

Re-thinking a Sacred Space

The evolution of burial practices as seen from a Bronze Age tumulus from Karlstrup, Denmark

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ABSTRACT

In this paper, we use a cultural evolution framework and methods to explore how continuity and change can be observed in a relatively small, enclosed space – a single prehistoric burial mound, from Karlstrup, Denmark, with a long and complex history of re-use.

This burial mound was extensively used and re-used across the Late Neolithic 'Dagger Period' and Early Nordic Bronze Age. Although archaeologists have long acknowledged the burial traditions of these two periods as quite distinct from each other, there is still much to be explored regarding what – if any – cultural evolutionary relationships there may be between societies across these periods (i.e., whether Nordic Bronze Age uses of sacred spaces, such as burial grounds, can be shown to have evolved from pre-existing Neolithic uses). By mapping a series of 41 cultural traits across the many funerary entities within burial Mound 4 at Karlstrup, we trace the degree of change, continuity, and coherence (i.e. cultural evolution) between Late Neolithic and Early Nordic Bronze Age burial traditions across time. We then relate these findings back to contemporaneous changes in notions of identity and social status in later European prehistory. By examining the evolution of the use biography of this mound, we relate changes in the sacred landscape with the changing social and economic circumstances of the deceased individuals buried in the mound, as well as the living individuals and communities that constructed them during a transitional period of prehistory in flux.

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Introduction

The prehistoric landscape remains a very visible aspect of everyday life in Southern Scandinavia, including frequent monumental burial mounds (see, e.g., Holst 2013, 32-33). These burial mounds line the main transport routes and settlement enclaves across the region, as they have since their construction in prehistoric times (Klassen 2014). The patterning of such monumental constructions not only marks out and delimits territories, but also symbolically reflects positional relationships between past peoples, the dead, and their surroundings (Müller 1904). Although archaeologists are well aware of the long continual use of such burial places and monuments, continuing even into the Iron Age (e.g., Holst et al. 2013), the evolutionary relationship (cultural descent or relatedness) of one burial tradition to another remains little explored from an evolutionary archaeology perspective.

Over the last few decades analytical methods for investigating cultural evolution have been used by anthropologists and archaeologists for their utility in modeling evolutionary relationships between units of culture, from artefacts to languages to socioeconomic systems and beyond (see e.g., Gjesfjeld and Jordan 2019; Gray, Bryant, and Greenhill 2010; Mace and Holden 2005; Jordan 2015; Mace, Holden, and Shennan 2005; Prentiss 2021; Straffon 2019). Here, we apply a cultural evolution methodology to the interpretation of a demarcated sacred space – a large burial mound (Karlstrup Mound 4) whose final construction dates to Period II of the Early Nordic Bronze Age (ENBA) (Frei et al. 2019). The approach taken here will be familiar to archaeologists interested in modeling cultural change from an evolutionary perspective (e.g., Buck and Meson 2015; Gjesfjeld and Jordan 2019; Prentiss et al. 2022, 2023; Straffon 2019).





Figure 1. Mound 4 at Karlstrup during excavation in 1965 (National Museum of Denmark).



Figure 2. Location of Karlstrup Mound 4 (FF 020505-04) marked by black star. Map generated using QGIS freeware and Natural Earth basemaps.

Increasingly in recent years, archaeological applications of cultural evolution methodologies (e.g., Matzig et al., 2024; Perreault 2019; Prentiss et al. 2023, 2025; Riede et al. 2024; and see review in Matzig et al. 2023) have highlighted how novel applications of evolutionary theory and methods – including tree-thinking – can contribute valuable insights into the broader processes, impacts, and implications of culture change in the past, as well as to specific case studies thereof, providing otherwise elusive means to “illuminate the unobservable past” (Evans et al. 2021: 9). Cultural evolution studies have also been used similarly in other contexts/areas to assess relationships of change within delimited spaces. Most relevant for the present study is the work done by Prentiss et al. (2020) looking at generation-scale change over time in a single prehistoric pithouse at the Bridge River village site in the Mid-Fraser Canyon region of British Columbia, Canada and by Last (1998), who examined a single Bronze Age burial mound at Barnack, Cambridgeshire, UK.

In terms of Mound 4 at Karlstrup (FF 020505-04), we have approached our cultural phylogenetic analysis on the presumption that, given the site’s consistent use as a burial space spanning centuries and across Late Neolithic (LN) and ENBA cultural complexes, there may have been

some level of cultural continuity between the different temporal funerary traditions undertaken at the site. Support for this hypothesis would take the form of a coherent evolutionary pattern of descent with modification from the earliest burial practices through the subsequent burial sequence(s). Here, we use a cultural phylogenetic approach in a case study of Karlstrup Mound 4. In so doing, we investigate cultural change across the use-life trajectory of this single burial mound across centuries.

Mound 4 at Karlstrup

Prior to its excavation under the supervision of National Museum of Denmark’s C. L. Vebæk in 1965-6, Mound 4 at Karlstrup was a fairly large tumulus (over 4 m; Figure 1). It was located southwest of Copenhagen, roughly eight kilometers north of Køge, Denmark (Figure 2). Mound 4 was one of a cluster of tumuli that were excavated to make way for a nearby industrial purposes. The burial mounds sat on a low, grassy plain with a clear view of Køge Bay and the Baltic Sea (the coastline lies less than two kilometers to the east). Excavations revealed a complex stratigraphy resulting from the burial of at least 31 individuals

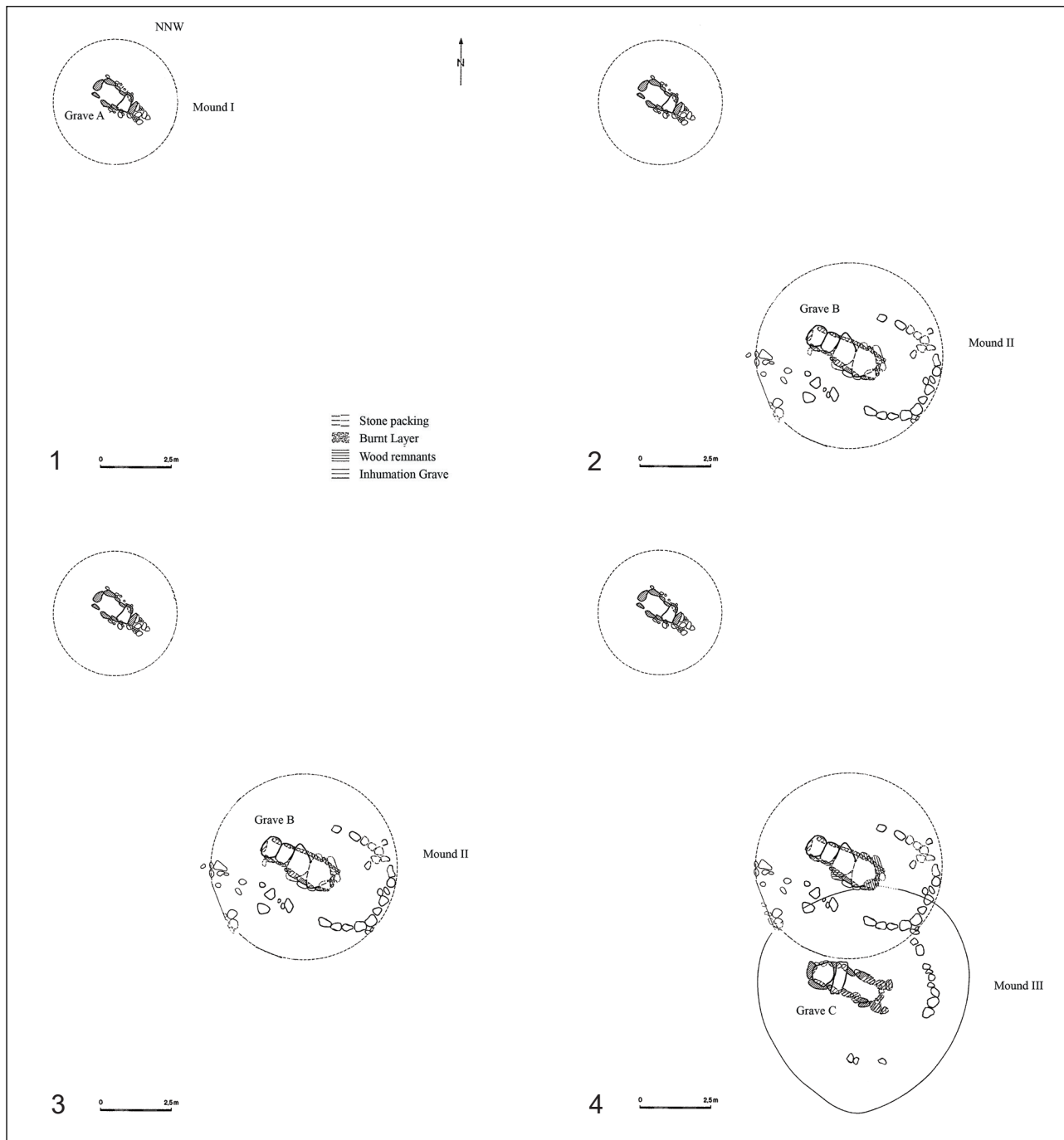


Figure 3. Site map of Mound 4 at Karlstrup showing the LN construction phases of the mound in terms of features and graves over time from left to right. Site map after Aner and Kersten (1973, 182).

in no less than 16 separate graves from an estimated seven or eight separate mound construction phases spanning the Late Neolithic to the Early Nordic Bronze Age (Figure 3).

