Kinship questions: three sketches from the Neolithic of Britain and Ireland

Alasdair Whittle

Department of Archaeology and Conservation, Cardiff University, Cardiff, UK; whittle@cardiff.ac.uk

ABSTRACT - Kinship, diverse webs of relationship generated by people in their social practice, has long been analysed and debated by anthropologists, from an earlier dominance of lineage theory to the current, much more fluid emphasis on relatedness. Since the days of processualism, archaeologists have given more attention to kinship than in the early years of the discipline, but in rather limited and general ways until very recently. With the advent of successful aDNA investigations, and with some prompt from posthumanist theory, that interest has been renewed recently. I discuss some inconsistencies between the accounts of kinship by anthropologists and archaeologists, notably the emphasis by the former on diversity, relatedness, the possibilities and implications of bilateral descent, and the uncertain relationship between biology and kinship. To begin to investigate how this might all work out in archaeology, I sketch three scenarios from successive parts of the Neolithic in Britain and Ireland, across the fourth to third millennia cal BC, attempting specific rather than generalised models and indicating the outlines of a possible trajectory through time.

KEY WORDS - kinship; relatedness; diversity; trajectory; Neolithic; Britain and Ireland

Vprašanja sorodstva: tri skice iz britanskega in irskega neolitika

IZVLEČEK – Antropologi že dolgo analizirajo in razpravljajo o sorodstvu in raznolikih spletih odnosov, ki jih ustvarijo ljudje v svojih družbenih praksah. Razprave segajo od nekdanje prevladujoče teorije rodu do sedanjega bolj fluidnega poudarjanja sorodnosti. Arheologi so od časov procesualizma sorodstvu posvečali več pozornosti kot v zgodnjih letih razvoja discipline, vendar do nedavnega na precej omejen in splošen način. Z uspešnimi raziskavami stare DNK in nekaj spodbude iz posthumanistične teorije pa se je zanimanje v zadnjem času povečalo. Razpravljam o nekaterih nedoslednostih pojasnjevanja sorodstva pri antropologih in arheologih; predvsem poudarjanja raznovrstnosti, sorodnosti, možnosti in posledicah bilateralnega potomstva ter negotovega razmerja med biologijo in sorodstvom pri prvih. Da bi začel raziskovati, kako bi vse to lahko delovalo v arheologiji, sem skiciral tri scenarije v zaporednih fazah neolitika v Britaniji in na Irskem, v četrtem in tretjem tisočletju pr. n. št.; pri tem poskušam oblikovati specifične in ne posplošene modele ter nakazujem obrise možne trajektorije skozi čas.

KLJUČNE BESEDE - sorodstvo; sorodnost; raznovrstnost; trajektorija; neolitik; Britanija; Irska

Introduction

Over the years, anthropologists and archaeologists have treated kinship in very different ways. Intensely observed and debated since as far back as the 1860s and 1870s, anthropological views of kinship – perhaps the still best overall definition is given by Edmund Leach (1982.107; emphasis in the original) as "a widely ramifying pattern of named relationships which link together the individual members of a social system *in a network* ... *The naming of relationships marks the beginning of moral sanctions*" – have gone through a long series of changes of perspective: successively evolutionist, structural-functionalist and symbolist (*Parkin, Stone 2004.ix*). In the latter part of the twentieth century, following the work of David Schneider (*1968; 1984*), there was a revision of the significance of what had previously been regarded as at the heart of the discipline of anthropology (*Leach 1982.134*), with a shift to looser notions of 'relatedness' and care for others (*Carsten 2000a; 2004; Sahlins 2013*). Debate continues (*e.g., Shapiro 2016; Bamford 2019a; Kuper 2018; 2019a; Papadaki* et al. *2019; Ingold 2022.350–352; Miller n.d.*), as sketched further below.

By contrast, many archaeologists have long paid mere lip-service to anthropological notions of kinship. With the advent of processualism in the late 1960s and 1970s, the topic came more to the fore (e.g., Edmonds 2019.19), in the belief that kinship was a fundamental constituent of tribal and other non-western social existence and with renewed interest in schemes of social evolution or development (Sahlins 1968; cf. Flannery, Marcus 2012). On the whole, however, very little detail was suggested until very recently, other than vague reference to lineages, at a time when anthropologists had already moved on from lineage theory (in which stable, enduring descent groups were seen as the basic unit in stateless societies). In recent times, of course, the advent of successful aDNA analyses (Reich 2018), extending from population studies to the first detailed examinations of specific mortuary contexts, collective and other, has changed the game, and kinship, starting from biological relatedness amenable to investigation by aDNA analysis but also going beyond those limitations, is very much to the fore (Fowler 2022). Chris Fowler (2022), in the wake of the successful and thought-provoking aDNA-based study of the collective mortuary deposit at the Hazleton North long cairn in central-southern England (Fowler et al. 2022; elaborated in Cummings, Fowler 2023), has given the best archaeological overview so far of kinship as diverse social practice in the Neolithic of Britain. This has coincided with further prompting from posthumanist theory, arguing for more fluid, creative, relational notions of kinship (Johnston 2020; Crellin, Harris 2020; Crellin 2021).

Nonetheless, in seeking to complement Fowler's and others' recent studies, there are further aspects to draw out: to emphasise the differing histories of the study of kinship in anthropology and archaeology; to underscore the diversity observed and debated by anthropologists and to consider the implications of such diversity, including the role of cognatic and bilateral systems; to look further at the role of biology in kinship; and to contemplate and speculate about possible differences through time, at least through the prism of changes in the Neolithic trajectory of Britain and Ireland. At stake are detailed questions about the possible character of small-scale social groupings and categorisations, allowing us potentially to move beyond so far often very general notions of 'community' and 'society'. This could obviously have significance for the wider study of the Neolithic as a whole.

Kinship: the anthropologists' and archaeologists' accounts

What archaeologists have to say about kinship is largely couched in the terminology derived from anthropology (and we may come to want to review that relationship in due course). I want to give a more historical or historiographical sense of how limited archaeological accounts have been until very recently. I am not attempting a full history of the development of thought in both disciplines, an impossible task in a short paper, but in making rather compressed comparisons I do want to try to bring out important differences, and some of the key remaining challenges for archaeology. There have of course been important periodic reviews of both disciplines, where the reader can find much more detail and many times more references than I have space to cite here (for anthropology, see Leach 1982; Kuper 1999; Carsten 2000a; 2004; Parkin, Stone 2004; Eller 2013.chapter 8; Engelke 2017; Ingold 2018; 2022; Bamford 2019a; for archaeology, see Trigger 2006; Harris, Cipolla 2017; Chapman 2023).

