"Invisible burials" and fragmentation practices in Iron Age Europe

Citation for published version:

Digital Object Identifier (DOI):
10.1080/00934690.2021.1924435

Link:
Link to publication record in Edinburgh Research Explorer

Document Version:
Publisher's PDF, also known as Version of record

Published in:
Journal of Field Archaeology

General rights
Copyright for the publications made accessible via the Edinburgh Research Explorer is retained by the author(s) and / or other copyright owners and it is a condition of accessing these publications that users recognise and abide by the legal requirements associated with these rights.

Take down policy
The University of Edinburgh has made every reasonable effort to ensure that Edinburgh Research Explorer content complies with UK legislation. If you believe that the public display of this file breaches copyright please contact openaccess@ed.ac.uk providing details, and we will remove access to the work immediately and investigate your claim.
“Invisible Burials” and Fragmentation Practices in Iron Age Europe: Excavations at the Monte Bernorio Necropolis (Northern Spain)

Jesús F. Torres-Martínez, Manuel Fernández-Götz, Santiago Domínguez-Solera, Antxoka Martínez-Velasco, David Vacas-Madrid, Mariano Serna-Gancedo, Gadea Cabanillas de la Torre, Marcos Galeano & Ricardo Fernandes

To cite this article: Jesús F. Torres-Martínez, Manuel Fernández-Götz, Santiago Domínguez-Solera, Antxoka Martínez-Velasco, David Vacas-Madrid, Mariano Serna-Gancedo, Gadea Cabanillas de la Torre, Marcos Galeano & Ricardo Fernandes (2021): “Invisible Burials” and Fragmentation Practices in Iron Age Europe: Excavations at the Monte Bernorio Necropolis (Northern Spain), Journal of Field Archaeology, DOI: 10.1080/00934690.2021.1924435

To link to this article: https://doi.org/10.1080/00934690.2021.1924435

© 2021 The Author(s). Published by Informa UK Limited, trading as Taylor & Francis Group

Published online: 27 May 2021.

Submit your article to this journal

View related articles

View Crossmark data
“Invisible Burials” and Fragmentation Practices in Iron Age Europe: Excavations at the Monte Bernorio Necropolis (Northern Spain)

Jesús F. Torres-Martínez, Manuel Fernández-Götz, Santiago Domínguez-Solera, Antxoka Martínez-Velasco, David Vacas-Madrid, Mariano Serna-Gancedo, Gadea Cabanillas de la Torre, Marcos Galeano, and Ricardo Fernandes

1Instituto Monte Bernorio de Estudios de la Antigüedad del Cantábrico (IMBEAC), Madrid, Spain; 2Complutense University of Madrid, Madrid, Spain; 3University of Edinburgh, Edinburgh, United Kingdom; 4Sociedad de Ciencias Aranzadi, San Sebastián, Spain; 5Service régional de l’archéologie de Bretagne, Rennes, France; 6Max Planck Institute for the Science of Human History, Jena, Germany; 7University of Oxford, Oxford, United Kingdom; 8Masaryk University, Brno, Czech Republic

ABSTRACT
The scarcity of burial remains in large parts of Iron Age Europe, particularly in the Atlantic regions, has often led scholars to discuss the apparent “invisibility” of graves. This paper presents the results from several excavation campaigns at Monte Bernorio, one of the most important sites of the 1st millennium B.C. on the Iberian Peninsula. The fieldwork and post-excavation work carried out in the area of the necropolis have identified numerous burial pits, with complex ritual activities characterized by fragmentation and the practice of the pars pro toto. In addition, evidence for later rituals in some of the graves can be linked to ancestor worship. The results provide important insights into funerary practices in Late Iron Age Europe, leading us to rethink the very meaning of cemeteries in the study area and beyond.

Burial Traditions in Iron Age Europe

Beliefs and rituals around death play a fundamental role in all human societies. However, their specific characteristics, the ways of performing them, and the associated remains vary considerably across time and space (Parker Pearson 2003; Tarlow and Nilsson Stutz 2013). During the 1st millennium B.C., different burial traditions were practiced in Iron Age Europe, with some regions having a rather extensive funerary record with thousands of graves (e.g. the Champagne region in eastern France or the Hunsrück-Eifel region in western Germany, cf. Demoule 1999; Fernández-Götz 2014; Gleser 2005), while for others, no burials (or only a limited number) have been identified. There are also considerable variations over time, sometimes within the same region, with periods of abundant burial remains alternating with others when graves are rare. Southwestern Germany provides a good example of this: numerous burials are known from the Hallstatt period (ca. 800–450 B.C.), mostly in the form of graves under barrows (Müller-Scheeffel 2013), which stands in contrast with the scarcity of burials in the same area during the final centuries B.C.

What is becoming evident from recent research is that even in regions with an abundant Iron Age funerary record, a significant part of the population must have been buried in ways that are not archaeologically recognizable. In addition to potential preservation issues (e.g. high acidity of certain soils) and gaps in archaeological research, we need to take into account the widespread use of alternative funerary practices, such as excarnation of the bodies or the deposition of the cremated ashes of the deceased in bodies of water. The disparity between the number of identified burials and population estimates can be illustrated with some examples from particularly well investigated microregions. At the important Iron Age site of Dürrenberg bei Hallein (Austria), H. Aspöck and colleagues (2007, 121) estimated that, at most, only a fifth of the population is represented in the burial record. This discrepancy reflects the difference between the number of burials, on the one hand, and population estimates based on settlement data and the assessment of mining activities on the other. A similar situation can be observed at the large Early Iron Age site of the Heuneburg (Germany), where the number of burials is far too small when compared to the ca. 5,000 inhabitants estimated from settlement evidence (Krausse et al. 2019). Such examples illustrate how preservation issues and burial practices that leave little or no archaeologically recognizable traces may result in a number of identified burials that underrepresents past population numbers. This was also proposed decades ago for Neolithic Britain (Atkinson 1968) and Early Iron Age Greece (Morris 1987), and further examples can be found from across the globe.

