



An Unusual Roman Fettered Burial from Great Casterton, Rutland

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ABSTRACT

In 2015, an unusual burial was uncovered during construction works at Great Casterton, Rutland. A male adult human skeleton, secured at the ankles with a pair of iron fetters and a padlock, was buried in a probable ditch. Iron hobnails were present around the feet of the individual. A radiocarbon date (AMS) from the burial produced a date of A.D. 226–427 with 95.4 per cent probability. This example appears to be the first definitive archaeologically excavated instance of an individual buried in this manner in Roman Britain. The character of the burial may imply that this was a slave, although other possibilities are also considered, as are the wider social and symbolic implications of the inclusion of shackles in a burial.

Keywords: burial; shackles; slavery; osteobiography

INTRODUCTION

That slavery existed in the Roman Empire is well attested,¹ and both slaves and former slaves feature in the epigraphic record.² Yet little archaeological work has been done on the topic in Britain,³ and identifying enslaved individuals in the archaeological record remains challenging.⁴ Many manacles, fetters and chains have been found across Britain and the rest of the Empire. However, few examples exist of skeletal remains found with surviving shackles *in situ*, and until recently there were no definitive instances from Roman Britain.

This article describes the discovery and analysis of a skeleton found in Great Casterton, Rutland, that had a set of iron fetters and a padlock fastened around the ankles. The osteological evidence is discussed along with a description of the iron artefacts, their form and

¹ Fitzgerald 2000; Thompson 2003; Bradley and Cartledge 2011; George 2013a.

² See Brunn 2014 for a general survey; Birley 1980, 145–50 on Britain, though now rather out of date. More recent discoveries include writing-tablets from Vindolanda recording food purchases and correspondence between slaves (Bowman and Thomas 1994, nos 301, 302, 347), tablets detailing slave sales and their commercial activity at London (Tomlin 2003; 2016, 54), the tombstone of a slave boy from Gloucester (Henig and Tomlin 2008) and a curse tablet from Leicester (Tomlin 2008) that mentions the theft of a cloak from ‘the slave quarters’, listing suspects who are perhaps slaves within the *familia urbana* of a wealthy household.

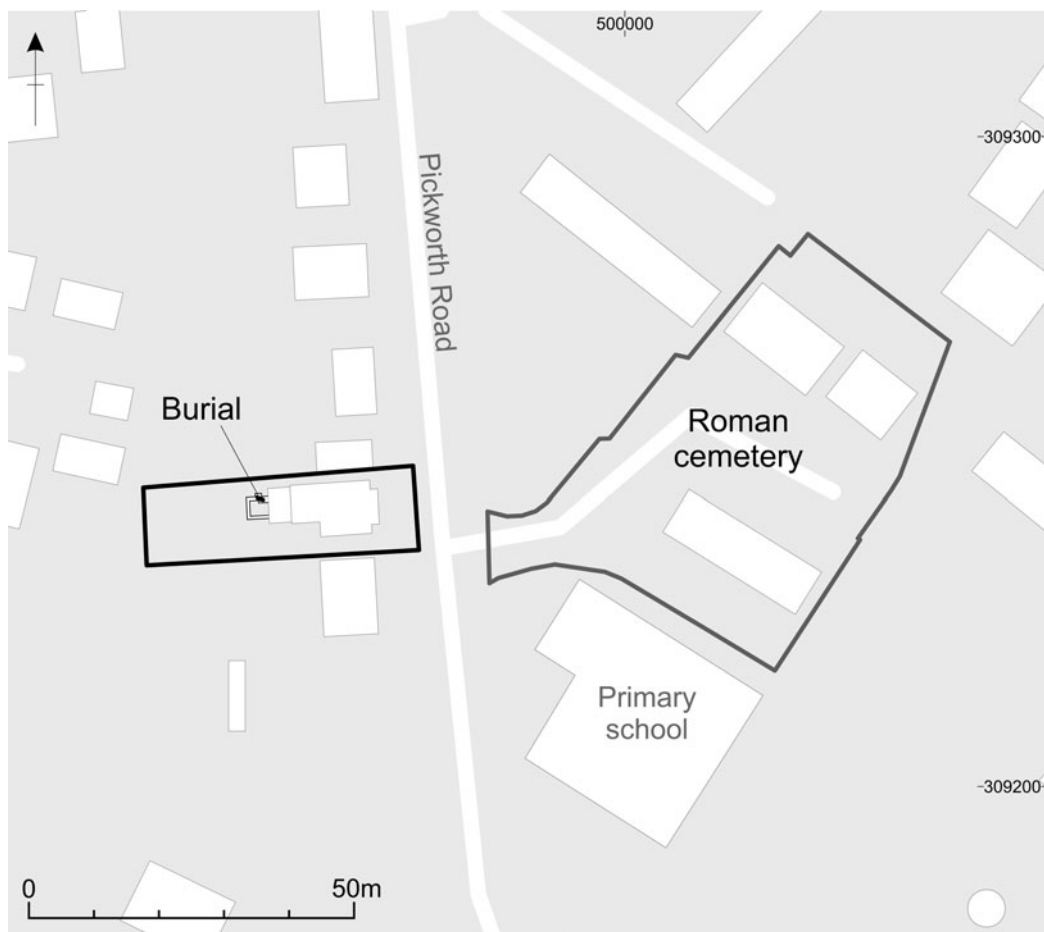
³ See Samson 1999 and Webster 2005 for this point. Webster 2005 and Redfern 2018 are notable exceptions.

⁴ For example, Webster 2005; George 2011; Joshel and Peterson 2014, 4–8; Revell 2016, 96–100; Trimble 2016, 448–9.

function. Recent work on the identification of enslaved individuals is considered to further understand the nature of the burial, its significance and its potential implications.

PROJECT BACKGROUND

The investigation area comprised part of a private garden in Great Casterton, Rutland (FIGS 1 and 2).⁵ An archaeological watching brief at the same property in 2013 had identified a pit of probable Roman date overlain by a plough soil containing pottery sherds dated to the twelfth and fourteenth centuries.⁶ Subsequently, a new planning application was granted for the construction of a conservatory to the rear of the property. This was granted without further archaeological requirements, as the site, following the results of the earlier watching brief, was not expected to produce any significant finds.



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FIG. 1. Site location plan.

⁵ NGR SK 99953 09244.

⁶ Hall 2013.

In June 2015 human skeletal remains were encountered by the developers whilst excavating foundation trenches for the conservatory using a mini 360° mechanical excavator. This caused construction work to cease. Leicestershire police removed a small quantity of human bone for analysis and the skeleton was temporarily covered with a body bag overlain by a protective layer of earth. The bone sample was AMS radiocarbon dated, and this gave a Roman era date between the early third and early fifth centuries A.D.⁷

An archaeological excavation was undertaken by Museum of London Archaeology (MOLA) later in 2015, which included widening one of the foundation trenches to fully expose the skeletal remains (FIGS 2 and 3). As the lower parts of the legs were excavated, it became clear that they were bound together by iron fetters secured with a padlock (FIG. 4). A full client report on the burial has been produced, which contains the full detailed specialist report, discussion of the skeletal remains and assessment of the iron artefacts.⁸

Broadly contemporary burials, as well as pottery kilns and corn-driers, were found opposite the property on the eastern side of Pickworth Road during excavations in 1959 and 2004/05.⁹ The latter excavation revealed the north-west corner of a third- to fourth-century inhumation cemetery, which appears to have been formally planned with the graves arranged in rows. The cemetery contained 133 graves, mostly aligned north-east–south-west with the heads orientated to the south-west. Of the 133 graves, 32 contained fragments of iron nails, which may indicate the presence of wooden coffins. A small number contained grave goods. The burial ground lay close to the course of Ermine Street and was located to the west of a Claudian auxiliary fort, established c. A.D. 44, and to the north of the small walled Roman town of Great Casterton.¹⁰

The skeleton excavated by MOLA lay slightly on its right side, head orientated to the north-west, with the legs partially flexed and the left arm flexed and elevated at an angle to the rest of the skeleton. The right arm was extended and lay by the hip (FIGS 2 and 3). The ankles were bound together by iron fetters and a small group of five complete and five incomplete hobnails, probably from nailed footwear, were present around the feet. The surviving remains were in a good state of preservation, though many bones were fragmented. The skull and several cervical (neck) vertebrae were missing, and it is likely that the remains had been truncated during the installation of modern services, the cut of which was present immediately adjacent to the skeleton (FIG. 2). The possibility remains that the skull had been removed prior to burial, though the absence of many of the vertebrae of the neck and the poor preservation of those that remained meant that no evidence for decapitation or post-mortem removal of the head could be observed.¹¹ No evidence for the presence of a coffin of any sort was encountered.

The position of the body in the ground gives some clue as to the manner of deposition. The body does not appear to have been placed with any consideration into a formal grave. Rather, the awkward position of the left arm, which rested on a slope of natural substrate, suggests that the individual was buried within a pre-existing ditch (FIGS 2 and 3). The *in-situ* positions of some of the smaller bones of the hands and feet indicate that it is likely that this was a primary burial rather than a secondary deposit (FIGS 3 and 4).¹² No significant movement of any of these smaller bones was observed, nor had the left arm fallen down the slope of the ditch to join the ribs and vertebrae, which may have been expected

⁷ Cook 2015: A.D. 226–427 at 95 per cent confidence, SUERC-62058 (on behalf of Alecto Forensics).

⁸ Chincock and Sharman 2017. Once authorised by the County Archaeologist, this will be available through the Archaeology Data Service (ADS) website.

⁹ Corder 1961, 50; Grassam and McConnell 2005. The pottery kilns, assigned to Phase 2 of activity on that site, have been broadly dated to the mid- to late second to early third century A.D. Both the burials and the corn-driers, assigned to Phase 4, are broadly contemporary and have been dated to the mid- to late third to fourth century A.D.

¹⁰ Historic Environment nos MLE 5294 and MLE 5293. Excavations during the 1950s and 1960s investigated the defences, gates and several buildings, including the barracks and *praetorium* (Todd 1968).

¹¹ The loss of teeth precludes the analysis of mobility isotopes. Furthermore, lack of available funding currently prevents any stable isotope analysis.