When the first detailed studies of kinship appeared in the 1860s and 1870s (*Maine 1861; Morgan 1871; 1877*), establishing an evolutionary interest in patterns of descent and affinity, and the terminology of patrilines and matrilines which is still in use, there is no sign that these were being read by early archaeologists. John Thurnam (*1869.177*), for example, in his examination of the remains from long barrows and long cairns, makes passing references to "great chieftains or heads of some British clan", and 'family tombs' used in 'successive generations' (*O.c. 224*), but goes no further than that. Jump over fifty years for-

ward, and the pages of Childe (1925; 1929), for example in his Dawn and Danube, whose principal concern was to begin to make sense of the growing mass of archaeological evidence for the Neolithic and Copper Age (and Bronze Age) across Europe, are disappointingly thin on social interpretation, with the occasional reference to peasants and chiefs giving no idea of the by then much more detailed studies emerging from anthropologists like Bronisław Malinowski, William H. R. Rivers, Franz Boas and many others (Leach 1982; Kuper 1999). The more discursive Man makes himself from the 1930s (Childe 1936) offers little more, with only brief mention of clans (including 'totemic clans' in the early Nile valley, O.c. 101), kings and slaves. Likewise, the era of social anthropology in the middle part of the twentieth century of dominant British structural-functionalist models of lineages, especially unilateral descent groups, as a key constituent of acephalous societies as exemplified in studies of the Nuer, Tallensi and Tiv in east and west Africa (Fortes, Evans-Pritchard 1940; Evans-Pritchard 1940; 1951; Bohannan 1952; Radcliffe-Brown 1952; Leach 1982.45-47) found little or no direct echo in contemporary archaeological interpretation. The same fate befell the alternative 'alliance' theory of Claude Lévi-Strauss (1949), though this was belatedly to receive much more discussion through the idea of 'house societies' (see briefly further below). In the 1950s into the 1960s in Britain, for example, much debate centred on the difficulty of achieving reliable social interpretation at all (Bradley 1984, with references); Ancient societies, by two giants of the establishment of British prehistory, Grahame Clark and Stuart Piggott (1965), has practically no specific social interpretations at all, far less any reference to the anthropological literature of its time.

With the advent of processualism in the late 1960s and 1970s, and on into the post-processualist era from the early 1980s onwards, as already noted, the topic of kinship did receive more attention (*Edmonds* 2019.19). There were some attempts to provide more detailed and sophisticated models of social difference and change rooted in anthropological understanding (*e.g., Friedman, Rowlands 1977*). There were frequent appeals in the literature to generalised ancestors, for example as a source of legitimacy for emergent social factions (*e.g., Shanks, Tilley 1982*) or the inspiration for specific feats of construction, as at Stonehenge (*Parker Pearson, Ramilisonina 1998; cf. Parker Pearson 2023*), but this led in due course to severe criticism, albeit without detailed plausible alternatives for the Neolithic period itself (*Whitley 2002*). Mark Edmonds (*1999.98–103,109–129*) made perceptive suggestions about the possible role of kin groups in the planning and implementation of causewayed enclosures, though without any detail of their possible composition. An important general potential link with cattle in terms of fictive relatedness and descent was proposed (*Ray, Thomas 2003;* see also *Ray, Thomas 2018.295–297*).

There were other, now rather striking, gaps in these processual and post-processual phases. Although the processual era ushered in a much more explicit interest in models of social development, in Britain exemplified by Colin Renfrew (1973; 1979) but drawing on a longer trail of comparative studies in the American tradition, going back to Elman R. Service, Morton Fried and Marshall Sahlins, and before them to Julian Steward and Leslie White, and other predecessors (see Trigger 2006; Flannery, Marcus 2012 for references), specific references to the role of kinship, descent and affinity remained surprisingly scarce. The narrowing of focus in post-processual approaches seems to have been one culprit (there is more to say on this, but space precludes it here), though the lack of awareness in processual interpretation is more puzzling. The diversity of situations by then being explored by anthropologists (so often the leitmotif of overviews of social anthropology (e.g., Leach 1982.123; Engelke 2017.314; Ingold 2018.27; 2022.1) does not seem to be reflected in archaeological models of the time. That African lineages did not seem to fit observations of highland communities in Papua New Guinea (Barnes 1962; and see further below) passed archaeologists by, as did the devastating critique of lineage theory (Kuper 1982; 1988; 1999), perhaps best summed up in Adam Kuper's (1982.84) striking judgment that "the Nuer are not like The Nuer". Kuper's account is complex but emphasises how a particular model worked more as an abstraction for anthropologists than as a robust description of diverse situations on the ground, involving among other things lack of permanence, considerable variability, liability to change, and other dimensions of local and territorial groupings. He concluded that "there do not appear to be any societies in which vital political or economic activities are organized by a repetitive series of descent groups" (O.c. 92). Further, it has long been emphasised that 'cognatic' systems of kinship, in which common ancestry is traced through both male and female links' are just as common as those dominated by unilineal descent (Leach 1982.167; see also Freeman 1961; Sahlins 1968.54-55). Finally, I can find no reference in the archaeological literature of the time (but I make no claim to an encyclopaedic search) to the major critique of kinship studies as whole by David Schneider (*1968; 1984*), which argued that previous interpretations had falsely imposed a western, specifically American, model of a biological basis to kinship on other parts of the world. That led to kinship generally falling out of anthropological focus (but note *Strathern 1992*) for a generation or so, until revived by Janet Carsten (*2000a; 2004*) and others, but the archaeological literature of the time seems silent on these great shifts.

A slow convergence of sorts has been taking place since. From the turn of the millennium, the anthropological study of kinship was revived (Carsten 2000a; 2004). At one level, Janet Carsten's After kinship simply constituted renewed, further studies of kinship (Carsten 2004; Bamford 2019a; Hirsch, Rollason 2019.16), but since that time kinship has no longer been the defining trope of anthropology (Moore 2010.20. footnote 9; Ingold 2018.98). Instead, the much looser and freer notion of relatedness has taken over, "to convey ... a move away from a pre-given analytic opposition between the biological and the social on which much anthropological study of kinship has been based" (Carsten 2000b.4). With "the boundaries between the biological and the social distinctly blurred, if visible at all", issues of gender, the body and personhood come much more to the fore (Carsten 2000b.3). Much of Carsten's own work has covered case studies such as gender assignment, adoption, surrogacy, artificial insemination and blood and organ donation (Carsten 2004, covered also quite extensively in chapters in Bamford 2019a, including Carsten 2019), but she has also looked at the relevance of more fluid notions of kinship for migration studies (Carsten 2020). She contrasts two anthropological models of kinship, centred on static notions of being and descent versus doing, becoming and performance (O.c. 321-322). The emphasis on performance has also been strongly asserted elsewhere (Engelke 2017. 6; Ingold 2018.100, Fig. 4 caption; Bamford 2019b).