Stepwise mound construction events such as those evident at Mound 4 were common during the Nordic Bronze Age (e.g., Haseloff 1938). These use and construction events span centuries from the LN ‘Dagger Period’ (start *c.*2350 BCE;

see review in Stafford 2003) to Periods I-II/III of the ENBA (*c.*1700-1200 BCE; see summary in Randsborg 1996). The final burial in the mound was that of two men equipped with rich grave goods, buried together in a large tree-trunk coffin (hereafter ‘Grave Q’ after Aner and Kersten 1973, 182, though the grave is also referred to as XVI; Vebæk, 1966).

Theoretical background of Neolithic to Bronze Age burial changeover and problematization

Again, although Karlstrup Mound 4 was part of a mound group in the immediate vicinity, here we focus on Mound 4 as a single unit in order to explore the many use and re-use interventions conducted at this particular burial mound over its use-life. We have chosen this due to the fact that Mound 4 comprises a complex narrative of sequential funerary events. Unsurprisingly, given the long use-life of the mound, those activities changed over time. As such, the mound reflects diverse manners of utilizing space. Over generations, the mound was modified and expanded. New graves literally replaced and overlapped older ones. This is not an unusual occurrence; barrow construction was a reoccurring theme of prehistoric life that both shaped and was shaped by those living with and interacting with these features of the sacred and mnemonic landscape (cf., Brück 2004; Holst et al. 2001; Holst and Rasmussen 2013).

New identities and reckonings of the sacred space and those in it must have been imagined, reformed and replaced (cf., Last 1998) by different peoples using the same spaces over time. Echoing Bloch (1982) and others, Sørensen (2014) points to the handling of the dead as well as the timing and placement of their bodies as evidence for the recognition of death as a social rite of passage. Moreover, Sørensen argues, death rituals were a sort of performance which was enacted both for the living as well as for the deceased. In this way, death rituals were a means of “negotiating communal relations in the absence of the deceased” (Sørensen (2014, 169) as well as between mind/matter, humans/things and culture/material culture (Oestigaard 2004, 23). In this sense, the differential treatment of the dead between the LN and the ENBA illustrates a resetting of social relationships simultaneously within the living community as well as between the living and the dead and between those (e.g., ancestors) already invested in a grave/cemetery and those joining them (the recently deceased).

For much of the Neolithic, burial was generally organized on a communal level, with placement of deceased individuals (or simply their bones) in

shared burial spaces (Ebbesen 2004). With the influx of the Single Grave Culture (a local derivative of the Corded Ware Culture in Denmark), as its name implies, there was a change in funerary practices in which graves became less communal (e.g. gallery graves) and more focused on individual (and double) burials in stone cists, covered by low mounds (Ebbesen 1980; Iversen 2016, 165; Jensen 1982). During this period, rather exceptional social and economic changes were taking place. Local and in-migrating populations were interacting across the region at differing levels and tempos, with the result being increasingly complex social and material culture throughout Southern Scandinavia (Kristiansen 1989; 1994; Vandkilde 1996). This trend continued through the ‘Dagger Period’ of the LN into the ENBA (Lomborg 1973; Vandkilde, Rahbek, and Rasmussen 1996; Johannsen 2023). By the Bronze Age, increased social hierarchy had become a prime factor leading to differential treatment of the dead (Clarke and Cowie 1985; Renfrew 1982; Rowlands 1980; Sherratt 1982, 1994; see also Reiter 2014).

Importantly in relation to our choice of exploratory analysis by means of cultural phylogenetics, from the earliest LN (c.2500-1700 BCE) through to Periods I-II burials of the ENBA (c.1700-1300 BCE), funerary activities at Karlstrup bear both notable differences as well as similarities (Randsborg 1996). While Mound 4 is not unique in its size or its complexity, the peculiarities of its graves give insight to changing traditions and ways in which meanings were symbolized with each new activity (i.e., burial) at the site. These changes can be modelled from an evolutionary perspective. Thanks to the excavators’ thorough photographic documentation and systematic excavation (specifically, Vebæk’s 1966 excavation report and photographs housed in the archives of the National Museum of Denmark), we can also visually explore this burial mound’s use-life from its earliest incarnation (a suite of communal LN gallery graves/stone cists) through to its final manifestation as a large mound and the double-grave of two high-status men which marked Karlstrup Mound 4’s final burial (Walsh et al. 2022). This final burial capped off a nuanced narrative of burial practice within this single large barrow. By better understanding the

cultural evolution of the mound, we gain a handle on whether or not the changes in burial practice reflect natural extensions of previous traditions (inherited culture), or whether those changes were more likely to have been the result of outside influences (cultural blending or borrowing, or outright replacement). In addition, this kind of analysis has several supplementary benefits. By studying the ‘life-history’ or ‘biography’ (e.g., Kopytoff 1988; Tringham 1995; Gosden and Marshall 1999; Peers 1999) of the mound, we open a window to how the local LN and ENBA communities who buried their dead there took part in an ostensibly constant re-imagining, re-thinking and re-use of the sacred landscape and their place within it (cf., Holst and Rasmussen 2013; Lewis 2007, 80-82). As Holst and Rasmussen (2015; see also Oestigaard and Goldhahn 2006, 28.) point out, there was likely a considerable obligation within and among communities to participate in burial mound construction (and adaptation) over a considerable long period of time and across different burial traditions. Therefore, the development of burial mounds reflects not only aspects of ritual praxis but also features of social cohesion (and coercion) related to the ways through which social order was maintained over time (cf., Last 1998).

The original excavations at Karlstrup were conducted and reported on by C. L. Vebæk (1966). The LN graves there have also been described by Klaus Ebbesen (2004). Both Vebæk’s and Ebbesen’s descriptions are in Danish. Vebæk’s original reporting can also be found transcribed into German in Aner and Kersten (1973), and Ebbesen’s (1995) also describes some of the LN materials also in German. Hence, it is necessary here to provide an overview of the details of the burials at Mound 4 in English to provide an accessible picture of mound formation.

Construction of the burial mound

Late Neolithic beginnings

The construction events at Karlstrup Mound 4 were not a single event (Figure 4). Rather, the complex that we today refer to as Karlstrup Mound 4 comprised numerous mounds that were gradually joined together into a single large mound by subsequent construction phases. It appears that the first mound at Karlstrup Mound 4 was a single low mound constructed in the Neolithic to cover a stone cist (Grave A).¹



Figure 4. Photographs of the final phase of excavation, showing the original ground level at Mound 4 at Karlstrup. These features evince the first stages of mortuary use at the site. Left: view from the northwest with cist Grave D in the foreground, Grave B in the middle, and Grave C, in the center-background. Right: aerial view of the same stage of excavation as at left viewed from the southeast; Grave A is above and to the right of Grave D (center right of photograph) (Photos: National Museum of Denmark).

The stone cist was oriented northwest-southeast with four support stones on either side and a single stone at each end. It measured roughly 1.7 by 1.25 meters on the outside, but had a smaller interior (0.70 by 0.50 meters). A single capstone covered the northwest end of the cist. No remains were preserved (note that we have coded this feature as cist grave because that is consistent with this type of feature for the LN, but we have also coded for the absence of any human remains).

