Bronze Age relations: genetics, kinship, and gender in Britain

Joanna Brück

Zusammenfassung

Beziehungen in der Bronzezeit: Genetik, Verwandtschaft und Geschlecht in Britannien

Das bronzezeitliche Europa wird oft als eine Zeit angesehen, in der führende Adelsschichten entstanden, die um die Kontrolle des Handels und die Anhäufung von Reichtum in Form von Bronzegegenständen und anderen Prestigegütern konkurrierten. Jüngste archäogenetische Studien stützen diese Sichtweise auf die Bronzezeit, in der expansive Kriegergesellschaften in patrilinearen Verwandtschaftsgruppen organisiert waren und der Austausch von Frauen als Bräute zwischen mächtigen Männern dazu diente, politische Loyalitäten zu festigen. Aber gibt es Alternativen zu diesem geschlechtsspezifischen Narrativ der Vergangenheit? Obwohl archäogenetische Analysen spannende neue Erkenntnisse erbracht haben, basieren deren aktuelle Interpretationen häufig auf biogenetischen Formulierungen von Verwandtschaft und Identität, die das Erbe der kolonialen Geschichte repräsentieren. Im Gegensatz dazu weist die anthropologische Forschung darauf hin, dass Vorstellungen von Verwandtschaft nicht immer auf biologischer Verwandtschaft beruhen müssen und dass die Zusammenhänge zwischen Abstammung, Ehe und Geschlecht komplex und variabel sind. Am Beispiel Britanniens in der Zeit des Chalkolithikums und der Bronzezeit sowie der Zusammenführung der genetischen und archäologischen Nachweise werden in diesem Artikel alternative Möglichkeiten zur Einordnung der genetischen Daten und zur Erforschung der sozialen Prozesse untersucht, durch die Identitäten in der Vorgeschichte konstruiert wurden. Obwohl in dieser Region paternale Bindungen offensichtlich von Bedeutung waren, lassen sich auch andere Formen der Verwandtschaft erkennen, was darauf hindeutet, dass die Stellung der Frauen in Verwandtschaftsgruppen unterschiedlich war; dass soziale Prozesse wie Rituale und Austausch für die Etablierung von Beziehungen von zentraler Bedeutung waren; und dass auch nicht-menschliche »Andere« als Verwandte betrachtet werden konnten. Diese Betrachtung vom europäischen Randgebiet legt nahe, dass es gewinnbringend sein könnte, alternative Wege zur Interpretation der archäogenetischen Evidenz aus anderen Regionen Europas in den Untersuchungen zu berücksichtigen.

Summary

Bronze Age Europe is often seen as a period which saw the emergence of chiefly aristocracies who competed to control trade and to accumulate wealth in the form of bronze objects and other prestige goods. Recent archaeogenetic studies have supported this vision of the Bronze Age, in which expansionist warrior societies were organised into patrilineal kin groups and the exchange of women as brides between powerful men was used to cement political allegiances. But are there alternatives to this gendered narrative of the past? Although archaeogenetic analyses have yielded exciting new insights, current interpretations of the evidence are often based on biogenetic formulations of kinship and identity that are the legacy of colonial history. In contrast, anthropological research indicates that ideas of kinship are not always based on biological relatedness and that the links between descent, marriage and gender are complex and variable. Taking Chalcolithic and Bronze Age Britain as an example, and bringing together the genetic and archaeological evidence, this paper will consider alternative ways of interpreting the genetic data and of exploring the social processes by which identities were constructed in prehistory. In this region, although paternal links were evidently significant, other forms of kinship can be discerned, suggesting that the position of women in kin groups varied; that social processes such as ritual and exchange were central to the making of relations; and that non-human others could also be considered as kin. This view from the margins suggests that it may be fruitful to consider alternative ways of interpreting the archaeogenetic evidence from other regions of Europe.

Introduction

Bronze Age Europe is often viewed as the first globalised economy, a period in which technological innovation and long-distance trade facilitated the creation of wealth, increasing inter-personal competition and the emergence of institu-

tionalised forms of social difference. According to this perspective, the Bronze Age is a stepping-stone towards the modern world. Central to developments of the period, it is argued, were the activities of male warriors, traders and chiefs. Women, in contrast, are viewed as objects of masculine control, displaying the wealth of their husbands in bronze

and gold ornaments, and traded as wives to bolster the political aspirations of male kin.

This vision of the Bronze Age foregrounds certain aspects of the evidence, such as the appearance of wealthy burials, the development of specialised weapons like swords and rapiers, and the accumulation of scrap metal hoards used for recycling and exchange. It also interprets that evidence from a very particular perspective. Men buried with bronze or gold grave goods are chiefs, traders or craftsmen; women buried with bronze or gold grave goods are bartered brides (Frieman et al. 2019). Although it is widely accepted that bronze was not always commodified, even socially significant items exchanged as gifts have primarily been viewed as objects to be manipulated in strategies of social and political aggrandisement (Brück/Fontijn 2013).

However, a different image of the Bronze Age is presented when one examines other aspects of the evidence. In Britain, the focus of this paper, the expansion of developer-funded archaeology over the past 30 years has reframed our perspective away from the hoards and burials that dominated narratives of the Bronze Age for much of the 20^{th} century. The most common finds now recovered during developer-funded excavations are the residues of everyday life: some 8000 settlements of Middle Bronze Age date have now been recorded, for example (Caswell 2018). These present an alternative reading of Bronze Age life in which competition between warrior elites is far from everyday experience, and in which both women and men were co-participants in complex social and cultural worlds. At the same time, recent discussion of hoards and burials has interpreted such finds in new ways. It is now recognised that bronze artefacts, for example, were not commodities to be weighed and measured for the purposes of trade, nor were they simple markers of status; rather, they were inextricably bound up with the life-histories of the people through whose hands they passed (Fontijn 2019).

