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# How Useful Are Osteoarchaeological Methods in Supporting Current Interpretations for Violent Death?

## A Review of the Data from Iron Age Burial Contexts in England

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### Abstract

A picture of the violent 'headhunting' Celtic peoples of Britain was painted by Roman historians and writers thousands of years ago. Even to this day, it is an image that has likely, though perhaps inadvertently, affected the interpretations of many incidents of skeletal trauma. This paper looks at a number of these narratives from a range of different burial contexts from the Iron Age in England. The secondary osteoarchaeological data from these sites was reviewed to understand the extent to which these interpretations can be scientifically supported. Results demonstrate that the study of the skeletal trauma was often unable to provide tangible support to most interpretations and raised some key issues with the limitations of the current techniques.

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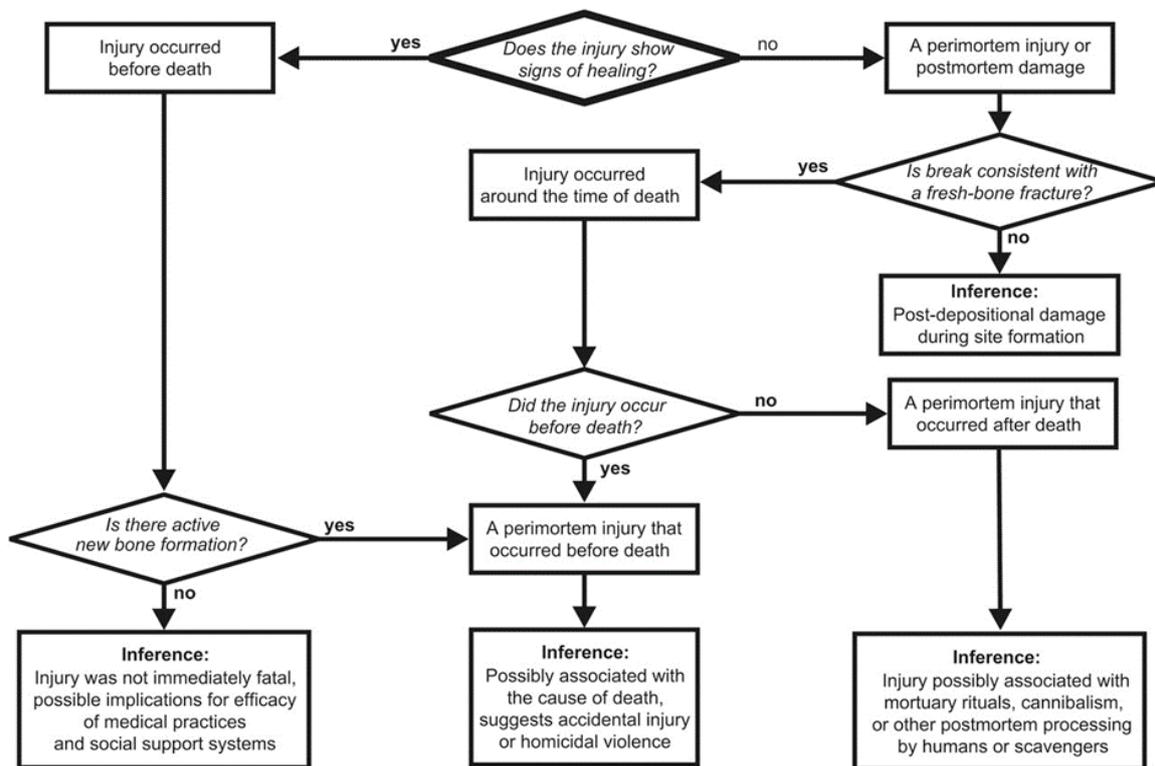
### Introduction

Violence has played an ever-present role in human society and is a phenomenon seen in all cultures as far back as the Palaeolithic (Bocquentin and Bar-Yosef 2004; Estabrook and Frayer 2014). Even today, inter-personal violence is the number one cause of premature death among young adults (Cornwell *et al.* 1995; Whitman *et al.* 1996). Yet despite its occurrence in practically all societies, violence is not fundamentally biological. Rather, it is a reaction, by a person or a group of people, to certain environmental stimuli (King 2010: 1). Osteoarchaeologists are uniquely positioned to explore violence in past populations because human remains provide a direct source of data for which to study trauma. This primary evidence is not subject to the same level of cultural biases as interpretive works such as historical literature or ethnographic research (Walker 2001: 574). However, it is important to note that osteoarchaeology is still not totally exempt from individual or wider social/political bias. Despite this, it is imperative that osteoarchaeology plays a leading role, used alongside wider archaeological practices, to ensure the most credible narrative about violent deaths in past societies is told. This paper will focus on the Iron Age period in England, commonly

agreed as beginning around the eighth century BC and ending in the first century AD. The period is characterised by its plentiful settlement evidence (Haselgrove 2009: 149). There is, however, a perceived lack of regular and recurrent burial rites, with the exception of some limited regional variations (Harding 2016). Though the evidence is somewhat incomplete for this period, there are still numerous burials which display evidence of trauma or violent death. Explanations for these deaths have included warfare, ritual and judicial killing, and even arguments for self-sacrifice and cannibalism (Millett and Russell 1982; Taylor 2001). In England, the interpretation of violence in Iron Age society can largely be divided into those who believe it was rampant and those who think it is exaggerated, with other factors such as agricultural practices taking a more important daily role (Redfern 2011: 114). These contrasting opinions have likely, though perhaps inadvertently, affected current interpretations of trauma in Iron Age burials.