During the same period, another small mound was built a few meters to the southeast of Grave A with a diameter almost twice that of its neighbor. The mound covered a relatively large well-built stone cist and included four thin, flat capstones (Grave B). This cist was also oriented northwest-southeast. It measured 2.85 by 0.85 meters in the northwest but widened out to 1.25 meters at the southwest end. Lengthwise, both sides were made from four upright stones and each end was closed by a single end stone. A ring of stones was set in a loose oval around the cist, partly marking out the edges of the low mound erected over it. Inside the cist lay the bones of four individuals: three children and one adult, all without grave goods. Immediately to the southwest of the cist lay a stack of small stones of unknown purpose. In addition to the stone cists under each of the two original mounds, a pit of roughly one meter in diameter and about one-meter-deep was dug at some point during this initial phase (Figure 3). It was located roughly a meter to the southeast of mound II. The pit contained discarded LN ceramic and earthenware sherds. An oblong pavement of stones ($\approx 2 \times 1$ m, oriented northwest-southeast) was also uncovered about five meters to the southwest of the mound covering Grave B and west of that covering Grave C. Devoid of cultural materials, its position and dimensions could indicate that it served as a staging area, perhaps for ritual purposes such as the display or even excarnation of a body prior to placement in a cist.

Next, another low mound was built slightly overlapping the previous one. This mound's stone cist (Grave C, oriented west-northwest by east-southeast) included five stone uprights on the north and six to the south. The northwest end was delimited by an end stone. The cist was covered by a packing of stones and

earth and closed off by a setting of flat stones. Two capstones partially covered the northwest end. Lengthwise, the cist measured 2.70 to 2.90 meters. Width varied from 0.50-0.70 meters. Inside were the remains of five individuals. Osteological analysis identified three children (aged 2-3, 12 and 14-15 years). Alongside these was the extended burial of an individual aged ≈ 18 years, who was later identified as female, measuring just 1.50 meters tall. Her skeleton showed signs of severe spinal deformation, which would have given her a hunched posture. She was supine with her head to the northwest. The bones of the subadults were piled in the northwest area of the cist in the space above her head (Figure 5). Two bones from another adult individual were also present. Associated grave goods included two amber beads and a small flint dagger (Aner and Kersten 1973; Vebæk 1966).

Importantly in terms of the chronological development of the site, one of the cists from this mound (Grave D) can be dated to the LN/ENBA transition based on the flint daggers present in the grave (see below). It was built between the mounds of Graves A and B. Next came another relatively low mound (mound D/IV). Like the others, Grave D was oriented northwest by southeast. The cist consisted of three stone uprights on the northern side and four on the south, with a single end stone to the northwest. The southeast end was open. Lengthwise, the cist measured 2.50-2.60 meters and was 0.55-0.85 meters in width. The enclosure was between 0.60-0.65 meters deep. There were no capstones. Vebæk (1966) posited that capstones may have been removed during the construction of the later graves G and H. A loose stone packing of white stone lined the floor (similar to LN features described by Pape 2019). Inside the cist were the remains of eight individuals (five males, two females and one individual of indeterminate sex). At ≈ 20 years, one of the females was a younger adult, while the others were adults (Aner and Kersten 1973; Vebæk 1966). Two of the male individuals were relatively tall (1.72 and 1.75 meters, respectively) for the period (Bennike 1985: 50). These two individuals' skeletons also suggested that they died while apparently healthy and in their physical prime. However, the other remains indicate that several individuals suffered from

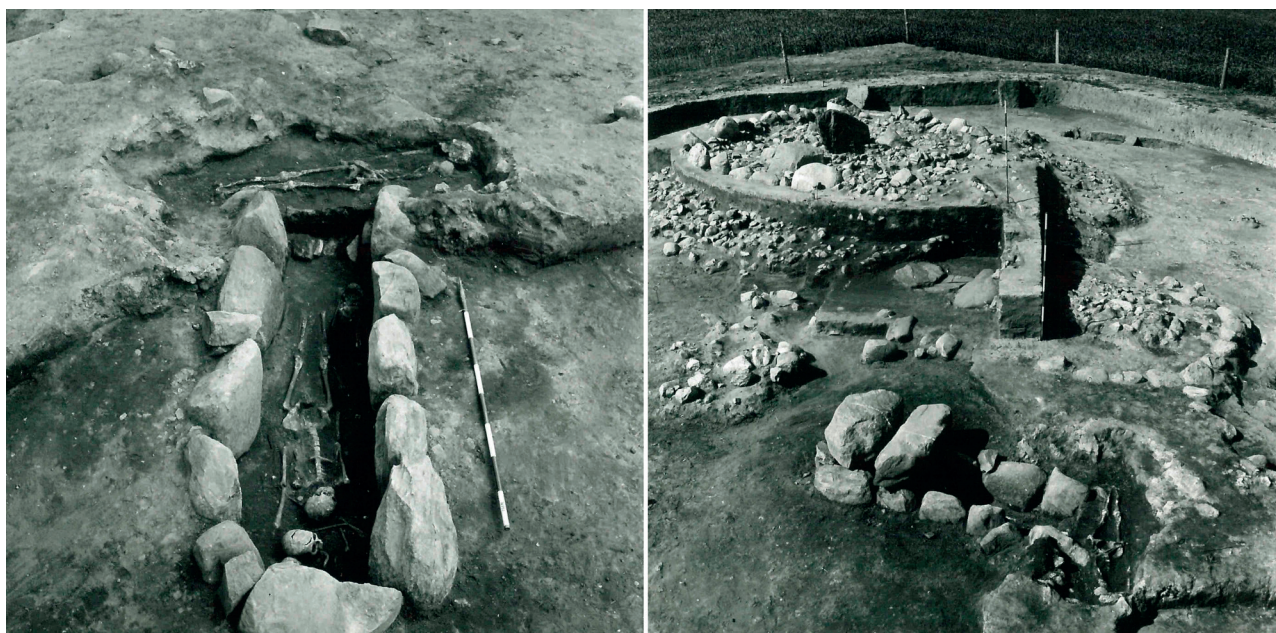


Figure 5. Left: Grave C, view from the NW looking SE. The inhumation grave E can be seen in the background; Right: Overview from the south, Grave C in the foreground with capstones still in place and exposed and Grave E; in the middle ground the capstones of Grave B are still in place at the ground surface; in the background, the stones set over Grave D can be seen (Photos: National Museum of Denmark).

disfiguring and likely painful cases of gout. Grave goods consisted of two flint daggers (Type IVC and IVA, respectively; Lomborg 1973), a small slate pendant, a small, flat, chisel-shaped piece of slate and a clay vessel.

Grave E was deposited around the same time as those just described. It was a single, extended inhumation laying on its right side with no grave offerings. Grave orientation was almost directly south to north, with the deceased individual's head to the south. This burial was above and to the southeast end of stone cist C, so we may presume the interment took place at least sometime after Grave C (Figure 6).

Around this time, another single extended inhumation with no grave goods was inserted into the existing mound. This grave (Grave F) was oriented northwest-southeast and was placed southwest of the base of mound II and at the northwest edge of mound III. The stratigraphy of its placement is difficult to ascertain. It is possible that Grave F lay near the cleft between the peripheries of the two adjacent mounds. Alternatively, this grave may also have had its own low mound, effectively extending the northwest portion of mound III and perhaps bridging the gap between mounds II and III along their western margins.

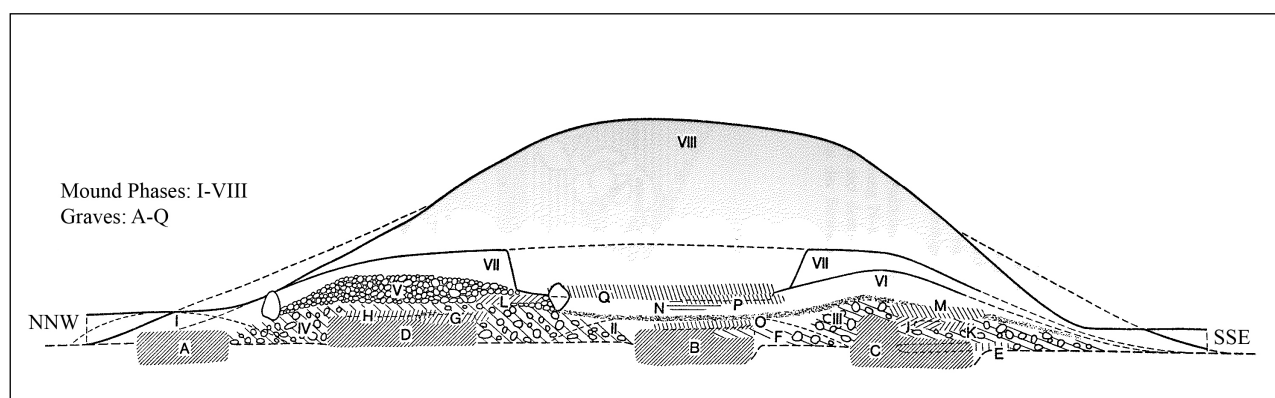


Figure 6. Profile of the Mound 4 construction sequence (After Aner and Kersten 1973, 183).

