




Research Article

The inverted dead of Britain's Bronze Age barrows: a perspective from Conceptual Metaphor Theory

Rob Wiseman^{1,*} , Michael J. Allen² & Catriona Gibson³

¹ McDonald Institute for Archaeological Research, Cambridge, UK

² Department of Archaeology, Anthropology & Forensic Science, Bournemouth University, UK

³ Independent Researcher

* Author for correspondence: ✉ rdw42@cam.ac.uk



Barrows are a prominent feature of Britain's Bronze Age landscape. While they originated as burial monuments, they also appear to have acquired other roles in prehistory. British prehistorians, however, have been hampered in their interpretations of these monuments, as they are wary of speculating about how Bronze Age people might have conceptualised their dead. Here, the authors suggest that a recurring pattern of inversion is significant. They use Conceptual Metaphor Theory to argue that Bronze Age people in Britain saw their dead inhabiting an inverted underworld directly beneath the surface of the earth. This interpretation would explain not only burial practices, but also some of the barrows' other apparent functions, such as guarding boundaries and controlling routeways.

Keywords: Bronze Age, barrows, archaeology of death, Conceptual Metaphor Theory

Introduction

At the 'Landscapes of the Dead: Exploring Bronze Age Barrowscapes' conference held in London in 2019, it was suggested that archaeologists would make more progress towards understanding barrows if they had a clearer notion of how Bronze Age people conceptualised their dead. While barrows undeniably had more functions than simply containing and marking graves, it is equally undeniable that some of these other roles were ultimately grounded in ideas about death and the dead. Prehistorians are understandably cautious about invoking spiritual or supernatural concepts that leave no direct material remains, but there comes a

Received: 18 July 2020; Revised: 23 August 2020; Accepted: 3 September 2020

© The Author(s), 2021. Published by Cambridge University Press on behalf of Antiquity Publications Ltd.. This is an Open Access article, distributed under the terms of the Creative Commons Attribution-NonCommercial-ShareAlike licence (<http://creativecommons.org/licenses/by-nc-sa/4.0/>), which permits non-commercial re-use, distribution, and reproduction in any medium, provided the same Creative Commons licence is included and the original work is properly cited. The written permission of Cambridge University Press must be obtained for commercial re-use.

point when committing to some position is essential in order to advance our understanding. It makes a significant difference to the interpretation of barrows if, for example, the dead were thought to be aware and active within their barrows, rather than inert or departed to a distant afterlife.

In this article, we suggest a new interpretation based on a common feature of Bronze Age barrow burials in Britain—one that can be explained by a well-attested concept of the dead. More broadly, the approach employed here can also be used to reconstruct ideas about the dead in other societies and times (see Wiseman 2019).

A recurring pattern of inversion

Barrows were constructed in Britain between *c.* 2400 and 1500 BC. Almost all were burial monuments, although a few empty ‘cenotaphs’ are known. The earliest contained inhumation burials, usually placed in a distinctive ‘crouched’ position, but from *c.* 2100 BC cremation burials appeared, becoming almost the sole form of burial in the period *c.* 1800–1500 BC. After the construction of barrows ceased at the end of the Early Bronze Age (*c.* 1500 BC), existing barrows continued to be used for secondary cremation burials, until cremation itself disappeared in Britain at the end of the Bronze Age (*c.* 800 BC).

Our starting point for interpreting barrows focuses on patterns of inversion found throughout Britain in association with these monuments. As there are obvious difficulties comparing inhumation and cremation burials, this analysis will focus on the latter burial rite.

Urns

During the Bronze Age, urns containing, covering or accompanying cremated human remains were often deposited upside down (Figure 1). All the main vessel types that accompanied cremation burials have been found inverted, and the practice is reported in all parts of Britain, including Scotland, Wales and north-east and southern England (Owoc 2000; Bristow 2001; Fowler 2012; Medina-Peterson 2013; Pettitt 2015).

Inverting urns became established practice in the second half of the Early Bronze Age, although it occurred occasionally for several centuries before (Figure 2). Towards the end of the British Chalcolithic (*c.* 2300–2150 BC), a handful of cremation burials were accompanied by inverted Beaker vessels (Clarke 1970: 138–39). Beakers were succeeded by Food Vessels in the first half of the Early Bronze Age (*c.* 2150–1800 BC). The Atlantic Europe in the Metal Ages (AEMA) Project (<http://www.aemap.ac.uk/search>) recorded 1200 Food Vessels accompanying burials in Britain: 54 per cent with inhumations and 46 per cent with cremations. Where urns’ positions were documented, 20 per cent (106) were inverted, while 80 per cent (422) were upright. Inversion only began in earnest when Collared Urns became part of the funerary repertoire (*c.* 1800–1500 BC). At this time cremation became the dominant funerary rite, with only 20 of the 510 burials recorded by the AEMA project involving inhumations. Of the 363 Collared Urns where position was reported, 56 per cent (341) were inverted and 44 per cent (266) were found upright.

Caswell and Roberts’s (2018) review of cremation burials in the Middle Bronze Age (*c.* 1500–1150 BC) identified 3133 individual burials from 378 sites, mostly in southern



Figure 1. Inverted urns during excavation: top) Early Bronze Age Collared Urn from Petersfield Heath in West Sussex (courtesy of S. Needham and the People of the Heath project); bottom) Middle Bronze Age Bucket Urn from Newark-upon-Trent (courtesy of Oxford Archaeology & Urban and Civic Plc.).