Despite the regional and temporal variations, it can be generally observed that Iron Age burials are scarcer along the European Atlantic coastline (Cunliffe 2001; Harding 2016; Henderson 2007), which on occasion has led some scholars to speak about the “invisibility” of burials in those regions. In northern Spain, for instance, burials dating to the 1st millennium B.C. are rare, particularly when compared to the large funerary record of neighboring regions such as the Spanish Inner Plateau (Meseta). The latter region contains large Late Iron Age (4th–1st centuries B.C.) cemeteries with hundreds or even thousands of graves at sites such as...
Among regions has been interpreted as reflecting different funerary practices. This article describes the results of the fieldwork carried out at the site of Monte Bernorio and its environs, which occupies a liminal transition zone between the Meseta and the Cantabrian Sea (Figure 1). The results offer new information on Iron Age funerary practices which are also relevant for other archaeological settings.

The Monte Bernorio Archaeological Zone

Monte Bernorio is an impressive limestone mountain that forms part of the southern foothills of the Cantabrian Mountains of northern Spain, located in the municipality of Pomar de Valdivia (province of Palencia) (Figure 2). Its location is strategic, controlling a network of natural communication routes that includes the main south-north connection between the Meseta and the Cantabrian Sea. This geographical position explains its military importance during the Roman conquest in the late 1st century B.C. and the Spanish Civil War in the 20th century (Fernández-Götz, Torres-Martínez, and Martínez-Velasco 2018; Torres-Martínez et al. 2021).

The Monte Bernorio archaeological zone covers an extensive area of sites from different time periods. The most important of these is the Iron Age fortified settlement (oppidum) and its associated areas, which include ritual and funerary sites. During the Late Iron Age, the upper part of the Bernorio mountain was fortified by a stone wall and a ditch which enclosed an area of 28 ha. In addition, a number of large concentric earthen ramparts on the slopes and at the foot of the hill form a multivallate system of multiple defense lines that expands the enclosed area up to at least 90 ha, making it one of the largest sites of late prehistoric Iberia (see summary in Torres-Martínez et al. 2016a). At the end of the 1st millennium B.C., Monte Bernorio was one of the central sites of the Cantabri, one of the main Iron Age populations at the time of the encounters with Rome (Peralta 2003).

Significant archaeological discoveries at Monte Bernorio started in the late 19th century, when R. Moro was commissioned by the Marqués of Comillas to undertake a series of searches for archaeological finds to enrich the noblemen’s private collection. During this work, Moro located one of the settlement’s cemeteries, excavating some burials that contained metal grave goods, including the famous Monte Bernorio-type daggers (Moro 1891, 432–437) (Figure 3). The originality of these daggers led to their study by some of the most prestigious scholars of Spanish prehistory (Griñó 1986; Sanz Mínguez 1986; Schüle 1969).

Following the Spanish Civil War, during which Monte Bernorio was a key point on the so-called Northern Front, the first proper archaeological excavations were undertaken by J. San Valero in 1943, 1944, and 1959 (San Valero 1944, 1960). This was followed by several decades without archaeological investigations, until the “Monte Bernorio in its Environment” project started in 2004. Since then, there have been annual excavation campaigns led by the IMBEAC (Monte Bernorio Institute of Ancient Studies of the Cantabric) under the direction of J. F. Torres-Martínez. Since 2015, site research has been carried out in collaboration with M. Fernández-Götz from the University of Edinburgh. The excavations and surveys have recovered some sparse archaeological evidence from the Early and Middle Bronze Age, followed by an intensification of settlement activity during the Late Bronze Age and Early Iron Age. A large fortified settlement (oppidum) developed during the Late Iron Age, until the Roman army destroyed the site at the end of the 1st century B.C. While the results of the settlement excavations have been summarized elsewhere (cf. Torres-Martínez et al. 2016a), cemetery data remains largely unpublished, with the exception of a preliminary report on the 2007–2008 excavations that appeared in Spanish (Torres-Martínez et al. 2017).

The necropolis of Monte Bernorio was one of the first Iron Age cemeteries investigated in Spain, although the search for finds by R. Moro in 1890 cannot in any way be described as a scientific archaeological excavation. The aim was to recover visually appealing metal objects for the Marquis’ private collection, and the short report published in 1891 provides no description of the burial contexts. In 1943, J. San Valero excavated in the same area inspected by Moro, documenting the structures and grave goods with drawings and photographs, although his report on the burial evidence is rather brief (San Valero 1944, 28–33; 1960, 8–9). At a depth of 1.5 m, he uncovered what he described as “six or eight” small- to medium-sized tumuli, several of them already disturbed by Moro’s previous digging. The “tumuli” described by San Valero were simple stone mounds that formed a tumular-shaped structure. One of them was found intact, and San Valero described it as composed of several stones laid roughly around the burial pit and covered in its entirety by a larger stone slab. San Valero emphasized that the intact structure contained “no significant finds” and that he only found metal grave goods in two of the other tumuli. In both cases, the graves contained a Monte Bernorio-type dagger, spearheads, and sword belts. No ceramic remains and only a few splinters of cremated bone were recorded. However, a large number of highly fragmented pieces of burnt metal were found around the funerary structures (San Valero 1944, 28–33, 45–47, pls. VI–VII). These tumular structures were built on top of the limestone base and covered by soil. The sediment rich in metal fragments identified by San Valero may have been part of a barrow, which would have eroded over time. Such a soil deposit was in turn covered by soil washed down from the hillfort, plant decomposition, and dust deposits.

Given the limited available information on burial practices at Monte Bernorio and the key role that this site played in Iron Age northern Iberia, priority was given to new excavations of cemetery areas. The campaigns took place in 2007–2008 and 2015–2016, and the main results are summarized in the following sections.

The 2007–2008 Necropolis Excavations

There are several burial areas at Monte Bernorio, both inside and outside the exterior enclosure defined by the multivallate system. In general terms, judging from the typology of tumular structures, those farthest from the settlement core date to the Bronze Age (ca. 2200–800 B.C.), whereas those inside the multivallate area date to the Early and Late Iron Ages (ca. 800–25 B.C.). During the 2004 archaeological campaign, a series of pedestrian surveys were carried out within the multivallate perimeter, as well as in the surroundings of the oppidum. This included the terrace on which San Valero...
indicated, somewhat imprecisely, that he had excavated a necropolis (San Valero 1960, 105–106). The surveys identified pottery sherds and tiny fragments of cremated bone in certain areas, indicating the possibility that there may have been various funerary areas on the southern slope of Monte Bernorio.