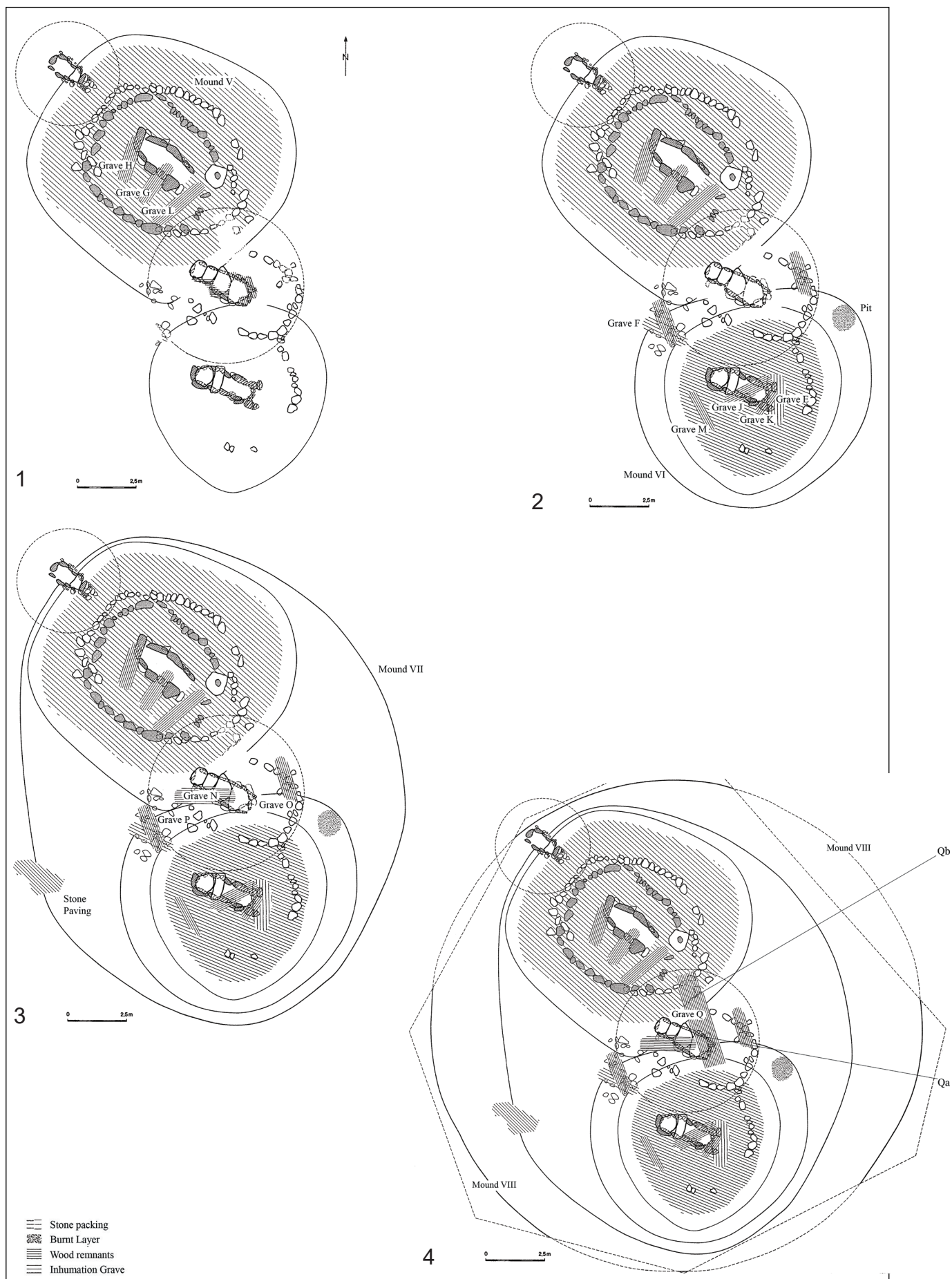


Figure 7. Site map of Mound 4 at Karlstrup showing the ENBA construction phases of the mound in terms of features and graves over time from top left to right (Site map after Aner and Kersten 1973, 182).

New materials, new motifs and a radical transition

The next few construction phases ushered in an extensive expansion of what was by then a small funerary complex of low barrows covering stone cists (Figure 7). Here we begin to see evidence of a systematic reuse and modification of the existing sacred landscape. Rather than situating new graves across the surrounding area, the existing low mounds were conspicuously re-used, to the extent that burials were placed directly atop the previous mounds and with new, higher burial mounds built over them. In at least two cases, earlier burials were disturbed in this process (in both cases some capstones were even removed, exposing earlier cists) (Aner and Kersten 1973; Vebæk 1966).

This brings us to Graves G, H and L² which were three roughly concomitant inhumations placed at equivalent depths, each in their own wood coffins (see Boye 1986). The graves most likely date to the earliest phase of the ENBA Period I. The coffins were lain on a stone packing roughly 5 by 6.2 meters in diameter which was installed directly across the top of mound IV. Construction atop the mound partially disturbed the earlier stone cist (Grave D) beneath, which likely explains the displacement of Grave D's capstones. A pile of large stones formed an offset ring enclosing the coffins. While each grave was oriented generally southwest to northeast, Grave H was oriented at a slightly sharper angle. Graves G and H were roughly two meters in length each and were covered by intermingled stone cairns, suggesting that these two burials took place at or near the same time. The coffin in Grave L was considerably longer, measuring around 3 by 0.5 meters, and it lay outside and immediately to the south-southeast of the stone cairn which covered Graves G and H. A flint strike-a-light rested to the right side of the deceased individual in Grave L. This grave was oriented approximately southwest to northeast. In each of these three, the deceased's head was at the southwest end.

Graves J, K and M were all also interred atop the preexisting mound III. Likewise, their placement also partially disturbed the capstones of the earlier cist; some bones appear to have been removed as well. Each of these three inhumations were

placed within what were likely tree-trunk coffins. Graves J and K were covered by a turf-built mound (mound VI) of their own. Grave J was oriented northeast to southwest, with the deceased's head to the northeast (Aner and Kersten 1973; Vebæk 1966). Placed above and to the northwest of the head lay bronze tweezers and an axe, both of typically Nordic style. To the right of the individual's head lay a bronze dagger. At about waist-level lay a flint strike-a-light and a bronze belt-hook. Several unidentifiable fragments of bronze were also recovered. Nearly parallel to this grave lay Grave K. Grave K contained an inhumation with the head to the south-southwest. No grave goods were present (Aner and Kersten 1973; Vebæk 1966).

Vebæk (1966) suggests that thick layers of charcoal and burnt human bone observed in the last two sets of burials indicate some form of sacral funerary practice in which bones from the earlier cist graves were disbursed, removed and presumably burned.

Grave M was another inhumation burial which was also presumably in a tree-trunk coffin. This grave was dug into the southwest verge of mound VI. The grave was oriented north-northwest by south-southeast, but there was no indication of which direction the deceased had lain and no grave goods were evident (Aner and Kersten 1973; Vebæk 1966).

Early Nordic Bronze Age repossessions

Continued mound expansion saw the penultimate burials: those of Graves N, O and P. Each of these was situated more or less between existing mounds V and VI, effectively bridging the gaps between those adjoining tumuli.

Grave O was an inhumation burial in what had probably been a tree-trunk coffin. The coffin was oriented north-northwest by south-southeast, with the head to the southeast. Grave P was similarly an inhumation, probably in a tree-trunk coffin and was oriented north-northwest by south-southeast. No human remains survived to indicate the positioning of the deceased. Both Graves O and P may have been dug into mound VII after it had been constructed, presumably as the intended tumulus to house Grave N (see below).



Figure 8. The pair of men in Grave Q seen from the east-southeast. Individual A is on the left, with sword in the crook of his left shoulder, and individual B is on the right. The cairn piled over Graves G and H can be seen in the background, with the resting place of Grave L's oak tree-trunk coffin roughly between the two in the center-right of the image (Photo: National Museum of Denmark).