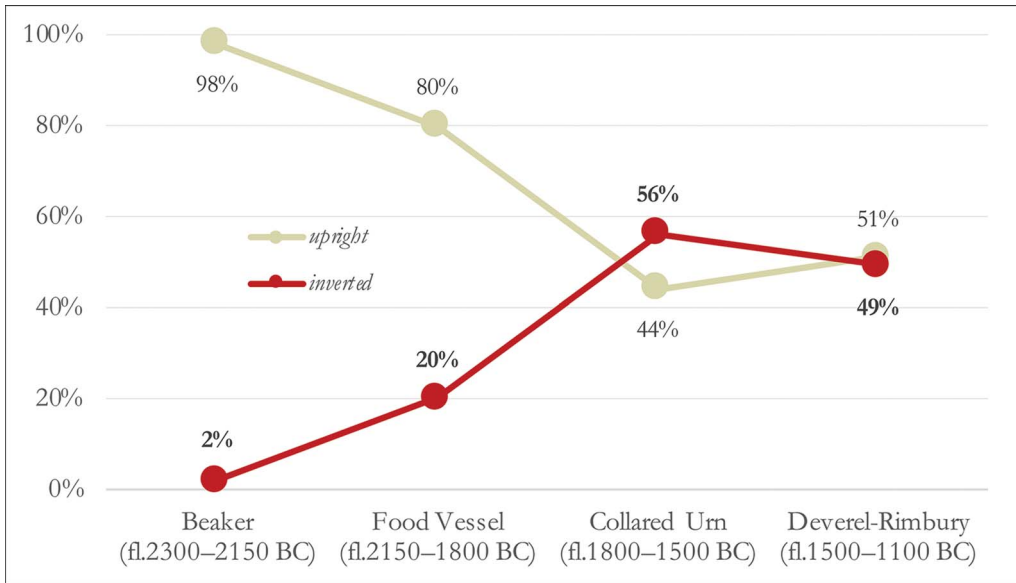


Figure 2. Percentage of urns found upright (grey) and inverted (red, bold text) (fl. = main period of use) (data sources: Grave Goods project; Atlantic Europe in the Metal Ages project; Cowie (1978); Gibson (1978); Longworth (1984); Wilkin (2013); Caswell & Roberts (2018)).

England. Where information on orientation was available, almost exactly half of the urns were inverted (460 of 945 reported). The use of inversion was not uniform within cemeteries, however: Caswell and Roberts (2018) note 35 sites with both upright and inverted urns.

By the Late Bronze Age (*c.* 1150–800 BC), urns had disappeared almost completely from burials, although cremation continued. The few published examples of urned cremations do include inverted examples, such as the Post-Deverel-Rimbury urns at Kimpton barrow cemetery in Hampshire (Dacre *et al.* 1981).

It is important to appreciate the peculiarity of inverting urns. Neither Roman nor Anglo-Saxon urned cremations in Britain were inverted (e.g. Hills *et al.* 1994; Philpott 1991: 30–44). Nor were other accompanying grave goods, unless they were used as ‘lids’ for cremation urns. Inversion defies the ‘right’ way to orientate any filled container, and inevitably means upsetting the contents (as did, in fact, happen in many Bronze Age urned burials). That half of the Middle Bronze Age urns were found rim-down attests to the importance of inversion. That it is not a full one hundred per cent presumably reflects the conceptual conflict between inversion and the ‘normal’ way of orienting a pot, and possibly a desire not to spill the urns’ contents.

Cremated remains

Although micro-excavation of cremation burials and urns is recommended practice (McKinley 2013: 156–57), all too often the results go unpublished. Consequently, British prehistorians lack a detailed picture of how bone, pyre debris and other material went into most Bronze Age cremation burials. This contrasts with examples elsewhere, such as the Late Bronze Age

cremation cemetery at Cottbus in Germany, where micro-excavation demonstrated that bodies were ‘reconstructed’ within urns (Gramsch 2007), with cremated bone being placed in urns to replicate their arrangement in a living body. Nonetheless, even amongst the limited number of micro-excavated British cremations, examples of inversion have been reported. Downes’s (2005) analysis of all 33 burial cists at Linga Field, Orkney, for example, found that, in the unurned primary burials and some secondary burials, material from the pyre was deposited in an inverse sequence. At the base of each cist was cremated bone, then cramp (a glassy slag, peculiar to Orcadian pyres, apparently produced by placing seaweed on the pyre), and then burnt turf or wood. Downes (2005) emphasises that this ordering must have been deliberate, as all the material had been meticulously picked out of the pyre, cleaned and sorted before being deposited. She also notes inversion in other Orcadian cremations, such as at Glitterpitten (Downes 2005: 172–74).

In southern England, micro-excavation of an inverted Collared Urn cremation (no. 3914) from Lodge Farm, St Osyth, Essex found that most of the skull bones were placed at the top of the urn while lower limbs were concentrated at the base (Armstrong 2007: 82–84). When the urn was placed upside down in the ground, the reconstructed body would also have been inverted. By contrast, micro-excavation of two urns buried right way up in nearby Chelmsford found that skull fragments were frequent at the base of each urn, axial bone in the centre and lower limb bones at the top, again inverting the bodies (Anderson 2005: 15–16).

Occasionally, the contents of urns may be layered (e.g. Brittain 2015: 226). While the inverted ordering of bones and pyre debris may sometimes simply reflect the way materials were collected from the pyre, other examples are clearly deliberate. An example is the Collared Urn excavated at Moel Goedog Cairn I (Lynch 1984: 22–23), where pyre ash was recorded at the base of the urn, overlain by cremated bone. The bone must have been retrieved from the pyre and set to one side, so that the pyre ashes could be placed into the urn first, then the bone, before the whole assemblage was finally inverted and placed in the ground.