In fact, it can be argued that colonial and dualist thinking lies at the heart of traditional narratives of the Bronze Age. The competitive individualism and economic intensification imagined for the period are predicated on modes of thinking characteristic of the modern Western world, in which self is divided from other, subject from object, culture from nature, and men from women (Olwig 1993; Thomas 2004). In this way, artefacts, women, animals and land are constituted as objects to be manipulated and exploited for economic and political gain. But such dualisms are more than conceptual categories: they are the product of recent colonial histories. European colonialism was legitimated by figuring land, natural resources and indigenous peoples as objectified »others« without history or agency, beyond the bounds of normal social and moral relations (e.g., Thomas 1994; Harley 2009); thus, they could be transformed into commodities to be bought, sold and controlled.

But how do these general comments on the Bronze Age relate to recent advances in archaeogenetics? The potential for ancient DNA to yield extraordinary insights into human mobility, interaction and social structure has been hailed as a scientific revolution (Kristiansen 2022). At the beginning of the Bronze Age, the appearance of populations whose genetic ancestry ultimately derived from the Eurasian steppes (Allentoft et al. 2015; Haak et al. 2015) has been interpreted

as indicating the large-scale migration of young men – described by archaeologists as »war bands« seeking new territories and intermarrying with local women (Kristiansen et al. 2017). These men are viewed as agents of significant social and economic change, introducing new technologies such as metalworking, new modes of transport, and intensive exploitation of secondary products (Wilkin et al. 2021). Beyond the macro-level of population dynamics, the past few years have seen increasing fine-grained analyses of prehistoric burials to understand Bronze Age kinship structures, marriage and residence rules. To date, most of these studies have argued that the primary unit of kinship was the monogamous nuclear family, and that patrilineal descent, patrilocal residence and female exogamy were the norm (e.g., Mittnik et al. 2019; Sjögren et al. 2020). The results of archaeogenetic research therefore appear to support views of male-dominated, hierarchical Bronze Age societies in which women are figured as passive objects of exchange, while male mobility is viewed as the result of activities such as warfare and trade.

Other perspectives on kinship and marriage

Contemporary Western understanding of kinship, marriage and gender are, however, profoundly interconnected with colonialism and its legacies. Indigenous and queer theorists have demonstrated how the imposition of settler sexuality on Indigenous communities was a core component of European colonialism in recent centuries (e.g., Smith 2005; Rifkin 2011). Colonial ideologies defined patriarchal, heteronormative and monogamous family structures as a moral imperative, central to the civilising mission of European settlers. By controlling women and identifying certain types of intimate relations as immoral, the ownership and transmission of land and other forms of wealth could be regulated, class boundaries maintained, and certain forms of labour - notably, reproductive labour - obscured and appropriated. Central to the colonial endeavour was a dualistic conceptual framework which distinguished culture from nature: by positioning women, Indigenous peoples and natural resources as part of the latter, the seizure of land could be legitimised, and land, animals and women could be defined as property (Stoler 2002; Descola 2013; TallBear 2018).

Indigenous theorists and anthropologists describe how in other cultural contexts, kinship extends to include non-human others, including animals and plants, sustained through relations of care, obligation and interdependency (Kimmerer 2013; TallBear 2018). In many Indigenous communities, it is not sexual relations that determine rights over resources. Rather, relations with non-human others are central to the constitution of kinship: abiding, emotional attachments to place or links to totemic and ancestral animals define identity and ensure access to resources (e.g., Sissons 2013). Western concepts of kinship consider it possible for kin relations to exist only between humans. This is due to the distinctions that are drawn between culture and nature, self and other, and humans and animals. By stripping the non-human world of agency, Western forms of kinship legitimise extractive, rather than meaningful, social relations between humans and non-human others (Haraway 2016). In contrast, Indige-

nous scholars propose expansive definitions of kinship that encompass relations beyond those centred on procreation, ownership and control. These perspectives underscore the ties of mutual care and interdependency between humans and non-humans, which must be nurtured to ensure a sustainable world (Kimmerer 2013; TallBear 2018).

Anthropologists have long recognised the extraordinary cross-cultural variability of kinship. There is always an element of cultural selection built into kinship systems: some relationships are considered more significant than others. For example, S. Kahn's study (Kahn 2000) of the new reproductive technologies in Israeli Orthodox communities in the 1990s demonstrated that because Jewishness is considered to be transmitted exclusively through the mother, and non-Jewish paternity is not recognised in religious law, children born to different women using sperm from the same non-Jewish donor are considered to be unrelated. In south India, C. Busby (1997) has shown that the children of a woman and those of her brother are also considered to be unrelated, as men pass on male substance to their children in the form of semen, while women pass on female substance in the form of blood and breast milk. The children of a brother and sister therefore do not share the same substance. Genetic relatedness, in other words, does not translate directly to social relatedness. This is because in many societies, although the physical process of procreation is acknowledged, it may not be considered socially salient, and the production of babies may be understood in other ways. E. Evans-Pritchard's classic study of the Nuer in the early 20th century illustrated how cattle are said to beget children (Evans-Pritchard 1951). Nuer fatherhood was not predicated on sexual relations with the mother, but on the transfer of cattle in bride-wealth transactions. If a woman's husband died, she could take a new partner, but any children from this second relationship were considered to be the children of the man on whose behalf her bride-wealth was originally paid.

