of animals (Näsström 2002:31; Nilsson 2003:288; Sundqvist 2007:94). Näsström (2002:33) believes that Odin’s questions refer to features of sacrificial knowledge, which were desirable to acquire. The incorporation of animal slaughter in the desired abilities indicates that knowledge of the craft was prestigious and in fact on a par with the mystical craft of rune carving, mentioned in an earlier line of verse 144 (*Veistu, hvé rísta skal?*) (see Hedeager 2011:10). The fact that it is Odin himself asking for this knowledge adds even more weight. Odin’s questions also imply that there was a predetermined or correct way of performing ritual slaughter. In *Ynglingatal*, two kings of Uppsala, Alf and Yngve, are attributed with the word ‘*valsæfendr*’. Sundqvist (2007:94) interprets this term as ‘proficient in sacrificing’. According to him the verbs *sóa* and *saefa* might be connected. *Valsæfendr* may thus refer to, or at least include, animal sacrifice. The same might be true for the attribute *blótmaðr mikill* (great sacrificer), supporting the idea of animal sacrifice as having a high social value. There might, however, be a difference between commissioning and conducting the sacrifice.

CULT LEADERS, CHIEFTAINS AND PERSONAL ACCOUNTS

In various instances a single person, often the chieftain, is mentioned in connection with the act of slaughter. However, most of these accounts leave open whether the chieftain conducted or merely commissioned the slaughter. An example is a runic stone (DR 357) from Stentoften in Blekinge, dated to AD 550–750. According to Santesson’s interpretation it says: ‘with nine bucks, with nine stallions Haduwulf gave good growth’ (Santes-

son 1989:227; Sundqvist 2007:95). Similarly, in *Gísla saga Súrssonar* 15, it is mentioned that Þorgrímr Þorsteinsson was going to arrange a feast, during which he intended to offer sacrifice to Freyr (*Þorgrímur ætlaði að hafa haustboð að veturnóttum og fagna vetri og blóta Frey*) (Malm 1994; Sundqvist 2016:331). Additionally, a story in *Landnámabók* (*Hauksbók*, chapter 268) describes how a ring was reddened with the blood of a bull, which had been sacrificed by the chieftain himself (*ok rjóða hann þar áðr í roðru nauts blóðs þess, er hann blótaði þar sjálf*) (Brink 2002:109; Sundqvist 2016:330). It is not clear if the act of sacrificing can be equated to the act of slaughter in the last two examples. A more direct account appears only in one case. In *Vatnsdæla saga* (chapter 34), it is said that ‘Jökull killed a mare and they opened it up at the breast’ (*Síðan drap Jökull meri eina og opnuðu hana hjá brjóstinu*) (Thorsson 2018:67). Note here that in the Swedish translation Jökull both killed and opened up the mare (Jóhannesson et al. 2014:45). The verb form *opnuðu*, however, denotes person in the plural, in other words ‘they’ opened up the mare. It indicates that different people took care of different steps in the butchery process.

GENDER AND BUTCHERY

The examples mentioned so far refer exclusively to male practitioners. Across historic and ethnographic examples, the craft of slaughter and animal sacrifice are predominantly connected with adult male practitioners (Goody 1982:71; Sered 2002). In the literary sources, there are, however, also sections mentioning women involved in the process of slaughter, specifically the killing of fowl. Ibn Fadlan observes that the slave girl who is to be sacrificed with the chieftain kills a hen by cutting off its head (Montgomery 2000:17). In *Kormáks saga* (chapter 22), it is told that Thordis ‘had killed two geese and let the blood run into a bowl, and she had taken up the third goose to kill it’ (*hefir hún skorið tvær gæs og látið renna saman blóðið í bolla. Þá hafði hún tekið hina þriðju gásina og ætlar að skera*) (Mouse 2019). In *Óláfs saga helga* (chapter 91), it is mentioned that the *álfablót* was led by the housewife (Nilsson 2003:301; Sundqvist 2016:370). Sundqvist (2016:365, 370–371) is positive towards the idea that women could have acted as cultic leaders at religious ceremonies. It should thus not be ruled out that women were actively involved in the process of animal slaughter. No reference could, however, be found that children engaged in any form of slaughter practices.