The issue of biology has been explored in recent times most extensively by Marshall Sahlins (2013). His short book is full of examples of the social construction of kinship, whose essence he defines as a 'mutuality of being', with repeated examples worldwide of how the facts of generation and birth are not the defining features of how people go on to be classified and treated in life. From the very start, in the opening sentences of his preface, he insists that "kinsfolk are persons who participate intrinsically in each other's existence; they are members of one another" (O.c. i). Reviewing the book enthusiastically, Carsten (2013.249) notes nonetheless the enduring 'sticky paradox' of the biological-social divide; "the more one tries to dispense with the dichotomy, the more one seems to end up reiterating it". Just as the notion of relatedness may prompt endless questions of definition (Miller *n.d.*), so too may Sahlins' definition make it very difficult to draw distinctions between kin, neighbours, allies and others, but his contribution should at the least serve to make archaeologists much more aware of the challenge. Tim Ingold (2022.350-352), as part of a wider, generalising discourse on philosophical and anthropological approaches to life, has referred to notions of filiation ("the fundamental human bond between parent and child", O.c. 350), going back to Meyer Fortes; "filiation - and the kinship it engenders - is supremely rhizomatic; its lines do not connect but are themselves lines of life that carry on alongside one another, answering or responding to one another - or literally corresponding - as they go" (O.c. 351). On a different note, Warren Shapiro (2016) has challenged the performative account of kinship championed by Sahlins and Carsten, and before them Schneider, reasserting the significance of indigenous kinship categories. Kuper (1982; 1988), who as noted above helped to demolish the previously perceived importance of lineage theory and was further another, earlier severe critic of Schneider (Kuper 1999; cf. Feeley-Harnik 2019), has comparatively recently called for fresh attention to be paid to kinship (Kuper 2018). And other anthropologists go on with the task of investigating changing attitudes to kinship in particular contexts (e.g., Papadaki et al. 2019; Firth 2019.97; Goddard 2019.231; Eriksen, MacCarthy 2019.354).

Signs of change in the archaeological literature came with a series of case studies through the Neolithic sequence of Greece, drawing attention to the neglect of kinship in social archaeology (*Souvatzi 2017*). An encouraging general statement frames things – *"Kinship is about much more than just blood ties.* It is a domain of social relations; a framework of action, rules, and rights; a powerful means to stretch identities across space and time; and a mode of structuring time, history, and memory" (O.c. 172) – and ways of weaving kinship into narratives of settlement and landscape are explored, but the theoretical and historiographical background is largely passed over and few suggestions are made about specific kinship relations. It is also worth mentioning the critique of patrilocality as the dominant mode for the European Neolithic, which combines isotopic, aDNA and archaeological analyses (*Ensor 2021*).

Meanwhile, the diversity of turn-of-the-millennium theoretical and interpretive approaches in archaeology shifted gradually to the relational, ontological or material turn. There are clearly many strands to this (Harris, Cipolla 2017; Harris 2021) but interest in themes of gender (see also Robb, Harris 2018), body, identity, flow, affect, vibrancy and others rather obviously overlap with the wider remit of anthropological relatedness. But in the search for material agency in a complex world, there is no sign until very recently of special attention being given to kinship (absent, for example, from the index of Harris 2021; see further below). Other less theoretically driven recent archaeological syntheses for Neolithic Britain and Ireland also still make very restrained use of notions of kinship and descent, especially still that of lineage (e.g., Bradley 2019). Vicki Cummings (2017.137, 188-189) has been more explicit than many others, even if very brief, while Keith Ray and Julian Thomas (2018. 47,119,172) have perhaps been the most explicit of all; their notion of 'invested lineages' (O.c. 113,171,312-314) underpins their interpretation of both houses and tombs in the early Neolithic of Britain, though they do not spell out further just what kinds of descent and relationships they envisage in this concept. There has been one exception to this reticence, in the form of the idea of house societies, derived from models of kinship by Lévi-Strauss (Borić 2008; Thomas 2015; Richards, Jones 2016; Ray, Thomas 2018). This is also discussed by Fowler (2022.3-4). The notion is not in itself a form of kinship, and it has been applied to so many diverse situations that it is often hard to understand its specific force. Interesting though it is, there is not space to pursue it further here.

As already indicated in the introduction, in the wake of the recent successful development of aDNA analysis, there have been important investigations of collective and other mortuary contexts, which have enabled close examination of particular situations beyond the initial attention given to population-level studies (*e.g.*, among others *Sánchez-Quinto* et al. 2019; *Cassidy* et al. 2020; *Cheronet* et al. 2022; *Rivollat* et al. 2023; see also *Meller* et al. 2023). Those include the ground-breaking analysis of the human contents of the Hazleton North long cairn in the Cotswolds of centralsouthern England (Fowler et al. 2022; Saville 1990). Fowler's further reflections on whether it is possible to see patterns of kinship in the varying architecture of early Neolithic tombs, cairns and barrows (Fowler et al. 2022) are the first sustained and detailed attempt that I know of in Neolithic studies to align archaeological with anthropological interpretation of kinship. He strongly emphasises process and performance, as underlined above in discussion of the anthropological literature post-Schneider, and correctly underscores the fact that aDNA analysis is the investigation of biological relatedness. His account of the history of archaeological research into kinship, however, is quite brief and compressed, which why I have given a more extended historiographical review above, and whether the potential diversity of performed kinship arrangements is to be easily read from the varying plans of tombs and monuments is perhaps more open to question in principle than he allows. He and Vicki Cummings have elaborated their interpretation of Hazleton North and its context (Cummings, Fowler 2023), which I discuss further in detail below.

Other posthumanist approaches to kinship have been made very recently. The most extensive, book-length, treatment is by Robert Johnston (2020), primarily applied to the Bronze Age in Britain and Ireland, but with obvious relevance to Neolithic and other studies as well (and cited on that basis by Fowler 2022). In setting out his inspiring stall, seemingly with a principal reliance on Sahlins (2013), Johnston (2020.15-18) pronounces five main features of kinship as he perceives it: its ability to create personhood and collective belonging; its association of people with nonhuman beings, things and landscapes; its historical situatedness; its making through the sharing of substances and what are called presences; and its creative, performative and political nature. In a similar spirit, a perceived diversity of kin relations has been emphasised, in an attempt to underscore relationality and avoid binary opposition between nature and culture (Crellin, Harris 2020; Brück 2021; Crellin 2021). It is interesting to reflect on the theoretical sources here. Several of these themes overlap with the more recent, more fluid anthropological emphasis on relatedness. Some, however, are so broadly framed that it is often hard to see (as noted above with reference to Sahlins 2013) what is specifically to do with kinship, rather than with a general model of sociality (for example, including 'relational work', Bandelj 2020), of a mostly warm and positive kind (as opposed to anything more negative, as noted importantly by both *Carsten 2013*, and *Bamford 2019b*). Thus, disappointingly, though Robert Johnston (2020) asserts the ubiquity of 'kinwork' and 'kinfolk' right from the beginning of his book, he never attempts to differentiate or further characterise kin relationships; it seems inherently improbable that these were uniform and unchanging throughout the span of the Bronze Age in Britain and Ireland. The dominant citations from the literature are to the broad ontological literature (for critique, see *Whittle 2018*), and the details of and historical shifts in anthropological models as such are not given.

So plenty of questions remain to be debated. I see getting to grips with diversity, specific contexts, finding plausible ways to account for changes through time, and the ever-troubling relation between kinship and biology as particularly significant challenges. How can we follow patterns of kinship rather than broader trends in sociality?