In many other societies, too, biological parentage is not the primary determinant of kinship. Instead, kinship is viewed as socially and culturally constituted – as the outcome of social not sexual relations. Kinship is understood to be a product of social practices including ritual, exchange and the sharing of food. J. Carsten (1997) describes how, on the island of Langkawi in Malaysia, kinship is viewed as an ongoing process that involves the sharing of substance. By living and eating in the same house, and by having children together, the blood of the husband and wife becomes increasingly similar over time. Foster children and other affines (people related by marriage) who eat food together also come to share the same blood. Because kin are made, not determined by birth, kinship can be strategic and situational. In many parts of highland New Guinea, immigrants are quickly absorbed into local descent groups, as residence (and not genetic links) is the most important factor in determining kinship (e.g., Held 1957). Although most societies in this region are patrilineal in principle, in practice co-resident maternal kin and affines may be considered members of the descent group. Elsewhere, different forms of kinship may be important in different contexts: among the Yakö of eastern Nigeria, land is passed down the paternal line, but cattle, money and cult membership are inherited from maternal kin (Ford 1950).

Indeed, although broad »types« of kinship organisation can be identified (for example patrilineality), their socio-political implications vary significantly: gender ideologies and the position of women in patrilineal societies are extremely variable (Stone 2010), for example, yet the pictures we are presented with on the basis of the archaeogenetic data remain highly stereotypical.

These observations have several significant implications for our interpretation of the archaeogenetic evidence. Firstly, dominant Euro-American binary and heteronormative models of gender and kinship have their origins in a particular historical context and cannot be assumed to be universal. Secondly, genetic relationships are not the sole determinant of kinship: rather, social practices of various sorts make kin, and kinship transcends biological links. The material world is often central to the creation of kin, and non-human others can be considered to be kin. This suggests that there may be other ways of understanding how kin relations were constructed in the past that may be archaeologically accessible beyond the identification of biological links.

Making relations in Bronze Age Britain

In this paper, I will consider how to interpret the evidence for biological kinship presented in a recent study of archaeogenetic change in Chalcolithic and Bronze Age Britain (Olalde et al. 2018). I will then discuss how archaeologists can move beyond genetics to explore how social practice made kin in the past. I. Olalde et al.'s primary focus is on genetic change at the population level and their samples were not selected in order to consider kinship. Nonetheless, genetic links were incidentally identified between sixteen individuals in their dataset. Twelve of these were related through the paternal line (Booth et al. 2021), suggesting that patrilineal descent was a significant factor in the reckoning of social identity. These included three sets of paternal relatives from Amesbury Down in Wiltshire. Here, the inhumation burials of an adult male and subadult male from adjacent pits were 1st degree relatives and shared a paternal but not a maternal lineage, indicating that they were genetic father and son (Booth et al. 2021). The inhumation burials of two adult males found close together near a Neolithic timber post-setting were 2nd-3rd degree genetic relatives belonging to the same patrilineages but different matrilineages. Radiocarbon dates from these burials are statistically indistinguishable, suggesting that they may have been paternal cousins or half-brothers. A third pair of paternal relatives from Amesbury Down was identified from the so-called »Boscombe Bowmen« grave, a collective burial that contained both articulated and disarticulated remains (Fig. 1; Fitzpatrick 2011). Here, the inhumation burial of an adult male (burial 2504) was probably the paternal cousin or half-brother of an individual whose disarticulated skull had been placed at his feet (ON 10) (Booth et al. 2021).

Paternal links are evident not only in the burial of men. An older adult female buried on a wooden bier or in a wooden coffin at Yarnton (Hey et al. 2016) was the probable paternal grandmother of a male infant who had been buried close by (Booth et al. 2021). This suggests that the position of women in ancestral genealogies may also have been important. This

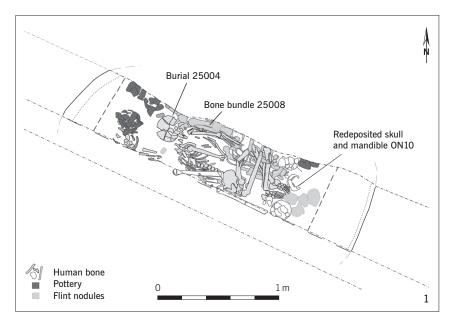


Fig. 1 The Boscombe Bowmen, Wiltshire.

Abb. 1 Die Bogenschützen von Boscombe,

Fig. 2 Double burial, Trumpington Meadows,

Abb. 2 Doppelbestattung, Trumpington Meadows, Cambridge.



is supported by evidence for the deliberate curation of bones belonging to both men and women during this period. On Amesbury Down, a grave containing the inhumation burial of an adult woman was reopened to facilitate the removal of some of her bones and the rearrangement of others (Gibson 2013). Similar practices have been well documented elsewhere and have been interpreted as a means of engaging with, and retrieving, ancestral remains belonging to known and significant individuals for curation and redeposition (Brück/Booth 2020).

Anthropological studies of kinship demonstrate that even where there is patrilineal descent in principle, relationships with maternal kin continue to be highly important, facilitating access to land, goods, titles, and so on (e.g., Held 1957). It is therefore no surprise that maternal relations were sometimes also foregrounded. For example, the articulated skeleton of a 9-11-year-old female from Amesbury Down was placed in a pit adjacent to another pit containing an adult female skull and vertebrae (Powell/Barclay 2022). Ancient DNA and radiocarbon evidence suggests that the child was probably the genetic maternal aunt of the neighbouring burial (Booth et al. 2021). Elsewhere, a young man and woman buried together in the same grave at Trumpington Meadows, Cambridge (Fig. 2; Evans et al. 2018) were 2nd-3rd degree relatives belonging to the same matrilineage. It is possible that matrilineal descent was the key principle of kinship organisation in this community, hinting at regional variability in kinship structures. Radiocarbon dates on the remains of these two individuals are statistically indistinguishable. They may have been half-siblings related through their mother (Booth et al. 2021). In matrilineal societies, a woman's loyalty is to her brother not her husband (Schneider 1961). Alternatively, they may have been the children of two sisters. Parallel cousins (the children of same-sex siblings) are regarded as siblings in many societies and marriage between them is prohibited (e.g., Busby 1997).