On another terrace near the southern gate of the oppidum, the new surveys identified a slight lenticular-shaped elevation with a large concentration of surface archaeological finds, including wheel-thrown Celtiberian-type pottery and a few sherds of high-quality reddish-type ware, as well as small pieces of bone. During the 2006 campaign, several local inhabitants informed the research team that a specific area, known as “the tumulus”, had been repeatedly plundered. This zone was designated as Area 7 within the project (Figure 4). It is located on a terrace near the southern gate of the oppidum, above the burial site excavated by San Valero, confirming the existence of different burial areas around the settlement.

In 2007, an excavation trench was opened in Area 7. Although the terrace had been considerably disturbed by agricultural work, the results were very positive, and further
excavations were carried out in 2007 and 2008 (Figure 5). The levels nearest the surface—the substratum disturbed by farming—yielded handmade and wheel-thrown pottery sherds similar to those found during the pedestrian surveys, as well as numerous remains of metal objects. Of particular note were an iron projectile tip identified as a part of a pilum (Roman javelin), fragments of an arrowhead, a fibula, nails, and some small bronze plates. These objects would have been the remains of weapons and personal attire related to the last moments of the oppidum and its assault and destruction by the Roman legions during the Cantabrian Wars in the mid-20s B.C. (Fernández-Götz, Torres-Martínez, and Martínez-Velasco 2018; Torres-Martínez 2015).

Below the topsoil, groups of stones and darker, charcoal rich stains in the earth indicating pits (negative archaeological features) were identified. The latter contrasted radically with the yellow soil of the sterile level. Each pit was individually excavated, its contents sieved, and the archaeological remains collected. Associated with these were high amounts of fragmented charcoal. Various samples of soil, charcoal, and bone were taken for osteological analysis and radiocarbon dating. The samples were taken from the cavities whose fill appeared to be best preserved and where we considered there was less likelihood of accidental mixing with the content of other stratigraphic units.

In total, 15 funerary pits of different sizes with approximately circular or oval shapes were identified during the 2007 campaign. The two largest pits were almost 2 m in diameter, while the rest were less than 0.5 m. In the center of the excavation trench, coinciding with the central zone of the tumulus, a concentration of superimposed pits was identified. During the excavation, it was possible to reconstruct the stratigraphic sequence in which they had been dug. Only four small pits were located outside the observed concentration. The rest were found inside the tumular area, albeit dispersed. In the center of the assemblage, the two largest pits were covered with stones that sealed their interiors. They did not appear to have been disturbed by ploughing (Figure 6A). Two more pits were found to have a similar covering.

In the 2008 campaign, we identified 13 more pits that were grouped together and linked, appearing to form a complex assemblage. The observed superimposition of the pits allowed us to establish their chronological sequence, except for two pits with identical contents.

Overall, it is possible to distinguish three main pit shape patterns. Firstly, there are smaller pits (less than 50 cm in
diameter) dug directly into the sterile base level of decomposed limestone that were not superimposed by any other pit. Secondly, there are a series of larger pits (more than 50 cm in diameter) overlapping the smaller pits. And thirdly, there were pits that preserved their stone covering, forming a very small tumular structure. The superimposition of the pits
in the structures excavated in both campaigns indicates that they were dug on top of and deliberately in contact with each other. We confirmed a deliberate, repeated, and intensive use of the same space, suggesting a ritual and symbolic significance of the area.

The fill of the pits was composed of dark soil containing small pieces of charcoal and ash. The most abundant finds were fragmented animal bones from domestic and wild pigs, ovicaprines, cattle, red and roe deer. There were also some smaller, more intensively burnt bone fragments. In a much lower proportion were pottery sherds, both handmade and wheel-thrown, particularly the remains of small and medium-sized vessels and small bowls (with an absence of large receptacles). Some of the wheel-thrown pottery sherds had painted decorations (parallel lines, large receptacles). Some of the wheel-thrown pottery sherds were concentration of the area.

Most of the wheel-thrown pottery sherds were handmade and had painted decorations (parallel lines, large receptacles). Some of the wheel-thrown pottery sherds had painted decorations (parallel lines, fish scales, and concentric circles) in shades of ochre.

Fragments of metal objects were also found in most of the pits, all with clear signs of having been burnt. Iron objects included burnt fragments from a knife with a horn handle, as well as chain and plate fragments, some of these with rivets. As for bronze objects, there were remains from rivets, needles, and fibulae fragments. Also found were necklace beads, rings, hobnails, earring rods, buckle pins, and belt buckle adornments, as well as other unidentifiable metal remains (Figure 6B). Some finds stood out, such as caligae hobnails, an almost complete Alesia-type fibula, and sherds from a terra sigillata vessel.

In summary, the pits contained fragments of burnt bones, as well as fragments of metal objects and pottery vessels, most of them rather small. All the objects showed clear signs of having been exposed to fire. Based on data from the 2007–2008 excavations, we were able to conclude that the necropolis situated in Area 7 consisted of groupings of pits in which ritually burned remains were buried. Each group of pits was, in turn, associated with different tumuli that in most cases had been gradually worn away or partially effaced by erosion and farming activities.

The 2015–2016 Necropolis Excavations

New excavations in Area 7 were undertaken in 2015 and 2016 (Figure 7). Unlike earlier campaigns, the new research was based on the results of previous geomagnetic surveys (magnetometry) carried out by a team from the University of Frankfurt am Main under the supervision of F. Teichner (cf. Torres-Martínez et al. 2016b). The geophysics team surveyed a large area of the same terrace on which the 2007–2008 cemetery excavations had taken place. The magnetometry identified a series of concentrations of what appeared to be accumulations of stones and other materials that had been burnt or altered by fire. The results were used to define a number of excavation trenches, 3 in 2015 (T1 2015, T2 2015, and T3 2015) and 2 in 2016 (T4 2016 and T5 2016).