The performance of kinship: three sketches from the Neolithic of Britain and Ireland

To offer a first start at addressing these questions, I give three brief sketches from the Neolithic of Britain and Ireland. The fullest is of the Early Neolithic, but I hope the other two may serve to point to ways of thinking about change through time. I will obviously make use of recent aDNA results, but hope fully to engage the archaeological evidence as well. My account is deliberately speculative.

Early Neolithic

I am not attempting complete coverage of the Early Neolithic from the late fifth to past the middle of the fourth millennium cal BC. I simply pick things up at the point probably around 3800 cal BC when monuments start to become more prominent. One of the most striking developments in recent times has been enhanced evidence for biological relatedness – or its absence – through aDNA analysis of mortuary assemblages.

Completed aDNA studies of this kind are still comparatively rare. The general picture for early monuments seems to be one of diversity. Patrilines have been suggested as the dominant arrangement found in megaliths in western Europe (*Sánchez-Quinto* et al. 2019), but differences in fact are also documented. Studies in western France indicate a mixture of related and non-related people being deposited (*Cheronet*

et al. 2022). In Ireland, there were also diverse arrangements, as seen in the relatively small sample of sites so far available. There was a lack of close biological relations in both the early portal tomb at Poulnabrone (from c. 3800 cal BC onwards) and the probably slightly later court tomb at Parknabinnia, leading the investigators to "exclude small family groups as their sole proprietors and interpret our findings as the result of broader social differentiation with an emphasis on patrilineal descent" (Cassidy et al. 2020.387). Is it kinship as opposed to alliance or other relationships which is being expressed here? (It is also worth noting the apparent father-daughter relationship found in analysis of the remains from Primrose Grange (O.c.; Cassidy 2023).) There was also a network of distant relatives in the passage tombs examined so far, some of which may go back to earlier centuries of the Neolithic (Cassidy et al. 2020; Cassidy 2023). If Chris Fowler's (2022) point is accepted that chamber architecture is related to kinship arrangements (though that claim is not unproblematic, given the instances above where close biological relations do not predominate), then we should expect further diversity. Perhaps that is characteristic of pre-Indo-European societies, with Indo-European societies (perhaps from the late fourth or third millennia cal BC onwards) being said to be predominantly patrilocal and patrilineal (Pronk 2023).

Penywyrlod, in inland south-east Wales, probably dating from the 38th century cal BC onwards and arguably one of the earliest constructions in its local area (Britnell, Whittle 2022), raises similar questions, though here without the benefit of aDNA because of poor preservation. Its large stone cairn probably contains several small lateral chambers, the investigated examples of which so far excavated have yielded varying, fragmented and small assemblages of human bone. Strontium isotopic evidence suggests a comparatively wide-ranging population, at a lifetime scale. We cannot therefore be certain in this and many other cases, but it is plausible on the basis of these isotopic analyses that Penywyrlod served a wider population, perhaps with multiple kinds of biological and social relationships, as seen in the diverse representation of age and sex groupings in the small assemblages of human bone excavated so far (Wysocki 2022), in a context of initial, pioneering inland settlement.

The most stunning aDNA case study for the early Neolithic in Britain and Ireland so far has been that of the Hazleton North, Gloucestershire, long cairn. Here in the two opposed lateral chambers and passages (Saville 1990) were the remains of 41 people; it was possible to obtain high-quality genetic information from 35 of these, 27 of whom proved to be close biological relatives (Fowler et al. 2022). The main picture is well published (O.c.; Cummings, Fowler 2023). Thus, over five generations in the earlier and middle part of the 37th century cal BC, deposition of the dead was carried out in parallel in both chambers, that on the north side interrupted and partly curtailed by the collapse of the northern passage. In the first generation, a man deposited in the innermost part of the north chamber had reproduced with four women, the remains of three of whom were recovered, two on the north side and one on the south side; the existence of the fourth is inferred from her descendants placed on the south side. Subsequent generations could trace relationships through the male line. There was a general lack of young adult females and indeed a total absence of any adult females born into the social group represented. Isotopic and other analysis had also already suggested a pattern of mid-range mobility at a lifetime scale and a diet rich in animal protein and including dairy products. In addition, there is strong evidence for the importance of maternal sub-lineages, with dominant continuity in those represented on the south side and also strong though not as complete continuity on the north side (Fowler et al. 2022.586). Women were also important in that offspring from unions from other fathers not represented in the monument were also deposited, which could evoke adoption and 'adoptive kinship' (O.c. 587). There were also "eight individuals without evidence of close biological relationships or reproductive partnerships with others in the pedigree" (O.c. 586).

From these and other observations a possible model of "*patrilineal descent, virilocality, polygyny and cattle husbandry*" was aired (*O.c. 586*). There is little reason to doubt these features, but an equally strong impression is of the diversity of the situation. The women in the first generation must also have been significant individuals, and it may be telling that one of them is absent, though that woman could have died before the monument was conceived (*Cummings, Fowler 2023.10–11*); there are of course many other such tombs in the Cotswolds, including the unexcavated Hazleton South close by. Their descendants in the respective maternal sub-lineages are also prominent. It is also possible to examine the diachronic and chronological situation in a little more detail (for which there was hardly space in the original Nature publication, supplementary information notwithstanding, but now made fully good in Cummings, Fowler 2023). The genetic analysis showed five generations, whereas the initial Bayesian modelling of the radiocarbon chronology of the monument had suggested probably three (Meadows et al. 2007). Clearly, further modelling will be desirable, with both more radiocarbon dates to come and genetic relationships acting as further powerful priors in future modelling (Chris Fowler, Alex Bayliss, pers. comm.). It is possible nonetheless to offer some preliminary analysis of the generational pattern of succession as it stands (it is also worth noting the arguments of Cummings, Fowler 2023.10 for probable generational overlap). We do not know if the first generation was itself responsible for the construction of the monument, or whether that was in fact the work of the second generation (Cummings, Fowler 2023.7); but if the latter, the case for lineage expansion in the first two generations (O.c. 10) is perhaps harder to support. That second generation is dominated by the adult sons of the women in the first generation (NC4, NE1, NE2 in various locations on the north side, plus an infant boy, NC5; and SC2, SC3 and SP1 on the south side, along with an infant boy who is a candidate for adoption from another union not otherwise represented). By the third generation, there is a strong emphasis on younger members, grandchildren of the first generation, which shows particularly on the north side (the side of the initial reproductive male); perhaps this represents an emphasis on continuity, though it has also been discussed in terms already of waning and decline (O.c. 12). In the fourth generation, there is a mix of ages and sexes; one adult male, NC9, is again placed at the back of the north chamber adjacent to the 'founder' male (though Chris Fowler notes (pers. comm.) that locational information is imprecise). The fifth generation is found only on the south side, perhaps a reflection of the north passage collapse or perhaps a final indication of the successful continuity of the south-side maternal sub-lineages. These relationships may of course alter in detail with further chronological modelling (and see Cummings, Fowler 2023 for further valuable detail), but overall what is striking so far is the combination of both stable and unstable arrangements and relationships. It may be unwise to construct any rigid model of a fixed, closed, unaltering patriline, since the maternal sublineages were clearly important, and some kind of bilateral descent could have been in question; there is the further dimension of the bilateral layout of the two opposed chambers (and their relationship to place in terms of placing relative to the pre-existing midden). It has been noted elsewhere in the vast global literature (see above) on kinship arrangements how bilateral systems tend to have a finite, relatively short span (Foxhall 2000; Forbes 2007). There is a tendency perhaps in the case of Hazleton and many other instances to seek more or less precise analogies with ethnographically documented systems. Such matching may be an historical chimera, but an alternative approach for Hazleton (since the account in Cummings, Fowler 2023.2, 3, 13-14 is still very much in the language of lineages) might be to think in terms of Melanesian big men, bolstered by an agnatic core but needing the support of many others including matrilateral kin and affines, and usually destined for a brief floruit (Barnes 1962.98-101; Sahlins 1968, 88-89; Martin 2019.375).