### **The study of violence through traumatic injuries**

One of the most common pathological conditions visible on the human skeleton is traumatic injury. Even so, many more injuries are limited to the soft tissue and are therefore not identifiable on archaeological human remains (Larsen 2015: 115). This can lead to a problem where violent death tends to be invisible in the study of human bones—exceptions are when the bone is directly damaged and does not show any evidence for healing. Therefore, to interpret ancient trauma and try to identify violent death in the archaeological record, a detailed decision-making process is required (fig. 1) (Walker 2001: 576). Furthermore, skeletal trauma could have been caused by accidental injuries rather than deliberate interpersonal violence. In many cases it can prove problematic trying to distinguish the actual cause. Osteoarchaeological research, when combined with other contextual information, can be a useful tool in attempting to identify cases of intentional injury and death in Iron Age England. Two of the most crucial steps for an osteoarchaeologist investigating potential cases of violence on skeletal remains is distinguishing the time, and type, of trauma inflicted.



**Figure 1: Flow diagram showing the process through which skeletal remains are assessed for evidence of interpersonal violence (Walker 2001: fig. 2).**

### *Time of injury*

There are three stages used in osteoarchaeology to describe the time an injury was sustained (table 1) (Haglund 2002; Sauer 1998; Galloway 1999; Knüsel 2005). The first of these stages is known as antemortem (prior to death), following that is perimortem (at or around the time of death), and finally postmortem (after death). It is worth noting that the purpose of these stages is to record the quality of bone at the time of an individual's death and not their actual time of death (King 2010: 48). Antemortem fractures which occurred sometime before death are comparatively easy to identify because of the visible callus of new bone that forms as part of the healing process (see table 1) (Mays 1998: 165; Walker 2001: 576). In contrast, perimortem and postmortem fractures show no signs of healing (see table 1). It is then often possible to further distinguish postmortem fractures because bone becomes much more brittle after death (though this process does not happen immediately). This results in postmortem breaks forming at right angles to the bone surface as opposed to the acute angles seen in perimortem fractures (see table 1) (Villa and Mahieu 1991). The period of time covered by the term 'perimortem' can differ depending on the rates of decomposition as bone retains collagen

for a variable period of time after death (Knüsel 2005: 53). This means that there can be ambiguity as to whether a perimortem fracture was the cause of an individual's death, or evidence for how they were treated after they died. Issues such as these are best dealt with by using a range of other contextual information and by looking at the injury itself. For example, a skeleton with multiple puncture wounds caused by arrows would be considerable evidence for intentional injury rather than an accident.

### *Type of injury*

There are three categories of traumatic injury that are strongly suggestive of deliberate interpersonal violence. These are sharp or blunt force trauma and penetrating wounds. By definition, sharp force trauma is an injury caused by a bladed weapon (Knüsel 2005: 55). Blunt force trauma is defined as that which creates depressed fractures or 'crushes' the bone and is produced by a blunt weapon or object (Mays 1998: 168). Lastly, penetrating wounds are defined as trauma caused by weapons that travel at a high velocity such as arrows or bullets (Novak 2000: 91; Knüsel 2005: 55). In some instances, low velocity or blunt projectiles (e.g. sling-stones) cause small depressed fractures that better fit the description of blunt force trauma. It is important to understand and identify the various injury characteristics left on skeletal remains by these three types of trauma. Most of the literature on this has been undertaken by forensic anthropologists and their work has been primarily focused on attempting to reconstruct marks left by modern weapons such as bullets, knives and bats (King 2010: 63; Symes *et al.* 2002; Byers 2008: 291-307). While this research certainly provides a solid framework, osteoarchaeologists are more often expected to encounter different wounds caused by historic weaponry. For the Iron Age in England this is likely to be from weapons such as swords, spears, axes and arrows to name a few. Some experimental studies (Novak 2000: 97-98; O'Flaherty 2007; Lewis 2008) have attempted to bridge this gap between the two professions by examining a range of injuries caused by a variety of historical weapons. Nevertheless, it would certainly be beneficial for more research to be undertaken in order to increase the dataset and improve reliability.

**Table 1: The three different stages of injury timing, with their definitions and photograph examples.**

<b>Injury Timing</b>	<b>Definition</b>	<b>Example</b>
Antemortem	<p>Occurs before death and is identified by healing bone as bone can only heal while the individual is still alive (Knüsel 2005: 52).</p> <p>Picture showing woven (healed) bone (Mays 1998: fig. 1.4).</p>	
Perimortem	<p>Occurs at or around the time of death but can vary in time after death as long as bone retains collagen (Knüsel 2005: 53).</p> <p>Picture showing an unhealed blade injury (Mays 1998: fig. 8.4).</p>	
Postmortem	<p>Occurs after death and refers to 'dry' bone that has lost its collagen resulting in right angle breaks (Knüsel 2005: 52).</p> <p>Picture showing a postmortem fracture (Walker 2001: fig. 5).</p>	

### **Violent deaths associated with Iron Age warfare**

The topic of warfare is without a doubt one of the most explored areas within the study of violence (King 2010; Redfern 2009, 2011). Despite this, identifying warfare in Iron Age England has, at times, proved problematic. Previous studies have commonly evaluated violence and warfare in this period using a range of settlement and artifactual evidence (e.g. Cunliffe 1971, 2005; Dent 1983; Haselgrove 1994; Armit 2007; James 2007). Of the settlement

evidence, hillforts have often received the most debate and a clear divide still exists between those who believe that they were either defensive or ritual in nature. Regardless of this debate, the architecture of hillforts shows that many of them possessed numerous defensive capabilities irrespective of whether or not they were ever utilised. It is likely that hillforts were both defensive and ritualistic in their design (Armit 2007: 36). Artifactual evidence from this period also supports the argument that violence and warfare played a regular part in people's lives. The manufacture and deposition of weapons such as swords, shields and spears represent a society that clearly associated with violence in both a practical and ceremonial manner (King 2010: 41; Redfern 2011: 114).