In two of the three trenches excavated in 2015 (Figure 8), a new series of dark stains was identified in the subsoil immediately below the ploughing level, indicating the existence of pits filled with blackish soil. There were also some finds from the final phase of the oppidum, including arrowheads from the time of the Roman assault. Trench 1 (T1 2015) yielded Pit 1, a large elliptical-shaped pit with an approximate diameter of 1 m, a depth of 1 m, and a flat bottom. It was full of greyish clayey sediment and small charcoal remains. Almost all the archaeological finds and the remains of leached ash were concentrated in the bottom 30 cm of the pit, which had been dug into the decomposed limestone rock base. Once again, the finds included fragmented remains of fauna, pottery sherds, an iron ferrule, and a bronze plaque.

No archaeological features could be identified in Trench 2. However, in Trench 3 (T3 2015), a stain was found that, on excavation, served to identify two more pits (Pits 2 and 3) that overlapped each other. At the end of the excavation, it was possible to document the presence of another pit (Pit 4) that had been disturbed by the subsequent digging of the two pits above it. The largest of the pits had a diameter of approximately 40 cm and a depth of some 70 cm. It was filled with very dark-grey clayey sediment containing charcoal remains. Fragments of animal bones were found concentrated in the first 20 cm of the pit. From the bottom, a blue glass bead, a bronze fibula spring, and a few pottery sherds were recovered. The fill of the second pit was easy to distinguish by its much lighter colour and more sandy texture. As in the previous pit, most of the finds were concentrated in the upper part of the fill and consisted of animal bone fragments and pottery sherds. The third pit, also shallow and containing dark soils with small pieces of charcoal and ash, yielded no archaeological finds.

In the 2016 campaign, two large trenches were excavated (Figure 9). In Trench 4, Pit 5 had an elliptical shape approximately 2 m in diameter and a maximum depth of 40 cm. It was filled with blackish soil with stains of black clay, together with very well-preserved fragments of charred wood (medium-sized branches). Identified below and around this deposit were pockets of blackish soil containing small and
medium-sized charcoal remains. At the bottom, there was a shallow deposit of archaeologically sterile, brown clayey soil without any charcoal that covered a bed of medium-sized stones. The stones and clayey soil formed the surface on which the charred branches and blackish earth that accompanied them were deposited. The pit was delimited

Figure 7. Plan of the funerary trenches excavated in 2015–2016 (design by J. F. Torres-Martínez and M. Galeano, Bernorio-IMBEAC Team).

Figure 8. Plan of Trenches 1–3 with funerary pits (design by J.F. Torres-Martínez and M. Galeano, Bernorio-IMBEAC Team).
by irregularly shaped pieces of limestone and covered with soil and medium-sized pieces of limestone (Figure 10). There was a large number of wood fragments preserved as charcoal. Associated with these finds were fragments of pottery and bone, as well as a small burnt fragment of a fibula spring.

Farther to the south in Trench 4 was the smaller Pit 6, which was dug into the geological substratum of semi-decomposed limestone, displaying an open V-shaped cut approximately 3 m wide with a maximum depth of about 75 cm. Based on the positions of the finds deposited in the ditch, we can surmise that the edges were reinforced with irregularly-shaped, medium-sized limestone stones. The latter were laid and covered with yellow clay from the sterile level. The ditch was silted up with a layer of brown clayey soil, below which there was an inverse stratigraphy that allowed us to reconstruct the filling process. A stratum of brown soil containing large stones that had fallen from the sides of the ditch was followed by dark brown soil with large and smaller stones that were blackened from exposure to fire. Below this, another level was found with a larger amount of burnt stones, although the clay around them did not show signs of exposure to fire. The bottom of the ditch contained deposits of blackish soil with a high organic content in which bone fragments and some ceramic body sherds had been deposited, as well as stones fallen from the sides. In some sections, attempts to even out the bottom of the ditch by building a base of stones were observed. Below the bed of stones, there was a very compact clayey layer of orange-brown soil that did not contain stones or archaeological finds of any type.

The presence of a ditch delimiting the area of the necropolis had already been suggested by the geomagnetic surveys (Torres-Martínez et al. 2016b). The magnetometry identified a linear structure that was interpreted at the time as a ditch, perhaps accompanied by a small wall. The ditch clearly delimited the area with archaeological features belonging to the necropolis from another space with a complete absence of geophysical anomalies, thus establishing a binary distinction between “inside” and “outside.”

The presence of a ditch delimiting the area of the necropolis had already been suggested by the geomagnetic surveys (Torres-Martínez et al. 2016b). The magnetometry identified a linear structure that was interpreted at the time as a ditch, perhaps accompanied by a small wall. The ditch clearly delimited the area with archaeological features belonging to the necropolis from another space with a complete absence of geophysical anomalies, thus establishing a binary distinction between “inside” and “outside.”

The pits with deposits identified during the 2015 and 2016 excavations exhibited a similar pattern to those documented in the 2007 and 2008 campaigns. Given this, and due to their spacial proximity, they were interpreted as being part of the same necropolis. They contained cremated bone fragments, remains of metal objects, and pottery sherds exhibiting signs of having been exposed to fire. The typological study of the finds dated them to the Late Iron Age (4th–1st centuries B.C.).

Post-Excavation Work and Interpretation: The Faunal and Human Remains

The excavations at the necropolis of Monte Bernorio Area 7 provided detailed data that constitutes an important contribution to our knowledge of funerary practices in the region and beyond. Only a few Iron Age cemeteries have been identified in northern Iberia, and practically none have been investigated in recent times using modern excavation methods. While the objects recovered during the recent excavations in the Monte Bernorio cemetery are rather unspectacular, the practices that can be inferred open new avenues for our understanding of funerary rituals during the 1st millennium B.C. Particularly important have been the results from a series of analyses of faunal and human skeletal remains, soil samples, charcoal, and other undetermined fragments.

The animal bone remains were mainly found occupying two positions within the graves. On the surface of the pits, there were large fragments that had been cooked or superficially burned. In the lower part of the pits, there were smaller fragments that were more intensively exposed to fire or heat.
We hypothesize that the remains could be part of a funerary banquet and/or constitute offerings to the deceased. Six animal species were identified in the superficial and/or lower levels: bovines (Bos taurus), suids (Sus domesticus/scrofa), ovicaprine (Ovis/ Capra), red deer (Cervus elaphus), roe deer (Capreolus capreolus), and lagomorphs (Oryctolagus cuniculus/Lepus europaues). The most numerous bone fragments were from bovines, followed by suids and ovicaprine. However, according to the MNI, the number of bovines is lower than those of suids and ovicaprine. Among the suids, it is possible that part of the remains belonged to wild boar. Although the wild species are present in lower numbers than domestic species, their presence in funerary rituals does suggest their deliberate capture for use in funerary ceremonies. Some of the bones show signs of having been cooked and eaten.