It is important to underline the probable construction date of Hazleton North, in the earlier part of the 37th century cal BC (*Meadows* et al. 2007; cf. Cummings, Fowler 2023.13–14). Not far away from Hazleton North is the rather similar long cairn at Ascott-under-Wychwood, also with opposed sets of lateral chambers or cists, containing a mortuary population not dissimilar to that in Hazleton North; Ascott, however, dates probably to the second part of the 38th century cal BC (*Bayliss* et al. 2007a; Benson, Whittle 2007), and so far, aDNA analysis of its human remains has not been carried out, though that would now be highly desirable for better understanding of sequence and development.

By the earlier 37th century cal BC, the Cotswolds may have been occupied for a couple of centuries (subject to the remodelling underway for *Gathering Time*). The latest revised models suggest that enclosures probably still appeared around the turn of the 38th century cal BC, but with a broader initial distribution than the previously suggested east-west spread (*Whittle* et al. *2011; 2022; forthcoming*). Enclosures became more numerous through the course of the 37th century cal BC, and reached the peak of their use in the 36th century (*Whittle* et al. *2022*). A few more enclosures have been discovered in eastern Ireland (*Whittle* et al. *forthcoming*).

These developments were a radical transformation of the physical and social landscape. Enclosures may reflect a more numerous population, a plausible enough claim after three centuries or more of early Neolithic settlement. The idea of these constructions was surely based on knowledge and memory of enclosures on the adjacent continent, but it was activated in Britain and Ireland long after continental practice had begun (Whittle et al. 2011; 2022; forthcoming). We have argued that enclosures both reflect and create a more competitive social milieu; some of the evidence for that can be seen in the occurrence of violent attacks and burnings, though that is not found in every case (Whittle et al. 2011; 2022). These three observations may be linked. It has also been claimed that enclosures can show the whole community at work, perhaps 'the largest cooperating social unit' of the time (Shennan 2018.101-103; cf. Pechtl 2009; Guilaine 2018; Vondrovský et al. 2022). Depending on the size of the enclosures in question and the temporality of phases and scales of construction, that might not always be the case, but there is no doubt that many of these undertakings, both in terms of the labour involved in building and of the people and things coming from afar to use these places, did represent a more intense order of social interaction (cf. Cummings, Fowler 2023.15-16). The question then remains of who drove such an innovation in the first place, before the phenomenon achieved its own momentum and dynamic of emulation, tradition and history.

Such a question has tended to be overlooked in the literature, with an unstated assumption that things would develop naturally on a trajectory from simple and more fragmented to complex and more integrated. At the same time, there have long been social inferences from the characteristically segmented ditch layouts of the involvement of multiple groupings (Oswald et al. 2001), and general speculation about the possible role of kinship groups (e.g., Edmonds 1999.98-103,109-129). In the proposed shifting social scenario it is plausible that more self-conscious and self-defining social groupings such as seen at Hazleton North by the earlier 37th century should have emerged. We can now therefore think in more concrete terms about the possible role of more rather than less tightly defined or self-defining kinship groupings, perhaps lineages or kindreds or both, in the adoption, practice and elaboration of the enclosure idea. Actual evidence of biological relatedness at enclosures themselves remains sparse in southern Britain; there are the disarticulated remains of three maternally related 1st-degree relatives at Whitehawk (Brace, Booth 2023.140) and one of these had distant biological relatives in Normandy (Booth forthcoming) - and so far, tantalisingly, that is about all we have to go on directly. If the trail of the enclosure idea, however, leads back to continental sources, it is plausible that this could have happened along lines of ancestral connection (cf. Anthony 1990; Carsten 2020). Even if enclosures represent a wider community at work than seen previously in other constructions and activity, there is the question of mobilisation. More or less self-defining but open lineages or kindreds could have been one contemporary kind of social grouping that could have risked innovation and motivated others to contribute to bigger shared enterprises. The modelled histories of the neighbouring Windmill Hill enclosure and the West Kennet long barrow, with the construction of the long barrow woven in between the building of the inner and outer circuits on the one hand and that of the middle one on the other (Whittle et al. 2011.chapters 3,14), strongly suggest that enclosure building and kin groupings were actively contemporary ideas, and thus arguably interacting. There are signs that the earliest enclosures in southern Britain may have been relatively simple in terms of layout and labour (Whittle et al. 2022) and thus feasible for smaller social groupings working on their own. Almost all the many individual activities seen at enclosures (Whittle 2014; 2022) could be broken down to be within the reach and scope of lineages or similar social groupings. The diversity of the situation at Hazleton North, stressed above, is potentially important in this regard, as adoptive kin and others associated but not biologically related would have served significantly to extend the network of connections and alliances that may have been necessary initially to bring enclosures into existence.

Middle Neolithic

My last two examples are much briefer. For the Middle Neolithic, from the later fourth into the earlier third millennia cal BC, I want to draw attention to both probable diversity and possible signs that kinship may not always have been a benign strand in society.

One element in mortuary practice from the latter part of the Early Neolithic and on into the Middle Neolithic is the development of more individualised burials (*Whittle* et al. 2011. 724). I follow Keith Ray and Julian Thomas (2018.159–161, 221) in seeing a "growing preoccupation with particular lines of descent". In the unusual case of Duggleby Howe, Yorkshire (*Gibson, Bayliss 2009*), funerary activity began in the 36th or 35th century cal BC – at a time when enclosures were still in use further south - with a deep grave shaft being used for the burial of four individuals, predominantly adult men, two with marks of trauma or violence (a fifth individual is represented by the severed head of a woman). After a probable gap of one to three centuries, the funeral around 3000 cal BC was that of a mature man (Burial C), in an adjacent shallow grave. Isotopic analysis indicates that none of these individuals were local, and that some lived far away, even perhaps on the Continent. Burial C was accompanied by worked flints, a bone pin, two beaver incisors and 12 boars' tusks. A small mound was subsequently raised over these graves, containing further burials, and later, possibly around 2800 cal BC (O.c.), over 50 deposits of cremated human bone were inserted into an enlargement of the mound. So far, no aDNA analysis is available for this sequence (but it is underway, Tom Booth, pers. comm.), but we could speculate that it represents, at least down to the early third millennium, a series of named ancestors or forebears, with the gaps between funerals not too great to be covered by living memory. Though I am again wary of precise analogies from ethnography, perhaps something akin now to the all-important counting back through the generations of lineages among the Tiv (Bohannan 1952) could be involved here. Descent may be becoming a weapon in power relations.