As previously noted, many scholars have suggested that women were exchanged as marriage partners by their male relatives. The argument that Bronze Age societies were patrilineal and practiced virilocal marriage (where a woman moves to join her husband on marriage) is perhaps supported by the identification of the genetic daughter of one of the cousins from Amesbury Down (Booth et al. 2021). She had been buried on Porton Down, some 6.5 km to the southeast. However, the reconstruction of residence patterns is complicated by evidence for residential mobility during this period: we cannot assume that relatives who were buried together actually lived together during life. Isotope analysis indicates that both

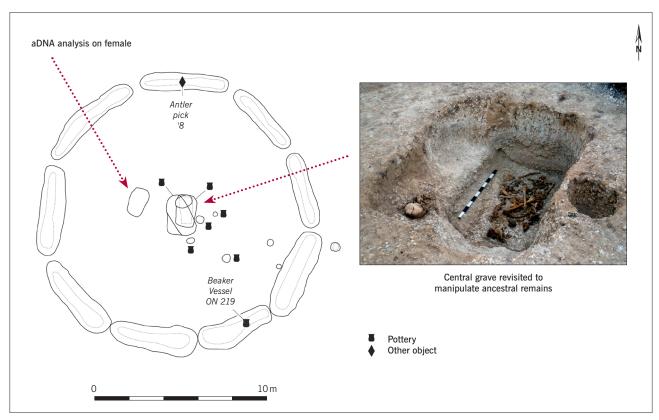


Fig. 3 The Porton Down (Wiltshire) ring-ditch and associated burials.

Abb. 3 Der Ringgraben von Porton Down (Wiltshire) und die dazugehörigen Bestattungen

men and women moved (Parker Pearson et al. 2019). Of the seven burials (six male and one female) from Amesbury Down that have been subjected to both genetic and isotope analysis, the female and four males were all identified as non-local. It is clearly problematic to assume that the woman buried on Porton Down moved for the purpose of marriage when mobility (for a variety of reasons) might in fact have been a common life experience regardless of gender. The burial of an adult woman close to the grave of her paternal uncle or grandfather at Netheravon Flying School in Wiltshire (Cunnington 1929) also indicates that women did not always move away from their paternal kin. In this case, isotope analysis suggests that both individuals were non-local (Montgomery et al. 2019) and may have travelled together into this area.

Evidence for the curation and redeposition of ancestral remains (Booth/Brück 2020) also suggests that those who were buried together may not have lived together during life. Certainly, Chalcolithic and Early Bronze Age cemeteries cannot be assumed to represent all members of a particular residential or kin group, and other priorities may have determined the place of burial. The woman from Porton Down, for example, was one of a group of burials of four adult females and six children in a segmented ring-ditch (Fig. 3; Andrews/ Thompson 2016). She lay approximately 1 m to the north-west of a large grave at the centre of the monument that contained the disarticulated remains of another adult female. The central grave had been revisited to access and manipulate this woman's bones; her skull was missing, suggesting that it may have been retrieved for deliberate curation or redeposition elsewhere. This latter individual may have been considered a significant ancestor and likely occupied a position of authority during life. The women buried in this monument were not accorded social positions relative to men, but rather, on their own terms.

Other evidence suggests that concepts of kinship were not always based on biological relatedness. At several sites, close spatial relationships between burials that likely reflected intimate inter-personal ties in life are not mirrored in the genetic data. Four individuals (Sk 2, Sk 4, Sk 7 and Sk 8) from Windmill Fields, Ingleby Barwick, North Yorkshire, were buried within a few metres of one another (Annis et al. 1997). Sk 2 and Sk7 comprised articulated single burials of an adult male and an adult female. Sk 4 was a disarticulated adult male cranium excavated from a collective deposit of disarticulated bones in a wooden cist. Sk 8 comprised a disarticulated adult female cranium that formed part of a bundle of disarticulated crania and long bones (Fig. 4) accompanying an articulated adult female burial (Sk 6; which was not subject to archaeogenetic analysis). Their radiocarbon dates suggest they were broadly contemporary, but they were not close genetic relatives (Booth et al. 2021). It is possible that these burials were genetic relatives too distant to be recognised by the methods used by Olalde et al. (2018), although the probability of this is reduced given that they all belong to different paternal and maternal lineages. It seems likely that the individuals buried at Windmill Fields belonged to a single small community and that they may have viewed each other as kin. Here, co-residence may have determined kinship, as is common in many contemporary societies (e.g., Schneider 1984). The careful deposition of the disarticulated bundle of bones with articu-



Fig. 4 Windmill Fields, Ingleby Barwick, Stockton-on-Tees, Durham: inhumation burial (Sk 6) accompanied by a bundle of disarticulated bones, including disarticulated cranium (Sk 8).

Abb. 4 Windmill Fields, Ingleby Barwick, Stockton-on-Tees, Durham: Körperbestattung (Sk 6), vergesellschaftet mit einem Bündel disartikulierter Knochen, einschließlich $disartikuliertem\ Sch\"{a}del\ (Sk\ 8).$

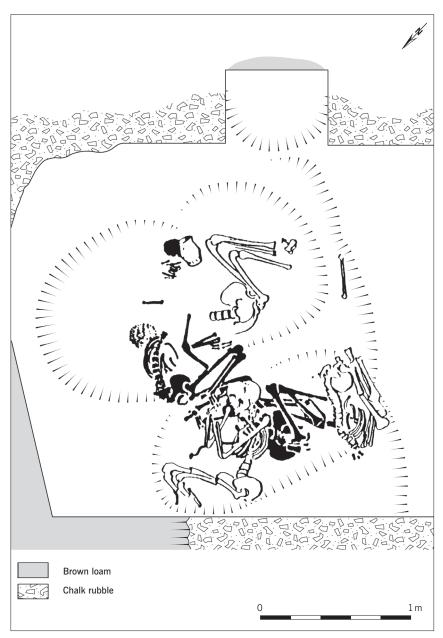


Fig. 5 Sequence of inhumation burials at South Dumpton Down, Kent.