Grave Q: a conventional yet exceptional grave

Grave N consisted of a tree-trunk coffin burial, oriented east to west and set into the channel between mounds V and VI. The coffin measured 2.40-2.50 meters by 0.65-0.70 meters. Grave N was noteworthy in that it contained the remains of a large male, who was accompanied by rich grave offerings. His height was estimated between 1.85-1.90 meters ($\approx$ 13-18 cm taller than the average male of his day; Bennike 1985). He lay extended and supine with his head to the east. His left arm was bent so as to rest over his abdomen. His grave goods included a bronze razor with a spiral handle placed to the right of his head. A bronze belt-hook was at his right hip. At either side of his head lay fine gold coils, presumably worn in his hair (Aner and Kersten 1973; Vebæk 1966). He also wore a spiral ring of gold on one finger. Both bronze and gold objects attest to this individual's wealth and status in ENBA society. Mound VII was erected over this burial. This was a flat-topped tumulus roughly 1.5 to 2.0 meters in height. This covered and merged together all the previous mounds under one roof, creating a single barrow which was both squat and broad. However, one more funerary event would mark the end of this grave complex. A final double grave (Grave Q) would eventually be dug deep into mound VII so as to be situated just above Grave N. This was then covered by a single tumulus (mound VIII), which was twice as high as the previous one, and which included the final grave at its center.

A discussion of the final grave in the burial mound, Grave Q, has been presented by the authors elsewhere (Walsh et al. 2022). However, a brief overview is necessary here for clarity. Grave Q consisted of two men buried together. Osteological analysis by Pia Bennike identified both individuals as robust and tall males (mean height of 1.72 meters; Bennike 1985: 51). Individual A – a man with a sword – would have stood 1.85-1.90 meters tall. His companion – Individual B – was only slightly shorter. The pair were placed together in a massive oak tree-trunk coffin measuring over 4.5 meters long and 1.0 meter in diameter. They were laid with their heads at opposite ends of the coffin (Figure 8). Individual B was placed in the grave first with his left arm flexed across his chest. Individual A was laid with his arms at his sides, with a sword in its scabbard tucked in the crook of his left shoulder. Their legs overlapped; Individual A's left knee resting over B's left foot.

Both individuals possessed a typical 'masculine' assemblage associated with high-status males during this period. In addition to the sword, Individual A had a single-edged knife, a pair of decorated tweezers and a horse-headed razor all of bronze and a flint strike-a-light. He also possessed two bronze fibulae and three double-buttons, including one large button with amber inlay. Recovered from remnants of a pouch placed at his waist were a set of six small wooden sticks covered with bronze oxide, along with two bronze fishhooks wrapped in woolen cord. He also possessed a fragment of thick, spiral-decorated gold sheeting.

Individual B had fewer possessions, but was nonetheless buried with a considerable assemblage. From a similar pouch at his waist were two small fragments of worked wooden sticks (one with a lengthwise notch), a small roll of bark or

leather, a horse-headed bronze razor, a fragment of bronze that may have been remnant of either tweezers or a flattened awl, a flint strike-a-light and fragments of what was probably a bronze knife (Randsborg 1968).

Randsborg (1968) dated Grave Q typologically and relative to the earlier graves upon which it rested, to Montelius sub-Period II-III (Montelius 1899), noting that decoration on the gold fragment buried with Individual A has parallels in the later Urnfield Culture. Radiocarbon dating of Grave Q by Frei et al. (2019) place the burial between 1500-1300 calBCE, i.e., in Period II. Hence, by that time this sacred space had been in active use for at least 300-400 years and Grave Q marked the end of the mound's use-life (see discussion in Walsh et al. 2022).

Strontium isotope ($^{87}\text{Sr}/^{86}\text{Sr}$) analyses of the men in Grave Q suggest that their origins were non-local to present-day Denmark, excluding Bornholm (Frei et al. 2019). Thus, we have a case in which two high-status, non-local men (at least one of whom was indicative of the elite warrior class) were buried together, with legs overlapping, in a large oak tree-trunk coffin (see Walsh et al. 2022). Their grave was dug into the existing large tumulus, and the mound which was constructed over this last burial doubled the mound's previous height.

Methods: A single mound, evolving?

Elsewhere, cultural evolution studies of ritual architecture have shown that such structures often represent cohesive cultural norms with long-lasting traits transmitted between related groups (e.g., Cochrane 2015; Jordan 2015). Aspects such as location, general features, structure size and shape, building techniques and materials, as well as details reflecting social structure and cosmology are often incorporated into ritual monuments. In this way, features or design elements were proscribed in or towards various directions or features of the landscape, or the structure itself. Often, such constructions also reveal rules regulating the placement of objects (including skeletal remains and grave offerings), features and the locations of ritual activities, including the prescribed and proscribed uses of sacred spaces.

We hypothesized that within the singular sacred space at Karlstrup Mound 4, there may also have been a level of cultural continuity between the different temporal funerary traditions practiced there. Support for this hypothesis would take the form of a coherent evolutionary pattern of descent with modification from the earliest burial practices through the subsequent burial sequence(s). To determine whether there is an evolutionary pattern (e.g. of descent from LN to EBA funerary tradition) within the cultural traditions at Mound 4, we considered each burial or compound set of burials as a taxonomic unit ('taxa') within an evolutionary model. In this way, each unit represents a synchronic moment in the diachronic trajectory of the space's use-life. We compiled trait data for each grave, accounting for variations in grave type and contexts, as well as to the material constituents of each burial assemblage (Table 1).

Archaeologists perceive of cultural change as noticeable variations in past behaviors and practices and their material culture correlates (e.g. house building styles, pottery formation or decoration and burial practices). Here, we recorded the various features and contexts – the character traits – of each identifiable grave at Mound 4. These traits include the presence (1) or absence (0) of the following: stone cist, wood coffin, multiple interments (three or more individuals), single grave, double grave, low barrow, high barrow (over roughly two meters in height), stone cairn, traits N1, S1, E1, and W1 indicate the primary cardinal direction of the burial where possible determined by the evident or most likely general position of the head rather than feet (Grave A contained no discernible human remains and thus its directionality is based merely on its relation to the adjacent LN cists. Traits N2, S2, E2, W2 indicate secondary intercardinal directions. A grave in which the deceased individual was interred with their head to the northwest would be coded N1, W2 (e.g., Grave C), whereas a grave in which an individual was interred with their head to the south-southwest would be coded S1, W1, S2 (e.g., Grave H). This coding system was devised to avoid the potential of creating dependent variables that could possibly bias the weight of certain directions over others. In some of the LN cists it is difficult to

Grave	Cist	Coffin	Multi	Single	Double	Barrow_Low	Barrow_High	Cairn	N1	S1	E1	W1	N2	S2	E2	W2	Child	Adult	Male	Female	Mixed	Supine	amber	flintdagger	SaL	SlateArtefact	ClayVessel	tweezers	bronzeax	bronzedagger	belthook	bronzerazer	haircoils	fingerring	bronzesword	fibula	bronzeknife	goldfrag	doublebutton	fishhook	gold		
GraveA	1	0	0	0	0	1	0	0	1	1	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
GraveB	1	0	1	0	0	1	0	0	1	1	0	1	0	0	1	0	1	1	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
GraveC	1	0	1	0	0	1	0	0	1	0	0	1	0	0	0	0	0	1	1	1	1	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
GraveD	1	0	1	0	0	1	0	0	1	0	0	1	0	0	0	0	0	0	1	1	1	0	0	1	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
GraveE	0	0	0	1	0	0	0	0	0	1	0	0	0	0	0	0	0	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
GraveF	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
GraveG	0	1	0	1	0	1	0	1	0	1	0	1	0	0	0	0	0	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
GraveH	0	1	0	1	0	1	0	1	0	1	0	1	0	1	0	0	0	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
GraveJ	0	1	0	1	0	1	0	0	1	0	1	0	0	0	0	0	0	1	0	0	0	1	0	0	1	0	0	1	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0
GraveK	0	1	0	1	0	1	0	0	0	1	0	1	0	1	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
GraveL	0	1	0	1	0	1	0	0	0	1	0	1	0	0	0	0	0	1	0	0	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
GraveM	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
GraveN	0	1	0	1	0	0	1	0	0	0	1	0	0	0	0	0	0	1	1	0	0	1	0	0	0	0	0	0	0	0	0	1	1	1	1	0	0	0	0	0	0	1	
GraveO	0	1	0	1	0	0	0	0	1	1	0	0	1	0	0	0	0	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
GraveP	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
GraveQa	0	1	0	0	1	0	1	0	0	1	1	0	0	1	0	0	0	1	1	0	0	1	1	0	1	0	0	1	0	0	1	1	0	0	1	1	1	1	1	1	1	1	1
GraveQb	0	1	0	0	1	0	1	0	1	0	0	1	1	0	0	0	0	1	1	0	0	1	0	0	1	0	0	1	0	0	0	1	0	0	0	0	1	0	0	0	0	0	0