### *Burials of battle victims: Maiden Castle*

Maiden Castle is one of the largest and most complex hillforts in England. The monument is located in south Dorset, one kilometre to the south-west of Dorchester (fig. 2) (Smith *et al.* 1997, fig. 1). When the site was excavated by Mortimer Wheeler in 1943, he uncovered a great number of burials, 86 of which were located at the eastern section of the hillfort and ramparts (Redfern 2011: 115). Wheeler (1943) divided the human remains from Maiden Castle into four categories, the focus here will be on one of those categories: the remains found buried in what Wheeler termed the 'war cemetery' (fig. 3). Several of the skeletons from this deposit showed traces of physical trauma comparable with intentional interpersonal violence (Morant and Goodman 1943; Sharples 1991a: 125; Redfern 2011). From his interpretation of the evidence, Wheeler (1943) created a dramatic narrative in which Maiden Castle was attacked and sacked by Vespasian's Second Augustan legion on their westward advance through Britain (Sharples 1991a: 124-125).

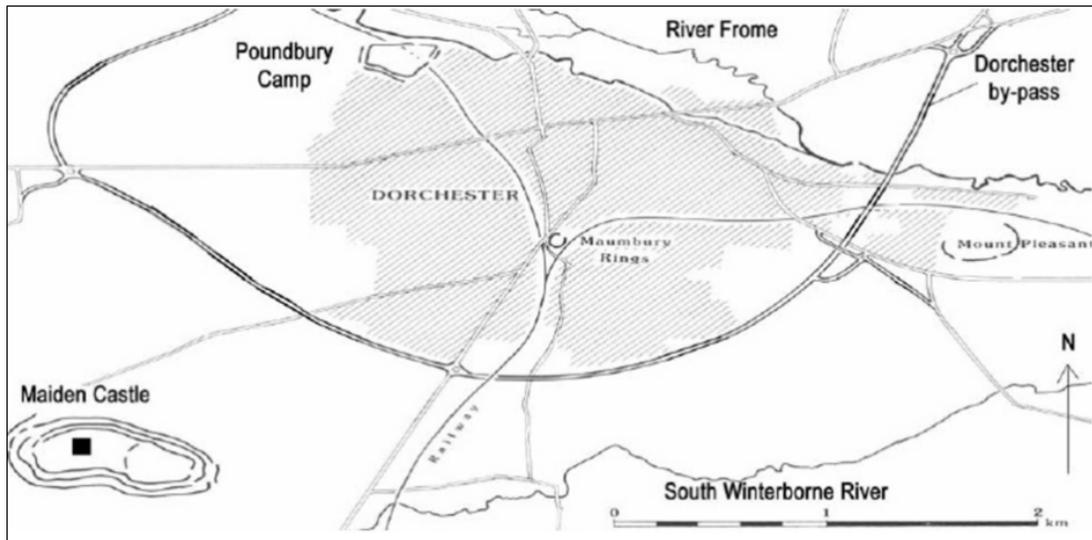


Figure 2: Map showing the location of Maiden Castle hillfort in Dorset (Smith *et al* 1997: fig. 1).

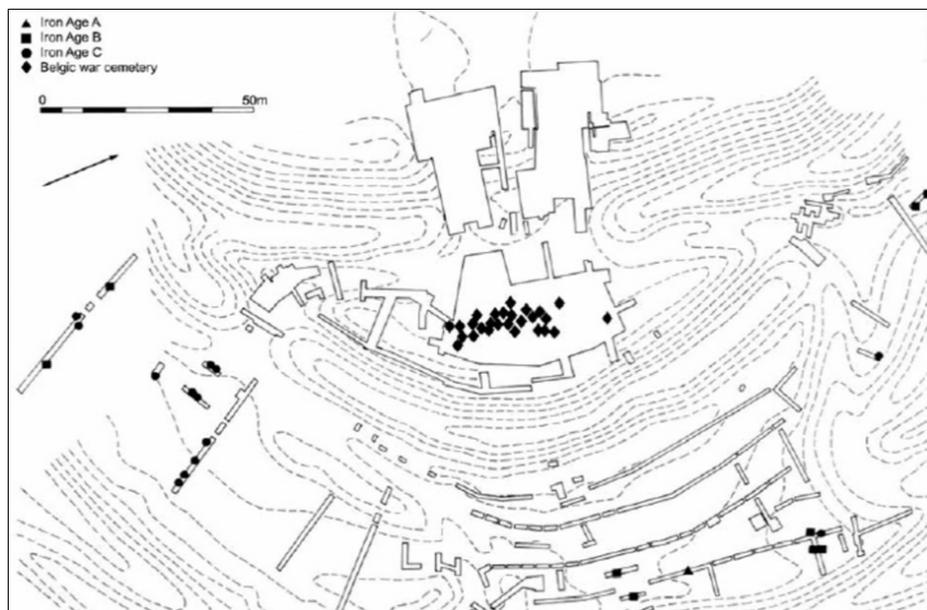


Figure 3: Plan of Maiden Castle east entrance showing distribution of burials (Sharples 1991a: fig. 90).