Abb. 5 Abfolge der Körperbestattungen in South $Dumpton\ Down, Kent.$

lated burial Sk 6 illustrates how here, social practices involving the manipulation of the bodies of the dead were central to the creation of kin relations.

I have already pointed out how the heteronormative character of kinship in the contemporary Western world serves particular purposes, supporting a view of gender identity that is integral to colonial and capitalist modes of political and economic power. This means that it is important to be open to exploring the archaeological evidence for other types of relationship. At Needingworth Quarry, Cambridgeshire, an adult female aged 18-25 years was laid at the base of a deep grave (Olalde et al. 2019, 84; Suppl. Inf. 2). The grave was subsequently recut and received the burial of a second adult female more than 40 years old. Their deaths were not many years apart, but they were not genetically closely related. Anthropological studies of kinship and gender suggest there are various different ways in which this grave might be interpreted. It is possible that they were co-wives in a polygamous marriage. Alternatively, these burials might represent an instance of woman-to-woman marriage. Historically, womanto-woman marriage was widespread in Africa (Levine 2008, 378). A woman presumed to be barren could divorce her husband and remain in her father's home. She could herself then marry a woman whose children would count her as their father and who would be members of her patrilineage. Woman-to-woman marriage enhanced women's status and offered greater social and sexual freedom. It is also possible that the women from the Needingworth Quarry grave were in an intimate same-sex relationship: this is something that is rarely considered in discussions of kinship and marriage in the Bronze Age.

Performing kinship

Archaeogenetics clearly provides extraordinary new opportunities to understand kinship in the past. However, because of the valorisation of science in contemporary academia, there is a danger of prioritising scientific data over other archaeological evidence for the making of kin in the past. Making kin involves material technologies: in the contemporary world, direct-to-consumer genetic testing kits do not so much reveal kin as make them (Wolf-Meyer 2020), just as the material economies of love create and sustain ideologies of kinship in the present. M. Di Leonardo (1987), for example, shows how the task of making and maintaining kin relations is primarily assigned to women in contemporary North America, and how the material world is central to that process, for example by sending greeting cards and organising holiday gatherings. Archaeologists are particularly well placed to investigate technologies of kinship in the past for these are directly reflected in material practice.

In Bronze Age Britain, as we have already described, kinship is created in the spatial articulation and manipulation of the bodies of the dead. At South Dumpton Down in Kent, for example, a deep pit at the centre of a ring-ditch contained seven crouched inhumations deposited in sequence (Fig. 5; Perkins 1995). All but one of these burials were placed so that they lay perpendicular to the body of the previous interment, and in most cases the skull had been removed when the sub-

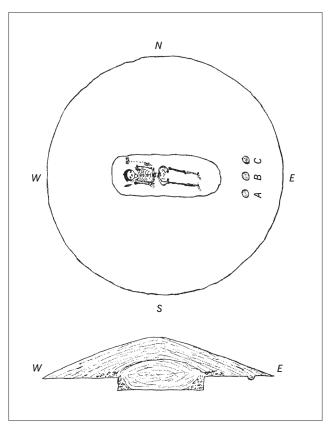


Fig. 6 Antiquarian drawing of the barrow at Towthorpe, East Yorkshire.

Abb. 6 Antiquarische Zeichnung des Hügelgrabes in Towthorpe, East Yorkshire.

sequent burial was deposited. Here, not only were spatial and bodily relations employed to foreground particular relationships, but the bones of the dead were also retrieved for curation, display or deposition elsewhere. Nearby, the inhumation burial of an adult was accompanied by the mandible of another individual, and we can surmise that this might have been recovered from the multiple deposit. A recent programme of radiocarbon dating indicates that such »relic« fragments of human bone were curated for around two generations before final deposition, suggesting that they derived from known individuals, possibly significant ancestors (Brück/Booth 2022). Here, the remains of the dead were manipulated to foreground, sustain and transform kinship links: engaging with the bones of dead individuals figured as ancestors acted as a means of performing kinship.

Kinship was not located solely in the human body, however. The archaeological record also provides rich evidence for different technologies of kinship, illuminating how kinship was conjured and enacted in material practices. For example, at Towthorpe, East Yorkshire (Fig. 6), a barrow covering the inhumation burial of an adult male was built of materials from three distinct sources: soil from the immediate vicinity of the barrow; clay from the area around Burdale, a mile to the west; and clay from the vicinity of Duggleby, a mile and a half to the north (Mortimer 1905, 6). The mound was composed of layers of these clays, alternating with layers of soil from the immediate vicinity of the barrow, and each kind of clay predominated at the side of the mound nearest the place from which it had been brought. Here, kin were



Fig. 7 Inhumation burial of a subadult female from Cliffs End Farm, Kent. Her head resting on

Abb. 7 Körperbestattung einer subadulten Frau von der Cliffs End Farm, Kent. Ihr Kopf ruht auf einem Rinderschädel.

made not through the bodies of the dead themselves, but through other forms of social practice, in this case, when people brought baskets of different materials from significant places in the landscape. In doing so, they marked the contribution of different kin groups (perhaps maternal and paternal kin, for example) to the substance of the deceased.