Detecting inversion in cremation burials requires particular circumstances: the bulk of the skeleton must be present and fitted tightly within the urn. This is rare in most Bronze Age cremations, where burials usually contain 330–470g of bone (McKinley 2013: 13)—far less than the 1000–2400g of a typical adult. Furthermore, if the bone is not tightly packed within the urn, the pieces will quickly become jumbled—especially if the urn is inverted. Small, dense fragments will settle to the bottom and larger, less dense pieces rise to the top (as apparent in several half-filled urns; e.g. Felter 2007: 14; McSloy & Ellis 2016: 4).

Barrow construction

Many Bronze Age barrows in Britain were constructed of turf and, where evidence exists, the turves often appear inverted—apparently deliberately. Regrettably, the orientation of turves often goes unquestioned and unreported, even when it is apparent in site photographs. Turf orientation is often difficult to detect in the field and easy to misinterpret. In preparing this article, we found turf orientation reported for just 20 excavated barrows, and consequently it is impossible to estimate how widespread turf inversion was, although, when discussing soil micromorphology from barrows, Macphail and French say it is common (Macphail 2017: 13; C. French *pers. comm.*). Inverted turves are reported in south-western England (six

examples in Owoc 2000; see also McKenzie, in Bayer *et al.* 2017: 64–72; Macphail & Lenka, in Tilley 2017: appendices 5 & 11), southern England (Bradley & Keith-Lucas 1975; Ashbee & Dimbleby 1976; Drewett 1976; Macphail 1980; Green *et al.* 1984; Parfitt 2018), and northern England (four examples in Smith 1994: 55, 57, 65–66; see also Bu'lock *et al.* 1960).

Along with turf, barrows were also constructed from stones and layers of soil. It has long been recognised that these layers may reverse the stratigraphic sequence of the earth from which they were made (e.g. Owoc 2000: 218–19; Bradley & Fraser 2010). While this inversion may sometimes simply reflect the order in which soil was excavated and heaped up to form the barrow, this does not explain all cases. In Wessex, for example, many round barrows were built with a turf core covered by chalk dug from the surrounding ditch; however, the grass must have come from a much wider area than the ditch could possibly have provided—over 10 000m² for large mounds. Consequently, placing chalk over the turf must have been a deliberate choice, rather than a simple by-product of excavation. In Orkney, Downes (2005) has reported excavations of a dozen barrows, all showing inversion: some with turf being packed around the burial cist, then overlain by subsoil; others with clay subsoil overlain by stones. In upland areas there are numerous cairns with turf or soil cores that also display an inverted stratigraphy (e.g. Smith 1994; Fowler 2012).

Barrow form

The examples discussed so far involved physically inverting elements of the burial or the barrow. One last potential type involves inverting the barrow's form. The most common barrow types in Britain—bowl, bell and saucer barrows—consist of an earth mound surrounded by a ring ditch. A rare alternative is the pond barrow, comprising a basin typically 10–25m across and 0.5–2.0m deep, with a surrounding earthen bank (Grinsell 1953: 23). In cross section, this form appears to mirror that of regular barrows (Figure 3). Although they are not barrows in the usual sense of an earthen mound, pond barrows do nonetheless sometimes contain burials, and are often found alongside regular barrows. Nearly 300 years ago, Stuckeley (1743: 12) described these as “barrows inverted” or “barrows reversed”, before they were renamed ‘pond barrows’ in the nineteenth century. This type of barrow first appears in the second half of the Early Bronze Age—around the same time that inverted urns became common.

Interpreting inversion: Conceptual Metaphor Theory

It is one thing to identify a recurring pattern like inversion. It is another matter entirely to connect it with an idea such as ‘the dead’. Here, we outline one way archaeologists may interpret this immaterial realm using only material evidence. Whatever other associations barrows later acquired, they are ultimately about the dead. Being dead, however, is not just the physical state of the deceased: it is also a concept in the minds of the living. There has been much work by cognitive scientists in recent decades into how people form concepts. One particularly productive area has been Conceptual Metaphor Theory (e.g. Gibbs 2008, 2017; Kövecses 2010). Here we propose that the inversions displayed by the barrow builders are

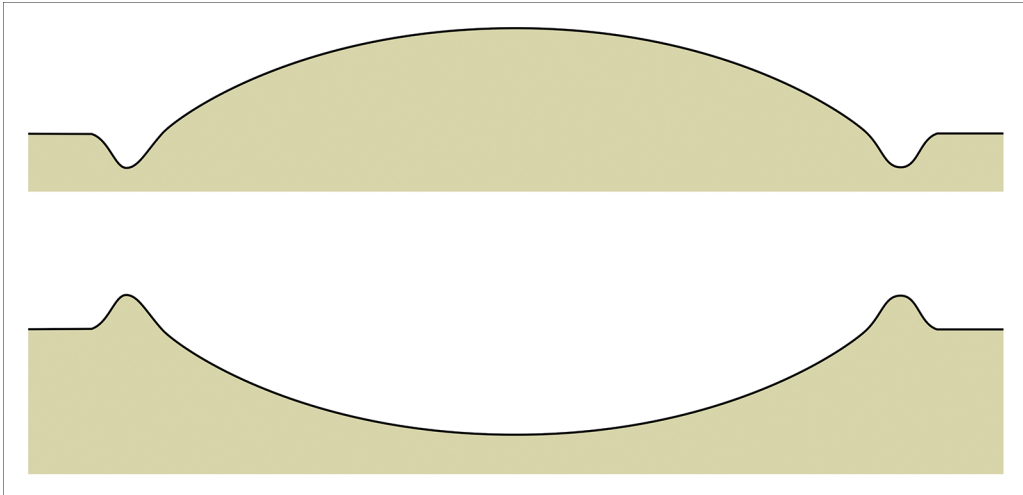


Figure 3. Schematic profile of a ring barrow (above) and pond barrow (below), illustrating the potential inversion of form (figure by the authors).

expressions of two underlying conceptual metaphors: THE DEAD ARE UPSIDE DOWN and THE DEAD ARE IN AN UNDERWORLD (UNDER THE BARROW). Moreover, it is straightforward to explain how these two concepts could have formed during the Bronze Age. In this article, we will follow the usual convention in Conceptual Metaphor Theory of writing the underlying metaphor in SMALL CAPITALS and particular expressions in *italics*.