Evidence of slaughter implements

In the literary sources, butchery implements are rarely mentioned. Some translations of the burial event in Ibn Fadlan’s *Risala* refer to the sword as

a butchery tool: ‘they cut them up with the sword and threw their meat into the ship’ (Barker & Grant 2010:77). While this would undoubtedly be visually impressive, it would have been rather impractical and laborious. Swords may, however, potentially have been used for the initial stages of butchery, the killing and beheading of the animal. In the Old Icelandic language, the verb ‘*hoggva*’ is used in connection to both swords and axes and seems to indicate the use of a thick-bladed tool (Zoga 2010:225).

Here we find resonance in zooarchaeological research, where the morphology of cut marks is used to gain information on butchery tools. Axes are commonly regarded as the main implements for slaughter, due to the high frequency of chop marks (Lucas & McGovern 2007:23; Magnell 2017:19). At the Helgö sanctuary, where a large concentration of animal bones has been found, the morphology of several chop marks clearly indicates the use of a curved-edge blade, excluding the use of a sword for dismemberment. Chop marks from thick-bladed tools occur in rural assemblages as well.

In contrast to the zooarchaeological findings, axes are rare and knives predominate in the archaeological record for this period. The majority of axes registered in the database of the Swedish History Museum are dated to the Viking Age and often found in burial contexts. Many of the recorded axes would not function well for animal butchery, due to their shape and material properties. At Helgö, no axes or other thick-bladed tools have been located which would have had the potential to create the chop marks observed on the bones. In Scania and Denmark naturally occurring flint stone was used for slaughter in the Iron Age (Knarrström 2017:88–90). In most parts of Scandinavia, however, metal tools predominate. Cleavers were employed in Roman and Roman-influenced butchery (see Grant 1987), but have not been identified in the Swedish record. A discrepancy in the implement use is thus indicated by the cut marks and the types of metal tools occurring.

However, the identification of butchery tools in archaeological contexts is difficult (Seetah 2019:187). It is highly likely that tools fulfilled multiple purposes. In a study on knife blades, Arrhenius (1970:48) found that many knives showed heavily worn blades, indicating long-term use. Metal tools were probably valued objects not owned or affordable by everyone (cf Seetah 2019:118).

Zooarchaeological traces of ritual slaughter practices

While there seems to be a broad variation of slaughter intensity in ritual contexts, extreme forms of *high* and *low intensity slaughter* frequently recur.

This section mostly reviews findings from published reports and articles. However, comments on the material from the Helgö complex are based on the author's own ongoing zooarchaeological analysis.

The most detailed record of butchery that also resonates with literary sources stems from Iceland and the Viking Age site of Hofstaðir. Here, cattle had been beheaded with a powerful blow to the neck. Lucas and McGovern (2007:22) describe the decapitations as violent with the purpose of maximizing a dramatic effect on the audience. The method required at least a two-person team, supporting the idea of animal slaughter as a collective undertaking as indicated by literary sources. The bones show evidence of specialized butchery, diverging from that observed at surrounding farms. The slaughter pattern seems to have been consistent over several generations (Lucas & McGovern 2007:14).

Furthermore, at many other religious centres of the Iron Age, the animal remains deposited within specific contexts bear traces of the forcefulness indicated by the texts. At the Viking Age cult house at Borg and the Vendel Period hall at Ströja, both located in Östergötland, the faunal assemblages include several bones with marks of unusually powerful, repetitive blows (Jonsson 1996; Leif Jonsson personal comment). Similar marks have also been noted on bones from the open-air sanctuary at Helgö, deposited between AD 200–800 (Figure 1). These marks feature on various types of bones, handled during different stages of the butchery process.

At the wetland site of Bukkerup in Denmark (AD 1–400), specific body parts of cattle, the limbs, were recurrently chosen for deposition. These body parts are described as showing evidence of violent dismemberment. Filleting, on the other hand, seems to have been performed with great care, leaving almost no marks on the bones (Gyldion 2009:73). As at Hofstaðir, long continuity of butchery tradition can be established for this site, seemingly consistent for over 400 years (Gyldion 2009:74, 78).