Beyond the mortuary context, material practices in the world of the living also made kin. I have described elsewhere how the assemblage of shale armlets from the midden at Potterne in Wiltshire were standardised in size (Brück/Davies 2018). Their internal diameters lay in the region of $5-7 \, \text{cm} - \text{a}$ size that will fit over the hand of a modern 8- to 10-year-old child of slim build, but will not fit someone older. The standardised diameter of these artefacts suggests that they may have been given to mark particular life-cycle rites, perhaps in mid-late childhood. Some of these items have been snapped in half or broken into quarters. Potterne has been interpreted as a ceremonial site at which large groups of people came together for feasting and other ritual activities (Lawson 2000; Madgwick/Mulville 2015). As such, these broken shale bracelets can perhaps be interpreted as the residues of age-grade ceremonies or initiation rites in which fragments of sociallysignificant artefacts were gifted to important kin: here, kinship was the outcome of social practice.

Archaeologists are also well-placed to consider the implications of Indigenous scholars' call to move beyond models of kinship rooted in the heteronormative, patriarchal, and anthropocentric structures of settler sexuality (Kimmerer 2013; TallBear 2018). More expansive and inclusive definitions of kinship that are not predicated on sexual reproduction but instead foreground ongoing acts of mutual care can make space for other-than-humans as kin. In Bronze Age Britain, R. Johnston (2021) has explored how kin relations were rooted in places invested with animate and ancestral powers. These relations can be traced in material interventions in the landscape, such as the deposition of bronzes and other objects at striking landmarks. For example, on Dartmoor in Devon, a complete pot was found placed in a crevice, part-way up the face of an imposing granite outcrop (Pettit 1974, 92). This can be interpreted as an offering to ancestral spirits whose powers were vested in this place - a gesture of care towards ancestral lands and a manifestation of kin relations with both human and non-human persons. Relations with animals may also speak of kinship links.

Sometimes, those were the intimate interconnections of everyday life: at Cliffs End Farm in Kent (Fig. 7; McKinley et al. 2014), for example, a subadult female lay flexed on her right-hand side, her head resting on a cattle skull. It is possible that this animal had been gifted as part of the bride-wealth of this young woman; anthropologists have frequently described how cattle transferred as part of marriage transactions are considered a crucial component of the self, with close personal links existing between particular people and animals (e.g., Evans-Pritchard 1951). Other relations may be more totemic in character. For example, the cremation burial of a child at Skilmafilly, Aberdeenshire, included a pair of burnt goldeneagle talons and a perforated bone or antler object (Johnson/ Cameron 2012, 30); these items may have been worn together as part of a necklace. Totemic animals are usually understood as kin, the original progenitors of their human descendants, their frequent slippage between human and non-human form reminding us that the boundary between human and animal is not always viewed as categorically elsewhere as it is in our own cultural context (Descola 2013).

Conclusion

In this paper, I hope to have demonstrated that bringing together theories of social practice with critical perspectives on the social salience of the biological links revealed by ancient DNA has much to tell us about kinship. Ancient DNA analysis has come to be viewed as the most accurate means of revealing prehistoric kinship structures, yet it is crucial that we avoid reading the genetic evidence in ways that unthinkingly impose modern conceptions of kinship and gender relations onto the past. A century of anthropological analysis of kinship and marriage demonstrates the extraordinary diversity of ways in which humans organise and understand their relationships with one another. We need to remain open to that diversity and consider alternative ways of interpreting the archaeogenetic evidence that go beyond our own lived experience. Moreover, kinship cannot be viewed as a direct reflection of genetic links. Kinship is not a given, or »natural fact«, but is a process: the outcome of culturally prescribed social practices that require careful nurture, work and commitment. Archaeological evidence provides many insights into how relations were created and maintained through varied technologies of kinship, both focused on the body and beyond it. This is a different but complementary perspective to that offered by archaeogenetics, which identifies genetic links but does not immediately reveal their social salience. It allows us to move beyond biogenetic determinism to consider the ways in which social practice generated enduring affective bonds and the sharing of substance with both human and non-human others. These points have implications for our understanding of the Bronze Age more generally. They require us to question established anthropocentric and androcentric notions of agency and to consider alternative concepts of gender, personhood and kinship. Set within this context, it becomes easier to understand evidence that appears to challenge accepted models of Bronze Age society, such as the discovery of wealthy female burials (e.g., https:// www.wessexarch.co.uk/news/beaker-burial> [23.04.2023]); the decentralised production of »high-status« weaponry like swords (Webley et al. 2020); or the evident regional and contextual variability in how social identity was constructed (Haughton 2018).

Bibliography

Allentoft et al. 2015

M. E. Allentoft/M. Sikora/K.-G. Siören/ S. Rasmussen/M. Rasmussen et al., Population genomics of Bronze Age Eurasia. Nature 522, 2015, 167-172.

Andrews/Thompson 2016

P. Andrews/S. Thompson, An early Beaker funerary monument at Porton Down, Wilt-shire. Wiltshire Arch. Natural Hist. Magazine 109, 2016, 71-74.

Annis et al. 1997

R. Annis/S. Anderson/A. Bayliss/C. Bronk Ramsey/J. Huntley et al., An unusual group of Early Bronze Age burials from Windmill Fields, Ingleby Barwick, Stockton-on-Tees. Unpubl. Report. Tees Arch. (Hartlepool 1997).

Booth/Brück 2020

T. Booth/J. Brück, Death is not the end: radiocarbon and histo-taphonomic evidence for the curation and excarnation of human remains in Bronze Age Britain. Antiquity 94,377, 2020, 1186-1203.

Booth et al. 2021

T. Booth/J. Brück/S. Brace/I. Barnes, Tales from the Supplementary Information: Ancestry Change in Chalcolithic - Early Bronze Age Britain Was Gradual with Varied Kinship Organization. Cambridge Arch. Journal 31,2, 2021, 1-22.

Brück/Fontijn 2013

J. Brück/D. Fontijn, The Myth of the Chief: Prestige Goods, Power, and Personhood in the European Bronze Age. In: H. Fokkens/A. Harding (eds.), The Oxford Handbook of European Bronze Age. Oxford Handbooks Arch. (Oxford 2013) 197-215.