Sharples (1991a,b) first raised doubts regarding Wheeler's (1943) interpretation of the 'war cemetery'. He claimed that trauma directly related to violent deaths could be observed on less than half (14 out of 52) of the individuals (Sharples 1991a). However, later work by Knüsel (2005) concluded the figure was most probably slightly higher, though still not as prevalent as Wheeler originally claimed. The most recent re-appraisal of the skeletal evidence, undertaken by Redfern (2011), stated that remains from the 'war cemetery' had the highest occurrence

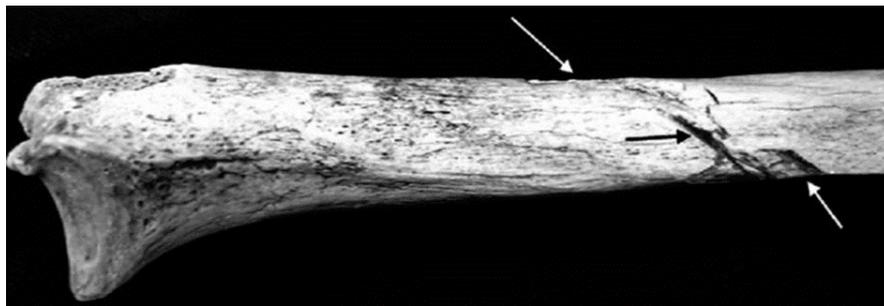
(87.5%) of trauma present on any group of individuals recovered from Maiden Castle. Table 2 shows the results of the osteoarchaeological re-analysis by Redfern (2011: 126). The table shows the percentage of perimortem injuries observed on a range of human bones from both male and female skeletons. Of the individuals buried in the ‘war cemetery,’ a few stand out as showing particularly violent deaths associated with warfare. An adult male located in grave P12 displayed some of the worst injuries: five incidents of sharp force trauma to the cranium (fig. 4) as well as fractures, two projectile wounds and further weapon injuries to the body (Redfern 2011: 125). The skeleton of another male from grave P27 displayed evidence of sharp force injuries to the posterior of the left radius and ulna (fig. 5). This type of trauma on the location of the lower arm suggests the individual was attempting to block his head from a bladed attack (Kimmerle and Baraybar 2008: 173; Resnick 2002: 2831). Two perimortem injuries to the individual’s skull perhaps show that their attempt failed (Redfern 2011: 126). Evidence for perimortem trauma caused by projectiles can also be seen on 13 other individuals from the ‘war cemetery’ (see table 2).

**Table 2: The percentage of skeletal trauma from the 'war cemetery'. Number of individuals shown in brackets (data from Redfern 2011).**

<b>Sex</b>	<b>Bone</b>	<b>PM Fracture</b>	<b>PM sharp-force weapon trauma</b>	<b>PM sharp projectile trauma</b>	<b>PM blunt projectile trauma</b>
<b>Male</b>	Cranium	33.3 (7)	38.1 (8)	19 (4)	14.3 (3)
	Mandible	14.3 (3)	14.3 (3)	-	-
	Vertebrae	-	-	19 (4)	-
	Ribs	19 (4)	19 (4)	-	-
	Pelvis	-	4.8 (1)	-	-
	Ulnae	9.5 (2)	4.8 (1)	-	-
	Radii	9.5 (2)	9.5 (2)	-	-
	Femora	9.5 (2)	4.8 (1)	-	-
<b>Female</b>	Cranium	60 (6)	20 (2)	-	20 (2)
	Ribs	-	10 (1)	-	-
	Radii	-	10 (1)	-	-
	Tibiae	10 (1)	10 (1)	-	-
	Fibulae	-	10 (1)	-	-



**Figure 4: Cranium of adult male (P12) which has five sharp force weapon injuries (Redfern 2011: 128).**



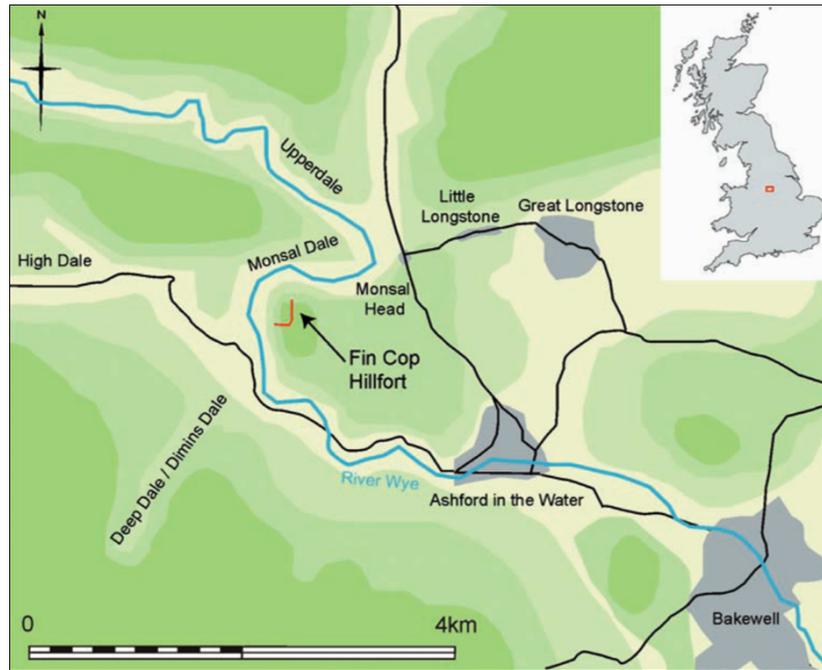
**Figure 5: Sharp force weapon injury on the left radius of an adult male (P27) (Redfern 2011: 129).**