The conduct of animal slaughter at communal events, outlined by literary sources, is furnished with more detail by the zooarchaeological record. At Uppåkra in Scania, intense and standardized butchery (pot-sizing,



Figure 1. Repetitive chop marks on the shaft of a metatarsus from cattle (*Bos taurus*), found at the open-air sanctuary at Helgö.

which denotes the division of animal carcasses into pieces suitable for cooking devices) was noted for the animal remains deposited around the cult hall (AD 350–550). The butchery pattern has been interpreted as a sign of large-scale communal consumption (Magnell 2012:203, 205; Magnell et al. 2013:85, 111, 119). Locally available data was sufficient enough to detect a clear difference in butchery intensity between the cult site of Uppåkra and the associated settlement (Magnell et al. 2013:112). Intense and systematic processing of animal bodies has also been noted in a Roman Iron Age burial mound at Fullerö in eastern central Sweden. The mound is located 10 km north of Uppsala, Uppland, and is one of the few inhumation graves thoroughly analysed in these terms (Stolle 2016). At least 25 animals were killed in conjunction with the funeral. The choice of tools and their use was similar between various species and elements. About 23 per cent of the bone material displayed butchery marks, mainly chop marks, a frequency similar to that observed on bones inside the cult hall of Uppåkra (Magnell et al. 2013:112).

As indicated by the find at Bukkerup (Gyldion 2009), animal bodies in ritual settings are not exclusively processed in an intense and forceful way, but can be rather cautiously handled. Low intensity slaughter lacks a counterpart in literary sources, but recurs in the archaeological record. In 2005, a possible slaughter or offering site from the Late Iron Age was excavated at Slavsta, Uppland. Approximately 30 m south of this context, a Viking Age cooking pit (A 752) was found. It contained the almost intact upper extremities of four young sheep. It is noted in the report that the bones are well preserved and did not show any butchery marks (Sjöling & Bäckström 2009:99). The extremities must have been dismembered very carefully at the upper joints and feet. It was also found that cattle and horses had been processed differently at the slaughter location at Slavsta. Fewer butchery marks on the horse bones were interpreted as utilization of the skin only (Sjöling & Bäckström 2009:96). Also, at the wetland site of Finnestorp, Västergötland, scattered horse bones show no signs of butchery, except for thin cut marks (Vretemark 2013:54). Vretemark (2013:54) believes that the meat was carefully cut from the bones. At Sivs väg at Old Uppsala, Uppland, larger body segments of horse carcasses were discarded. Similar to Slavsta, they display barely any butchery marks, while cattle carcasses are more intensely processed (Magnell 2017:17). Some butchery marks are inconsistent with skinning practices, implying that even in this case the meat was carefully cut from the bones. Magnell (2017:106) also notes the deposition of complete mandibles in several pit houses at Old Uppsala. They had not been chopped off from the head, as in most cases, but were carefully cut to keep the mandibles intact. Gyldion (2009:93) mentions that crania and mandibles from Järrestad, Scania, also lacked signs of butchery. At

the recently excavated site of Stanstorp, Scania, deposited heads and distal limb bones of horse in pits lack evidence of butchery, despite their apparent dismemberment. Horse bones from meaty parts in other areas of the settlement have, however, been thoroughly butchered (Söderberg 2018). Finally, at the wetland site of Skedemosse on the Öland island, dismembered animal carcasses have been found that display no signs of butchery at all (Hagberg et al. 1968:13–14; Vretemark 2013:53).

The recurrence of certain species (horses) and body parts (crania) among the carefully treated remains is notable and even more so considering the mentions of heads and horses in connection with ritual activities in the literary sources. The separation and deposition of animal crania and mandibles seem to have been widespread ritual practices in Iron Age Scandinavia (Magnell & Iregren 2010; Price 2010; Vretemark 2013; Sundqvist 2016:340).

Discussion

The above-mentioned examples underline that zooarchaeological analyses offer a much more detailed, nuanced and diversified picture of slaughter practices in ritual settings than literary sources. New insights can be gained through systematic social zooarchaeological research, taking into account social and practical dimensions of ritual slaughter.

First, the general suggestion that all slaughter practices have been ritualized (Kaliff 1999; Vretemark 2013) needs to be reconsidered. While it might potentially be true for some sites, it is contradicted by the presence of a distinct way of conduct at others. A pattern that emerges in both literary sources and zooarchaeological data is *high intensity butchery* practices in connection to communal events. The prevalence of such practices at Middle and Late Iron Age centres such as Helgö and Uppåkra may be a question of sample size and data resolution. It may, however, also have significant implications, indicating a form of animal handling and slaughter specific to certain places. The sites mentioned are interpreted as important centres for politics, economy and religion. It was at places like these that the centralization of cultic activities, under the authority of an elite, began. This development is likely to have influenced killing and butchery techniques, food preparation and consumption patterns, as well as the general setting for butchery practices. Staged scenes at potential slaughter sites, such as platforms, provide functional and visual preconditions for forceful methods and heavy tools to be used. At many sites, such as Helgö and Borg, these apparent stages are positioned in the religious centre of the settlement, suggesting that butchery was a central practice as well.