¹² This follows the application of archaeoanthatology, which seeks to determine whether a burial is a primary deposit based on, amongst other things, the level of articulation between key areas of the skeleton. The joints of the

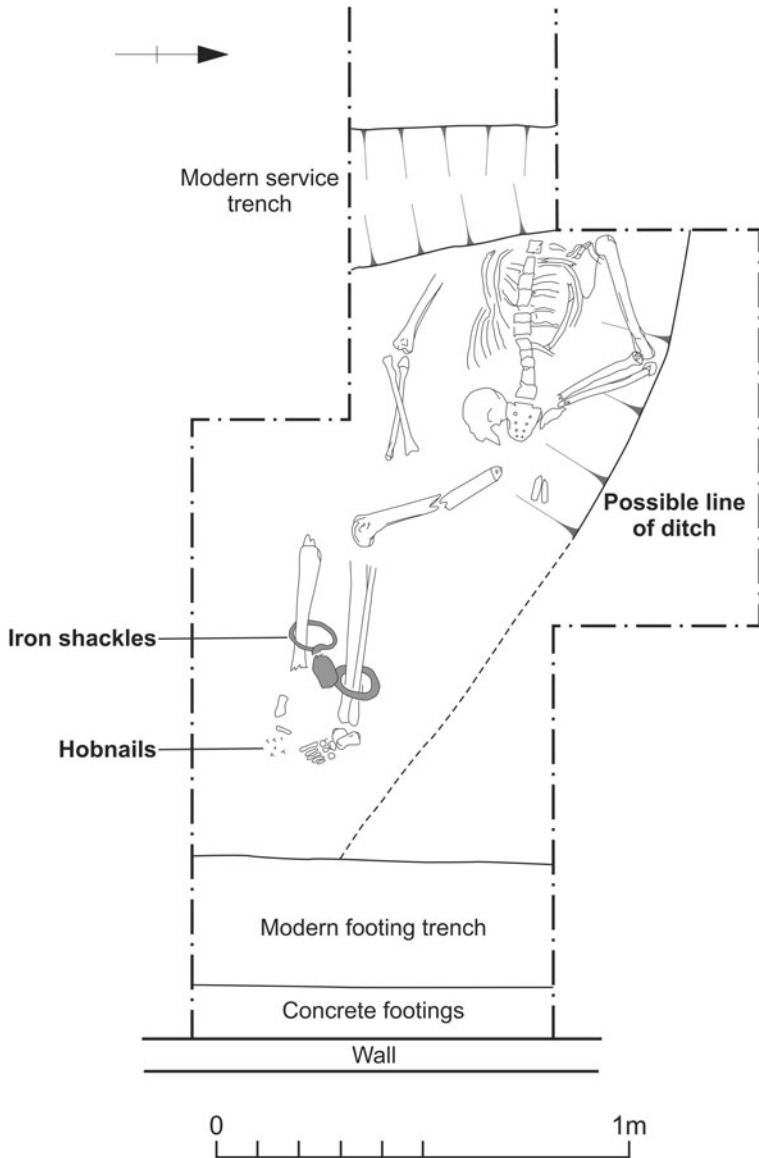


FIG. 2. Plan of burial.

had the body been left to decompose in the open for a significant length of time,¹³ and no gnaw marks indicative of scavenger activity were identified on any of the bones.

wrist and hand as well as the distal part of the foot break down more rapidly, and close articulation of these elements may suggest that the body was buried soon after death (Duday 2009, 27).

¹³ Conversely, a secondary burial or secondary deposit is often identified by the lack of anatomical connections, the absence of skeletal elements and/or the presence of marks on the bone consistent with de-fleshing. None of these criteria can be considered conclusive, as each one could, in specific circumstances, be seen in primary burials also. The identification of secondary burial is not often made with certainty, and distinguishing between robbed-out



FIG. 3. Skeleton and iron fetters *in situ*, looking west.

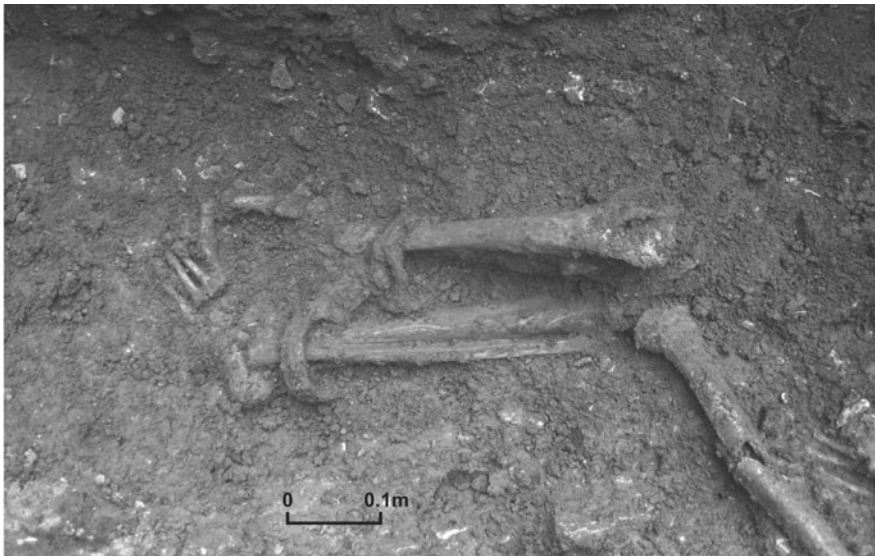


FIG. 4. Close-up of the lower legs showing iron fetters fastened around the ankles, looking south.

The overlying fill and its contents appear to be more characteristic of a ditch fill rather than the backfill of an isolated grave.¹⁴ It is possible that a shallow grave was excavated into a partially filled ditch, the fill of which may have contained animal bone, pottery sherds and other domestic detritus. Alternatively, the body, cast unceremoniously into an open ditch, may have been buried in haste using soil containing domestic waste brought from elsewhere. In such circumstances, it is particularly difficult to determine the precise sequence of events, and thus our understanding of the exact nature of the deposition is limited. A late Roman burial of a person in a prone position (face down) within a boundary ditch at Ashton Roman town in Northamptonshire poses similar restrictions in its interpretation.¹⁵ The pottery recovered from the fill comprises locally produced coarsewares and finewares in shell-gritted, greyware and colour-coated fabrics. Diagnostic sherds are represented by a single rim sherd and two body sherds from a wide-mouth jar in Nene Valley Colour Coat, which dates to the fourth century,¹⁶ and a rim sherd from a large storage jar in a shell-gritted fabric.

No other archaeological features were recorded within the foundation trenches for the conservatory.

THE SKELETON

The skeleton was subjected to full osteological analysis,¹⁷ although the absence of key elements, such as the skull, and the fragmentary state of the bones have compromised some data, such as those related to determining dental health and/or observing the presence or absence of non-specific developmental stress indicators.

Observations of the morphological characteristics of the pelvis, supplemented with measurements of the femoral circumference and femoral head diameter, have determined the remains to be most likely those of a male individual.¹⁸ Degenerative changes observed in the pelvis and to the sternal rib ends indicate that the male was aged between 26 and 35 years at the time of death.¹⁹ The estimated stature of 167.4–175.5 cm compares well with the average recorded stature for the period, which is given as 169 cm.²⁰

Periosteal new bone formation is present on the anterior part of the distal (ankles) and further lesions are present on the medial mid-shaft on both tibiae (FIGS 5 and 6). The lesions are characterised by well-healed areas of striated lamellar bone and are most clearly visible on the medial aspect of the tibial diaphyses. No periosteal lesions are present on the fibulae as might be expected if the wearing of fetters had caused the lesions on the tibiae. Lesions such as these are commonly observed in archaeological skeletal material and cannot be attributed, in isolation, to the wearing of fetters intermittently or for extended periods of time.²¹ Periosteal

primary burials and true secondary deposits is often impossible (Duday 2009, 90). Nevertheless, the burial at Great Casterton does not display any of these negative characteristics but does display some of the positive characteristics associated with primary burial.

¹⁴ The fill comprised friable mid-brown/grey silty clay, from which several fragments of animal bones and several sherds of pottery were recovered.

¹⁵ Stephen Parry (pers. comm.).

¹⁶ cf. Howe *et al.* 1980, 75, fig. 7.

¹⁷ This includes a full catalogue of the skeletal remains, estimation of biological sex and age, metrical and non-metric data as well as detailed descriptions for all pathological lesions (Chinnock and Sharman 2017).

¹⁸ Bass 1987, 219. Metrical data can be very useful in sex determination, though caution should be exercised, and they are generally only used in lieu of more sexually dimorphic elements, such as the skull and pelvis, when they are poorly preserved or absent (see Brickley and McKinley 2004, 24).

¹⁹ İşcan *et al.* 1984; Lovejoy *et al.* 1985.

²⁰ Roberts and Cox 2003, 163. Stature calculated using the only intact long bone: the left humerus.

²¹ Research on this topic has determined that 'periosteal new bone formation at any location is not uniquely diagnostic of any one pathological condition. Nor are the size, shape and form of periosteal new bone formation, as



FIG. 5. Periosteal new bone formation and iron corrosion on the right and left distal tibiae (scale 2cm).



FIG. 6. Periosteal new bone formation on the medial aspect of the right and left tibial diaphysis (scale 2cm).



FIG. 7. Bony spur on the right femur (scale 2cm).

lesions are frequently found on tibial diaphysis in archaeological populations, possibly a result of slower blood circulation and lack of soft tissue covering, which make the tibiae more vulnerable to inflammation and infection.²² Lesions such as these can be a response to specific and non-specific infections as well as a consequence of localised trauma. As such, the presence of isolated 'sub-periosteal bone deposits may be difficult or impossible to classify'.²³ Nevertheless, attempts have been made in the past to equate these kinds of lesions, based on their severity and/or location, with the wearing of shackles or other such restraints.²⁴ Overall, the distribution

seen by the macroscopic examination of the bone surface or by radiography, uniquely diagnostic of any pathological condition. Many pathological conditions may cause periosteal new bone formation with no means of clearly diagnosing its aetiology, and conversely, these same pathological conditions may be present without periosteal new bone formation occurring' (Weston 2008, 56).

²² Roberts 2000, 148; Weston 2008, 48.

²³ Roberts 2019, 289.

²⁴ Calvin Wells describes three individuals (Burial 6, elderly male; Burial 35, middle-aged female; Burial 38, middle-aged male) at Icklingham, Suffolk, who display lesions that he suggests may be indicative of the use of shackles. These lesions include osteitis and non-specific new bone formation at the wrists and ankles. Whilst acknowledging that periostitis and osteitis were relatively common occurrences during the Roman period, he suggests that the changes evident in Burial 6 were 'strongly suggestive of shackle lesions in which close fitting

of the lesions does not appear to be consistent with the position of the fetters and whilst a link between the well-healed lesions at the ankle and the wearing of fetters is possible, it cannot be proven. The most obvious lesions are those present on the medial part of the tibial mid-shaft, which, given their location, are unlikely to be related to the wearing of fetters.

A bony spur indicative of traumatic myositis ossificans is present on the left femur and may indicate a traumatic event, perhaps a fall or blow to the hip or thigh (FIG. 7). Alternatively, the injury may reflect excessive movement or a repetitive activity.²⁵ The spur is located at the insertion point for the *psaos major* and *iliacus* muscles, which work to flex the thigh at the hip joint.²⁶ Injuries such as these, in modern clinical literature, are most commonly observed in individuals who take part in heavy-contact sports.²⁷ This condition is often asymptomatic, although it can cause localised pain and tenderness, and, depending on location, it can affect joint function.

No other pathological lesions were observed on the skeleton.

THE IRON ANKLE FETTERS AND PADLOCK

The iron ankle fetters and padlock have been examined and described in their corroded state with the aid of X-rays (FIGS 8 and 9; see APPENDIX 1 for dimensions). Fetters were used to secure the ankles of the wearer, often joining them together, as demonstrated by the *in-situ* Great Casterton pair. This example belongs to Hugh Thompson's type Sombernon²⁸ and has close parallels from sites in France, Germany and Britain, several datable to the late Roman period.²⁹ The two penannular ankle hoops are C-sectioned, with a convex interior face and a central rib running around the concave exterior. As worn, the open sides of the two hoops are orientated inwards, facing one another, and the hoop terminals form closed loops at either side of the openings. Each terminal loop holds a free-pivoting iron ring with a sub-square section. The locked padlock has a square-sectioned rectangular case and a kinked loop that passes through and fastens together all four pivoting rings, thereby linking the two ankle hoops and locking them in place. The X-ray reveals additional strips that provide a frame/strengthening for the case and the end of the barb-spring bolt locked in place inside (FIG. 9).