There were no horse (Equus caballus) remains detected within the stratum that would have corresponded to the surface level of the necropolis during its use and in the level disturbed by ploughing. Although we cannot include horse as a species found inside the pits, it is possible that it was present in other types of rituals. At the necropolis of Herreria (Guadalajara province, central Spain), no horse remains were documented in funerary structures, but they were abundant in the ditch, where they were found fragmented and bearing marks of fire and heat (Cerdeño and Sagardoy 2007, 159–160). The absence of horse among the offerings that accompanied the deceased is also observed in Late Iron Age Gaul, where they are generally not present in the graves but are sometimes found among the remains of other rituals associated with funerary spaces (Méniel 2001, 96–98). In any case, the need for contextual analysis is exemplified by the fact that—in contrast to Monte Bernorio, Herreria, and parts of Gaul—horse remains have been found in graves from other Late Iron Age cemeteries in Iberia, such as Pintia (Sanz Mínguez 1997) and Numantia (Jimeno Martínez et al. 2004).

Of the 183 animal remains from Monte Bernorio Area 7 for which age attribution was possible, 13 (7%) were infants, 32 (17%) juveniles, and 138 (75%) adults. The numbers demonstrate a clear predominance of adult specimens, and there is also a complete absence of infant wild animals. This data suggests that the practice of funerary rites at Monte Bernorio were similar to those in Iron Age Gaul, where animal sacrifice in funerary banquets has been reported (Méniel 2001, 73–77) together with offerings to the deceased or as part of post-funeral rituals (Méniel 2001, 73–77, 87–98).

Initially, no bone remains could be identified as clearly human among the fragments recovered from the excavations in Monte Bernorio Area 7. However, thin section microscopic analysis of fragments recovered from soil sieving allowed for the identification of both human and animal remains from the study of the properties of bone osteons (Figure 11). The histological study of the Monte Bernorio bone remains was carried out at the LaUAM laboratory (Autonomous University of Madrid) by the biologist A. Rodriguez Trigo under the supervision of A. Fuentes. The analysis demonstrated that human remains were indeed cremated as part of the ritual. The totality of the data from the cemetery suggests that the deceased were cremated with grave goods (clothes, adornments, vessels for alcoholic drinks, etc.) and possibly also along with animal parts. The heat produced during the cremation would have burnt the flesh and fat off the body completely. Once the fire had been extinguished, the cremated human remains were probably mixed with those of the animals and pottery burned alongside them.

It is evident that this was a funerary ritual with an established order and criteria. A funerary banquet with the consumption of domestic and sometimes wild animals has been identified through faunal remains that show signs of having been cooked and bear marks of the flesh having been stripped from the bone. Once this part of the ritual had been completed, a small part of each and every one of the elements that had been involved in the ceremony was collected: soil, ashes, charcoal, bone fragments from the animals cooked for the banquet, and pottery sherds. During this collection process, some splinters of cremated human bones would have been included. This suggests the practice at Monte Bernorio Area 7 of a funerary ritual dominated by fragmentation following the practice of the pars pro toto, in which human remains and objects are symbolically represented by only part of the body/artifact. The Latin expression “pars pro toto” means “a part taken for the whole”; in other words, a part of something that serves as a representation of the whole.
Fragmentation is a well-known phenomenon in archaeology (e.g. Brittain and Harris 2010; Chapman 2000), but it has rarely been discussed in relation to human remains. At the Late Iron Age cemetery of Lamadelaine near the oppidum of Titelberg (Luxembourg), the excavators reconstructed a complex burial ritual composed of four consecutive stages: 1) exposure of the corpses; 2) cremation of the fleshless bones and performance of animal sacrifices; 3) deposition in the graves of the various objects and food offerings accompanied by only some of the cremated human remains; and, 4) the probable deposition in water of the remaining human remains (Metzler-Zens et al. 1999). According to the excavators, each of these phases might have been associated with one of the world’s fundamental elements: air, fire, earth, and water. At Lamadelaine, only a small proportion of the human remains were deposited in the graves, in what represents a clear example of the pars pro toto practice applied to the human body. This is consistent with the small amount of human remains frequently found in Iron Age graves throughout Europe, indicating that in many cases—including at Monte Bernorio—there was an intentional practice of selecting only part of the body for secondary deposit in a burial (Beausoleil, Gros, and Pélissié 2006, 137; Rebay-Salisbury 2016; Van der Vaart-Verschoof and Schumann 2020; Veselka and Lemmers 2014).

There is also evidence at Monte Bernorio that points towards a worship of the memory of the dead that would have taken place after the funeral, a practice well attested in different parts of Iron Age Europe (Fernández-Götzt 2016), the Mediterranean, and beyond (cf. for example Antonaccio 1995). This could be the case for some of the pits that had not been disturbed by ploughing and contained faunal remains deposited in the upper part of the grave; we can link this to a type of funerary worship subsequent to the interment. One of the tombs excavated in 2015 revealed a covering of stones and long mammal bones apparently undisturbed by ploughing. These bones were clearly deposited stratigraphically, well above the deposit of dark earth full of small pieces of charcoal, burnt and cooked bones, and grave goods.

Structure and Chronology of Monte Bernorio Area 7

The burial pits excavated in both the 2007–2008 and the 2015–2016 campaigns had similar structures and content. In many cases, the pits were sealed with a stone cover and by small- and medium-sized tumuli. Some pits were clustered together, forming concentrations of burials superimposed over each other. This indicates a deliberate decision to bury certain remains in close proximity, probably beneath the same tumular structure or in another type of delimited space.

On its northern side (facing the wall of the oppidum), the necropolis of Monte Bernorio Area 7 was bordered by the edge of a natural terrace, while on the southern side, it was enclosed by the aforementioned ditch, identified through geophysical prospection and excavation. The two excavated sections are part of the same ditch. They are similar, and their edges were reinforced with stones. The presence of ditches delimiting the sacred space (nemeton) of Iron Age cemeteries in Iberia has also been observed at the Celtiberian necropolis of Herrera, associated with an area in use during the Late Iron Age. The structure and fill of the ditch at Herrera phase IV are similar to that of Monte Bernorio Area 7 (Cerdeño and Sagardoy 2007, 159–161).