The formation of primary conceptual metaphors

To understand how conceptual metaphors form, we can consider a well-understood example: INTIMACY IS WARMTH. People express this concept when they speak of ‘warm friendships’, ‘warm smiles’ and ‘a warm welcome’. From this concept also derive expressions of dislike or rejection based on a lack of warmth, such as ‘the cold shoulder’, ‘an icy stare’ and ‘a luke-warm reception’. Such expressions are found worldwide (Wiseman 2014). The connection between warmth and intimacy is not just linguistic. Psychological experiments have found that providing warmth (e.g. in the form of a hot beverage) can induce positive feelings towards others (Williams & Bargh 2008; Ijzerman & Semin 2009), while people who are scorned or excluded can feel cold (Zhong & Leonardelli 2008).

This concept develops in the first few months of life, and is a direct result of the way human babies are raised (Lakoff & Johnson 2003: 265; see also Lakoff & Johnson 1999: 46–47). When very young children are played with, fed or loved, their brains register several types of stimulation. One is positive emotion, another is the warmth of the person holding them. As human babies are unable to walk, feed or care for themselves for many months after birth, and therefore have to be held and carried by the adults caring for them, the two experiences frequently coincide. It is a basic property of brains that, when two different areas are activated, neural connections develop between them, a process known as ‘Hebbian learning’ (Feldman 2006). The result of an infant repeatedly experiencing positive emotions and

warmth at the same time is that a neural connection develops between the parts of the brain being stimulated. Because this link is established while the child's brain is growing at its fastest, and is reinforced by frequently repeated experience, the outcome is a very strong neural connection—one that lasts into adulthood. This is the grounding for the conceptual metaphor POSITIVE EMOTION IS WARMTH. And because the warmth is experienced literally at the hands of those with whom the growing baby has intimate social relations, warmth becomes linked with intimate social experiences.

The metaphor INTIMACY IS WARMTH is what is termed a 'primary conceptual metaphor'. These concepts are grounded in direct, embodied experience and develop through the repeated coincidence of two otherwise unrelated activities. Linguists and psychologists have identified over a hundred such primary metaphors (e.g. Grady 1997: 281–99). Other examples include MORE IS UP, BIG IS IMPORTANT, ANGER IS HEAT, SIMILAR IS CLOSE and DIFFICULTIES ARE BURDENS. These all arise from experiences common to everyone: direction, size, heat, distance and weight. Unsurprisingly, therefore, such metaphorical concepts are also found across many unrelated cultures. The way that primary conceptual metaphors form means that, if archaeologists can show that people in the past had the same formative experiences as people today, then archaeologists can deduce that they would also have developed similar concepts.

Forming the concept of the inverted dead

Being dead is not a state that people can know by direct experience. To comprehend death people must unavoidably draw on experiences from other domains. In the process they create metaphors. Known conceptual metaphors for death include DEATH IS DARKNESS, SLEEP, WINTER and the goal of a JOURNEY (Lakoff & Turner 1989; Wiseman 2019). Here, we highlight one other widespread example: BEING DEAD IS (UPSIDE) DOWN. This concept derives from another well-understood primary conceptual metaphor, LIFE IS UP. It arises because humans have an upright body that lives in a world subject to gravity. We feel gravity pulling us down at every instant. Every moment we are 'up and about'—every moment we are alive—we must apply effort to keep our bipedal bodies upright. Moreover, our brains are constantly engaged in monitoring and maintaining our posture. The parts of our sensorimotor system involved in keeping us upright are constantly active at the same time as we are conscious and aware. The result is a close association of being up(right) and being alive. This is the basis for the conceptual metaphor BEING ALIVE IS UP. From this, we infer that when we lose consciousness—such as when we die—we cease to hold our bodies up: we 'drop down dead' or 'lie down and die'. The metaphor DYING IS GOING DOWN is apparent in expressions such as 'the soldiers fell in battle', 'She dropped dead of a heart attack' and 'the firemen laid down their lives'. Resurrection involves movement in the opposite direction: being 'raised from the dead'. Linguists have found similar expressions in unrelated languages around the world, including most European languages (Vogel 2009), Turkish (Özçalışkan 2003) and Chinese (Cong 2014).

While the concept of DYING AS DROPPING DOWN arises from our physical experience of keeping ourselves upright, the state of BEING DEAD is more complex, as we have several ways of experiencing 'being down'. We can draw on not only our physical experience of verticality, but also our perceptions of UP and DOWN, and the associated notions of ABOVE

and BELOW. The last of these is enormously productive, and is used worldwide to infer where the dead are. In ancient Rome the dead were *inferi*, ‘those below’, and the place of the dead was *infero*, ‘below’ (Lewis & Short 1962: 944). For the Zulu the dead are *abaphansi*, ‘those below’ (Ngubane 1977: 51 & 56). The number of cultures worldwide who considered their dead to be somewhere below is striking. Examples include ancient Egyptian *Duat*, *Neter-khertet*; Greek *Hades*, *Tartaros*; Roman *Avernus*; Old Norse and Anglo-Saxon *Hel*; Finnish *Manala*; Saami *Jabmeaimo*; Biblical Hebrew *She’ol*, *Eresh*; Islamic *Jahannam*; Old Persian *Duzakh*; Sumerian *Irigal*, *Ešgal*, *Kiši*, *Halib*; Akkadian *Eršetu*; Swahili *Ku-Zimu*; Indian (Hindu and Buddhist) *Naraka*, *Pātāla*; early Chinese *Huángquán*; Chinese (Daoist) *Diya*; Japanese (Shinto) *Yomi*; Aztec *Mictlan*; colonial Mayan *Xibalba*; Inca *Ukhu Pacha*; Māori *Rarohenga*; and the Society Islanders’ *Po* (Siikala 1987: 300; Taylor 2000). The metaphor doubtless finds some corroboration in cultures that bury their dead, as this physically places the deceased below the world of the living. Unsurprisingly, in some of these cultures, the words for ‘grave’ and ‘underworld’ are identical (e.g. Sumerian *Irigal*, Hebrew *She’ol*).