DISCUSSION

THE FUNCTION OF SHACKLES AND THE IDENTITIES AND EXPERIENCES OF THEIR WEARERS

Roman iron shackles have been discussed and catalogued by Thompson, who saw them as evidence for the taking of military captives and for slavery.³⁰ Shackles appear to have played only a very limited role in the imprisonment of free people within a judicial context

metal shackles had been applied just above the wrists and ankles, leading to ulceration of the skin and subcutaneous tissues, with eventual infection and irritation of the periosteum and underlying bone' (Wells 1976, 113). Wells does go on to state that such an interpretation should not be accepted lightly, though he had never previously encountered a group of lesions such as these.

²⁵ Resnick and Niwayama 1988, 42–7; Ortnier 2003, 133–4.

²⁶ Stone and Stone 2000, 156–7.

²⁷ Lipscomb *et al.* 1976; Sokunbi *et al.* 2010. Contact sports such as American football feature heavily in the clinical literature and often involve the quadriceps muscles reflecting blows to the thigh by helmet, knee or foot.

²⁸ Thompson 1993, 113–17, 148; see also Manning 1985, 83–4, fig. 23, type 7; Henning 1992, 409, Abb. 2, types B – 1, B – 2 for related fetter classifications.

²⁹ Thompson 1993: France nos 55–6, 57 (fourth century A.D.), 58–63, (?)69, Germany no. 117b (third century A.D.), England nos 138, 141, 143 and the present find (third to fifth century AMS; fourth century A.D. pottery), Scotland no. 153b.

³⁰ Thompson 1993; cf. 2003, *passim*.

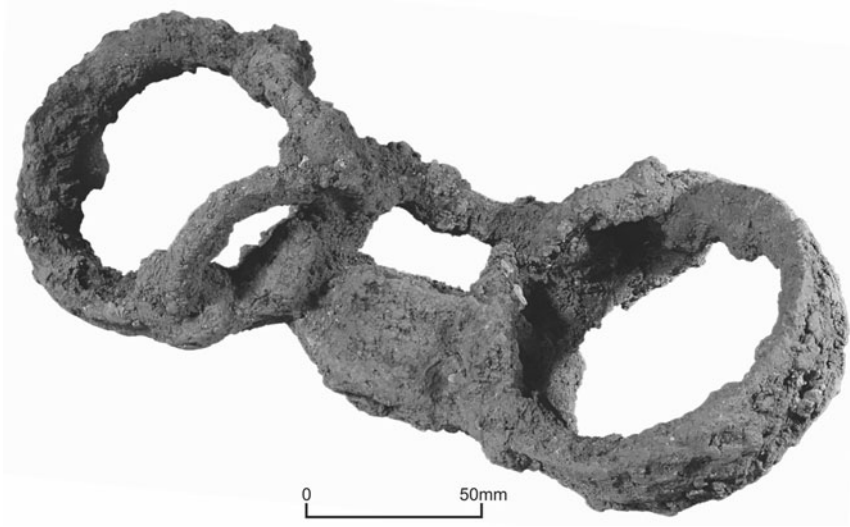


FIG. 8. Iron fetters with central padlock.

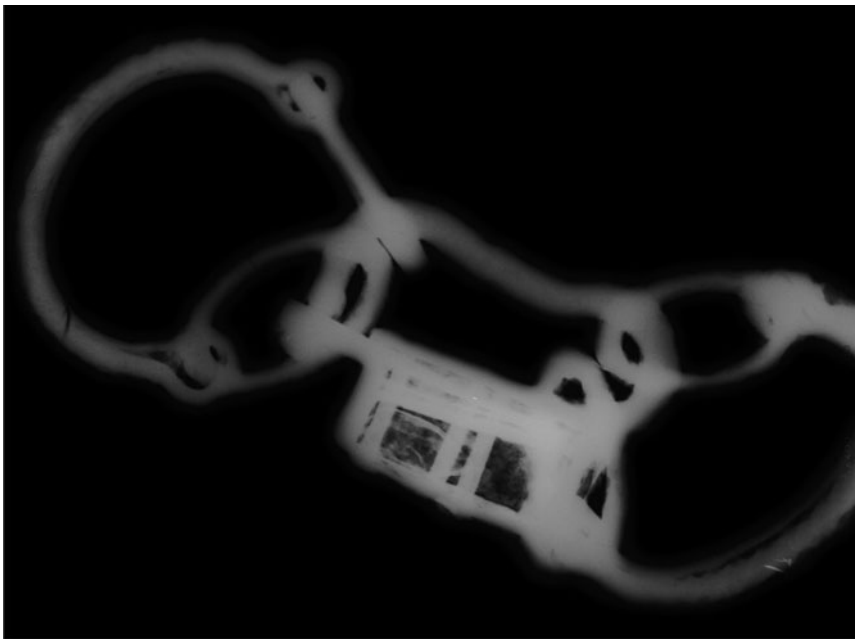


FIG. 9. X-ray of iron fetters and padlock showing the detail of the lock mechanism.

and late Roman law codes explicitly sought strictly to limit or even prevent the wearing of chains by prisoners.³¹ However, convicts condemned to hard labour could be chained,³² and fourth-century law states that runaway *coloni* (a population group obliged to pay tax to their landlord, and to both work and remain on the land) may be chained in the manner of slaves.³³ This complicates any hard distinction between legally enslaved individuals in shackles and others ‘subjected to coercive force in order to make them work’.³⁴ Osteologically, it may be possible to interpret an individual as having led a hard life full of strenuous physical activity. However, directly equating such an interpretation either with forced labour or with the legal status of enslavement is deeply problematic.

Different types of shackles may provide some clues as to the context of their use. Ankle fetters permitted some mobility, allowing wearers to move short distances and to use their hands, but made escape difficult by preventing them from running or travelling greater distances (see below). They are the most numerous form of shackle to be recovered and are found in a wide range of contexts. In Britain they are rare in the northern military frontier zone, but more strongly represented in lowland eastern England. Fetters also have a stronger rural emphasis to their distribution than other shackle types, such as neck collars and wrist manacles which are thought to be more strongly associated with the slave trade and the taking/transport of military captives.³⁵ This led Thompson to suggest a connection between ankle fetters and slaves working on agricultural land,³⁶ an interpretation that complements the frequent mention of chained slaves (*servi vinciti*) in an agricultural context by early Roman writers.³⁷ He acknowledges the difficulties of distinguishing between late Roman chained slaves and *coloni*.³⁸

Shackles were not worn by all slaves and served specific purposes. At a basic level they functioned as a means of restraint that controlled movement/action and could prevent the escape of potential runaways. These uses can be contrasted with language in a deed of sale found in London where the slave Fortunata is characterised as being in good health and unlikely to wander or runaway. Her supposed submission to the spatial constraints imposed by her owner is presented as evidence of her value as a good slave.³⁹ However, shackles were not simply a way of preventing the escape of more rebellious slaves, they were symbolically charged and violent tools of domination and humiliation, a fact that is clear in the writings and iconography of the ancient world.⁴⁰

Ulrike Roth has argued that the term *servi vinciti* refers not to slaves wearing chains per se, but to those slaves who had been punished through chaining.⁴¹ This status remained beyond the duration of imprisonment, counting as a defect to report in the future at the point of sale and as

³¹ See Hillner 2015, 124 for a summary.

³² Millar 1984.

³³ Hillner 2015, 151–2, 179. See the *Codex Theodosianus* of A.D. 332 (5.17.1.); Grant 1993 presents the translation as: ‘He with whom shall be found a *colonus* belonging to another shall have not merely to restore him to the estate on which this *colonus* was born, but shall be obliged also to pay the capitation for the time [passed with him] . . . As for the *coloni* who attempt to run away, it shall be allowed to load them with chains, in the manner of slaves.’ Samson 1989, 109 presents a slightly different wording: ‘that *coloni* who attempted to flee were to be chained and compelled like slaves to do the work of “free” men’. Cf. *Codex Justinianus* 11.53.1.

³⁴ Henning 2008, 37.

³⁵ Thompson 1993, 74–87, 99–109.

³⁶ Thompson 1993, 147–9, illus. 116; Roymans and Zandstra 2011, 170–1, table 1, fig. 5. The Great Casterton burial falls within the lowland agricultural zone discussed by Thompson, but comes from the edge of an extramural urban cemetery and so might be relatable to either the town or its hinterland.

³⁷ For example, Columella, *Rust.* 1.6.3, 1.9.4; Plin., *Ep.* 3.19.7; Mart., *Epigrams* 9.23. Such references are so commonplace that Bodel 2011, 330 suggests they may have become almost a rhetorical topos.

³⁸ Thompson 1993, 58, 149–50.

³⁹ Tomlin 2003; Revell 2016, 99. See Joshel and Peterson 2014, *passim* but especially 9–17 on ‘geographies of containment’ as imposed by masters and responded to by slaves.

⁴⁰ Aldhouse-Green 2004.

⁴¹ Roth 2011.

a permanent blight on the slave's value and prospects. Under early imperial Roman law these *servi vincti* could not achieve citizenship after manumission due to their state of moral disgrace (*turpitudō*), which was comparable to that of a convicted criminal or a gladiator.⁴²

The punitive aspect associated with the wearing of shackles features prominently in ancient sources,⁴³ and Nico Roymans and Marenne Zandstra suggest that shackles found on sites in rural Gaul were principally used in this way, arguing that they are too restrictive to have been worn routinely by slaves undertaking agrarian work in the fields.⁴⁴ However, fetters, which left the hands free, may have been popular in non-military contexts precisely because they allowed some forms of work to continue during punishment.⁴⁵ Literary references to chained miners are common and a fettered skeleton was found in the mine/quarry at Pellenz, Germany.⁴⁶ The works of Plautus and Apuleius describe mill workers wearing fetters at work.⁴⁷ Depictions of 'Cupid punished' show the god chained with ankle fetters, and, in some instances, working with a hoe.⁴⁸ This genre scene is not necessarily an accurate depiction of agricultural slavery, but it does imply a connection between shackles, labour and punishment. While idle custody would impinge on economic productivity, slaves working in shackles contributed to their owner's wealth, and their punishment may also have proved a visible deterrent to disobedient peers.⁴⁹

The Great Casterton burial allows us to explore the physical effects of fetters in more detail.⁵⁰ The fetters secured the man's lower legs together using a padlock. The same components could have been reconfigured to secure the wearer to a fixed position or to shackle multiple individuals together,⁵¹ but this arrangement allows for some limited individual mobility. Shackling the ankles together limits stride length, severely restricting speed and range of movement. The semi-rigid fetters pivot on a padlock loop a mere 97 mm long, and their outer edges are less than 250 mm apart (see APPENDIX 1). A normal step length for a man of this size is more than twice as long. This set-up would have made moving quickly impossible, produced a slow uncomfortable shuffling gait and created a sound as the iron components moved against one another. These effects would have externalised the wearer's unfree status to any viewer, imparting social stigma and preventing them from blending into society, especially during any escape attempt.⁵²

⁴² Bradley 1984, 92; Roth 2011, 75–6, 90.

⁴³ See Harper 2011, 197, n. 265 and Hillner 2015, 165–6, nn. 68, 73 for extensive lists of ancient sources. See Bradley 1984, 113–37 for the punishment of slaves generally.

⁴⁴ Roymans and Zandstra 2011, 172; cf. Roth 2011.

⁴⁵ Thompson 1993, 147–9.