Brück/Davies 2018

J. Brück/A. Davies, The social context of Late Bronze Age valuables. Cambridge Arch. Journal 28,4, 2018, 665-688.

Brück/Booth 2022

J. Brück/T. Booth, The Power of Relics: The Curation of Human Bone in British Bronze Age Burials. European Journal Arch. 25,4, 2022, 440-462.

Busby 1997

C. Busby, Of marriage and marriageability: gender and Dravidian kinship. Journal Royal Anthr. Inst. 3, 1997, 21-42.

Carsten 1997

J. Carsten, The Heat of the Hearth: The Process of Kinship in a Malay Fishing Community (Oxford 1997).

Caswell 2018

E. Caswell, Finding a place to call home: understanding the changing roles of Bronze Age settlements in communities in Britain through the analysis of their environs c. 2200-800 BC. Unpubl. PhD thesis Durham Univ. (Durham 2018).

Cunnington 1929

M. Cunnington, Two Bronze Age Beaker burials at Netheravon. Wiltshire Arch. Natural Hist. Magazine 53, 1929, 490-492.

Descola 2013

P. Descola, Beyond Nature and Culture (Chicago 2013).

Di Leonardo 1987

M. Di Leonardo, The Female World of Cards and Holidays: Women, Families, and the Work of Kinship. Signs 12,3, 1987, 440-453.

Evans et al. 2018

C. Evans/S. Lucy/R. Patten, Riversides: Neolithic barrows, a Beaker grave, Iron Age and Anglo-Saxon burials and settlement at Trumpington, Cambridge. New Arch. Cambridge Region (Cambridge 2018).

Evans-Pritchard 1951

E. Evans-Pritchard, Kinship and marriage amongst the Nuer (Oxford 1951).

Fitzpatrick 2011

A. P. Fitzpatrick. The Amesbury archer and the Boscombe Bowmen: Bell Beaker Burials at Boscombe Down, Amesbury, Wiltshire. Excavations at Boscombe Down. Wessex Arch. Report 27 (Salisbury 2011).

Fontiin 2019

D. Fontijn, Economies of Destruction. How the systematic destruction of valuables created value in Bronze Age Europe, c. 2300-500 BC (London 2019).

Ford 1950

D. Ford, Double Descent among the Yakö. In: A. Radcliffe-Brown/D. Ford (eds.), African Systems of Kinship and Marriage (London 1950) 285-323.

Frieman et al. 2019

C. J. Frieman/A. Teather/C. Morgan, Bodies in Motion: Narratives and Counter Narratives of Gendered Mobility in European Later Prehistory. Norwegian Arch. Rev. 52,2, 2019, 148-169.

Gibson 2013

C. Gibson, Out of time but not out of place. Tempo, rhythm and dynamics of inhabitation in southern England. In: A. Chadwick/C. Gibson (eds.), Memory, Myth and Long-Term Landscape Inhabitation (Oxford 2013) 99-123.

Haak et al. 2015

W. Haak/I. Lazaridis/N. Patterson/N. Rohland/ S. Mallick et al., Massive migration from the steppe was a source for Indo-European languages in Europe. Nature 522, 2015, 207-211.

Haraway 2016

D. Haraway, Staying with the Trouble. Making kin in the Chthulucene (Durham 2016).

Harley 2009

J. B. Harley, Maps, knowledge, and power. In: G. Henderson/M. Waterstone (eds.), Geographic Thought: A Praxis Perspective (London 2009) 129-148.

Haughton 2018

M. Haughton, Social Relations and the Local: Revisiting Our Approaches to Finding Gender and Age in Prehistory. A Case Study from Bronze Age Scotland. Norwegian Arch. Rev. 51,1-2, 2018, 64-77.

Held 1957

D. Held, The Papuans of Waropen (The Hague 1957)

Hey et al. 2016

G. Hey/C. Bell/C. Dennis/M. Robinson, Yarnton. Neolithic and Bronze Age settlement and landscape. Results of excavations 1990-98 (Oxford 2016).

Johnson/Cameron 2012

M. Johnson/K. Cameron, An Early Bronze Age unenclosed cremation cemetery and Mesolithic pit at Skilmafilly, near Maud, Aberdeenshire. Scottish Arch. Internet Reports 53 (Edinburgh 2012).

Johnston 2021

R. Johnston, Bronze Age Worlds. A Social Prehistory of Britain and Ireland (London 2021)

Kahn 2000

S. Kahn, Reproducing Jews. A Cultural Account of Assisted Conception in Israel (Durham, NC 2000).

Kimmerer 2013

R. Kimmerer, Braiding sweetgrass. Indige-

nous Wisdom, Scientific Knowledge and the Teachings of Plants (Minneapolis 2013).

Kristiansen et al. 2017

K. Kristiansen/M. E. Allentoft/K. M. Frei/ R. Iversen/N. Johannsen et al., Re-theorising mobility and the formation of culture and language among the Corded Ware Culture in Europe. Antiquity 91,356, 2017, 334-347.

Kristiansen 2022

K. Kristiansen, Archaeology and the Genetic Revolution in European Prehistory. Cambridge Elements. Elements Arch. Europe (Cambridge 2022).

Lawson 2000

A. Lawson, Potterne 1982-5. Animal husbandry in later prehistoric Wiltshire. Wessex Arch. Reports 17 (Salisbury 2000).

Levine 2008

N. E. Levine, Alternative Kinship, Marriage, and Reproduction. Annu. Rev. Anthr. 37, 2008, 375-389.

Madgwick/Mulville 2015

R. Madgwick/J. Mulville, Feasting on forelimbs: conspicuous consumption and identity in later prehistoric Britain. Antiquity 89,345, 2015, 629-644.