There is an important variation on the concept of DOWN. One of the ways in which the normally upright human body can go down is by tripping or falling—an uncommon experience, but a psychologically prominent one, as it literally ‘upsets’ us. In its most caricatured form, falling turns a person upside down, ‘head-over-heels’ or ‘topsy-turvy’. UPSIDE DOWN is another attested notion for the dead. The Saami of northern Finland believed that their dead walked upside down in an inverted underworld, *Jabmeaimo*, “with the soles of their feet against those of the living on earth” (Pettersson 1957: 148 & 155). The Egyptian *Book of the Dead* includes a prayer to protect the dead from the fate of walking upside down in the underworld (no. 53; Taylor 2010: 190). The Hebrew Bible suggests that come Judgment Day, the world would be turned upside down (Isaiah 24:1).

Apart from DEAD, there appears to be just one other primary conceptual metaphor based on inversion: CHAOS IS BEING UPSIDE DOWN. We see this in expressions such as ‘her world turned *upside down*’, ‘the thieves *turned* the house *over*’, and ‘his life is *topsy-turvy*’. This concept plainly does not apply in the case of Bronze Age barrows, as they present no evidence for chaos. Archaeologists, therefore, can infer that the various expressions of inversion found in barrows refer only to the dead *and nothing else*.

The inverted dead of Bronze Age barrows

We suggest that when inversion first appeared in barrows and burials, Bronze Age people may have been taking the concept of their upside-down dead quite literally. Inverting the urn or its contents was actually placing the cremated remains ‘right-way up’ into the underworld. Laying turves upside down may have been taking the idea one step further—placing grass and earth ‘beneath’ the newly dead. Pond barrows would have taken the concept even further by ‘building’ an inverted barrow and ring ditch. Later, inversion appears to have become less literal, so that several aspects of burial might appear upside down—inverted remains within an inverted urn, for example—multiplying the concept, even though it would negate literal inversion.

As the dead were rarely buried more than a metre below the ground surface, it seems to us that Bronze Age people might have envisioned the underworld as being just beneath the surface of the earth, close to the living. This idea finds parallels elsewhere. As noted above, the Saami's inverted underworld, *Jabmeaino*, also lay just beneath the ground. We are, of course, not claiming any direct connection between these two cultures, but the existence of this belief in the recent past demonstrates that such a way of conceptualising the dead was also possible in Bronze Age Britain.

The idea that the dead are just underfoot would explain one curious absence from these cremation burials: grave goods associated with travel. Objects such as shoes, carts and boats commonly accompany the dead worldwide. Their inclusion derives from what is possibly the most common conceptual metaphor for death: DYING IS A JOURNEY (TO A DISTANT PLACE) (Wiseman 2019). Cultures that view death this way often help their dead travel to the afterlife by placing travel-related objects in graves. But during the period when inversion was common in British Bronze Age burials, this category of grave goods was effectively unknown. The dozen 'boat-shaped' log coffins (Parker Pearson *et al.* 2013: 47–48) and five 'coracle burials' (Watson 1980) excavated in Bronze Age Britain all pre-date 1900 BC—that is, before the time when inversion became commonplace. Furthermore, horse gear only started to appear in British burials from the Early Iron Age (*c.* 800–400 BC), after evidence for inversion had disappeared from British cremation burials. But for the thousand-odd years between, when inversion was widespread, we suggest that people in Britain thought their dead were immediately underfoot, rather than in some distant 'land of the dead', and consequently needed no transportation to reach the underworld. A small hole in the ground would have been sufficient to deliver the deceased to their new home.

What we are proposing is more than a 'just-so' story about the Bronze Age dead: it helps explain not just why barrows were built, but potentially also some of their other functions. It has long been suggested, for example, that barrows in Britain may have claimed grazing land, guarded boundaries and controlled or overlooked routeways (e.g. Field 1998; Kitchen 2001; Pryor 2001: 407–408; Watson 2001; Buteux & Chapman 2007; Garwood 2007: 151–53; Johnson 2017). Implicit in such suggestions, however, is that barrows have *something* that controls, guards, claims and looks—and, moreover, that this *something* must also take action against those who transgress. The presence of this active *something* is most easily explained if the dead had some ongoing existence within their mounds, close to the world of the living. Such an interpretation, however, is one that many prehistorians have been wary of committing to.

A connection between inversion and the dead in Britain's Bronze Age raises questions about other inversions found in the same period, such as the occasional metalwork hoards found in inverted pots. This connection might also prompt archaeologists to think about the significance of reflections—particularly in pools of water—in which images are inverted. If watery reflections are images of the dead, this may provide insights into why materials, from butter to metalwork, were deposited in watery locations during the Bronze Age: they might have been placed into the care of the dead.