⁴⁶ See Millar 1984 for chaining associated with labour; Thompson 1993, 141 for the Pellenz burial; 2003, 131–86 for slaves in mines and quarries generally. Not all miners were chained; see, e.g., probable trapped miners found in the mine at Saint Felix de Pallières (Thompson 2003, 176).

⁴⁷ Plaut., *Bacch.* 4.6.781; Apul., *Met.* 7.15, 9.12–13. William Fitzgerald notes that Plautus' comedies are saturated with references to punishment: 'Crucifixion, fetters, the mill and above all, the whip provide the material for countless jokes' (2000, 37).

⁴⁸ George 2013b, 161–2, figs 6.5–7.

⁴⁹ Hillner 2015, 165–72, 201.

⁵⁰ Aldhouse-Green 2004, 321 and Trimble 2016 explore some of the potential for an embodied approach to such objects. Cf. Cool 2015.

⁵¹ Single ankle fetters with a padlock (e.g. Thompson 1993, 115, fig 79, no. 64) or double ankle fetters could effectively immobilise an individual if attached to a fixed point using the padlock or a chain. A similar padlock with three hoops and another with five come from the Great Chesterford hoard, Essex (Thompson 1993, 116, figs 80–1), and, if used as such, may have shackled two to three and three to five people, respectively. Aldhouse-Green 2004, 321 and Harper 2011, 231 discuss the impacts of group chaining, including reduced mobility, synchronised movement, 'loss of selfhood' and embarrassment.

⁵² As with modern prison uniforms. There was no universal Roman slave attire and unfree status would not always have been immediately recognisable (see George 2011, 398–9), but shackles would have removed this ambiguity, as could other attested slave-owner tactics such as shaving, tattooing (Jones 1987; Harper 2011, 257) and inscribed slave collars (Harper 2011, 258; Trimble 2016).

The heavy Great Casterton fetters would have caused discomfort and would have fitted tightly on an adult male ankle (internal hoop diameters of *c.* 70–3 mm), preventing the wearer from slipping his feet free.⁵³ The convex interior surface of the fetters may have been designed to minimise rubbing and bruising, allowing for some movement.⁵⁴ However, with extended use, harm from fetters was unavoidable and this would have been exacerbated if a wearer attempted to move quickly or pull their foot free. We have already noted that shackling had long-term legal/social impacts, and Roman writers also note that fetters left visible marks/scars, which could remain and continue to carry stigma long after the shackles had been removed.⁵⁵ Skeletal pathology that *could* result from wearing of fetters has already been noted above, but is not strictly diagnostic. The principal difficulty that we face is that archaeological contexts do not afford us the opportunity to observe soft-tissue damage associated with the wearing of shackles and other means of restraint. Certain skeletal lesions may be indicative of some soft-tissue trauma and it is tempting to relate them to the wearing of the fetters. Nevertheless, these cannot be considered as conclusive evidence for slave status nor even that the individual had worn shackles in life. Equally, the absence of such lesions on a skeleton does not mean that an individual had never worn shackles.

THE SIGNIFICANCE AND SYMBOLISM OF IRON SHACKLES FOUND WITH HUMAN REMAINS

The discovery of a Roman skeleton at Great Casterton was not entirely unexpected, given that an extramural cemetery was known to have existed 60 m to the east, but the burial is very distinctive. The archaeological excavation was limited, but the burial probably lay outside the cemetery and the awkward position of the skeleton suggests the body lay within a ditch rather than a normal grave cut.⁵⁶ The iron fetters are seemingly unique for a Romano-British burial and are rare elsewhere (see below and APPENDIX 2).

Burials within ditches are not unknown in Britain,⁵⁷ and sometimes this treatment co-occurs with other noteworthy features such as a location peripheral to a formal cemetery, signs of hasty burial or coercion and evidence for peri- or post-mortem violence such as decapitation.⁵⁸ In fact, small numbers of atypical burials that do not conform to the majority burial rite are found within or near many late Roman cemeteries.⁵⁹ The fettered Great Casterton burial should be considered in relation to this wider spectrum of practices. The position, possibly outside or peripheral to the contemporary cemetery, may have been a conscious effort to separate or distinguish the man from the population within. Atypical burials were also found in somewhat peripheral positions during the earlier Pickworth Road excavations; two decapitated individuals were buried in adjacent graves close to the western boundary.⁶⁰ One unsexed adult skeleton, also one of the westernmost burials, displayed organic stains around the knees and is described as having been bound, although inspection of the site plans suggests that the

⁵³ Corrosion has slightly reduced the internal diameter here. Thompson 1993, 59 cites the average adult male ankle as 80 mm in diameter/width.

⁵⁴ Thompson 1993, 127–8 notes this but also argues that the C-shaped flange would make the hoop harder to break open. Both may have been intended.

⁵⁵ For example, Ov., *Am.* 2.2.47; Claudian, *In Eutropium* 2.342–5.

⁵⁶ The relationship between the ditch in which the fettered skeleton was buried and the contemporary cemetery to the east is not fully understood. The distance from the most westerly burials in the cemetery may suggest that the fettered burial is most likely outside the formal cemetery. However, the possibility remains that the skeleton may have been deposited in a ditch related to, or perhaps part of, a western boundary to the cemetery or an extension to it.

⁵⁷ For example, Pearce 1999, 154; 2013, 102–5. See Buck *et al.* 2019 for discussion of disarticulated burials in ditches.

⁵⁸ Philpott 1991, 71–6.

⁵⁹ Taylor 2008, 100.

⁶⁰ Grassam and McConnell 2005, fig. 4, SK2021 adult male and SK2025 unsexed adult; both had the skull placed close to the feet.

individual may more likely have been buried in a shroud or some other form of wrapping, perhaps with some binding that had left an organic stain.⁶¹

Perishable restraints such as rope were used for other ‘bound’ burials and the iron shackles might simply represent a difference in materials. However, the value and symbolic meaning of iron may be important⁶² and we have seen that shackles had their own important social and symbolic dimensions. The Great Casterton burial is the only example with removable/lockable iron shackles that can be definitively identified in Roman Britain.⁶³ However, other associations between human remains and various types of iron shackles are known from Iron Age Europe and from the Graeco-Roman world, and these allow us to situate the burial within a broader interpretative context (see APPENDIX 2 for a list).

The overarching term ‘shackle’ risks obscuring some important variability. Some bodies have been found wearing *lockable shackles*, like the ankle fetters from Great Casterton, which bound the wearer’s limbs together or attached them to a chain, but which could easily be removed with a key. However, some burials have produced simpler *fixed rings* instead. These rings were either rivetted or forged/welded closed around individual limbs and may have been more difficult to remove. There is typically no clear indication how/if these fixed rings were joined together, although they could have been tied to one another or to a fixed point with a rope or cord that has not survived. Lockable shackles and fixed rings are found together in some burials, seemingly confirming their relationship to one another, but the distinction is emphasised below, where it may be of some interpretative importance.⁶⁴

Iron Age and Roman bodies found wearing iron shackles have often been interpreted as slaves, on the assumption of a direct connection to the legal status of these individuals in life.⁶⁵ Is the matter really this simple or are these objects more closely linked to the particular circumstances of these specific deaths and burials? Several are not formal burials at all, with the bodies of shackled (and sometimes confined) individuals left *in situ* at their place of death. This is often because of some unusual calamity which prevented recovery, such as mining accidents,⁶⁶ the destruction of sites by fire or violence,⁶⁷ or the eruption of

⁶¹ Grassam and McConnell 2005, fig. 17, SK2368; the narrow and tightly compacted arrangement of the bones suggests that this individual may have been buried in a shroud. The left humerus (the right humerus is not shown on the plan) lay above the ribs rather than lateral to the body; this may be a consequence of transversal compression at the shoulders caused by burial in a tightly wrapped shroud (following archaeoanatomical concepts discussed in Duday 2009, 45).

⁶² See below and Hingley 2006.

⁶³ A disturbed decapitation burial wearing rivetted fetters from beneath the cathedral at Old Sarum has sometimes been suggested to be Roman (e.g. in Henning 2008, fig. 2.2), but the style of rivetted fetters is unparalleled within Roman contexts in the UK and might indicate a medieval date instead (Thompson 1993, 131–3, 163, no. 153; Schuster *et al.* 2012, 167, no. 238). It has been speculated that skeletons with metal objects around their necks from Carlbury, Co. Durham, and ‘south Wales’ belong to Roman slaves (Wooler 1917, 172–3), but these are better understood as torcs rather than shackles. The descriptions suggest the former was an expandable wire hoop (constructed as Cool 1983, 130–5, group III bracelets; cf. a lead neck-sized example from London reported on by Wardle 2003, 153–4, <S19>), while the latter may be an iron collar/torc with a mortice-and-tenon joint, as seen at Cadbury Castle, Somerset (Barrett *et al.* 2000, 123).

⁶⁴ For burials with both, see Dyggve 1928, 149–50, tombe no. 36; Baratti 2018. For further discussion of these issues, see APPENDIX 2 below.

⁶⁵ For a general discussion, see Duval 2008.

⁶⁶ See Thompson 1993, 141 and Röder 1957, 254 for a body in the mine/quarry at Pellenz wearing fetters; cf. Kamariza, Laurion, Greece, for a Hellenistic find thought to be associated with the silver mines (Thompson 1993, 131, 140).

⁶⁷ These include the *praetorium* of the fort at Pfünz, Germany, where a body wearing manacles was found (perhaps a military prisoner: Röder 1957, 254; Thompson 1993, 141, no. 112), and a burnt-down building, perhaps a slave prison (*ergastulum*), at the villa at Els Munts, Spain, which produced calcined bones associated with fetters (Berges Soriano 1979; Thompson 1993, 141, no. 91).

Mount Vesuvius.⁶⁸ In such cases, it is reasonable to see the shackles as a reflection of the wearer's status as a slave (or similarly imprisoned person) rather than as a form of deliberate mortuary practice. As yet, there are no definite finds of this sort from Britain.⁶⁹

In other instances where finds are poorly recorded or isolated it can be difficult to determine whether shackled bodies were simply abandoned or deliberately buried.⁷⁰ Lockable iron shackles were sophisticated objects that had value (for reuse or recycling) and which, under normal circumstances, could easily be unlocked and removed by their owners after the death of the wearer. As such, it seems unlikely that it was the norm to bury a dead slave in such shackles simply because they died wearing them. While a few might have been left *in situ* due to carelessness, apathy or absence of a key, it seems quite likely that some shackles (whether also worn in life or not) were deliberately included within burials for a symbolic purpose.

It is easier to develop these arguments in relation to shackled bodies that appear to have been deliberately buried, such as those found within cemeteries and other clearly defined burial contexts. The late Roman Great Casterton burial is the only one with lockable shackles from Britain and its precise relationship to the adjacent extramural cemetery is somewhat uncertain, but earlier Roman burials with iron limb *rings* have recently been excavated from two highly unusual urban extramural cemeteries. The Driffild Terrace cemetery, York, is completely dominated by young adult males and features a very high proportion of decapitations, including a burial with iron ankle rings. There is not yet a definitive publication, but it has been suggested that the cemetery population includes victims of execution and perhaps death in the arena.⁷¹ In the upper Walbrook valley cemetery, London, there is again a high male to female burial ratio, although less pronounced than at York. Here, bodies were buried where they could be eroded by the river, and large numbers of disarticulated bones, predominantly skulls, have been found, as have a modest number of decapitation burials. Some have suggested a link between these distinctive funerary practices and particular social groups, such as the urban poor, gladiators and executed criminals/war prisoners.⁷² Where it can be determined, the York⁷³ and London⁷⁴ individuals with iron rings are adult males like the Great Casterton

⁶⁸ Two bodies thought to date to the A.D. 79 eruption have been found in the environs of Pompeii with iron shackles or rings of uncertain form on the legs/ankles. One was found near the Porta Capua (Etani 2010, fig 58, no. 1; Cool 2015, 3) and is an adult male aged 20–25. The other was found in an underground chamber, perhaps an *ergastulum*, at the Villa of the Mosaic Columns (Joshel and Petersen 2014, 214–15, fig 163; *Notizi degli Scavi* 1910, 259–60, fig. 3) and is thought to be an adult male.