Table 1. Graves (taxa) and character traits matrix used to generate the study's phylogenetic models.

determine the directionality of individuals as the remains are jumbled or because individuals were placed in the grave in ways that do not simply conform to the lengthwise orientation of the grave space (e.g., in Grave D at least one individual appears to have been placed in the cist in a hocker position with their left side up, with their head and flexed legs perpendicular to the lengthwise orientation of the cist), but other skeletal remains in the same cist had a prone orientation parallel to the length of the larger enclosure. In each case, we have attempted to discern the most likely orientation that the burial may have been seen to possess during its use, as e.g., based on the position of skulls versus lower extremity elements or where end stones or capstones indicate possible opening points also in relation to the position of skeletal remains and grave goods. Demographic traits reflect child, adult, male, female, and position of the interment is recorded as mixed (in cases where the remains of multiple individuals have been significantly jumbled together or where the likely position of bodies is undeterminable) or whether supine/extended (e.g., as in a tree-coffin). Grave goods are represented by: amber, flint dagger, strike-a-light (SaL), slate artefact (i.e., pendant), clay vessel(s), bronze tweezers, bronze ax, bronze dagger, bronze belt-hook, bronze razor, hair coils (regardless of material), finger ring (regardless of material), bronze sword, fibula (regardless of material), bronze knife, gold fragment, bronze double

button, fishhook, and the mere presence of any gold (as an indicator of status oriented wealth).

As our approach to Karlstrup Mound 4 comes from looking at a single archaeological unit – a single burial mound (itself a palimpsest of smaller mounds that were gradually united by subsequent building phases into a single large mound) that evinces a systematic pattern of re-use over a relatively long period of time and during which significant cultural changes occurred, we employed two evolutionary tree-building methods: neighbor-joining network analysis (NeighborNet) using Splitstree4 (Bryant and Moulton 2004; Bryant et al. 2005; Huson and Bryant, 2006; see also Gray et al. 2010) and a Bayesian phylogenetic tree model using BEAST 2 (Bouckaert et al. 2019; Drummond and Bouckaert 2015; Drummond and Rambaut, 2007; Gray and Watts 2007; Pagel and Mead 2006; see also Gjesfjeld and Jordan 2019). For each analysis, we used the presence/absence of the 41 traits described above that are evident across the sixteen graves in Mound 4 at Karlstrup (Table 1; note that one trait [W2] is unrepresented in the data; we have kept this trait in the data matrix for replicability purposes, to show that this grave orientation was at least considered during data collection). The individuals in Grave Q are included as separate ‘taxa’ for the purposes of our analyses because they each have a distinct identifiable directional orientation and their own distinguishable

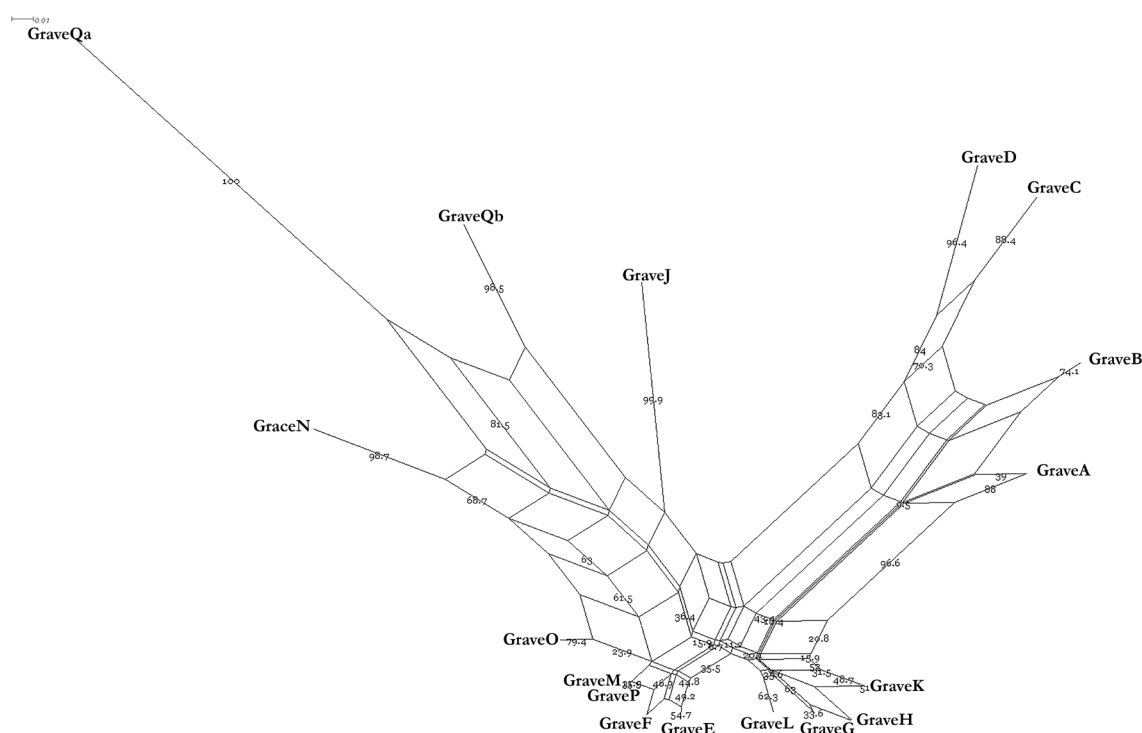


Figure 9. NeighborNet 'split graph' showing the results of the analysis of the burial data given in Table 1.

grave goods. For the Bayesian analysis, following Gjesfjeld and Jordan (2019) and Prentiss et al. (2022) we ran 12 different models with variable settings (see Prentiss et al. 2022: 7-8). We then calculated Bayes factors using the end likelihoods of each model to determine the best-fit model: Model 5 (M5). We generated a maximum clade credibility tree (MCCT) based on M5 using TreeAnnotator (Heled and Bouckaert 2013) and visualized that tree using FigTree³, both from the BEAST 2 suite. We should note that the trees generated for each of the 12 models were topologically identical in terms of the branching scheme, with minor variations only in their respective branch lengths and posterior probability values. M5's settings were: Gamma Category Count: 4, Clock Model: Relaxed Clock Exponential; Priors: Yule tree; MCCT chain 1×10^7 and all other settings default.

Results

The NeighborNet split graph shows a temporally differentiated trajectory (Figure 9; from right to left from the LN graves A-C-/D through to the later well-equipped ENBA graves J, N, P, and Q. This

pattern is supported by a Delta score of 0.2996 and a Q-residual score of 0.03797, both goodness-of-fit indices indicative of tree-likeness (Holland et al. 2002; Gray et al. 2010). The Delta score is a value between 0 and 1 in which the higher the score the more evidence of blending and borrowing between taxa – i.e., homoplasy in evolutionary terms (Holland et al. 2002; Gray et al. 2010; Prentiss et al. 2015), whereas the Q-residual score is also a value between 0 and 1 where 0 indicates a complete lack of reticulation and higher values indicate more reticulation. Combined, our Delta and Q-residual scores indicate a tree-like pattern in the changes over time that occurred at Karlstrup Mound 4. The ENBA graves split into three clades, with Grave E, F, M and P in one group, Graves G, H, K, L, and O in another, and J, N, P, and, finally, Q in another. However, this is the result of just a few trait variants: the E, F, M, P group are coffin graves with no distinguishable remains, while the G, H, K, L, O group are all variants of south-oriented graves also with no distinguishable remains. These individuals were not accompanied by significant wealth in the form of metal goods. Thus, despite these minor differences, we may view the central grouping of ENBA graves as a