In the different context of Orkney in the late fourth millennium cal BC and around the turn of the millennium, collective burials in a variety of styles of tomb were still the norm (Edmonds 2019; Bayliss et al. 2017). Kin groupings are plausible. Comparatively little aDNA analysis is so far available, and there was a lack of close biological relatives in small samples from Isbister and Holm of Papa Westray North (Armit et al. 2016; Olalde et al. 2018; Sheridan et al. 2019); recent discovery of a Maeshowe-style chambered tomb with preserved human remains at Blomuir (Current Archaeology 2024) may soon expand the range of sampling. At the major settlement of Ness of Brodgar, a series of impressive, large stone-built houses in existence around and just after the turn of the millennium (Card et al. 2017; 2020) could be seen, from their individual characteristics, to represent separate communities or something like clans (Edmonds 2019.263) or kindreds, brought together in this dominant focus in the landscape. Among the monuments of this broad horizon, probably from the 32nd century cal BC, people were building large, impressive passage grave monuments, including nearby Maeshowe, whose architecture, decoration and contents evoke important connections with the developed passage tombs of eastern Ireland.

That brings in another stunning recent discovery, thanks to aDNA analysis, of the adult son of a firstorder incestuous union (between either parent and offspring or perhaps siblings) in a central position in the chamber - in the most elaborate recess - of the major passage tomb at Newgrange in the Boyne valley (Cassidy et al. 2020). This probably dates to the late fourth millennium cal BC, the apogee, with Knowth and Dowth in the same Boyne group, of the Irish passage tomb tradition and notable for its scale, architectural sophistication and the range from which constituent materials were brought in (Hensey 2015; Schulting et al. 2017; cf. Lynch et al. 2014). Incest of this kind is seen as rare, and comparisons are said to have been documented almost exclusively among 'politico-religious elites', specifically within "polygynous and patrilineal royal families that are headed by god-kings" (Cassidy et al. 2020.384), examples being cited from Hawai'i, the Incas and ancient Egypt (O.c. 385; cf. Flannery, Marcus 2012). Fairly distant biological relatives are also detected in both Carrowkeel and Carrowmore out to the west (Cassidy et al. 2020.386). As far as I know, we do not have further information from other individuals in Newgrange or neighbouring Knowth. Cassidy et al. (2020.385) see such 'dynastic incest' as part of the 'deification of political leaders', and as "a means of intensifying hierarchy and legitimizing power", "alongside tactics such as extravagant monumental architecture and public ritual"; speculate that such practices may have extended to Wales, Orkney and Brittany, because of the link of shared architecture; and even talk in terms of "early states and their precursors" (O.c. 386,387).

This needs a bit of unpicking. I think that the reference to early states is unhelpful, since so much else characteristic of early states is missing from the Middle Neolithic record in Ireland and Britain. The Breton exemplars which have prompted speculation about Neolithic kings (*e.g., Jeunesse 2017*) are much earlier, and the claim for a much wider set of practices is open to discussion. It has also to be noted that incest does not universally incur the same level of taboo, historical and ethnographic counter-examples being given by both Robin Fox (*1967.63*) and Edmund R. Leach (*1982.51,115,233*). Nonetheless, the examples of dynastic incest are compelling (*Cassidy* et al. *2020.385*, citing *Wolf 2014*), and the isolation of the Newgrange example perhaps clinches that kind of explanation (though this is controversial). If so, here is a case of kinship being potentially part of unequal social relations and even coercive practices, and it may be telling that the apogee of the passage tomb tradition appears to have been quite short-lived.

Late Neolithic

My last example is even briefer and largely speculative, but develops the themes of extreme differentiation just discussed. At the end of the Late Neolithic, there was a flurry, not to say a frenzy, of major construction projects, before and perhaps overlapping with the arrival of Beaker practices and people, around 2400 cal BC. At least some of these undertakings appear to have been carried out swiftly, as at Mount Pleasant, Dorset, in the generations either side of 2500 cal BC (Greaney et al. 2020.219, Fig. 12; see also Marshall et al. 2024). The two largest heroic feats of assembly and building, Stonehenge and Silbury Hill, are very different in conception (Parker Pearson 2012; 2023; Parker Pearson et al. 2020; 2021; Whittle 1997a; 1997b; Leary et al. 2013) but similar in outrageous scale. The current consensus view is probably that the major sarsen phase (Stage 2) at Stonehenge preceded the building of Silbury Hill, these taking place perhaps a century or so apart at c. 2500 and c. 2400 cal BC respectively (Darvill et al. 2012; Parker Pearson et al. 2022; Parker Pearson 2023.14; Leary et al. 2013), though in my view there may still be unresolved questions of detail about the currently available chronology of Stonehenge (Bayliss et al. 2007b) and these two constructions might be closer in time, offering rival, more or less contemporary, conceptions of the origin of the cosmos (Whittle 1997a; 1997b).

Though great strides have been made in recent years in the understanding of Stonehenge and its wider context (Parker Pearson et al. 2020; 2022; Parker Pearson 2023), there is much still that we do not easily comprehend. Our knowledge of mortuary practice at this time, which had shifted to dominant cremation rites, is limited, though small cremation cemeteries could be consistent with all manner of kinship arrangements in line with practice earlier in the Neolithic (Willis 2021). Likewise, our knowledge of settlement and landscape at this time is decidedly uneven, with the broad exception of Orkney in the north. It is striking, however, in a recent review of Grooved Ware pottery across Britain and Ireland how a whole series of regional studies emphasise the shifting and comparatively slight evidence for settlement in

the last stages of the Neolithic in southern Britain, better seen now in the context of often large-scale investigations in advance of development (Barclay 2024; Brook 2024; Cleal, Pollard 2024; Evans et al. 2024; Garwood 2024; Jones, Quinnell 2024). While there is still much more to be done with the fine grain of settlement, this surely raises the question of how the major constructions of the end of the Late Neolithic, and especially those of Stonehenge and Silbury Hill, were actually brought about in a context of potentially patchy population levels (Armit, Reich 2021; Booth forthcoming), albeit one with evidence for extensive movement of both people and animals (Snoeck et al. 2018; Madgwick et al. 2019). Paul Garwood (2024. 241) has suggested authoritarian ideologies and fundamentalist mythologies as driving monument building at this time. Could all this have been effected through the calling in of scattered kinship connections and obligations, by elites again (as in Middle Neolithic Ireland) claiming kinship with the divine? And was the ensuing "fragmentation, disillusion, rejection and rebellion" (O.c. 241) made all the more inevitable because of the irresistible attractions of more normal, intimate kinship arrangements among Beaker people, a return to the named relationships and moral code with which people had been familiar over the longer term?