⁶⁹ The best candidate is from a demolished and backfilled subterranean late Roman structure at Colchester that has variously been interpreted as a Mithraeum or an *ergastulum*. It produced several sets of shackles and small quantities of human remains, but it is not clear that a complete body was present or that the shackles were worn. See Hull 1958, 111, pl. XXI; Thompson 1993, 74–8; 2003, 242–4; Webster 2005, 166–8. The only other possible candidate is Great Casterton.

⁷⁰ For example, the early twentieth-century discovery of a skeleton wearing lockable fetters at Remedello di Sopra, Italy (see Patroni 1922; Thompson 1993, no. 93).

⁷¹ Caffell and Holst 2012; Tucker 2015, 100–3.

⁷² Redfern and Bonney 2014; Harward *et al.* 2015, 134–5; Ranieri and Telfer 2017, 103–4; Perring 2017.

⁷³ Driffild Terrace, York (SK37/3DT37) (Caffell and Holst 2012; Cool 2015; Tucker 2015, 93–103, especially 98, fig. 35): inhumation of adult male, aged 26–35 (36–45 suggested by Tucker 2015), buried without a coffin; decapitated, his head at his feet; bound hands and two forged iron rings with overlapped but not welded ends around his ankles; wearing hobnailed footwear. Second to fourth century A.D. Extensive pathology suggests a hard life afflicted by injuries and illness; lesions on the tibiae and periosteal new bone on the tibiae and fibulae. Isotopic analysis (Montgomery *et al.* 2011) suggests he possibly originated in south-west Britain or the Mediterranean.

⁷⁴ London: three adult inhumation burials without coffins, all probably second century A.D. Upper Walbrook burial 30 (Harward *et al.* 2015, 144–5, fig. 108): adult male, aged 18–25; hands placed behind back and perhaps tied; pair of welded iron rings on the ankles; Schmorl's nodes exhibited. Upper Walbrook burial 73 (Harward *et al.* 2015, 73): badly truncated adult; one welded iron ring surviving on the left ankle. Nearby, Crossrail Liverpool Street burial 6 (Ranieri and Telfer 2017, 88–9, 106, figs 69–71): male, aged 18–35; decapitated with missing cranium; iron ring welded closed around right wrist, the other wrist nearby as if bound together but part truncated, perhaps removing a second wrist ring;

shackled burial. Two of three well-preserved examples were decapitated and two of those with iron ankle rings may also have had their wrists bound with rope. It has been suggested that lesions on the man from York's legs were caused by him having worn the iron rings in life as well as in death, but this is uncertain.⁷⁵ Hilary Cool argues that they were forged in place at or after death and that to do so during life would have caused very significant damage or death; similar arguments have been put forward about the welded London rings, which have been argued to represent a specific mortuary practice.⁷⁶

Other formal burials with iron shackles are not common and are widely distributed in space and time (see APPENDIX 2). They include examples from an Etruscan cemetery in northern Italy⁷⁷, a Late Iron Age burial in France⁷⁸ and Roman cemeteries in France,⁷⁹ Spain⁸⁰ and Croatia.⁸¹ Where bioarchaeological information is available, most are thought to be adult males, although there are a few exceptions.⁸² Decapitation burials with shackles have seemingly not been recorded beyond Britain, a fact that reflects the popularity of the decapitation rite in the province more generally.⁸³ Like the York and London burials, a high proportion of continental burials wear fixed iron limb rings, either forged/welded or rivetted closed. This suggests a finality to the act of imprisonment, and the dominance of fixed limb rings in burials contrasts with the overall predominance of lockable shackles in Thompson's corpus (where most are functional site finds) and amongst the victims of disasters noted above. If shackles had been worn in life, iron fixed rings may have been symbolically permanent funerary versions or have been substituted because removable shackles were wanted for reuse amongst the living.⁸⁴ Alternatively, these rings may have been more exclusively related to death and/or burial.

It is plausible that some shackled individuals were executed. Indeed, several mass burials from the Hellenistic world include iron shackles and seem very likely to represent executions of criminals or military prisoners; some of these restraints may even have been utilised in a form of crucifixion

dental caries and lower-leg periostitis; the legs are part truncated but there is no obvious evidence for leg/ankle rings/fetters.

⁷⁵ Tucker 2015, 98 on the York pathology; but cf. Caffell and Holst 2012, 85. The decapitated male with a wrist ring from London also has lower-leg periostitis but lacks *in-situ* iron ankle rings or fetters. It is interesting that three of the five Roman burials from Britain with iron shackles that have undergone osteological analysis have pathology on their lower legs, but, unfortunately, this common pathology can have multiple causes and, in isolation, cannot be used as a criterion to identify people who have been shackled.

⁷⁶ See Cool 2015 on York; Harward *et al.* 2015, 95 on London.

⁷⁷ Inhumation from an Etruscan cemetery at Baratti, Populonia, not yet fully published but described in a preliminary account (Baratti 2018). This was an adult male (argued to be a slave) wearing heavy leg rings, a neck shackle and perhaps some kind of wooden upper-body restraint.

⁷⁸ See Duval 2008 for an adult female with rivetted ankle rings in an isolated Iron Age burial at Vallon du Fou.

⁷⁹ A burial wearing rigid rivetted manacles from within a cemetery at Luxé (Chauvet 1904, 40–1; Dechelette 1913, 188; Thompson 1993, no. 37) and not yet fully published finds including five inhumation burials, of varied age and gender, wearing shackles of various types that were excavated recently within a cemetery near the amphitheatre at Saintes. Cool (2015, 3) briefly discusses these unpublished finds based on early media reports. An inhumation with rivetted ankle rings from the Roman cemetery at Valros is briefly mentioned in Duval 2008 in relation to the Vallon du Fou burial region.

⁸⁰ García Prosper and Guérin 2002, 212: a badly truncated adult (?) male inhumation in a cemetery at Valencia with an iron ring on the left tibia, suggested to be an executed criminal. It was found alongside prone burials and children, possibly in a segregated area away from the main cemetery population.

⁸¹ An adult inhumation in a cemetery at Salona (Dyggve 1928, 149–50, tombe 36) was buried in an amphora tomb wearing closed penannular fixed ankle rings and neck/waist shackles; the grave was notably deeper than others in the cemetery. A late Roman burial from Tekić with a rivetted neck ring was found in a cemetery without grave goods; some of the other burials had grave goods (Sokac-Štimac 1974; Henning 2008, 37).

⁸² A Late Iron Age adult female from Vallon du Fou, France (Duval 2008). Preliminary media reports on the finds from Saintes, France, suggest the presence of women and children.

⁸³ See Millella *et al.* 2015 on the distribution of decapitation burials.

⁸⁴ Cool 2015; Harward *et al.* 2015, 95–6; Marshall 2018.

(*apotympanismos*).⁸⁵ Beheading may well have been the cause of death for some of the York and London iron-ring burials,⁸⁶ and, as the associated rings were not necessarily functional restraints, it is possible that they were associated with peri-mortem torture or execution, or that they represent post-mortem corpse abuse.⁸⁷ This might draw on the stigma associated with shackles to demean the deceased. The lack of coffins, grave goods or other burial rites observed in most shackled burials, and the peripheral locations of a few of them, outside or on the edges of cemeteries, might also be taken to indicate a lack of subsequent care for the body (see APPENDIX 2). Some burials have complex ‘overkill’ sets of restraints that secure multiple limbs. These do not resemble those of fettered working slaves but seem to represent a more complete and perhaps ritualised form of physical subjugation or punishment.⁸⁸ Other forms of elaborate ritualised binding or restraint in Iron Age and Roman funerary contexts and iconography provide a wider context for these practices.⁸⁹

Some Romans believed that the dead could return to disturb the living, especially those who had experienced a premature or violent end, or had received inadequate observance of burial rituals.⁹⁰ Fear of the dead has been widely discussed in relation to non-normative burial traditions, including decapitation, severing of limbs, burial under stones or in deep graves and prone and bound burials.⁹¹ While there are few written sources to confirm such interpretations, the *Sepulcrum Incantatum* describes the placement of stones and iron objects such as chains and stakes within a grave as part of a spell to prevent the soul of a dead boy rising and visiting his living mother.⁹² Iron appears to have had particular magical efficacy, and as such other forms of iron restraints could have served a similar role. Even if the deceased were not considered as having agency in themselves, they represented a potential source of magical power that the living could harness.⁹³ The Greek magical papyri describe necromantic spells of this sort, but also include a spell designed to *prevent* such magic. This requires the use of an inscribed iron ring, made of iron taken from fetters, as an ingredient in a restraining seal upon the corpse.⁹⁴

⁸⁵ See APPENDIX 2; Thompson 1993, 140; Logothetis 2014; Kucharski 2015.

⁸⁶ Tucker 2015, 96–103; the poorly dated Old Sarum burial was also beheaded (Thompson 1993, no. 153; Schuster *et al.* 2012). Unfortunately, the status of the truncated Great Casterton body is unclear.

⁸⁷ See Hope 2000, 112–20 on other strategies, such as dismemberment, display of the body and denial of burial.

⁸⁸ The most dramatic are those with multiple sets of iron shackles from Baratti, Italy, and Salona, Croatia, cited above, but the possible evidence for hands tied with rope in some of the Romano-British iron-ring burials suggests a spectrum of related practices.

⁸⁹ See Aldhouse-Green 2004 on bound bog bodies and the issue of execution and/or sacrifice; Redfern 2020 on evidence for bound bodies from Iron Age Britain; Black 1986 on bodies confined within the grave from Roman southern Britain; Quercia and Cazzulo 2016 on diverse forms of restrained burial from Roman Italy. Both Aldhouse-Green 2004 and Jackson 2005 also discuss a series of Roman figurines showing elaborately trussed/hog-tied human figures with bound hands, feet and necks, and with cords joining these body parts together. Their function is not clear, but Ralph Jackson argues these come mostly from the *limes* and often depict overtly barbarian subjects, perhaps suggesting they might be related to the taking of military captives and the slave trade. However, Miranda Aldhouse Green also notes the similarities to some Iron Age bog bodies. More recent finds include several from lowland southern Britain, some distance from the contemporary frontier and somewhat shifting the weight of their distribution to suggest a less exclusively military emphasis (see n. 117 below for examples).

⁹⁰ Hope 2000, 106; Alfayé 2009; Quercia and Cazzulo 2016, 30.

⁹¹ For example, Black 1986, 225–7; Alfayé 2009; Harward *et al.* 2015, 95–6; Tucker 2015, 157–8; Quercia and Cazzulo 2016. The burial with restraints from Salona in Croatia (Dyggve 1928, 149–50) was also buried deeper than adjacent burials, perhaps indicating a concern about the possibility of the dead rising.