Seetah (2019:57, 59) emphasizes the importance of the butcher and butchery practices in the construction of social identities across historical contexts. How important this strategy may have been in Iron Age societies is demonstrated by examples such as Hofstaðir and Bukkerup, where certain butchery traditions were passed on for generations. Forceful methods of slaughter might have been part of the overall power strategies of the elite. This has already been suggested by Sundqvist (2007:95) and Fredengren (2015:176) in regard to human and animal sacrifice. The public killing and butchery of animals may not only express wealth and authority, but also the physical and mental strength of the individual and society enacting the slaughter. Many of the qualities of a butcher are also favourable abilities of a warrior, for example strength, skill and courage to kill another being. The deposition of weapons at many sites with intense slaughter adds to this idea. The butcher may thus have become associated with the warrior identity. The regular exposure of people to killing and blood during slaughter events may even have functioned to normalize war and fighting.

The relationship between ritual slaughter/animal sacrifice and violence/suffering is not an uncommon one (Girard 1979; Lucas & McGovern 2007:23; Price 2010:136; Russell 2012:97; Seetah 2019:49). However, while this study can confirm a connection between ritual slaughter and forceful methods, its explanation through intentional violence is not as clear-cut. Other reasons for the presence of *high intensity slaughter* need to be considered. Impactful cut marks made by heavy tools might for instance be the side effect of a rapid butchery process rather than reflecting a crude method (Seetah 2006). At communal events, a large number of animals would need to be killed and butchered during a relatively short time-span. Additionally, unless hung, animals need to be processed immediately after their death, since the accumulating blood would otherwise render the meat unfit for consumption (Seetah 2019:204). This would explain the connection of *high intensity slaughter* to sites that formed an attraction for large gatherings of people. It has also been suggested that religious ceremonies were held during evenings and nights (Nordberg 2009:292). This would hamper visibility and thus probably affect the accuracy of the butcher.

The presence of *low intensity slaughter* methods in ritual contexts adds nuances and contrasts to previous assumptions about ritual slaughter practices. It raises the questions of where, when and why certain butchery strategies were chosen. The fact that slaughter intensities may vary at different stages in the butchery process, as at Bukkerup, adds to the complexity of the situation. The ultimate use of the animal body probably played an important role in the choice of methods, and needs to be considered.

The butcher is an indispensable component in the process of ritual slaughter. As the executor of necropolitics, he or she assumes an important role in

the transmission and negotiation of knowledge, relations and ideals (see also Berggren & Nilsson Stutz 2010:176–177). This would support the previous suggestion that the chieftain or cult leader has been actively involved in animal slaughter. It would not only leave the leader in control of the process but also offer an opportunity to form collective and individual identities. The liminal act of transforming the animal from the living assemblage to the death assemblage, resulting in the killing and beheading of the animal, seems to be the most strategic stage for such an attempt. After this stage the animal becomes progressively more abstracted until only pieces of meat and bone remain. Note here, that Seetah (2019:116) finds that ‘ritual and religious practice is closely identified with the initial cut used to extinguish life’. Examples such as Hofstaðir present the killing as a crucial act in the butchery process. It might be connected to the importance that is ascribed to animal crania in ritual settings, since the separation of the head is commonly performed at an early stage.

Forceful or careful methods are, however, not restricted to the first stage of the butchery process, but can be observed at other stages too. Despite the crucial role that the butcher might have possessed, it must be doubted that the chieftain or cult leader had sufficient experience or time to perform the entire slaughter process. Linking back to the killing and butchery of at least 25 animals for one single burial event at Fullerö, it seems unlikely that a single person of high status could have performed the butchery. Even if the burial process may have lasted for several days, other ceremonial and social duties must have limited the chieftain’s time for animal slaughter. Moreover, assuming that the chieftains’ or cult leaders’ role in animal slaughter was confined to public events, their level of experience and routine needs to be questioned. It can be doubted if he or she possessed the skill and training to dismember crania and carcasses in the careful way noted at many ritual sites. Forceful methods may thus be a way to conceal inexperience. However, it can be argued that *high intensity slaughter methods* would need at least as much expertise, attention and planning as any other slaughter technique in order to work as a social strategy (Fabech 2009:331; Seetah 2019:39, 131, 139). The literary sources are ambiguous as regards the commitment and role of the chieftain in ritual slaughter. Perhaps a relationship similar to that between sponsors and rune carvers is conceivable for the initiators and performers of ritual slaughter and animal sacrifice. If the chieftain’s role was confined to commissioning the process, who then took care of the butchery?