Other concepts

While we propose that the concept of *INVERSION* was important in structuring Bronze Age barrows and burials, we certainly do not consider it to be the only concept at work. It is worth highlighting other features of barrows that were also likely symbolic, but unrelated to inversion:

- Barrows are circular.
- Bronze Age cremation burials were preceded chronologically by tightly ‘crouched’ inhumations laid on their sides—akin to a sleeping or foetal position.
- Barrows were often built in prominent locations, such as on skylines or routeways.
- Grass is food for domesticated herds, and the turf provides organic matter for crops. Denuding hectares of grass to construct turf barrowfields would have involved the conscious destruction of a significant economic resource for the community.
- Stripping turf for barrowfields would have transformed the local flora for decades afterwards. Moreover, in the first spring after turf stripping, the newly disturbed earth would have germinated prominent flowering species, such as poppies and cornflowers—quite unlike the grasses they replaced.

None of these features ‘contradicts’ the concept of *INVERSION*, any more than an Egyptian pyramid ‘contradicts’ the Egyptian belief in death as a voyage on the Sun god’s barge: significant monuments often express a number of concepts. Nonetheless, inversion is expressed in many aspects of barrow construction, which suggests that it was a primary concept used to comprehend death for around 1000 years in prehistoric Britain.

Conclusion

People structure their physical environment to conform to their concepts. Burial sites, unsurprisingly, reflect ideas about death. Interpreting such sites therefore demands that archaeologists understand these concepts. Conceptual Metaphor Theory provides a robust method for interpreting how ancient people conceptualised their worlds. The idea that the Bronze Age dead inhabited an inverted underworld immediately below the surface of the earth is consistent with well-understood concepts of death. Nothing in Conceptual Metaphor Theory is limited to prehistoric Britain: other metaphoric conceptualisations of death and the dead have been identified in other cultures where they may be grounded in experiences as diverse as *JOURNEYS*, the *GROWTH OF PLANTS*, the *METAMORPHOSIS OF INSECTS* and the *MOVEMENT OF THE SUN* (Wiseman 2019). Understanding how death was conceptualised in specific societies can help archaeologists interpret the potential roles of the dead within their communities. For example, if the dead remained close to the living, as in British Bronze Age barrows, then they were potentially able to interact with or help the living, which might explain why

many Bronze Age barrows appear to overlook, control and guard the lands around them. Alternatively, if the dead are conceptualised as crop plants, such as rice or corn, then they might have had some influence over the weather, which caused crops to grow or wither (e.g. Bloch 1971; Ortman 2011). Or, if death is conceptualised as a journey to be with the gods, then the dead might interact with the gods on the behalf of the living, as in many parts of Africa (e.g. Wirudu 2012). Conceptual Metaphor Theory provides a way for archaeologists to reconstruct intangible concepts, such as death, that shaped the lives of people in the past.

Acknowledgements

Our thanks to two anonymous reviewers for their most constructive comments, and Ed Caswell for allowing us to check our ideas against his PhD database of Middle Bronze Age burials.

Funding statement

This research received no specific grant from any funding agency or from commercial and not-for-profit sectors.

References

- ANDERSON, S. 2005. Cremated bone, in B. Holloway & P. Spencer (ed.) An archaeological excavation at Birch Pit northern extension, Maldon Road, Colchester, Essex, July–August 2003: 13–24. Unpublished report no. 289, Colchester Archaeological Trust.
- ARMSTRONG, S. 2007. Cremated bone, in M. Germany (ed.) *Neolithic and Bronze Age monuments and Middle Iron Age settlement at Lodge Farm, St Osyth, Essex* (East Anglian Archaeology Monograph 117): 81–85. Colchester: Essex County Council.
- ASHBEE, P. & G.W. DIMBLEBY. 1976. The Moor Green barrow, West End, Hampshire: excavations, 1961. *Proceedings of the Hampshire Field Club Archaeological Society* 31: 5–18.
- BAYER, O., A. SIMMONDS & K. WELSH. 2017. Excavation of an Early Bronze Age round barrow at Emmets Post, Shaugh, Dartmoor. *Proceedings of the Devon Archaeological Society* 75: 51–95.
- BLOCH, M. 1971. *Placing the dead: tombs, ancestral villages, and kinship organization in Madagascar*. London & New York: Seminar.
- BRADLEY, R. & E. FRASER. 2010. Bronze Age barrows on the heathlands of southern England: construction, forms and interpretation. *Oxford Journal of Archaeology* 29: 15–33. <https://doi.org/10.1111/j.1468-0092.2009.00338.x>
- BRADLEY, R. & M. KEITH-LUCAS. 1975. Excavation and pollen analysis on a bell barrow at Ascot, Berkshire. *Journal of Archaeological Science* 2: 95–108. [https://doi.org/10.1016/0305-4403\(75\)90029-1](https://doi.org/10.1016/0305-4403(75)90029-1)
- BRISTOW, P.H.W. 2001. Behaviour and belief in mortuary ritual: attitudes to the disposal of the dead in southern Britain 3500 BC–AD 43. *Internet Archaeology* 11. <https://doi.org/10.11141/ia.11.1>
- BRITAIN, M. 2015. Layers of life and death: aspects of monumentality in the Early Bronze Age of Wales, in V. Cummings & C. Fowler (ed.) *The Neolithic of the Irish Sea: materiality and traditions of practice*: 224–31. Oxford: Oxbow. <https://doi.org/10.2307/j.ctvh1dq1n.28>
- BU'LOCK, J.D., C.E.P. ROSSER & G.W. DIMBLEBY. 1960. Winter Hill: a composite cairn of the Bronze Age. *Transactions of the Lancashire and Cheshire Antiquarian Society* 70: 66–73.
- BUTEUX, S. & H. CHAPMAN. 2007. *Where rivers meet: the Catholme ceremonial complex and the archaeology of the river gravels: research at the confluence of the Trent and Tame Rivers in Staffordshire*. London: Historic England.
- CASWELL, E. & B.W. ROBERTS. 2018. Reassessing community cemeteries: cremation burials in Britain during the Middle Bronze Age (c. 1600–1150 cal BC). *Proceedings of the*