The structures located in the new excavations have yielded different results to those excavated by San Valero’s team in 1943 and by Moro in 1890. Daggers of the so-called Monte Bernorio-type, as discovered in the previous excavations, were not recovered during the more recent work. In general, the grave goods recovered from Area 7 are more modest than those identified by Moro and San Valero, perhaps indicating that the various funerary areas could be linked to social status differences. The daggers found in the necropolis excavated by San Valero and the other associated finds indicate that it was in use between the end of the 4th and the 3rd centuries B.C. (Griñó 1986, 297–299; Peralta 2003, 56; Sanz Mínguez 1986, 27, 39–40). On the other hand, the burials excavated in Area 7 date somewhere between the 3rd and 1st centuries B.C. This makes them roughly contemporaneous with the Iron Age necropolis of Villa-nueva de la Teba and the final phase of the cemetery of Pinilla Trasmonte, both located in the nearby province of Burgos (Morea and Nuño 1990; Ruiz Vélez 2001, 88–89, 105–111, 118).

In order to establish a more precise chronology for the necropolis in Monte Bernorio Area 7, a series of radiocarbon measurements were carried out, mainly on the animal bones. One sample of burnt bone (Beta-462864) taken from Pit 10 (excavated in 2007) was analyzed at the Beta Analytic laboratories. The pit was near the surface, and its contents were protected by a covering of stones that sealed them in and
allowed us to rule out any a posteriori introduction of materials. The calibrated radiocarbon date (339–46 \text{ Cal B.C., 95\% credible interval}) is consistent with the discovery in the pit of Roman military artifacts, confirming a chronology towards the end of the Iron Age.

The second sample was taken from cooked bone remains from Pit X (excavated in 2008), which we had interpreted as part of the funerary banquet and which came from the deepest part of the pit. The sample was sent for radiocarbon dating to the Leibniz-Laboratory for Radiometric Dating and Isotope Research (Kiel, Germany). Three measurements were carried out on samples under the same laboratory reference (KIA-51519). The individual results for each (2054 ± 34 \text{ B.P., 2137 ± 26 \text{ B.P., and 2097 ± 26 \text{ B.P.}}) were combined using the “R_Combine” function of the OxCal v.4.4 software package and calibrated into calendric dates using the same software and the IntCal20 calibration curve. The combined uncalibrated result was 2103 ± 17 \text{ B.P.}, following a Chi-squared test (T = 3.8 [for df = 2 and α = 0.05, χ² = 6]). This combined measurement coincides perfectly with the date (Beta-462864) obtained in the Beta Analytics Laboratory. However, given the high precision of the combined measurement, it provides a more precisely calibrated date of 169–52 \text{ Cal B.C. (95\%, credible interval)} (Figure 12).

In addition, radiocarbon measurements were done on animal bone fragments from other parts of the necropolis. A sample of mammal bone (SUERC-75404) recovered from the top of Pit X was subjected to radiocarbon analysis at the SUERC Radiocarbon Dating Laboratory in Glasgow. The calibrated range for the measurement (1942 ± 34 \text{ B.P.,}) was 30 \text{ Cal B.C.}–204 \text{ Cal A.D. (95\% credible interval). Two other measurements were carried out at SUERC on mammal bone samples from the upper (SUERC-75397) and lower (SUERC-75398) layers of the ditch that delimited the necropolis area. The calibrated date range for SUERC-75397 (2033 ± 34 \text{ B.P.,}) was 151 \text{ Cal B.C.}–69 \text{ Cal A.D. (95\% credible interval)} and -389 to -198 (95\% credible interval) for SUERC-75398 (2228 ± 34 \text{ B.P.,}). A sample of charred wood (SUERC-75399) found in a charcoal deposit had an uncalibrated result of 2344 ± 34 \text{ B.P., calibrated into the range 540–236 \text{ Cal B.C. (95\% credible interval).}}

The dates obtained from the Monte Bernorio Area 7 necropolis suggest an extended period of use of the funerary area, although it is not possible to precisely estimate this, given the wide ranges for individual dates. Specifically, the bone date from the bottom of the ditch suggests that it was almost certainly in use at least since the 2nd century B.C., whereas the data from the upper part of the ditch dates somewhere between the mid-2nd century B.C. and the first half of the 1st century A.D.

It is important to point out that among the finds in some tombs of Monte Bernorio Area 7 were Roman military equipment, including an Alesia-type fibula and caliga hobnails. Interestingly, this practice is attested some decades before the Roman conquest of the territory, which might be connected with the interaction of some Cantabrians with the Roman army, either as mercenaries or enemies in the decades prior to the Cantabrian Wars (Peralta 2003, 184–188, 210–211, 299–319; Torres-Martínez 2011, 432–433, 439–442).

In addition to the burial pits themselves, the excavations identified other types of rituals that do not strictly correspond to when the remains were buried. However, they can be associated with ritual practices carried out in the necropolis and therefore linked to the cult of the dead in a wider sense. For example, there were perfectly carbonized wood fragments deposited in a pit sealed with a stone covering. The study of the deposit indicates that the burning did not take place there and that the wood was extinguished when it was already well alight. The complete absence of any signs of calcination on the stones and the soil covering the bottom of the pit, along with the presence of very few remains of ash, also indicate that cremation took place elsewhere.
Destruction of the Body, Commemoration in the Absence of a Corpse, and Visibility of the Mortuary Rites

The results of the excavations outlined above suggest that Monte Bernorio Area 7 was not only used as a cemetery to deposit grave goods or fragmented human remains, but also for other ritual purposes. This has also been observed in other cemeteries of Iron Age Iberia, including, in central Spain, those of Herrera (Cerdeño and Sagardoy 2007, 160–161) and Pintia (Sanz Mínguez 1997). The fact that similar evidence to that identified at Monte Bernorio is so far absent from other Iron Age sites in northern Spain might be partly due to research strategies, since the remains might be difficult to identify and interpret without very detailed analysis.