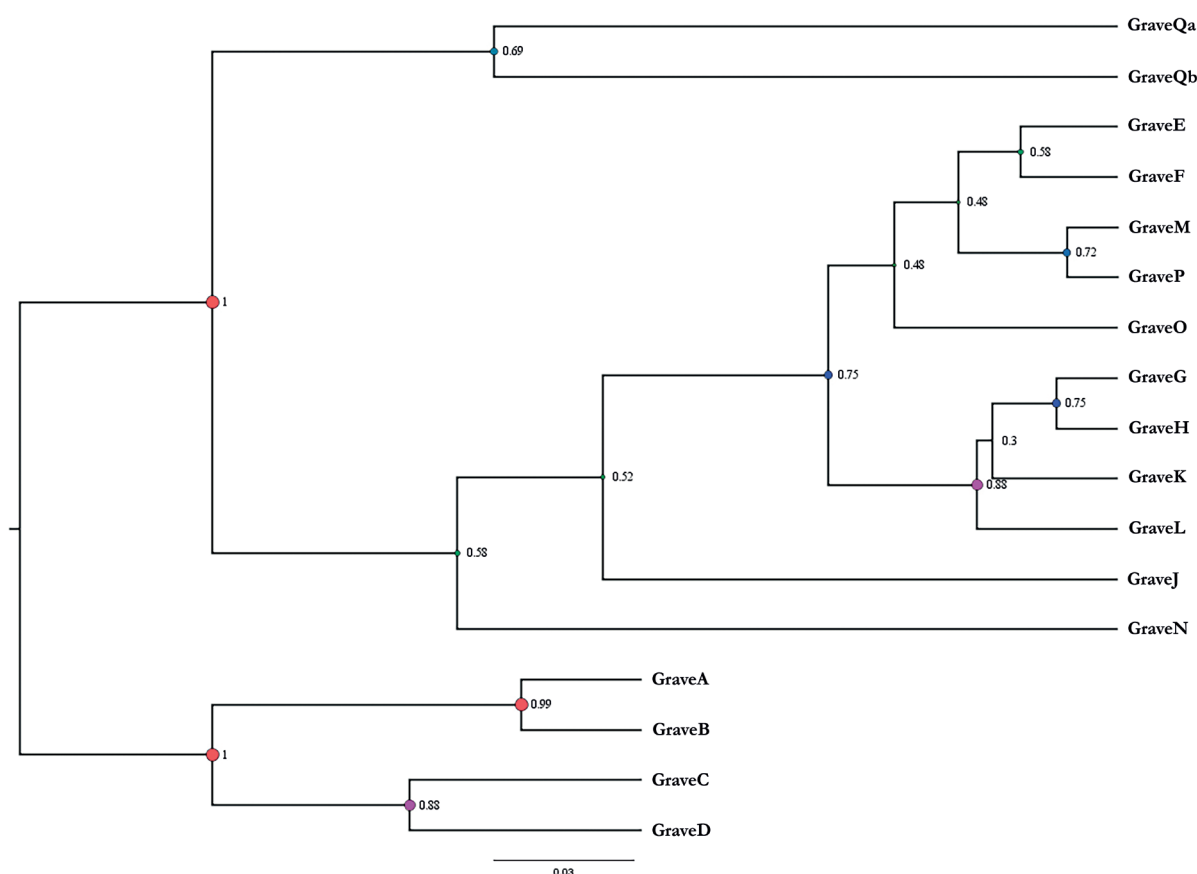


Figure 10. Phylogenetic Maximum Clade Credibility Tree (MCCT) generated in BEAST 2. We have rooted the phylogram in Grave A. Note the strong posterior probability values supporting the distinction between the LN and ENBA cultural traditions.

singular phenomenon: tree-trunk coffin graves of various orientations with not much extant material in the way of preserved grave goods. This leaves us with the far-left clade comprised of Graves J, N, and Q, the ENBA graves with grave goods. These distinctions are further supported by exceptionally strong bootstrap scores for the separation of the LN graves from the ENBA graves (bootstrap score: 98.6) and the final Grave Q from the rest of the ENBA graves (bootstrap score: 88.7).

The MCCT (Figure 10) generated in BEAST 2 (Bouckaert et al. 2019; Drummond et al. 2005; Drummond et al. 2006; Lewis 2001) shows a similar branching pattern to the split graph.

Discussion

The results of our cultural evolutionary analyses indicate that the burial traditions at Karlstrup Mound 4 show considerable differences between

the LN and the ENBA despite the use of the same sacred space over the *longue durée* of the mound's use-life. However, there is distinct coherence within temporal traditions throughout the LN and ENBA graves and the trajectory of the ENBA graves changes over time in the sense that grave assemblages generally became more complex, culminating in richly furnished elite graves and finally a single compound burial of two elite men.

We see a strong discontinuity between the LN graves, the bulk of the ENBA graves, and the final few ENBA interments, with Grave Q standing out distinctly. There appears to be no evidence for descent with modification relationships between LN practices and the introduction of novel ENBA practices. The ENBA graves are further divided between the earliest graves and the later, more extravagant final burials, which branch off early on the dendrogram despite being later in the burial sequence. The strong relationship *within* clades indicates temporal 'pockets' of cultural coherence:

momentary or perhaps adjacent-generational practices during the LN and during the ENBA, respectively. The latter funerary practices appear to have become more complex over time with increased expressions of material wealth in the form of grave goods and in the extension of the burial mound itself. The high bootstrap scores indicated in the NeighborNet split graph and the high posterior probability values at particular branching events in the MCCCT support that coherence within clades is strong. This points to that the cultural traditions reflected by each grouping represent distinct cultural variants expressed even in the space of what appeared on the surface as a single large burial mound prior to Vebæk's excavation.

The clear split between the LN and ENBA graves suggests a rather dramatic cultural change, perhaps even a significant population replacement between these phases. At the very least it connotes considerable changes in cultural norms even at this highly localized scale.

Coherence within temporal traditions and LN and ENBA identity formation

Collective types of interment for multiple individuals in the same enclosure were common during much of the Neolithic throughout much of Europe. It has been suggested that this reflects the communal nature of group and individual identities during that period (e.g., Ebbesen 1983, 2004; Kaul 1994; Tilley 1994; Bradley 2002; Blank 2021). In anthropological terms, such distinctions have been theorized to reflect different paradigmatic understandings of selfhood: one general understanding focused on the individual and the other focused on collective and inclusive identities ('dividual') (e.g., Dumont 1980; Strathern 1988). Taylor's (2007) concept of 'buffered' and 'porous' selves provides a similar ontological corollary. On the one hand, sharing in an inclusive collective identity appears to have been paramount and was often intrinsically tied to early egalitarian socio-economic conditions. Over time, the focus shifted towards individuals being set apart in one way or another, often delimited by increasingly exclusive units, such as status, wealth or clan/household membership. These concepts need not be mu-

tually exclusive, and manifest to varying degrees within any given population (for discussions see Fowler 2004; Smith 2012).

It is well established that as society became increasingly hierarchical through the emergence of chiefdoms and increased control of wealth and resources during the LN and into the ENBA (sensu Renfrew 1973; Sherratt 1987, 1994), individual graves (rather than communal ones) became progressively commonplace. By the beginning of the ENBA, individual interments were the norm, reflecting autonomous expressions of individual socio-economically-reckoned identities. However, the multiple graves from the LN were an entirely different phenomenon from the formal double- and triple- graves which came later (such as Grave Q). The LN cists at Mound 4 would have been relatively unobtrusive in the landscape. While each construction phase would have required co-operation for the movement and placing of the largest stones, the scale of construction is not clearly indicative of social organization at the level of either of Renfrew's (1973, 1974) 'Chiefdom' models. What these features do at least suggest is a communal concept of identity reflected in the treatment of the dead, in which bones were regularly intermingled, over-laid and probably even moved and removed at various stages of each grave's use (see discussion Kaul 1994).

Each of the initial phases of ENBA graves in Mound 4 comprised a single inhumation in a coffin with a low turf mound erected over it. This includes the purposeful appropriation and re-use of the sacred space itself from the previous burials in the vicinity. The lack of grave goods in these graves is telling. We may presume that preservation in the mound was relatively good given the objects recovered from both earlier and later graves. It seems that the majority of individuals in graves E-O (excluding J) were not buried with precious objects such as bronzes (which were more likely to have been preserved). Of course, they could have been buried with other types of finery such as textiles, which simply have not survived. This indicates a material distinction even between the elites of ENBA Periods I and II: over time, wealth became expressed more consistently and with increasing extravagance (see below). It may also be that at this early stage of the ENBA,

metal items were more regularly kept in circulation, through e.g. curation or recycling (Vandkilde 2014), among the living rather than deposited with the dead.