- Prehistoric Society* 84: 329–57.
<http://doi.org/10.1017/ppr.2018.9>
- CLARKE, D.L. 1970. *Beaker pottery of Great Britain and Ireland*. Cambridge: Cambridge University Press.
- CONG, T. 2014. A contrastive study of death metaphors in English and Chinese. *International Journal of English Linguistics* 4: 134–42.
<https://doi.org/10.5539/ijel.v4n6p134>
- COWIE, T.G. 1978. *Bronze Age Food Vessel urns*. (British Archaeological Reports British Series 55). Oxford: British Archaeological Reports.
- DACRE, M., A. ELLISON, R.F. EVERTON, I.F. SMITH, S. DAVIES & J. RICHARDS. 1981. A Bronze Age urn cemetery at Kimpton, Hampshire. *Proceedings of the Prehistoric Society* 47: 147–203.
<https://doi.org/10.1017/S0079497X00008902>
- DOWNES, J. 2005. Cremation practice in Bronze Age Orkney. Unpublished PhD dissertation, Sheffield University.
- DREWETT, P. 1976. The excavation of four round barrows of the second millennium BC at West Heath. *Sussex Archaeological Collections* 114: 126–50.
- FELDMAN, J.A. 2006. *From molecule to metaphor*. Cambridge (MA): MIT Press.
<https://doi.org/10.7551/mitpress/3135.001.0001>
- FELTER, M. 2007. Conserving the Lawrence Street urn. *Yorkshire Archaeology Today* 13: 13–14.
- FIELD, D. 1998. Round barrows and the harmonious landscape: placing Early Bronze Age burial monuments in south-east England. *Oxford Journal of Archaeology* 17: 309–26.
<https://doi.org/10.1111/1468-0092.00065>
- FOWLER, C. 2012. Chalcolithic and Early Bronze Age burials in northeast England. Dataset available at:
https://archaeologydataservice.ac.uk/archives/view/baburial_ahrc_2012 (accessed 8 April 2021).
- GARWOOD, P. 2007. Late Neolithic and Early Bronze Age funerary mounds and burial traditions in the West Midlands, in P. Garwood (ed.) *The undiscovered country: the earlier prehistory of the West Midlands*: 134–65. Oxford: Oxbow.
- GIBBS, R.W. 2008. *The Cambridge handbook of metaphor and thought*. Cambridge: Cambridge University Press.
- 2017. *Metaphor wars: conceptual metaphors in human life*. Cambridge: Cambridge University Press.
- GIBSON, A.M. 1978. *Bronze Age pottery in the north-east of England* (British Archaeological Reports British Series 56). Oxford: British Archaeological Reports.
- GRADY, J. 1997. Foundations of meaning: primary metaphors and primary scenes. Unpublished PhD dissertation, University of California, Berkeley.
- GRAMSCH, A. 2007. A microarchaeological approach to the social significance of Late Bronze Age burial practices, in P. Carrell & F. Fahlander (ed.) *Encounters, materialities, confrontations: archaeologies of social space and interaction*: 1–16. Newcastle-upon-Tyne: Cambridge Scholars.
- GREEN, C., S. ROLLO-SMITH, E. CROWFOOT & C. WELLS. 1984. The excavation of eighteen round barrows near Shrewton, Wiltshire. *Proceedings of the Prehistoric Society* 50: 255–318.
<https://doi.org/10.1017/S0079497X00007556>
- GRINSELL, L.V. 1953. *The ancient burial-mounds of England*. London: Methuen.
- HILLS, C., K. PENN & R. RICKETT. 1994. *The Anglo-Saxon Cemetery at Spong Hill, North Elmham. Part 5: catalogue of cremations* (East Anglian Archaeology 67). Norwich: Norfolk Museums Service.
- IJZERMAN, H. & G.R. SEMIN. 2009. The thermometer of social relations: mapping social proximity on temperature. *Psychological Science* 20: 1214–20.
<https://doi.org/10.1111/j.1467-9280.2009.02434.x>
- JOHNSON, N. 2017. *Early Bronze Age round barrows of the Anglo-Welsh border* (British Archaeological Reports British Series 632). Oxford: Archaeopress.
<https://doi.org/10.30861/9781407315966>
- KITCHEN, W. 2001. Tenure and territoriality in the British Bronze Age: a question of varying social and geographic scales?, in J. Brück (ed.) *Bronze Age landscapes: tradition and transformation*: 110–20. Oxford: Oxbow.
- KÖVECSES, Z. 2010. *Metaphor: a practical introduction* (2nd edition). Oxford: Oxford University Press.
- LAKOFF, G. & M. JOHNSON. 1999. *Philosophy in the flesh: the embodied mind and its challenge to Western thought*. New York: Basic Books.