However, several important questions remain: what happened to the human remains and other items after the funeral? Why are there no appreciable amounts of human remains in the excavated part of the necropolis? Although the phenomenon of the invisibility of human remains occurs in different times and places (Metcalf and Huntington 1991), it remains poorly understood. While in some cultures we have the problem of locating archaeologically recognizable burial places, in others, such as our example of Monte Bernorio Area 7, there are structures and finds related to funerary rituals but no visually identifiable human remains. Here, we are not dealing with problems of natural preservation (e.g., acidity of the soils, since, as mentioned below, some newborn remains are found within the settlement), but rather intentional cultural practices designed to render the remains of some of the deceased invisible, while at the same time commemorating their memory.

Finds of funerary structures without clearly identifiable human remains are observed from the Bronze Age in the northern Iberian Peninsula, as well as in other regions of Atlantic Europe. The building of tumuli, mainly for funerary use, began towards the middle of the 2nd millennium B.C. in the entirety of the Cantabrian region and the western part of the Pyrenees. The construction of this type of monument continued during the Late Bronze Age and the Early Iron Age and in some cases into the Late Iron Age and even the beginning of the Roman period (Aja et al. 1999, 53–61; Peñalver 2001, 54–58, 65–70; Torres-Martínez 2011, 451–459; Torres-Martínez et al. 2018). In some cases, human remains have been found, most of them cremated, together with the remains of charcoal and other finds that indicate cremation funerary rituals (Bettencourt 2010, 37–38; Blot 1994; Edeso et al. 2016, 194–196, 202–204; Pellicer 2008). However, in many other cases, the tumuli do not contain any human remains and sometimes lack finds altogether. The existence of apparently empty tumuli, in which no human remains or any other type of deposit or offerings are detected, is well documented archaeologically in the whole Cantabrian Mountain Range, as well as other areas of western Europe. They can be linked to ritual sites that are still not well known or understood, which we can identify as places of commemoration or lieux de mémoire (Blas Cortina 2004; Brück 1995; Torres-Martínez et al. 2018).

Within the framework of the “Monte Bernorio in its Environment” project, surveys were also carried out in the mountainous area of Mata del Fraile. The latter is located several kilometers away from the oppidum and comprises more than 50 tumuli. Two tumuli were carefully excavated, the first one in 2012 and 2015 and the second in 2016 (see report and discussion in Torres-Martínez et al. 2018). Tumulus 1 measured 6 m in diameter and was preserved to a height of 1.1 m. It was completely empty, with the exception of a carved stone cippus placed in the middle of the structure. In 2016, the nearby and smaller tumulus 2 was excavated, yielding no archaeological finds. In both cases, the absence of human remains and grave goods cannot be explained as the result of post-depositional processes but rather seems to indicate an intentional desire to leave the monuments empty. While we should not necessarily extrapolate the results to all the barrows of Mata del Fraile, at least in the case of the two excavated tumuli, we are not looking at burial monuments in the sense of regular tombs but possibly at commemorative structures. These could have acted as landmarks in a natural corridor zone through which livestock would likely have been herded on the journey to summer pastures.

In northern Spain, the cremation ritual, which started to be frequent from the middle of the 2nd millennium B.C., became generalized at the transition from the Late Bronze Age to the Iron Age (Torres-Martínez 2011, 446–447, 515–516). Only in the case of the ritual interment of newborn and stillborn babies do we find the preservation of non-cremated human bone remains. The corpses of the babies were buried below the floors and in the walls of houses in a type of practice that was common at many sites in the Cantabrian region (and in other parts of the Iberian Peninsula) during the Late Bronze and Iron Ages (Galilea and García 2002; Gusi and Luján 2011; Torres-Martínez 2011, 329). In the oppidum of Monte Bernorio, the remains of newborn individuals have also been found interred inside buildings, representing the only known inhumations at the site (Torres-Martínez, Domínguez-Solera, and Carnicer 2012). Newborn and child inhumation burials inside settlements constituted a common practice in the case of infants who had yet to develop the ability to chew food for themselves. This burial tradition could represent a specific rite of passage (for a discussion of the concept, cf. Van Gennep 2004). On the other hand, juveniles and adults were cremated, and their remains were at least partially buried in the necropoleis, in what could have constituted the general rite of passage for the population of the region.

In general terms, and leaving aside the newborns, three main funerary traditions can be distinguished in Iron Age northern Iberia (Torres-Martínez 2011, 515–516, 526–530): 1) urnfields: cremation burial sites with the remains inside pottery vessels deposited in pits—a variation of this would be those with a tumulus or in which the tomb was covered with stones or earth; 2) cremation burial sites in tumular structures with the remains deposited in a pit, but without any container; and, 3) invisible burials, i.e. areas in which no necropoleis have been found. Therefore, although we can establish an apparent absence of burial sites in certain areas, as well as the existence of funerary structures without human remains, in general terms, the expression “invisibility of the dead” needs to be nuanced. The funerary rituals attested both at Monte Bernorio and in other areas of northern Spain cannot be defined as the invisibility of the dead, given that necropoleis were frequently built (in many cases with tumular structures) in areas linked to population centers. What we observe are rituals aimed at the disappearance...
of the corpse, a phenomenon that is common in other regions of Iberia and Europe during the Iron Age, and also in other prehistoric periods. As well as cremation and fragmentation, these practices could be related to other specific rituals for the treatment of the dead, such as stripping the flesh from the bones and/or exposure to animals (Sopeña 1995, 184–262). In addition to fire, human and other unreserved remains could have been thrown into or made to disappear by the action of water, in a similar way to the Hindu Antyesti rituals.

The apparent irrelevance of the body, or at least of its integrity, in the funerary treatment following cremation could explain its absence from some ritual structures and necropoleis. This is the case, for example, in the necropolis of Las Cogotas (Cardeña, Ávila province), dated between the 4th and 3rd centuries B.C.: in Area 1 of the cemetery, 17 of the 37 excavated tumuli were empty (Álvarez-Sanchís 1999, 297). In the case of the necropolis in Monte Bernorio Area 7, this type of “invisibilization” ritual appears to be the norm rather than the exception. What was perhaps important was not so much the preservation of the body itself, but the perpetuation of a tangible impression and memory of the deceased and their funeral. The funerary chaîne opératoire constituted a rite of passage in which, through different sequences, the deceased passed from being a member of the community of the living to that of the dead (Valentin et al. 2014). From this perspective, the rite could have constituted the goal in itself and what was actually being commemorated was that event.