McKinley et al. 2014

J. McKinley/M. Leivers/J. Schuster/P. Marshall/ A. Barclay et al., Cliffs End Farm, Isle of Thanet, Kent, A mortuary and ritual site of the Bronze Age, Iron Age and Anglo-Saxon Period with evidence for long-distance maritime mobility. Wessex Arch. Report 31 (Salisbury

Mittnik et al. 2019

A. Mittnik/K. Massy/C. Knipper/F. Wittenborn/R. Friedrich et al., Kinship-based social inequality in Bronze Age Europe. Science 366, 6466, 2019, 731-734.

Montgomery et al. 2019

J. Montgomery/J. Evans/J. Towers, Strontium isotope analysis. In: M. Parker Pearson/ A. Sheridan/M. Jay/A. Chamberlain/M. P. Richards et al. (eds.), The Beaker People. Isotopes, Mobility and Diet in Prehistoric Britain. Prehist. Soc. Research Paper 7 (Oxford 2019) 369-406

Mortimer 1905

J. R. Mortimer, Forty years' researches in British and Saxon burial mounds of East Yorkshire (London 1905).

Olalde et al. 2018

I. Olalde/S. Brace/M. E. Allentoft/I. Armit/ K. Kristiansen et al., The Beaker phenomenon and the genomic transformation of northwest Europe. Nature 555,7695, 2018, 190-196.

Olwig 1993

K. Olwig, Sexual cosmology: nation and landscape at the conceptual interstices of nature and culture, or: what does landscape really mean? In: B. Bender (ed.), Landscape: politics and perspectives. Explor. Anthr. (Oxford 1993) 307-343.

Parker Pearson et al. 2019

M. Parker Pearson/A. Sheridan/M. Jay/ A. Chamberlain/M. P. Richards et al., Synthesis, discussion and conclusions. In: M. Parker Pearson/A. Sheridan/M. Jay/A. Chamberlain/ M. P. Richards et al. (eds.). The Beaker people: isotopes, mobility and diet. Prehist. Soc. Research Paper 7 (Oxford 2019) 425-60.

Perkins 1995

D. Perkins, An assessment/research design: South Dumpton Down, Broadstairs, Unpubl. Report. Trust for Thanet Arch. (Birchington

Pettit 1974

P. Pettit, Prehistoric Dartmoor (Newton Abbot

Powell/Barclay 2022

A. Powell/A. Barclay, Between and Beyond the Monuments: Prehistoric Activity on the Downlands South-East of Amesbury, Wiltshire. Wessex Arch. 36 (Salisbury 2022).

Rifkin 2011

M. Rifkin, When Did Indians Become Straight? Kinship, the History of Sexuality, and Native Sovereignty (Oxford 2011).

Schneider 1961

D. Schneider Introduction: The Distinctive Features of Matrilineal Descent Groups. In: D. Schneider/K. Gough (eds.), Matrilineal Kinship (Berkeley, Los Angeles 1961) 1-29.

Schneider 1984

D. Schneider, A Critique of the Study of Kinship (Ann Arbor 1984).

Sissons 2013

J. Sissons, Reterritorialising Kinship: The Māori Hapū. Journal Polynesian Soc. 122,4, 2013, 373-392,

Sjögren et al. 2020

K.-G. Sjögren/I. Olalde/S. Carver/M. Allentoft/ T. Knowles et al., Kinship and social organization in Copper Age Europe. A cross-disciplinary analysis of archaeology, DNA, isotopes, and anthropology from two Bell Beaker cemeteries. PLOS ONE 15,11, 2020, e0241278, https://doi.org/10.1371/journal.pone.0241278 (25.04.2023).

Smith 2005

A. Smith, Conquest: sexual violence and American Indian genocide (Durham, NC 2005).

A. L. Stoler, Carnal Knowledge and Imperial Power. Race and the Intimate in Colonial Rule (Berkeley 2002).

Stone 2010

L. Stone, Kinship and Gender. An Introduction (Philadelphia 2010).

TallBear 2018

K. TallBear, Making Love and Relations Beyond Settler Sex and Family In: A. Clarke/ D. Haraway (eds.), Making kin, not population: reconceiving generations (Chicago 2018) 145-209.

Thomas 1994

N. Thomas, Colonialism's Culture. Anthropology, Travel, and Government (Chichester

Thomas 2004

J. Thomas, Archaeology and modernity (London 2004).

Webley et al. 2020

L. Webley/S. Adams/J. Brück, The social context of technology. Non-ferrous metalwork in later prehistoric Britain and Ireland. Prehist. Soc. Research Papers 11 (London 2020).

Wilkin et al. 2021

S. Wilkin/A. Ventresca Miller/R. Fernandes/ R. Spengler/W. Taylor et al., Dairying enabled Early Bronze Age Yamnaya steppe expansions. Nature 598, 2021, 629-633.

Wolf-Meyer 2020

M. Wolf-Meyer, Recomposing kinship. Feminist Anthr. 1,2, 2020, 231-247.

Source of figures

- 1 © Wessex Archaeology. Reproduced by permission of Wessex Archaeology
- © Cambridge Archaeological Unit. Reproduced by permission of Cambridge Archaeological Unit
- © Wessex Archaeology. Reproduced by permission of Wessex Archaeology
- © Tees Archaeology. Reproduced by permission of Tees Archaeology
- after Perkins 1995, Fig. 5 (redrawn by A. Leaver). Reproduced by per-
- mission of the Trust for Thanet Archaeology
- after Mortimer 1905, Fig. 6
- © Wessex Archaeology. Reproduced by permission of Wessex Archaeology

Address

Prof. Dr. Joanna Brück University College Dublin School of Archaeology Newman Building Belfield Dublin 4 Ireland joanna.bruck@ucd.ie ORCID: https://orcid.org/0000-0001-8942-5504