At Karlstrup Mound 4, there is also a notable change in the orientation of the graves and of the deceased individuals within them, from approximately northwest-southeast oriented graves with the head of the deceased to the northwest (with little variation) in the earliest graves, to approximately southwest-northeast oriented graves with the deceased's head to the southwest (with some variation) later. A number of the ENBA graves appear to purposefully disturb earlier mounds and graves, possibly to assert the legitimacy of the newly deceased onto the existing funerary landscape (cf., Bátor et al. 2012; Millett 1990). This was evident from the thick layer of burnt remains interspersed throughout the fill of the newer ENBA mounds just above Graves G-H and J-K as mentioned above. While it is impossible to say for certain, the excavation and burning of bones from the earlier graves could have constituted two very different rites. On the one hand, this may reflect a feature of ancestor worship – a re-mingling of the earlier inhabitants of the sacred space with the resting place of the newly deceased, symbolically transforming the newly dead into ancestors. In contrast, it could also have represented a ceremonial re-claiming of the sacred space for the newly deceased – an abnegation, erasure, and perhaps even focused desecration of the old to make room for the new. A further hint at this possibly is the conspicuous placement of the stone footing, burnt remains, and the coffin burials (G, H, L atop mound IV and J, K, M over mound III) themselves directly atop the earlier LN grave feature. Indeed, the various negotiations taking place in the development of a funerary landscape like that at Karlstrup Mound 4 are myriad, highly symbolic, and in many ways likely acted to reinforce and sometimes transform social and political positions, far more for the sake of the living than the dead (Oestigaard and Goldhahn 2006). In either case, a radical re-understanding of space was in process.

There is also obvious continual re-use of the sacred space, albeit in ways that varied over time. These results suggest that we should consider how culturally congruent local and perhaps even

regional communities *actually* were or were not within their respective periods. This is important because the site suggests quite different and distinct cultural traditions playing out over time – not a relatively slow accumulation of different traits that one may be expected of descent with modification from the LN to the incipient ENBA and through to ENBA I-II. While there may be gradual change between the burials of the ENBA over time (i.e. the increasing accumulation of wealth in the form of grave goods), change from the LN to the ENBA is abrupt.

Regardless of any difference in identity formation there may have been between the LN and ENBA at Karlstrup, the stark split between the LN and ENBA usages of the site leaves us with an interesting conundrum: whence did these cultural changes originate? The site seems to have been continually and consistently treated as a sacred space – albeit a rethought and reconceptualized one – for the expression of funerary identities across several centuries. Why did the means of expressing those identities change, although place and burial group appear to have remained constant?

In answer, it is useful to turn to the precepts of the New Mobilities Paradigm (Sheller 2018, 2021; Sheller and Urry 2006; Urry 2007; van der Sluis et al. 2020; for archaeological applications see Reiter and Frei 2019; Reiter et al. 2021). This interpretive framework suggests that our conception of mobility should include the movement of persons as well as the exchange of ideas, cultural materials and exchange commodities. Certainly, the changes in the funerary events described at Karlstrup Mound 4 might have been influenced by changes in mobility experienced by those living in the vicinity during different times. Previous studies examined considerable numbers of LN and ENBA individuals (Frei et al., 2019; see also van der Sluis et al. 2020), with Frei et al. having conducted the largest multidisciplinary human mobility investigation to date of skeletal remains from a total of 88 individuals buried within present-day Denmark and dating to the 3rd and 2nd millennia BC. While their data revealed that mobility of people seems to have been continuous throughout LN and ENBA, there was a “clear shift in mobility patterns from around 1600 BC onwards, with a larger variation in the

geographical origin of the migrants, and potentially including more distant regions” (Frei et al., 2019, 1). Frei et al. also revealed that the men in Grave Q discussed herein were different, in that they have the highest strontium isotope ratios of their entire dataset (Frei et al. (2019)). This may in turn suggest that more complex trajectories of cultural transmission were at play across the late prehistoric landscape in which diverse peoples and ideas moved around rather more dynamically than the early culture-historical theories of migration have tended to consider.

Some of the final ENBA interments in Mound 4 (Graves N and Q; as well as J) very clearly represent the graves of elites buried with typical high-status ‘masculine’ assemblages (i.e., a variety of grave goods including weaponry, ornaments, and typical ‘male’ kit) and under mounds that reflect costly tolls on both labor and landscape in their construction (Holst et al. 2013). For example, mound VII erected over Grave N effectively enveloped all of the previous graves and mounds at the site. This hints at this individual’s social status, as his burial can be seen to symbolically (en)close the use of the burial ground. However, numerous other interments were not so furnished. These dramatic differences in funerary practices illuminate that the people interring, building, maintaining and replacing graves and mounds at this site over many generations – even spanning entire socio-economic and cultural historical paradigms – were constantly re-imagining and re-configuring what the existing monuments (and the dead within them) meant. Across generations, this would likely have transformed what those meanings represented within the community, prevailing society at large, and upon the sacred landscape. These new understandings would likely have reflected the political landscape as well, as ENBA mounds were highly symbolic of the existing social inequalities of the time (Holst et al. 2013). Graves built upon graves built upon graves symbolically both established and in some cases overrode relationships between the living and the dead across time, a phenomenon seen across the northern European Bronze Age world (e.g., Johnston 2021, 82; Last 1998). While these considerations must have in some way(s) determined who, where, how and even if new graves were incorporated into the site and into a sacred

landscape, it also seems that there were few if any hard and fast rules dictating exactly how this was necessarily manifested.

We find support for the hypothesis that the sacred space represented at Mound 4 – while continually recognized as sacred ground through its use as a burial place spanning both LN and ENBA usage – must have been re-interpreted often by the living communities making use of it. The space was not being gradually modified so much as re-configured and likely re-imagined by those doing so. This is evident by temporal phases between that of the LN and the onset and the final stages of the ENBA burials, respectively. But this may also have been the case even between the elites in the first ENBA burials still interred with very little evidence of material wealth and those that eventually follow which appear to be exceptionally wealthy burials rounding out the final phases of the mound’s use-life (i.e., Graves J, N, and Q).

Conclusion

Our analyses suggest that Karlstrup Mound 4 represents a palimpsest of changing burial practices and reflected identities within a single burial mound. The burial traditions enacted within it evince a punctuated difference between the LN use of the space and that of the ENBA. But there remains considerable coherence within the LN burials and the ENBA burials, respectively. Even so, the same sacred space consistently remained important as such. This itself implies a level of continuity for funerary rituals which reflect highly diverse traditions that varied considerably between the LN, ENBA Period I, and ENBA Period II/III. The pattern suggests a series of major shifts in cultural norms and values playing out elsewhere between the LN and the ENBA, as well as within the ENBA. Recent genomic studies indicate significant population replacements at various points during the Late Holocene across much of Europe (e.g. Allentoft et al. 2015, 2024; Olalde et al. 2018; Papac et al. 2021). One result of these broader events was the remarkably wide-spread and varied use of burial mounds and accompanying ideologies and funerary traditions (e.g. Borgna and Celka 2012). But, the changes over time observable in

the burials at Mound 4, particularly at the schism between the LN and earliest ENBA appears to have been a rather sudden change in traditions occurring ‘off camera’ as it were. This does not look like an uninterrupted population gradually taking on new cultural variants. It appears that new types and extents of grave goods and aspects of funerary practices were introduced abruptly with little or no evidence between temporally adjacent graves for dynamic descent with modification between the LN and ENBA. Then, within the ENBA we see wealth and status increasingly manifested over time. That the space was reused for diverse mortuary practices indicates that it was nevertheless recognized as an important place on the sacred landscape, but one that could also be appropriated, molded, re-thought, re-imagined, and re-configured as and when it was deemed necessary by the local population. Ultimately, this re-use of the burial mound(s) may reflect scenarios such as acts of ancestor worship or a ceremonial re-claiming of the sacred space by erasing the old to make physical and metaphysical room for the new. Both of these possibilities (and myriad others) suggest a profound re-interpretation of the funerary landscape. Whatever the case may be, while the vicinity

remained sacred, its use does not appear to have conformed to any particular ‘norm’ for very long. At Mound 4, sacred space remained sacred space, but its use changed with the times.

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Notes

- 1 The precise order of the LN cists is somewhat speculative, as these were probably built more or less concomitantly. The stratigraphy and the position of the graves relative to the general circumference of the mound sequence at least suggests the order presented here.
- 2 The numbering system skips the letter ‘I’ so as to avoid confusion with the mound construction phases listed in Roman numerals.
- 3 <http://tree.bio.ed.ac.uk/software/figtree/> (Accessed 14 March 2023).

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