⁹² Ps.-Quint., *Declamatio Maior* 10. Various authors (e.g. Alfayé 2009, 190–1; Quercia and Cazzulo 2016, 30) have compared this text to the archaeological evidence for unusual burial/post-mortem practices.

⁹³ Hope 2000, 120–2.

⁹⁴ Parker 2018; Adam Parker (pers. comm.); cf. Suárez de la Torre 2019. *PGM* 4.2125–39 (Betz 1992): ‘A restraining seal for skulls that are not satisfactory [for use in divination], and also to prevent [them] from speaking or doing anything whatever of this [sort]. Seal the mouth of the skull with dirt from the doors of [a temple] of Osiris and from a mound [covering] graves. Taking iron from a leg fetter, work it cold and make a ring on which have a headless lion engraved. Let him have, instead of his head, a crown of Isis, and let him trample with his feet a skeleton (the right foot should trample the skull of the skeleton).’

Examples of shackles deliberately deposited in non-funerary contexts provide some complementary/contrasting evidence for their symbolic potency and for their inclusion within magical or religious ritual practices. It has been argued that finds from temples and watery contexts in continental Europe were dedicated to the gods by slaves upon manumission.⁹⁵ Several shackle finds from placed/structured deposits in Britain can be noted, and these appear to have been deposited open or damaged, in contrast to the locked condition of most grave finds.⁹⁶

Iron shackles seem to have been used to exert control over both the living and the dead. It is possible that there is a direct equation here and that, either magically or symbolically, shackles in burials represent an attempt to enslave the deceased, to claim power over them and/or to deny them escape in the afterlife.⁹⁷ Indeed, slaves did not achieve legal freedom in death, and some funerary practices seem to make explicit reference to this. Slaves' tombstones often record both their status and the name of their owner, permanently memorialising the ownership of one party by the other.⁹⁸ A more direct parallel might be drawn with graves containing late Roman inscribed slave collars of a type found in the Mediterranean. These collars asserted ownership over living slaves and asked readers to help prevent their escape. The bodies of slaves still wearing such collars have been found at Frascati, Italy, and Bulla Regia, Tunisia.⁹⁹ Did they die while on the run, unable to remove their collars, or were they deliberately laid in the grave while still wearing symbols of their enslavement? It has been suggested that a third-century BC burial at Selca, Albania, is a slave buried alongside his owner.¹⁰⁰ A Roman period cremation burial from Mojtyny, Poland, contains a shackle alongside other grave goods like weapons and horse gear. This is a much richer burial than any other detailed here and, crucially, the shackle was both open and accompanied by a key which could be worn as finger ring; perhaps this was meant to indicate that the deceased was a slaver or slave owner who held the power to capture or enslave others.¹⁰¹

⁹⁵ Roymans and Zandstra 2011, 171; cf. Thompson 1993, 142. Those deposited in watery contexts might have similar significance, although the deposition of gang chains alongside weaponry and other metalwork at the Iron Age sacred site of Llyn Cerrig Bach (Aldhouse Green 2004) suggests a wider suite of meanings may be possible.

⁹⁶ These include: an opened iron fetter hoop from the Upper Walbrook Valley marsh in London found in the same context as a late Roman iron candlestick and a lead votive mirror, both also deliberately destroyed (Ranieri and Telfer 2017, 133, fig. 107; Marshall 2018, 15–16; this is the same area from where the earlier iron-ring burials came); a pair of disarticulated ankle fetter hoops and a unlocked padlock bolt (but not the padlock itself) deposited in a well at Ewell, Surrey, alongside a late third-century hoard of 150 copper-alloy coins in a ceramic flagon, articulated pig burials and horse heads (Orton 1997, 103, 106, fig. 13, no. 406 feature F120); and a loose/damaged ankle fetter hoop from the temple area at the sanctuary site of Springhead, Kent (Schuster 2011, 266, fig. 17.285). More complete fetters from the large late Roman ironwork hoard at Great Chesterford, Essex (Thompson 1993, no. 137), may also have had some votive significance, but the meaning of this large mixed ironwork deposit is likely to have been rather different. For general discussions of ironwork hoarding, see Manning 1972; Humphreys 2017.

⁹⁷ Ranieri and Telfer 2017, 91–3; Marshall 2018, 15–17.

⁹⁸ See, e.g., a tombstone from Gloucester (Henig and Tomlin 2008) inscribed '(To the shades of the dead and) of Martialis, the slave of Gaius Cilonius, aged 14. He lies here.' The tombstone was a stock design, more typically used for slave owners rather than the enslaved; its focus is on the owner dining in comfort while served by the smaller figure of the slave.

⁹⁹ Trimble 2016, 457–9. A famous example of this type of artefact is the Zoninus collar (Trimble 2016, 447–8), which comprises an iron ring with a bronze plaque with the following message inscribed upon it: 'I have run away; hold me. When you have brought me back to my master Zoninus, you will receive a gold coin.' Such artefacts have not been found in Britain; the majority of the small corpus of inscribed collars have been found close to Rome. The Frascati inscription (Trimble 2016, 457–9) found in a burial reads: 'Hold me and return me to Aponianus the palatinus, at the Golden Napkin on the Aventine, because I have run away.'

¹⁰⁰ Eggebrecht 1988, 374, no. 286; Thompson 1993, 133, 141.

¹⁰¹ Czamecka 2013.

THE BURIAL OF A SLAVE?

Based upon the discussion above, two distinct, but not mutually exclusive, hypotheses can be considered to explain the specific features of the Great Casterton burial. The first is that the man died while wearing shackles and was then buried without them being removed. Taken together with the informal circumstances of the burial, this could represent the expedient disposal of the body of a slave, or similar figure, with little effort expended on funerary rites. The second possibility is that shackles were part of a deliberate treatment of the body that was related to the circumstances of death or beliefs about what came afterwards. In such a scenario, the fetters would have been deliberately included in the burial for some symbolic purpose, either by choosing to leave existing restraints in place or by adding them where they had not previously been present.

We have seen how ankle fetters are more likely to have been used by working slaves than other forms of functional shackles like wrist manacles and neck collars. They also differ from the fixed iron rings that seem to predominate over lockable shackles in more overtly ritualised Roman funerary contexts. These strands of artefactual evidence do not provide definitive proof as to the deceased's status but are consistent with the identification of him as one of the *servi vincti*, slaves punished by shackling, or at least as someone who had been punished or coerced into labour in a similar fashion, such as a convict or runaway *colonus*.

Unfortunately, it cannot be proven that the man wore these fetters during life. While it is perhaps tempting to interpret the observed pathological lesions and the fetters as connected, nevertheless, it is crucial to recognise the significant limitations of such an argument and to acknowledge that they cannot be definitively linked. Periosteal lesions such as those observed on the tibiae of the Great Casterton individual are very common in the archaeological record for the period and would not be considered unusual in any other circumstance. They have a complex aetiology, and it remains entirely possible that their presence here is not linked in any way to the wearing of shackles. As such they cannot be taken as proof that shackles were worn for any extended period of time before death. Overall, the pathological lesions present on the skeleton could be taken as indicators of stress and a life of physical activity, although they are not so significant that they would be considered exceptional on the remains of individuals from any social strata.¹⁰² As such, it remains possible that the shackles were only added peri- or post-mortem, perhaps as part of a short-term imprisonment associated with an execution or as a form of mortuary practice.

Whether or not the man was a slave, we are still left with the question of why he was buried wearing these removable shackles? They were valuable objects,¹⁰³ and their rarity in burials suggests that they were more normally recovered and reused. Some of the shackled individuals discussed above seem to have died in disasters, and their bodies may never have been recovered or they may have been buried outside the slave/key owner's purview, providing no opportunity for the shackles to be reclaimed. However, despite its informal location in a ditch, the degree of articulation of the Great Casterton burial, the lack of scavenging and its proximity to the town and its cemetery all argue against the body simply being left to rot in the open. It probably received a burial of sorts and met some minimum ritual requirements, even if these were very basic and undertaken for reasons of public order/hygiene rather than concern for the deceased's soul.¹⁰⁴ Burial in an extramural ditch, perhaps beyond or near the edge of the Great

¹⁰² This should not be considered as an attempt to diminish the likelihood that he was enslaved during life but as an attempt to highlight the difficulty in identifying enslaved individuals by osteological means alone.

¹⁰³ Indeed Cool 2000, 52 argues that iron became more valuable and was increasingly curated/recycled in the late Roman period.

¹⁰⁴ Hope 2000, 105–6; Rebillard 2009, 62.

Casterton cemetery, could perhaps be seen as a version of the cheap and expedient burial of the anonymous and poor within ‘potters’ fields’ or *puticuli*.¹⁰⁵

Some slaves certainly received a funeral and a formal burial paid for by their owners, by other members of their household or by independent burial societies (*collegia*) to which they belonged,¹⁰⁶ though a shackled slave who died while undergoing punishment might plausibly be isolated from such networks of support. Even executed criminals would often be returned to their family for burial; although instances of the abuse of corpses by the authorities are recorded in Roman literature.¹⁰⁷ The use of shackles probably indicates an acrimonious relationship between the man and those who had power over him at the end of his life, who had perhaps punished or even executed him and who may also have had final say over his treatment after death. This may have been a slave owner or some judicial authority. It is possible that both the informal burial context and the decision to leave the shackles in place were additional punitive acts, perhaps continuing a previous power struggle beyond death or meant as a deterrent for the living. However, the evidence previously discussed might also suggest that the shackles represented insurance for the living against any potential supernatural repercussions of the man’s harsh treatment.

Belinda Crerar has recently cautioned against uncritical assumptions that unusual or non-normative funerary rites relate to individuals with ‘deviant’ lived identities, such as criminals or outcasts, or reflect fear or hostility towards the deceased.¹⁰⁸ However, in this case, we believe that the wider body of archaeological, textual and iconographic evidence discussed above suggests shackles had strong links to the imprisonment and punishment of people with low or marginal status. In the context of iron-ring burials, Cool has noted that iron was a valuable material and thus perhaps an indication of high status,¹⁰⁹ but this could be restated as a reflection of the power/wealth of those who placed the restraints upon the dead. Adam Parker has considered whether the inclusion of iron rings might be a measure to protect/defend the dead from magical exploitation/necromancy; this is possible but need not be seen as altruistic, since it could be interpreted as an attempt to confine the dead to protect the living.¹¹⁰ The bioarchaeological and funerary evidence for other shackled burials (see APPENDIX 2) is too sparse, widely distributed and inconsistently published to allow for a systematic comparison to normative burials,¹¹¹ but, nonetheless, it provides little to contradict the view that the deliberate burial of individuals wearing iron shackles signified negative attitudes towards them or, at the very least, a disregard for their wellbeing.

¹⁰⁵ For Rome itself, see Bodel 2000, 128–35; Hope 2000, 110–12.

¹⁰⁶ Dumont 1987, 184–5. Evidence for Britain includes slave children buried and memorialised by their owners at Chester and Gloucester (Birley 1980, 146; Henig and Tomlin 2008) and a slave’s tombstone at Haltonchesters set up by a *collegium conser(vorum)* of fellow slaves (Birley 1980, 146). This limited evidence is broadly in line with the better understood picture at Rome (see Galvao-Sobrinho 2012).

¹⁰⁷ Hope 2000, 112–20.