In this instance the skeletal remains from the ‘war cemetery’ of Maiden Castle provide sufficient evidence that those buried there died as the result of violence during conflict(s). Nevertheless, evidence of trauma and violent deaths alone is not enough to support Wheeler’s (1943) interpretation of a ferocious battle. Problems remain when contextual evidence is used alongside the osteoarchaeological evidence. Firstly, the number of remains recovered from the ‘war cemetery’ were comparatively small when considered against the sheer size and importance of Maiden Castle (Harding 2016: 191). Secondly, the bodies were all carefully placed in a formal cemetery, some with grave goods, which suggests that the bodies were likely moved to this location following death elsewhere. One individual from the ‘war cemetery’ showed evidence of trauma inflicted by a Roman ballista point which does provide evidence that conflict occurred at least once between the Roman army and an individual buried at the

cemetery. However, defining when and where this conflict took place is more problematic. The current osteoarchaeological evidence partially supports Wheeler's (1943) interpretation regarding violent deaths and conflict. In one instance it also supports the idea of conflict with the Roman army. The lack of any haphazard mass graves arguably refutes Wheeler's suggestion that the warriors died defending the eastern entrance from a Roman attack. Though his interpretation cannot be fully discounted, the deposition of individuals in the 'war cemetery' are more indicative of a formal cemetery (Sharples 1991a: 125; Redfern 2011: 133).

#### *Site of a massacre: Fin Cop hillfort*

Though the two can often be relatable, violence from warfare and massacres are not always directly linked. 'Massacre' is defined by the Oxford Dictionary of English as "an indiscriminate and brutal slaughter of many people" (Stevenson 2010). Of course, this description can be aptly applied to battles and warfare. However, it can also apply to non-combatants (e.g. young or elderly civilians) who, for example, could be slaughtered post-battle during the destruction of their settlement. A large number of massacre or desecration deposits from the Iron Age date to the later part of the period and, as with Maiden Castle, have frequently been attributed to the advance of the Roman army (Kenyon 1953; Alcock 1972; Barrett *et al.* 2000; Hilts 2013). At Sutton Walls, Herefordshire (Kenyon 1953), twenty-four individuals were recovered from a ditch by the west entrance. A number of these individuals displayed perimortem trauma while six had been decapitated (Harding 2016: 192). Similarly, the massacre at the site of Cadbury Castle, Somerset (Alcock 1972; Barrett *et al.* 2000) has been painted as one of the most violent episodes from the Iron Age in England. Here the evidence of trauma on the skeletal remains is supported by the recovery of numerous weapons, both of native and Roman manufacture. Evidence at these sites are fairly conclusive: a large number of individuals met a violent end. Identifying and interpreting the result of prehistoric massacres, however, is not always so clear.



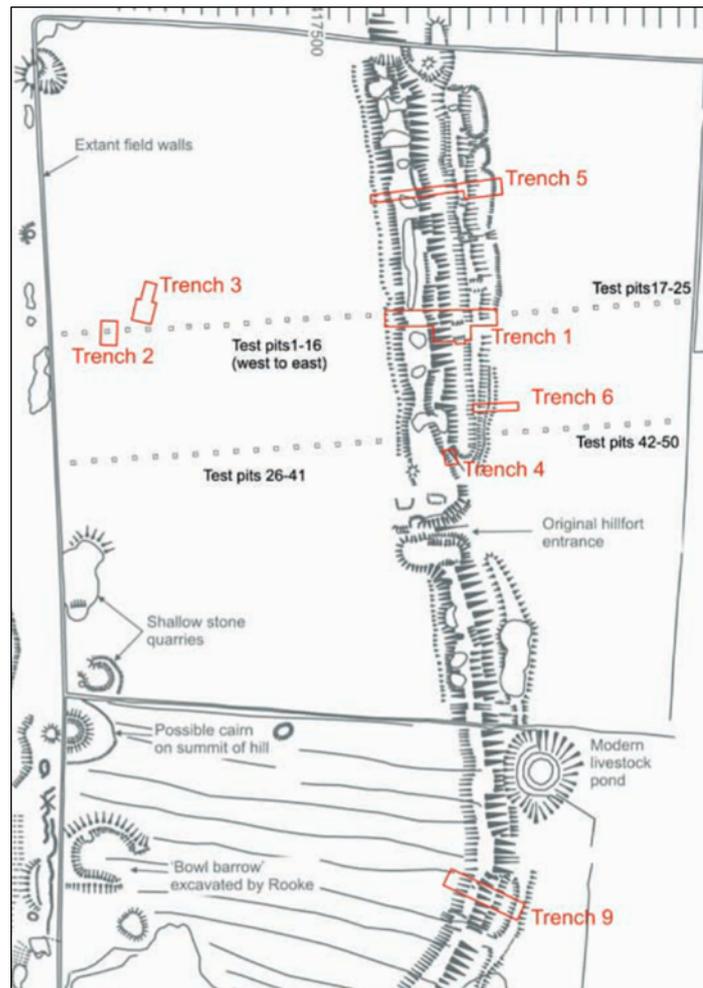
**Figure 6: Map showing the location of Fin Cop hillfort (Waddington *et al* 2012: 160).**