It can be assumed that there was not one butcher for animal slaughter at ritual events, but many. The example of Hofstaðir demonstrates that the killing and butchery was a collective undertaking, even if one person might have led the action. In light of the organisational and dietary demands that

accompany public events it is likely that tasks have been distributed. The image of butchery as a collective process, with various agents, also resonates with some of the literary as well as ethnographic sources (Mooketsi 2001). The process was not necessarily conducted by a ritual specialist of high status. Equally, those skilled in butchery may have played important roles. In the Roman Empire, slaves were the enactors of official sacrifices, including the killing and butchery of the animals (Ekroth 2014:328). The craft of butchery is a physically demanding task, involving fluids and smells that can be perceived as unpleasant and polluting (Seetah 2019:50). As many other occupations dealing with death, it is not unusual that butchers are associated with a lower or marginal segment in a society. In kosher practices, on the other hand, butchers could enjoy high prestige and respect, due to their specific knowledge and skill (Steinsaltz 2010:223). The status of the occupation is not predetermined. Hence, even ritual slaughter might have been conducted by more ‘ordinary’ but skilled individuals.

The craft of butchery in the Iron Age is not comparable to the profession of butchery today. It was probably not a full-time occupation and it is so far uncertain if butchers made use of specific implements. This, however, does not mean that it was not a specialized craft. The process of butchery needs to be recognized as an activity that cannot be performed by everybody. It requires specific knowledge of animal anatomy, food culture and implement use (Seetah 2019:7, 37, 44). The knowledge of slaughter must have been quite widespread in Iron Age Scandinavia, presupposing on-site slaughter, since processed animal remains are found at sites of varying size and function. The scarcity of axes in the archaeological record might at the same time indicate that tools were personalized and owned and used by only a few people. This would also restrict the number of possible butchers. So far, we know very little about these people, which is why an open mind should be kept towards their role, status and gender. Nonetheless, the marks they left on the bones are valuable traces of their actions and agency in the past. Social zooarchaeology enables us to make the most of these traces and bridge some of the challenges that the study of ritual slaughter poses.

Conclusions and future directions

Ritual slaughter was not a homogeneous or static phenomenon, but varied in time and space. Equally the role and identity of the butcher was similarly dynamic and multifaceted. Butchers and butchery of animals were important in the negotiation and demonstration of political, economic and religious values and power, especially at late Iron Age centres. The presence of *high intensity slaughter* at many ritual and religious centres should

not necessarily be interpreted as evidence of intended violence, but might just be the result of a rapid butchery process targeted to feed many people. Chieftains or cult leaders may have actively engaged in ritual slaughter, but are probably not the sole or main enactors of the butchery process. Ritual slaughter should rather be understood as a collective undertaking with different stages. Not necessarily all stages in this process were ritualized.

There is much left to be done before we can use the butchery record to effectively infer information about ritual slaughter in the Iron Age. The discrepancy between the frequent documentation of chop marks and scarcity of axes in the study area is curious and needs more attention. Furthermore, zooarchaeology needs to gain a stronger voice and stance in determining if, and in which stages, the butchery process may have been ritualized. It is important to illuminate the entire scale of butchery practices and not only the most extreme forms of it. Understanding general or ‘ordinary’ slaughter practices on a local level is essential for distinguishing the conduct of ritual slaughter. Analysing slaughter practices in terms of varying degrees of intensity may be a promising approach to the identification of deviating procedures. For this endeavour it is necessary to develop comparable analytical criteria. As Seetah (2019) sets out, these criteria should include the location and frequency of butchery marks, the implements used as well as the precision and force of the cuts. Future work should also embrace the concept of social zooarchaeology, which, it is to be hoped that this study has shown, enables the use of cut mark data for social interpretations.

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PERSONAL COMMUNICATION

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