¹⁰⁸ Crerar 2016. The term ‘deviant’ is often applied to describe non-normative burial practices such as an unusual body position and treatments that are at odds with practices in adjacent contemporary cemetery populations. However, this has become conflated with interpretations of the identity of the deceased as ‘deviant’, and recent research on the interpretation of deviancy has concluded that the term has become laced with negative connotations (see Taylor 2008).

¹⁰⁹ Cool 2015, 4–5.

¹¹⁰ See above; Parker 2018.

¹¹¹ As in Crerar’s study of decapitation burials in Cambridgeshire (2014; 2016). This did not indicate any clear demographic or pathological difference in ‘lived identities’ between decapitated and non-decapitated populations. Different trends in funerary practices were both ‘negative’ (e.g. decapitated burials were less likely to have a coffin) and ‘positive’ (they were more likely to have grave goods).

CONCLUSIONS

The Great Casterton burial is perhaps the best candidate for the remains of a slave in Roman Britain. By providing evidence for the use of shackles, the burial illustrates some of the potential consequences of slavery and re-emphasises our obligation to engage with this topic at a level beyond the scarce epigraphic sources available for the province. However, it does not resolve the larger problem of identifying the enslaved of Roman Britain. The man's precise legal status remains a moot point, as others punished and coerced into labour, such as convicts and *coloni*, could also be chained in the manner of slaves. Some of the burials in iron restraints may well have been executed convicts but, unfortunately, due to truncation, it is unclear whether the fettered individual from Great Casterton had been decapitated like some of the iron-ring burials from York and London and several other burials in the nearby cemetery. While we might wish to use this burial to define criteria that would allow us to identify other people who had been shackled, this does not seem to be possible. The bioarchaeological evidence provides some suggestion of stress and physical activity, and there is lower leg pathology that *could* have been caused by the fetters. Similarly, the bony spur present on the left thigh bone *could* be a result of intentional blows to the leg.¹¹² However, none of this evidence is strictly diagnostic, and in isolation from the fetters it would certainly be insufficient to identify the individual as being a slave. Even here the evidence for slave status cannot be considered conclusive, and, short of epigraphic evidence, determining the precise lived experiences and/or legal status of the individual is impossible.

Such ambiguity even in the context of an uncommonly revealing burial could be taken as a further demonstration of the 'invisibility' of Roman slavery. Perhaps it would be more helpful to see it as an indication that the evidence is simply hard to isolate and as a suggestion that other evidence for slavery may be hiding in plain sight. Slaves were integrated into almost every part of Roman society and their legal status had widely varied consequences depending on who they were owned by, whether they were a member of a *familia urbana* or *familia rustica* (urban or rural household), what precise responsibilities and privileges they held and the character of their relationship with their owner.¹¹³ Thus there is unlikely to be any pattern of health and disease that would have affected all Roman slaves or a class of material culture that all would have used. Slaves often lived and worked alongside the free, albeit on different terms, and it was possible to transition between unfree and free status over the course of a lifetime, although this did not necessarily result in escape from hardship or in socio-economic independence from one's former owner.¹¹⁴ As such there will have been areas of considerable overlap between the living standards and life experiences of slaves, freedmen, the free poor and bonded *coloni*.¹¹⁵

Given that the enslaved were not a neatly bounded category of people, for whom we can point to clear material or bioarchaeological correlates, we need to find alternative strategies that will allow us to engage with this issue further. There is a need for more data gathering; even for some relatively straightforward categories of evidence, such as epigraphy and shackles, the most recent detailed surveys of the British evidence are more than 25 years old¹¹⁶ and thus do not take full advantage of the explosion of new information from sources such as developer-funded archaeology and the

¹¹² Such injuries along with various other palaeopathological observations, in the right circumstances, can be taken as evidence that the individual had been subject to ill treatment and potential beatings, though in isolation they are difficult to interpret. Rebecca Redfern has compiled a series of criteria for different types of bioarchaeological evidence that might indicate different types of violence in her recent exploration of captivity and punishment in Iron Age Britain (Redfern 2020, table 1).

¹¹³ For example, Bradley 1984, 15–18; Fitzgerald 2000, 3; Bodel 2011, 329–30; Edmondson 2011, 350; Joshel and Peterson 2014; Redfern 2018.

¹¹⁴ For example, Bradley 1984, 81–2.

¹¹⁵ Knapp 2011; Revell 2016, 98; Redfern 2018.

¹¹⁶ Birley 1980 on epigraphy; Thompson 1993 on shackles.

Portable Antiquities Scheme (PAS).¹¹⁷ A full reassessment of all known shackled and bound burials would also be of value. However, if we are to get a broader understanding of slave experiences, and to consider them as embedded within Roman society, then it is a matter of asking the right questions as much as of having the right evidence.¹¹⁸ This will include thinking about slavery in a less segregated and unthinkingly empirical manner. While the identification of individual slaves can potentially provide us with useful case studies, it is clearly challenging and will never allow us to identify the majority of the enslaved population. Given these difficulties, it may be more useful simply to accept that the presence of slaves in the Roman world is indisputable and does not need to be proven. However, a long overdue change in the way in which we read the archaeological record is required in order to construct narratives that account for the presence and lived experiences/perspectives of enslaved people in Roman Britain.¹¹⁹ A similar approach has been taken in Italy, where innovative work has begun to shift the emphasis away from identifying the presence of slaves and towards interpreting the wider archaeological record in ways that seek to illuminate their lives, recognising that the free and the unfree inhabited much of the same material world but experienced it in different ways.¹²⁰

While the analysis of the Great Casterton burial suggests that osteobiographies are not necessarily sufficient to identify enslaved individuals, similar approaches could theoretically be used to study the experiences of slaves as part of wider populations. Recent work by Rebecca Redfern has drawn on research into New World slavery to explore possible osteological correlates of captivity and enslavement.¹²¹ The role of ancient DNA and stable isotope analysis, in conjunction with more traditional osteological methods, is also highlighted as being important in future research in this area.¹²² Crucially, she argues that we can consider slaves as victims of structural violence, living within a legal framework that systematically disadvantaged them and opened them up to certain forms of mistreatment in a manner that was distinct from the experiences of the free population. As such, we should perhaps be ‘less reticent about proposing slavery as a causality’ for population-level health patterns.¹²³ Similar interpretations might also plausibly be built around other indices of inequality, such as patterns observable in material culture. Such population-level analyses avoid the problems of identifying individual slaves, but they would obviously be most effective when applied to specific populations where a high proportion of slaves would be expected.¹²⁴ In the case of Roman Britain, where relevant historical and epigraphic sources are rare, this is far

¹¹⁷ Green 2015 comments on the contribution of PAS finds, which include fragments of iron ankle fetters from Billingford, Norfolk (PAS find NMS-3924D6), and Headbourne Worthy, Winchester, Hampshire (HAMP-C45106). Of great interest are also numerous copper-alloy bound figurines, like those mentioned in n. 89 above and discussed in detail by Jackson 2005. These represent the largest potential body of iconographic evidence for captivity/slavery in Britain. Six finds recovered through the PAS in recent years represent a substantial contribution to the total corpus; Jackson 2005 cites a total of just 16 from across the entire Empire. The PAS finds include figurines from: Brough with St Giles, North Yorkshire (DUR-3DB631); Holt, Wrexham (LVPL-8C4A48); West Lindsey, Lincolnshire (NLM2845); Broxholme, Lincolnshire (DENO-EB7C77); Harmston, Lincolnshire (DENO-9632F6); and Andover, Hampshire (HAMP-378231).

¹¹⁸ Webster 2005; Revell 2016, 96–100.

¹¹⁹ A similar statement is made by Redfern in her recent study of captivity and enslavement in Iron Age Britain. She states that ‘the presence of chains and restraints and the often gruesome descriptions in the primary sources suggest that we should be more open to captivity and enslavement as being the causes of many of the skeletal changes and injuries observed’ (Redfern 2020, 14).

¹²⁰ Joshel and Peterson 2014.

¹²¹ Redfern 2018.

¹²² Redfern 2018, table 1.

¹²³ Redfern 2018.

¹²⁴ For example, Morris 2011, 177–88 considers grave-good provision in fifth-century BC Greece, contrasting Laurium, where burial of high proportions of slaves associated with mining can reasonably be conjectured based on the textual sources, with the rest of Attica, and observing some profound differences in the mean numbers of grave goods deposited.

from easy and would be a matter of educated guesswork perhaps supplemented by careful use of cross-cultural comparisons. The key advantage of such approaches is that they could allow us to move past the vexed identification of individual slaves to consider slavery's consequences on a wider social scale. Only then will it be possible to place the fate of individuals like the man from Great Casterton into context.

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APPENDIX 1: DIMENSIONS OF THE GREAT CASTERTON FETTERS

Funding for post-excavation work was limited, as the excavation took place outside the context of normal developer-funded archaeology and a grant application to cover the costs of conservation was unsuccessful. The shackles were examined and recorded in a corroded state and the following measurements may therefore be slightly affected by corrosion products. However, the corrosion was not especially voluminous and so they should still be useful for any future metric work on shackles.

Maximum length across the fetters 243 mm.

Right hoop: external diameter 92 mm; internal diameter 70.5 mm; width of section 25.6 mm; thickness of section 12 mm; external diameter of pivoting rings 61.9 mm and 60.5 mm; diameter of section of pivoting rings 10.5 mm and 10.3 mm.

Left hoop: external diameter 96 mm; internal diameter 73.7 mm; width of section 25 mm; thickness of section 12.8 mm; external diameter of pivoting rings 58 mm and 60.8 mm; diameter of section of pivoting rings 11.5 mm and 12.6 mm.

Padlock: maximum length including loop 97 mm; maximum height including loop 71 mm; length of padlock case c. 62 mm; width of padlock case 40.3 mm.

APPENDIX 2: EUROPEAN FINDS OF IRON SHACKLES OF IRON AGE AND ROMAN DATE FOUND IN CLOSE ASSOCIATION WITH HUMAN REMAINS

This appendix presents a list of iron restraints from Iron Age and Roman contexts believed to have been found in close association with human remains (TABLE 1). It makes no claim to be exhaustive, especially for the Hellenistic world,¹²⁵ but it brings together examples from across a wide area of Europe, spanning a considerable period of time, and it expands substantially upon the list of similar associations previously discussed by Thompson.¹²⁶ It supports the analysis of the Great Casterton burial presented above but may also prove a useful starting point for further work on related topics.

Many finds are either old or very recent discoveries and these have not always been recorded or published in detail, meaning information about shackle type, burial practice and bioarchaeology is sometimes absent or ambiguous. However, there clearly was considerable variation in the type of iron shackle used in such contexts.

A number of typologies of Iron Age and Roman iron shackles have previously been devised and a major study of the topic by Joachim Henning, which also covers later restraints, is in preparation. The most comprehensive published account is Thompson's wide-ranging study.¹²⁷ A detailed typological treatment is not appropriate here as those examples from burials represent only a subset of the wider range known from archaeological contexts and few are published in sufficient detail to allow them to be assigned to a specific type. Nonetheless, published accounts often provide some basic information and can tell us more about their varied function and significance.

TABLE 1 indicates considerable diversity regarding which parts of the body shackles were attached to, and Thompson makes a functional division on this basis, principally distinguishing between neck rings/collars (including gang chains joined together in sets by chains), wrist manacles and ankle fetters.¹²⁸ Some neck collars did not have chains attached and served principally as a label of slave status, rather than as restraints per se.¹²⁹ Shackles on the ankles clearly predominate within the burial data, as they do in Thompson's wider corpus of site finds, but wrist and neck shackles/collars have also been recovered.