Conclusion

I have tried to show in more detail than commonly attempted in the archaeological literature how until very recently archaeological interpretations of kinship have lagged far behind those of anthropology. In catching up with current looser anthropological definitions of kinship as relatedness, practice and performance, archaeologists nonetheless risk blurring, in generalised models of sociality and mutuality, principally of a benign kind, what could be distinctive about kinship. The issue of the role of biology in kinship remains problematic; we have learnt to be suspicious of it, but some of the most instructive case studies of kinship in recent times, enabled by aDNA analysis, are founded on the genetic identification of biological relatedness. I have also argued that specific models are needed. Through examples taken at intervals across the sequence of the Neolithic in Britain and Ireland, I have suggested the outlines of a possible trajectory, from fluid arrangements among pioneers and early communities, to more self-defining groupings and namings at the time of established tomb building and enclosure construction, through to diverse practice in the later fourth millennium, including the incestuous union at Newgrange, suggestive of elite differentiation, and perhaps some kind of lineage at Duggleby Howe. Finally, I have speculated briefly on whether the drivers of massive constructions at the end of the Late Neolithic also made use of appeals to kinship with the divine, before a return to more grounded, familiar and acceptable notions in the Beaker period.

Acknowledgements

I am very grateful to Miha Budja for the invitation to attend the seminar in Ljubljana; Tom Booth and Alison Sheridan for information; and Chris Fowler, Bisserka Gaydarska, Susan Greaney, Ollie Harris, Josh Pollard and Keith Ray for critical comments on an earlier draft of this paper.

...

References

Anthony D. W. 1990. Migration in archaeology: the baby and the bathwater. *American Anthropologist 92: 895–914.*

Armit I., Reich D. 2021. The return of the Beaker folk? Rethinking migration and population change in British prehistory. *Antiquity 95(384): 1464–1477*. https://doi.org/10.15184/aqy.2021.129

Armit I., Sheridan J. A., Reich D., Cook G., Tripney B., and Naysmith P. 2016. Radiocarbon dates obtained for the GENSCOT ancient DNA project, 2016. *Discovery and Excavation in Scotland 17: 195–198*.

Bamford S. (ed.). 2019a. *The Cambridge handbook of kinship*. Cambridge University Press. Cambridge. 2019b. Introduction: conceiving kinship in the twenty-first century. In S. Bamford (ed.), *The Cambridge handbook of kinship*. Cambridge. Cambridge University Press: 1–34.

Bandelj N. 2020. Relational work in the economy. *Annual Review of Sociology 46: 251–272.* https://doi.org/10.1146/annurev-soc-121919-054719_

Barclay A. J. 2024. Between Essex and Wessex: a review of Grooved Ware from the Upper and Middle Thames Valley. In M. Copper, A. Whittle, and A. Sheridan (eds.), *Revisiting Grooved Ware: understanding ceramic trajectories in Britain and Ireland, 3200–2400 cal BC*. Oxbow Books. Oxford: 191–207. Barnes J. A. 1962. African models in the New Guinea highlands. *Man 62: 5-9*.

Bayliss A., Benson D., Galer D., Humphrey L., McFadyen L., and Whittle A. 2007a. One thing after another: the date of the Ascott-under-Wychwood long barrow. *Cambridge Archaeological Journal 17(1) supplement: 29–44.* https://doi.org/10.1017/S0959774307000157

Bayliss A., McAvoy F., and Whittle A. 2007b. The world recreated: redating Silbury Hill in its monumental landscape. *Antiquity 81(311): 26–53*. https://doi.org/10.1017/S0003598X00094825

Bayliss A., Marshall P., Richards C., and Whittle A. 2017. Islands of history: the Late Neolithic timescape of Orkney. *Antiquity 91(359): 1171–1188.* https://doi.org/10.15184/aqy.2017.140

Benson D., Whittle A. (eds.). 2007. *Building memories:* the Neolithic Cotswold long barrow at Ascott-under-Wychwood, Oxfordshire. Oxbow Books. Oxford.

Bohannan L. 1952. A genealogical charter. *Africa 22: 301–315*.

Booth T. forthcoming. The end of the beginning of archaeogenomics: beginnings and ends in Neolithic Britain. In V. Cummings, D. Hofmann, R. Iversen and M. Bjørnevad-Ahlqvist (eds.), *The early Neolithic of northern Europe: new approaches to migration, movement and social connection*. Sidestone Press. Leiden.

Borić D. 2008. First households and 'house societies' in European prehistory. In A. Jones (ed.), *Prehistoric Europe: theory and practice*. Wiley-Blackwell. Oxford: 109–42.

Brace S., Booth T. 2023. The genetics of the inhabitants of Neolithic Britain: a review. In A. Whittle, J. Pollard, and S. Greaney (eds.), *Ancient DNA and the European Neolithic: relations and descent*. Oxbow Books. Oxford: 123–146.

Bradley R. 1984. *The social foundations of prehistoric Britain: themes and variations in the archaeology of power*. Longman. London.

2019. *The prehistory of Britain and Ireland*. Cambridge University Press. Cambridge.

Britnell W., Whittle A. (eds.). 2022. *The first stones: Penywyrlod, Gwernvale and the Black Mountains Neolithic long cairns of south-east Wales*. Oxbow Books. Oxford.

Brook E. 2024. Recent Grooved Ware discoveries from Bulford and other sites in southern Wiltshire. In M. Copper, A. Whittle, and A. Sheridan (eds.), *Revisiting Grooved Ware: understanding ceramic trajectories in Britain* and Ireland, 3200–2400 cal BC. Oxbow Books. Oxford: 209–223.

Brück J. 2021. Ancient DNA, kinship and relational identities in Bronze Age Britain. *Antiquity 95: 228–237*. https://doi.org/10.15184/aqy.2020.216

Card N., Edmonds M., and Mitchell A. (eds.). 2020. *The Ness of Brodgar: as it stands*. Kirkwall Press. Kirkwall.

Card N., Mainland I., Timpany S., +7 authors, and Whittle A. 2017. To cut a long story short: formal chronological modelling for the Late Neolithic site of Ness of Brodgar, Orkney. *European Journal of Archaeology 5: 1–47.* https://doi.org/10.1017/eaa.2016.29

Carsten J. (ed.). 2000a. *Cultures of relatedness: new approaches to the study of kinship*. Cambridge University Press. Cambridge.

2000b. Introduction: cultures of relatedness. In J. Carsten (ed.), *Cultures of relatedness: new approaches to the study of kinship*. Cambridge University Press. Cambridge: 1–36.

2004. *After kinship*. Cambridge University Press. Cambridge.

2013. What kinship does – and how. *HAU: Journal of Ethnographic Theory* 3(2): 245–251. https://doi.org/10.14318/hau3.2.013

2019. The stuff of kinship. In. S. Bamford (ed.), *The Cambridge handbook of kinship*. Cambridge University Press. Cambridge: 133–50.