- LAKOFF, G. & M. JOHNSON. 2003. *Metaphors we live by* (3rd edition). Chicago (IL): University of Chicago Press.
- LAKOFF, G. & M. TURNER. 1989. *More cool than reason: a field guide to poetic metaphor*. Chicago (IL): University of Chicago Press.
- LEWIS, C.T. & C. SHORT. 1962. *A Latin dictionary*. Oxford: Clarendon.
- LONGWORTH, I. 1984. *Collared Urns of the Bronze Age in Great Britain and Ireland*. Cambridge: Cambridge University Press.
- LYNCH, F. 1984. Moel Goedog Circle I: a complex ring cairn near Harlech. *Archaeologia Cambensis* 133: 8–50.
- MACPHAIL, R.I. 1980. Soil report of West Heath cemetery (1980), West Sussex. Unpublished report no. 3586, Ancient Monuments Laboratory.
- 2017. Soil micromorphology, in C. Tilley (ed.) *Landscape in the longue durée: a history and theory of pebbles in a pebbled landscape, appendix 5*: 10–17. London: UCL Press.
<https://doi.org/10.2307/j.ctt1vxm8qq>
- McKINLEY, J.I. 2013. Cremation, in L. Nilsson Stutz & S. Tarlow (ed.) *The Oxford handbook of the archaeology of death and burial*: 147–71. Oxford: Oxford University Press.
- McSLOY, E.R. & C. ELLIS. 2016. A summary report on a Middle Bronze Age cremation cemetery at Locks Heath, Hampshire. *Proceedings of the Hampshire Field Club and Archaeological Society* 71: 1–10.
- MEDINA-PETTERSON, C. 2013. Bronze Age urned cremation burials of Mainland Scotland: mortuary ritual and cremation technology. Unpublished PhD dissertation, University of Edinburgh.
- NGUBANE, H. 1977. *Body and mind in Zulu medicine: an ethnography of health and disease in Nyuswa-Zulu thought and practice*. London, New York & San Francisco (CA): Academic.
- ORTMAN, S.G. 2011. Bowls to gardens: a history of Tewa community metaphors, in D.M. Glowacki & S. van Keuren (ed.) *Religious transformation in the late prehistoric Pueblo world*: 84–108. Tucson: University of Arizona Press.
- OWOC, M.A. 2000. Aspects of ceremonial burial in the Bronze Age of south-west Britain. Unpublished PhD dissertation, University of Sheffield.
- ÖZÇALIŞKAN, Ş. 2003. In a caravanserai with two doors I am walking day and night: metaphors of death and life in Turkish. *Cognitive Linguistics* 14: 281–320.
<https://doi.org/10.1515/cogl.2003.012>
- PARFITT, K. 2018. Coxhill Mount, Rover, Dover: evaluation report. Unpublished report no. 2018.185, Canterbury Archaeological Trust.
- PARKER PEARSON, M., J.A. SHERIDAN & S. NEEDHAM. 2013. Bronze Age tree-trunk coffin graves in Britain, in N.D. Melton, J. Montgomery & C. Knüsel (ed.) *Gristhorpe Man: a life and death in the Bronze Age*: 29–66. Oxford: Oxbow.
- PETTERSSON, O. 1957. *Jabmek and Jabmeaino: a comparative study of the dead and the realm of the dead in Lappish religion*. Lund: Gleerup.
- PETTITT, R.G. 2015. Materiality in Early Bronze Age Wales. Unpublished PhD dissertation, University of Manchester.
- PHILPOTT, R. 1991. *Burial practices in Roman Britain: a survey of grave treatment and furnishing* (British Archaeological Reports British Series 219). Oxford: Tempus Reparatum.
<https://doi.org/10.30861/9780860547259>
- PRYOR, F. 2001. *The Flag Fen basin*. Swindon: English Heritage.
- SIKALA, A.-L. 1987. Descent into the underworld, in M. Eliade (ed.) *The encyclopedia of religion*: 300–304. New York: Macmillan.
- SMITH, M.J.B. 1994. *Excavated Bronze Age burial mounds of north-east Yorkshire*. Durham: Architectural and Archaeological Society of Durham and Northumberland.
- STUCKELEY, W. 1743. *Abury: a temple of the British druids, with some others, described*. London: Gale ECCO.
- TAYLOR, J.H. 2010. *Ancient Egyptian Book of the Dead: journey through the afterlife*. London: British Museum.
- TAYLOR, R.P. 2000. *Death and the afterlife: a cultural encyclopedia*. Santa Barbara (CA): ABC-CLIO.
- TILLEY, C. (ed.). 2017. *Landscape in the longue durée: a history and theory of pebbles in a pebbled landscape*. London: UCL Press.
<https://doi.org/10.2307/j.ctt1vxm8qq>
- VOGEL, A. 2009. Going toward the unknown: expressions for dying in European languages, in J. Zlatev, M. Andrén, M. Johansson Falck & C. Lundmark (ed.) *Studies in language and cognition*: 209–17. Newcastle-upon-Tyne: Cambridge Scholars.

- WATSON, A. 2001. Round barrows in a circular world: monumentalising landscapes in Early Bronze Age Wessex, in J. Brück (ed.) *Bronze Age landscapes: tradition and transformation*: 205–16. Oxford: Oxbow.
<https://doi.org/10.1111/j.1095-9270.1980.tb01147.x>
- WATSON, T. 1980. A prehistoric coracle in Fife. *International Journal for Nautical Archaeology and Underwater Exploration* 9: 277–86.
- WILKIN, N.C.A. 2013. Food Vessel pottery from Early Bronze Age funerary contexts in northern England: a typological and contextual study. Unpublished PhD dissertation, University of Birmingham.
- WILLIAMS, L.E. & J.A. BARGH. 2008. Experiencing physical warmth promotes interpersonal warmth. *Science* 322: 606–607.
<https://doi.org/10.1126/science.1162548>
- WIRUDU, K. 2012. African religions, in C. Meister & P. Copan (ed.) *The Routledge companion to philosophy of religion*: 29–39. Abingdon & New York: Routledge.
- WISEMAN, R. 2014. Social distance in hunter-gatherer settlement sites: a conceptual metaphor in material culture. *Metaphor and Symbol* 29: 129–43.
<https://doi.org/10.1080/10926488.2014.890469>
- 2019. Getting beyond rites of passage in archaeology: conceptual metaphors of journeys and growth. *Current Anthropology* 60: 449–74.
<https://doi.org/10.1086/704696>
- ZHONG, C.-B. & G.J. LEONARDELLI. 2008. Cold and lonely: does social exclusion literally feel cold? *Psychological Science* 19: 838–42.
<https://doi.org/10.1111/j.1467-9280.2008.02165.x>