More recent excavations of the hillfort at Fin Cop, Derbyshire (fig. 6) (Waddington *et al.* 2012) has revealed evidence for a possible massacre that dates to the Middle Iron Age. Remains of nine individuals were recovered during the 2009 and 2010 excavation seasons (table 3). Subsequent excavation in 2012 revealed a further six individuals (not included in table 3). All the human remains at Fin Cop hillfort were located in the main rock-cut ditch, trenches 1, 5 and 9 (fig. 7). Table 3 does not include the information for the six individuals recovered in 2012 as they have not yet been fully analysed. However, they comprise two adults, two neonates and two pre-term foetuses (Waddington *et al.* 2012: 215, 230-231). It has not been possible to determine the sex of the two adults although the presence of pre-term foetuses suggests at least one female. Unlike many of the popular interpretations for Roman massacre in the Late Iron Age, at Fin Cop the skeletal evidence for violent death was non-existent. As previously mentioned, this does not necessarily mean they did not have a violent death, the trauma may have only occurred to the soft tissue. Mapplethorpe (2012) did note a number of perimortem injuries to some individuals though. A probable female adult (skeleton 1) from trench 1 shows areas of inflammation localised to her “clavicle, ribs, left tibia and right fibula” (Waddington *et al.* 2012: 215). As these had not healed, they represent bruising that was caused at or very soon after death. Evidence for perimortem sharp force trauma was only observed on skeletons 3 and 8. Skeleton 3 was a probable female recovered from trench 1; a cut mark can

be seen medially on her left cuneiform (fig. 8) indicating that she was cut on the foot around the time of death. Skeleton 8 of unknown sex (trench 5) had a small cut on their skull surrounded by woven bone. The fracture was in the very early stages of repair and was not related to the cause of death, but happened shortly before (Waddington *et al.* 2012: 216).

**Table 3: Human remains from 2009 and 2010 excavations with estimated age and sex (data from Waddington *et al* 2012: 215).**

<b>Individual</b>	<b>% Skeleton present</b>	<b>Estimated age</b>	<b>Estimated sex</b>	<b>Trauma observed</b>
Skeleton 1	38	25 – 35 years	Probably female	Peri-mortem bruising
Skeleton 2	<1	Neonate or young infant		Cut mark on left medial cuneiform, peri-mortem bruising
Skeleton 3	50	20 – 25 years	Female	
Skeleton 4	1	Perinate or possibly neonate		
Skeleton 5	12	20 – 30 years		
Skeleton 6(1) and 6(2)	20	Neonates or possibly perinates		
Skeleton 7	7	2 years and 8 months		
Skeleton 8	60	15 -16 years		Various ante-mortem injuries at different stages of healing



**Figure 7: Site plan showing location of trenches 1, 5 and 9, where the human remains were recovered (Waddington *et al* 2012: 163).**

Upon careful consideration of the skeletal remains as well as other archaeological evidence Waddington *et al.* (2012: 226) concluded the human remains from the ditch at Fin Cop were most likely victims of a massacre. The excavators believed that the hillfort was deliberately dismantled and destroyed based upon the quantity of stone debris in the ditch. To an extent, the current osteoarchaeological evidence supports this interpretation—the adults successfully whose sex could be identified are female, while the remaining individuals ranged from foetal to adolescent. This supports the idea that this was a massacre of specific members of the community, and those who fought died elsewhere during battle, or may have been disposed of in an area that has not yet been excavated. Skeletons 1 and 3 both showed some signs of perimortem bruising (Waddington *et al.* 2012: 215-216) which could be consistent with being thrown from the ramparts, either alive or shortly after death. Yet there is a complete

lack of similar trauma on the other individuals which does not support this proposition. Overall, it is not possible from the osteological evidence to fully support a massacre interpretation, though it is plausible that the individuals died from soft tissue injuries that left no evidence on their skeletons. Furthermore, alternative explanations to that of a massacre must be considered. Perhaps these individuals represent sacrificial killings, as argued for a number of similar ‘massacre deposits’ at Ham Hill, South Cadbury and Maiden Castle (Hingley 2006: 226).