As outlined above, in the Bernorio necropolis, we documented a cremation ritual similar to that carried out in other parts of Iron Age Europe. However, it has been shown that the human remains, although they existed, were not always or fully incorporated into the grave. This implies that there were at least two associated rituals: one to make the deceased’s body disappear and another to commemorate it through a ceremony and a burial structure. Therefore, we cannot speak of “invisibilization,” as the memory of the deceased was made visible through the cremation act (which would have represented a performance, cf. Sørensen and Rebay 2007), the necropolis itself, and its funerary structures and rituals, including some evidence for later ancestor worship. This and other similar necropoleis were ritual places for the memory of the deceased with an (almost complete) absence of human remains.

The conclusion is that we have identified a much more complex use of necropoleis than what has traditionally been documented for the Iron Age in northern Iberia. In this respect, the exhaustive analyses undertaken have been decisive in helping to understand the multistaged performances involved in the funerary ritual. The Iron Age necropolis of Monte Bernorio Area 7 reveals itself as much more than a conventional cemetery: it was in fact a multipurpose ritual space with highly diverse practices linked to the worship of the dead. In this respect, we could consider these types of necropoleis as places of commemoration, or lieux de mémoire (cf. Nora 1989). They were places in which collective memories were constructed and maintained, primarily through the worship of the memory of the dead and the commemoration of their funerary rituals as social ceremonies, often going beyond the treatment of their bodies. This links to an increasing literature that emphasizes the role of cemeteries as places of memory and ancestral remembrance and the role of burial mounds as mnemonic devices (cf. Arnold 2010).

Thus, it is time to rethink the meaning of many funerary spaces in the European Iron Age and beyond. As expressed by H. Fokkens (2012, 553) in his discussion of tumuli cemeteries in the Low Countries: “Barrow groups of the Late Neolithic or the Bronze Age are generally interpreted as cemeteries: places where people buried their dead […] That is a logical way of thinking because this is how cemeteries function today.” However, “it may be even wrong to speak of barrow cemeteries. It might be better to refer to them as ancestral monuments that were only occasionally also used as cemeteries.” The necropolis of Monte Bernorio Area 7 contributes to this ongoing task of recognizing the complexity of past practices linked to death, memory, and the afterworld, thus adding to our broader understanding of Iron Age funerary traditions in western Europe.

Acknowledgments
We would like to thank the Leverhulme Trust and the local and regional authorities for their support during the fieldwork campaigns and post-excavation analysis that have led to the production of this article.

Disclosure Statement
No potential conflict of interest was reported by the author(s).

Notes on Contributors
Jesús F. Torres-Martínez (Ph.D. 2009, Complutense University of Madrid) is co-founder and president of the Monte Bernorio Institute of Ancient Studies of the Cantabtic (IMBEAC). He has directed fieldwork at Monte Bernorio and its environs since 2004 and excavated at the nearby Roman site of Huerta Varona. His Ph.D. thesis, published in 2011, provides the most comprehensive overview on the archaeology of the Cantabrian region during the 1st millennium B.C.

Manuel Fernández-Götz (Ph.D. 2012, Christian-Albrecht University of Kiel and Complutense University of Madrid) is Reader and Head of the Department of Archaeology at the University of Edinburgh. He has directed fieldwork in Germany, Spain, the UK, and Croatia, including co-direction of the Monte Bernorio project from 2015–2017. He has published extensively on Iron Age societies in central and western Europe, including aspects such as urbanization processes, funerary rituals, ethnicity, and conflict.

Santiago Domínguez-Solera (Ph.D. 2017, Complutense University of Madrid) is a researcher at the Monte Bernorio Institute of Ancient Studies of the Cantabtic (IMBEAC) and co-director of the company “ARES: Archaeology and Cultural Heritage.” He specialises in zooarchaeology and Iron Age societies, having participated in numerous fieldwork projects, including the Cantabrian sites of Monte Bernorio and La Loma.

Antxoka Martínez-Velasco (Ph.D. 2018, University of Santiago de Compostela) is a member of the Sociedad de Ciencias Aranzadi specializing in the study of late prehistoric and Roman societies in the Cantabrian region. He has directed fieldwork at several sites in the region, including the hillfort of Munouandi in the Basque Country. He has participated in the fieldwork at Monte Bernorio for nearly 15 years.

David Vacas-Madrid (M.A. 2016, University of Alicante) is a researcher at the Monte Bernorio Institute of Ancient Studies of the Cantabtic (IMBEAC), where he has been in charge of documentation. He currently works as a visualization and geospatial processor at Cyberhawk, Scotland.

Mariano Serna-Gancedo is a researcher at the Monte Bernorio Institute of Ancient Studies of the Cantabtic (IMBEAC). He has published extensively on the prehistory of the Cantabrian region and currently directs
experimental archaeology workshops at the Research Centre and Museum of Altamira.

Gades Cabanillas de la Torre (Ph.D. 2015, Autonomous University of Madrid and Paris-Sorbonne University) is a conservator at the Service régional de l’Archéologie de Bretagne. Her main areas of expertise are Iron Age pottery in western Europe and funerary rituals in the Atlantic regions. She has participated in fieldwork in Spain and France, including the excavation of the Monte Bernorío necropolis.

Marcos Galeano (M.A. 2017, Complutense University of Madrid) is a specialist in graphic design and virtual reconstruction. He has worked at numerous archaeological sites in Spain, with a particular focus on the Bronze and Iron Ages. He has been in charge of the digital documentation of sites such as Monte Berriono, Huerta Varona, and Cerrito.

Ricardo Fernandes (Ph.D. 2013, Christian-Albrecht University of Kiel) is Head of the Radiocarbon Lab at the Max Planck Institute for the Science of Human History (Jena), Research Associate at the School of Archaeology of the University of Oxford, and Associate Professor at Masaryk University. He has published extensively on radiocarbon and isotope analysis in different parts of the world, with current projects focused on the Classical Mediterranean.

References