Wherever possible, a distinction is also made here based on how these restraints were attached/fastened. *Lockable shackles*, like the fetters from Great Casterton, normally bound an individual's limbs together, restricting their range of movement or else attaching them to a fixed position or to another person. They were easy to put on and take off again, so long as the key was available. This might imply an intent to use them for a fixed/limited term and/or to reuse them. Lockable shackles are fairly common site finds.¹³⁰ Although they have been found *in situ* on several bodies, some of these appear to have been abandoned, and they are generally rare in formal inhumations; where they do appear, they sometimes co-occur with the iron rings discussed below. Only a very small minority of potentially removable limb shackles are rivetted closed: for example, the rigid wrist manacles associated with a Roman inhumation from Luxé, France,¹³¹ and a set of rivetted ankle fetters with a pivot from the burial of uncertain date at Old Sarum, Wiltshire.¹³² These *rivetted shackles* would have been more difficult to attach or remove than the lockable

¹²⁵ A recent blog by Katerina Logothetis (2014) lists a number of finds with references including several not considered here. Her list includes a cist-grave burial with chained ankle 'cuffs' from 'eastern Chalkidiki', a burial with a two-piece iron collar from Vrendesium, 'cuffs' found with foot bones at Chieti, eight individual burials with 'cuffs on their feet' from Akanthos, the 'group burial' at Falero (including some very recent unpublished discoveries), a broken tibia with cuffs from Thebes, a group burial from Pydna and ankle cuffs associated with bones from Laurion. We reproduce her list here for the reader's convenience but have not explored these examples further because they are beyond our scope and because we have not been able to engage fully with the Greek-language literature. Only those previously noted by Thompson, or for which we have located a recent English-language publication, are included in our tabulated data and our discussion.

¹²⁶ Thompson 1993; cf. Henning 2008, 38, fig. 2.2, which maps burials with shackles.

¹²⁷ For shackle typologies, see Manning 1985; Henning 1992; Kunzl 1993; Thompson 1993; Hanemann 2014. Henning has established a new dated typology covering shackles of Iron Age to medieval date based on over 400 examples, but this is not yet published: Henning 2008, 35; Joachim Henning (pers. comm.).

¹²⁸ Thompson 1993.

¹²⁹ See Trimble 2016 for a recent discussion.

¹³⁰ Thompson 1993.

¹³¹ Chauvet 1904, 40–1; Dechelette 1913, 188; Thompson 1993, no. 37.

¹³² Thompson 1993, no. 153; Schuster *et al.* 2012.

TABLE 1. A LIST OF EUROPEAN FINDS OF IRON AGE AND ROMAN SHACKLES FOUND IN CLOSE ASSOCIATION WITH HUMAN REMAINS

Country	Site	Date	No. individuals	Skeleton	Shackle location	Shackles worn/removable	Burial context	Thompson 1993	Other sources of information
Albania	Selca	Late 3rd C B.C	1?	?Adult male	Ankles	Unworn	Unclear – unworn, near inhumations	Mention only	Eggebrecht 1988, 374
Croatia	Kastel Gomilica	Roman?	1	Unclear	?Wrist	Worn/?fixed	Inhumation?	–	Dyggve 1928, 149–50
Croatia	Salona	Roman	1	Adult ?male	?Ankles (unjoined); waist/neck	Worn/fixed ankles; removable neck/waist	Inhumation – within cemetery	–	Dyggve 1928, 149–50
Croatia	Tekić	4th C A.D.	1	Adult male	Neck	Worn/?fixed (rivetted)	Inhumation – within cemetery	–	Henning 2008
France	Bavay	Roman	1	?	Ankles	?Worn/removable	Unclear – with leg bones in well	No. 64	
France	Cimiez	5th C A.D.?	1?	?	Ankles	?Unworn/?removable	Unclear – found ‘near to inhumations’	No. 84	
France	Luxé	Roman	1	Adult ?male	Wrists	Worn/?fixed (rivetted)	Inhumation – within cemetery	No. 37	Chauvet 1904, 40–1; Dechelette 1913, 188
France	Saintes	2nd C A.D.?	5	Adult male and female; children	Ankle; neck; wrist	Worn/at least some removable	Inhumation – within cemetery	–	Unpublished (media reports only); but see Cool 2015
France	Saint-Vallerin	Roman	1	?	Ankle	?Worn/removable	Unclear – with leg bones	No. 68	Audin and Armand-Calliat 1962, 21, fig. 12
France	Vallon du Fou	2nd–1st C B.C.	1	Adult female	Ankle (unjoined)	Worn/fixed	Inhumation – isolated	–	Duval 2008
France	Valros	1st–2nd C A.D.?	1	?	Ankles	Worn/?fixed	Inhumation – ?within cemetery	–	Unpublished; but noted briefly in Duval 2008
Germany	Pellenz	Roman	1	?	Ankle	?Worn/?fixed (rivetted)	Unclear – supposedly worn, in mine	Mention only	Röder 1957, 254

Continued

TABLE 1. CONTINUED

Country	Site	Date	No. individuals	Skeleton	Shackle location	Shackles worn/removable	Burial context	Thompson 1993	Other sources of information
Germany	Pfünz	Before A.D. 244?	1	?	Wrist	?Worn/removable	Unclear – with bones in fort <i>praetorium</i>	No. 112	
Greece	Kamariza	4th C B.C.?	1	?	Ankle	?Worn/removable	Unclear – with leg bones, possibly from mine	Mention only	
Greece	Lerissos	4th–3rd C B.C.	8	?	Ankle	?Worn/?removable	Inhumations – group within cemetery	Mention only	
Greece	Phaleron	7th–5th C B.C.	17/18+	?	Ankle; neck; wrist	?Worn/unclear	Inhumation – group burial	Mention only	Cf. also new discoveries in the media
Greece	Pydna	4th C B.C.	4	Adult male; ?adult female; ?children	Ankle; neck; wrist	Worn/?removable	Inhumation – part of mass burial within cemetery	–	Triantaphyllou and Bessios 2005
Greece	Thebes	Hellenistic and later	1	?	Ankle	?Worn/unclear	Unclear – tibia with shackle in cemetery	Mention only	
Italy	Baratti	Etruscan, 4th C B.C. or earlier	1	Adult male	Ankles (unjoined); ?neck yoke	Worn/fixed	?Inhumation – within cemetery	–	Unpublished (media reports only); preliminary discussion in Baratti 2018
Italy	Brindisi	Iron Age or Roman	1	?	Neck (?inscribed collar)	Worn/?removable	?Inhumation – within cemetery	Mention only	
Italy	Chiete	Roman?	1	?	Ankle	?Worn/?removable	?Inhumation – within cemetery	Mention only	
Italy	Frascati	4th/5th C A.D.	1	?	Neck (inscribed collar)	Worn/fixed	Inhumation	–	Trimble 2016
Italy	Pompeii	A.D. 79	1	Adult male	Ankles	Worn/unclear	Victim of eruption	–	Etani 2010, fig. 58, no. 1; Cool 2015

Continued

Italy	Remedello di Sopra	Roman	1	Adult	Ankle	Worn/removable	Inhumation	No. 93	
Poland	Mojtyny	Roman	1	?Adult male	Wrists	Unworn with key/removable	Cremation – within cemetery	–	Czarnecka 2013
Spain	Els Munt	A.D. 268?	1	?	Ankle	?Worn/removable	?Victim of fire – with calcined human bones	No. 91	Cf. Thompson 2003, 106
Spain	Valencia	1st–3rd C A.D.	1	?	Ankle (unjoined)	Worn/fixed	Inhumation – within cemetery	–	Garcia Prosper and Guérin 2002, 212
UK	Colchester	A.D. 337+	1+	?	Neck; wrists	?Unworn/removable	Unclear – with bones in ? <i>ergastulum</i>	No. 4	Hull 1958; Webster 2005
UK	Great Casterton	4th to early 5th C A.D.	1	Adult male, ?decapitated	Ankles	Worn/removable	Inhumation – near cemetery	–	This paper
UK	London	Probably 2nd C A.D.	3	Adult males (where known), some decapitated	Ankles (unjoined); wrist (unjoined); neck (decapitated)	Worn/fixed	Inhumations – within cemetery	–	Harward <i>et al.</i> 2015; Ranieri and Telfer 2017; Marshall 2018
UK	Old Sarum	Post Roman?	1	Adult male, decapitated, disturbed	Ankles	?Worn/?fixed (rivetted)	?Inhumation	No. 153	Schuster <i>et al.</i> 2012
UK	York	c. 2nd–4th C A.D.	1	Adult male, decapitated	Ankles (unjoined); wrist (bound with rope); neck (decapitated)	Worn/fixed	Inhumation – within cemetery	–	Montgomery <i>et al.</i> 2011; Caffell and Holst 2012; Cool 2015; Tucker 2015

types and would have required the use of tools and some basic blacksmithing skills. However, some inscribed slave collars, clearly intended for living wearers, are also fastened this way, so it was clearly possible to rivet a shackle closed without irreparably harming the wearer.¹³³ It is possible that these were envisaged as more permanent fixtures than lockable shackles.

Fixed limb *rings* differ from the lockable/removable shackles in two important respects. The first is that they are normally attached to individual limbs and exhibit no clear evidence of having been connected to one another. They are often found in pairs, but some burials have only one. In such cases, it is probable that a second example has been disturbed or truncated, but the deliberate use of just one ring cannot be entirely ruled out.¹³⁴ Such rings would not have served as effective restraints on a living wearer unless ropes or chains were added. Of course, this limit to their functionality would have been less important if they were conceived principally as signifiers of slave status, like the fixed slave collars worn on the neck, or a symbolic/magical form or restraint, rather than as tools truly designed to restrict movement. The second fundamental difference is that these rings are not locked (and thus easily removable with a key) but instead are rivetted or (often) even forged closed, with the ends welded, lapped or butting.¹³⁵ Where the matter has been considered in detail, it seems unlikely that these rings could simply be slipped off over the head, hands or feet,¹³⁶ and as such it is possible that they were intended to be worn (at least semi-) permanently. By contrast, lockable shackles could be put on and taken off easily if the keys were available. Lightweight fixed rings closed with rivets could probably have been attached by a smith without causing significant harm to the wearer,¹³⁷ and this category includes inscribed neck collars that were clearly worn by the living.¹³⁸ However, many are made from substantial iron bars, and if these were welded closed/forged into place at high temperatures this process would likely have caused substantial harm to a living wearer. As such, this is more likely to have happened post-mortem or at the time of death.¹³⁹

These fixed rings make up a substantial proportion of the classifiable iron restraints found in formal burials. This may be because they were directly involved in specific funerary rites or, for some of the lighter rivetted examples that may have been worn in life, because they were more difficult to remove than unlockable shackles and this was not felt to be worth the effort. Equally they have rarely been recognised in non-funerary contexts, although as normal site finds the simplicity of most examples, particularly the large forged/welded types, would make them difficult to distinguish from other types of ring fitting.

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¹³³ Trimble 2016, 466.

¹³⁴ García Prosper and Guérin 2002, 91–3, 212; Marshall 2018, 15–17.

¹³⁵ Dyggve 1928, 149–50.

¹³⁶ Cool 2015; Harward *et al.* 2015, 95; Marshall 2018, 15–17.

¹³⁷ Duval 2008.

¹³⁸ Trimble 2016.

¹³⁹ Cool 2015; Harward *et al.* 2015, 95.

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