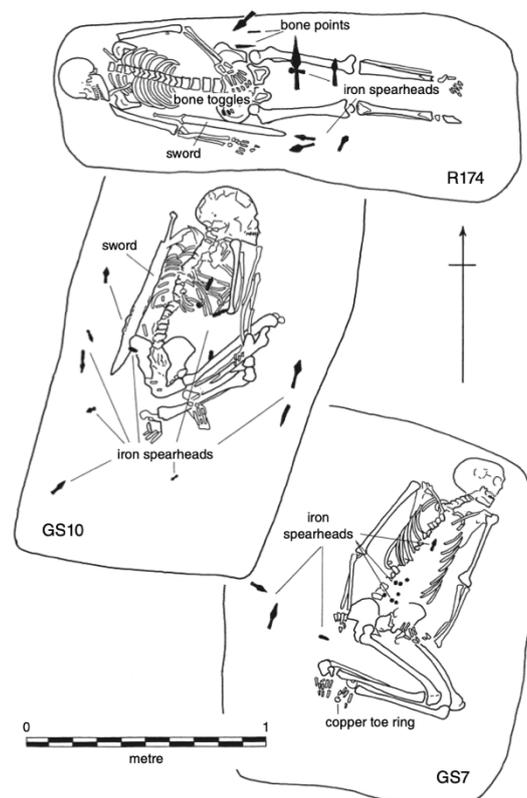


**Figure 8: Sharp force trauma injury of left cuneiform of skeleton 3 (Waddington *et al* 2012: 217).**

### **Violent death and ritual: East Yorkshire spear ritual**

Many rituals in Iron Age Britain involved violence and sacrifice towards both humans and animals. One of the key difficulties with identifying and interpreting ritual violence is that often it can appear similar to ordinary regional burial practices. One ritual practice that stands out is the extraordinary East Yorkshire funerary spear ritual. This violent ritual is restricted to just a few sites in eastern Yorkshire and involved spearing the individual(s) multiple times (fig. 9) (Harding 2016: 204). Interestingly, though it mostly appears to have been corpses who received this treatment, a number of individuals show evidence for perimortem spear injuries. These will be the focus of this section. At a cemetery in Rudston, the burials of three adult males (R94, R140, and R152) were found with spearheads embedded in their skeletons (Stead 1991: 136). The position of the spears within the bodies of these individuals strongly suggests that the spearing injuries were likely the cause of death. Originally Stead (1991: 136) thought that the cause of these individual’s deaths were accidents, most probably related to hunting. But perhaps they reveal that the spearing ritual was not exclusively a postmortem rite. Burial

R140, who appeared to have been attacked from the front, had a spearhead embedded in his right pubic bone (Giles 2012: 105). Though this could have been caused postmortem, Stead (1991: 137) noted that the spear was twisted in the pelvis with such a downward angle that it was unlikely this injury could have been caused by throwing a spear from the top of the grave (ibid). This evidence could suggest that the injury was perhaps caused perimortem, or at least was inflicted on the body before it was placed within the grave. The other two cases, burials R94 and R152, had been speared from behind. R94, a young adult male, had an iron spearhead thrust in his back just to the right side of his spine (Stead 1991: 137). While the burial of adult male R152 was found laid flat on his back—likewise, the spear had penetrated him from behind (fig. 10). In this case, the spear had entered on the left-hand side of the body and would have likely penetrated his heart (ibid). All three of these injuries are perimortem, suggesting that the spearing was likely the cause of death. However, the injuries may have also occurred post-mortem, prior to deposition. It cannot be definitively proven either way, but violent deaths here are a real possibility.



**Figure 9: Examples of the East Yorkshire Spear Ritual (Harding 2019: fig. 7.5)**



**Figure 10: Burial 152 of an adult male from Rudston. Arrow indicates the location of the spearhead (Giles 2012: 106).**

The East Yorkshire spear rituals have been open to various interpretations since their discovery. One of the most common interpretations for this remarkable burial rite is related to a type of ‘ghost killing’. The theory suggests this ritual would have involved the community coming together to ensure bad spirits were neutralised postmortem, before the individual was buried (Harding 2016: 206). At Rudston, this interpretation is challenged by the presence of three individuals who seemingly met a violent death from speared weapons, possibly as a direct cause of the spear ritual. The lack of healing on the skeletal remains proves that none of these injuries were antemortem, whilst the fracture patterns seen on the bones rules them out as being postmortem. Unfortunately, though they can be placed in the perimortem timeframe, current osteoarchaeological techniques cannot confirm if the spear ritual was the actual cause of their death or whether it took place shortly after whilst the bones still contained collagen. The location of the injuries does suggest that all three individuals were subject to violent trauma before being interred. If indeed the spearing was the cause of one or all of their deaths, it is still unclear why it was necessary to leave the spears embedded in the bodies for their burial

(Harding 2016: 205). Rudston could possibly represent a localised practice which was derived from the wider region's spear ritual, where living individuals were sacrificed in a similar manner. Alternatively, these individuals could have been warriors who were killed in conflict. Perhaps to be killed or treated after death in this manner was considered a mark of honour for a warrior, though we can only speculate as to their reasons for such a practice. The osteoarchaeology suggests that violent death could have been caused by the spear ritual in some instances, rather than being just a postmortem practice as previously thought. A re-examination of the skeletal evidence for other individuals who received the spear rite could lead to more confident conclusions.

### **Judicial violence: West Lane, Kemble**

Given the abundance of documented evidence by Roman authors for head-hunting and their depiction of constant violence in Celtic-speaking communities, it is surprising how little physical evidence there is for violent judicial killings during the Iron Age in Britain (Harding 2016: 198). From an osteoarchaeological approach, unless certain execution techniques (e.g. beheading) were used, it is unlikely that most violent judicial deaths (e.g. throat slit or hanging) would leave traces on skeletal remains (while the hyoid bone can be damaged in some cases, it is often not recovered due to its fragility). Therefore, interpretations of violent judicial killings are largely based on contextual information such as the location of the body, how it was buried and whether grave goods were present etc. At West Lane, Kemble in Gloucestershire (fig. 11) (King *et al.* 1996) three Iron Age inhumations were uncovered. One of these, Burial 21 (fig. 12), was of a young man aged 17-25 years old (King *et al.* 1996: 19). As opposed to the normative local burial rite for this time (crouched on side), burial 21 was found kneeling face down with his torso resting on his upper legs (King *et al.* 1996: 19). The left arm was placed behind his back and the bones of both his hands were found in a pile muddled with the bones of his feet as if the wrists and ankles had been tied together at the time of death. No evidence of violent trauma could be observed on the skeleton, but the likelihood is that he suffered a soft tissue injury which resulted in death. The remains were recovered from a cut that was made in a filled pit, indicating that this was clearly not a typical grave. A large, heavy limestone slab was used to seal the body in the pit (King *et al.* 1996: 22).

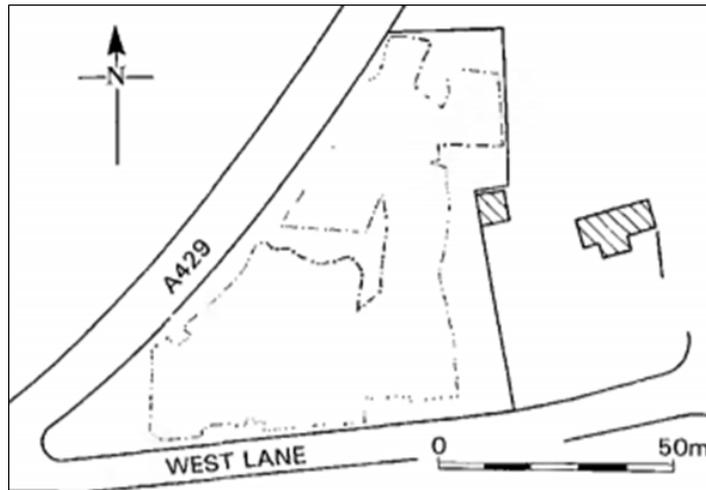


Figure 12: Location of excavation area (outlined with dashes) for West Lane, Kemble (King *et al* 1996: 20).

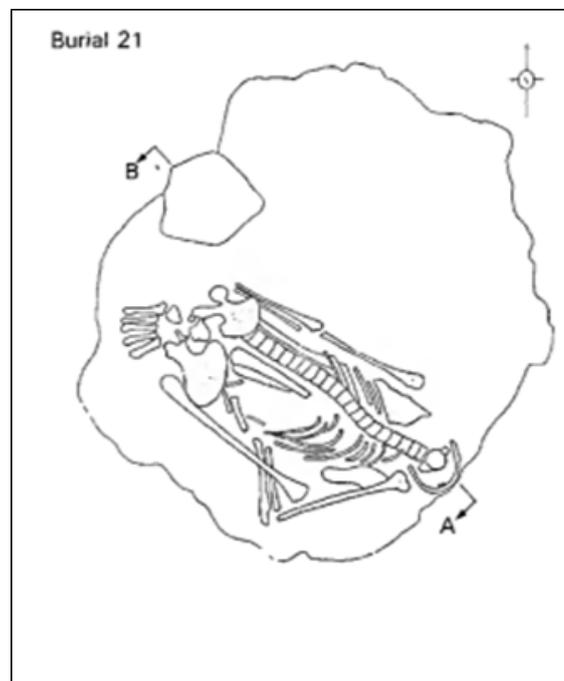


Figure 11: Layout of burial 21 from West Lane, Kemble (King *et al* 1996: 21).

Current interpretations for the death of burial 21 are as the result of judicial, or possibly ritual violence (King *et al.* 1996: 22). Osteoarchaeological evidence alone is unable to prove one over the other, though the mixed bones from the hands and feet supports the wrists and ankles being bound as well as the probability of a violent death. When the remains are examined within the wider context of their disposal, the evidence becomes more suggestive of an individual whose death was a result of judicial violence. The binding of the hands and feet

suggests the man was restrained at the time of his death. Furthermore, the careless placement of the body, face down in the pit, could be considered a shameful or humiliating position for an individual to be placed in. The ‘grave’ cut was made in an already full pit which also suggests that burial 21 was not afforded a typical grave or normative regular burial rites (King *et al.* 1996: 22). The grave cut was also sealed with a large, heavy limestone slab. This, along with the bodies posture could suggest a “desire to keep it firmly suppressed” (Harding 2016: 201). Finally, the location of the burial was not in, nor near to, any Iron Age settlement. However, more extensive excavations would be needed to determine whether there was a settlement within the nearby vicinity and if so, how far away the burials were from the site. Harding (1974: 113) has argued that burials isolated from the community are atypical for the Iron Age in England, suggesting that individuals buried in this manner are most likely criminals or social outcasts. If this is the case, the other two burials could also be considered victims of judicial violence. Though a firm conclusion cannot be made using osteoarchaeological analysis alone, its use in identifying the likely bound wrists and ankles has allowed a narrative to be built in conjunction with other contextual information. Therefore, it can support, to a degree, that burial 21 met a violent end as a result of a judicial killing and as further punishment was deliberately denied the ordinary funeral traditions.

## **Conclusions**

It is apparent that the application of osteoarchaeological analysis can significantly contribute to our ability to identify and interpret violent deaths at a range of different burial contexts in Iron Age Britain. Using osteological techniques allows for specific types of trauma (e.g. sharp force) to be identified on individuals. Furthermore, it enables us to describe the time such injuries were sustained. However, due to the fact that bone retains collagen for a period of time after death, it is not always possible to confirm if an injury was the cause of death or whether it was caused by the treatment of the body postmortem. Therefore, despite these contributions, it is still of the utmost importance that osteoarchaeology is used alongside all other available contextual evidence and analytical techniques. This will ensure the most detailed interpretations of violent death, or not, are presented. Osteoarchaeological analysis can be used to identify and interpret violent deaths in Iron Age England. Yet as this paper has shown, there is a tendency for archaeologists to exaggerate osteological, and indeed other evidence, in order to depict a more appealing narrative.

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