2020. Imagining and living new worlds: the dynamics of kinship in contexts of mobility and migration. *Ethno-graphy 21(3): 319–334*. https://doi.org/10.1177/1466138120940343

Cassidy L. M., Ó Maoldúin R., Kador T., +10 authors, and Bradley D. G. 2020. A dynastic elite in monumental Neolithic society. *Nature 582: 384–388*. https://doi.org/10.1038/s41586-020-2378-6

Chapman R. 2023. *Archaeological theory: the basics*. Routledge. Abingdon.

Cheronet O., Fernandes D., Olalde I., +8 authors, and Pinhasi R. 2022. aDNA and kinship in French Atlantic façade megalithic monuments. In L. Laporte, J.-M. Large, L. Nespoulous, C. Scarre, and T. Steimer-Herbet (eds.), *Megaliths of the world, Volume I.* Archaeopress. Oxford: 1260– 1262.

Childe V. G. 1925. *The dawn of European civilization*. Kegan Paul, Trench, Trubner. London. 1929. *The Danube in prehistory*. Clarendon Press. Oxford.

1936. Man makes himself. Watts and Co. London.

Clark G., Piggott S. 1965. *Ancient societies*. Hutchinson. London.

Cleal R., Pollard J. 2024. The only way isn't Essex, but it may be one of them ...: Grooved Ware, Beakers and long-distance connections in southern Britain. In M. Copper, A. Whittle, and A. Sheridan (eds.), *Revisiting Grooved Ware: understanding ceramic trajectories in Britain and Ireland, 3200–2400 cal BC*. Oxbow Books. Oxford: 171–190.

Crellin R. J. 2021. Making posthumanist kin in the past. *Antiquity 95(379): 238–240.* https://doi.org/10.15184/aqy.2020.235

Crellin R. J., Harris O. J. T. 2020. Beyond binaries: interrogating ancient DNA. *Archaeological Dialogues 27: 37–56*. https://doi.org/10.1017/S138020382000082

Cummings V. 2017. *The Neolithic of Britain and Ireland*. Routledge. Abingdon.

Cummings V., Fowler C. 2023. Materialising descent: lineage formation and transformation in Early Neolithic southern Britain. *Proceedings of the Prehistoric Society 89: 1–21.* https://doi.org/10.1017/ppr.2023.2

Current Archaeology 2024. Neolithic cairn excavated in Orkney. *Current Archaeology 406: 8.*

Darvill T. C., Marshall P., Parker Pearson M., and Wainwright G. J. 2012. Stonehenge remodelled. *Antiquity 86(334):* 1021–1040. https://doi.org/10.1017/S0003598X00048225

Edmonds M. 1999. *Ancestral geographies of the Neolithic: landscape, monuments and memory*. Routledge. London.

2019. *Orcadia: land, sea and stone in Neolithic Orkney*. Head of Zeus. London.

Eller J. D. 2013. *Cultural anthropology: global forces, local lives*. Routledge. Abingdon.

Engelke M. 2017. *Think like an anthropologist*. Penguin Books. London.

Ensor B. E. 2021. *The not very patrilocal European Neolithic: strontium, aDNA, and archaeological kinship analyses.* Archaeopress Archaeology. Oxford.

Eriksen A., MacCarthy M. 2019. Charismatic churches, revivalism and new religious movements. In E. Hirsch and W. Rollason (eds.), *The Melanesian world*. Routledge. Abingdon: 345–358.

Evans C., Pollard J., and Tabor J. 2024. Niche bunching and the Inland Sea: Grooved Ware settlement at Over, Cambridgeshire, and River Great Ouse distributions. In M. Copper, A. Whittle, and A. Sheridan (eds.), *Revisiting Grooved Ware: understanding ceramic trajectories in Britain and Ireland, 3200–2400 cal BC*. Oxbow Books. Oxford: 147–170.

Evans-Pritchard E. E. 1940. *The Nuer: a description of the modes of livelihood and political institutions of a Nilotic people*. Clarendon Press. Oxford.

1951. *Kinship and marriage among the Nuer*. Clarendon Press. Oxford.

Feeley-Harnik G. 2019. Descent in retrospect and prospect. In. S. Bamford (ed.), *The Cambridge handbook of kinship*. Cambridge University Press. Cambridge: 51–87.

Firth S. 2019. Geo-political overview of Melanesia. In E. Hirsch, W. Rollason (eds.), *The Melanesian world*. Routledge. Abingdon: 95–109.

Flannery K., Marcus J. 2012. *The creation of inequality: how our prehistoric ancestors set the stage for monarchy, slavery and empire*. Harvard University Press. Cambridge.

Forbes H. 2007. *Meaning and identity in a Greek landscape: an archaeological ethnography*. Cambridge University Press. Cambridge.

Fortes M., Evans-Pritchard E. E. 1940. *African political systems*. Oxford University Press. Oxford.

Fowler C. 2022. Social arrangements. Kinship, descent and affinity in the mortuary architecture of Early Neolithic Britain and Ireland. *Archaeological Dialogues 29(1): 67–88.* https://doi.org/10.1017/S1380203821000210

Fowler C., Olalde I., Cummings V., +6 authors, and Reich D. 2022. A high-resolution picture of kinship practices in an Early Neolithic tomb. *Nature 601(7894): 584–587*. https://doi.org/10.1038/s41586-021-04241-4

Fox R. 1967. *Kinship and marriage: an anthropological perspective*. Penguin Books. Harmondsworth.

Foxhall L. 2000. The running sands of time: archaeology and the short term. *World Archaeology 31: 484–498*. https://doi.org/10.1080/00438240009696934

Freeman J. D. 1961. On the concept of the kindred. *Journal of the Royal Anthropological Institute 91: 192–220*.

Friedman J., Rowlands M. J. 1977. Notes towards an epigenetic model of the evolution of "civilisation". In J. Friedman, M. J. Rowlands (eds.), *The evolution of social systems*. Duckworth. London: 201–276. Garwood P. 2024. Grooved Ware in south-east England: social geographies, chronology and interpretation. In M. Copper, A. Whittle, and A. Sheridan (eds.), *Revisiting Grooved Ware: understanding ceramic trajectories in Britain and Ireland, 3200–2400 cal BC*. Oxbow Books. Oxford: 225–243.

Gibson A., Bayliss A. 2009. Recent research at Duggleby Howe, North Yorkshire. *Archaeological Journal 166: 39–78.*

Goddard M. 2019. Searching for Melanesian urbanity. In E. Hirsch, W. Rollason (eds.), *The Melanesian world*. Routledge. Abingdon: 223–236.

Greaney S., Hazell Z., Barclay A., +6 authors, and Marshall P. 2020. Tempo of a mega-henge: a new chronology for Mount Pleasant, Dorchester, Dorset. *Proceedings of the Prehistoric Society 86: 199–236.* https://doi.org/10.1017/ppr.2020.6

Guilaine J. 2018. Les enceintes néolithiques entre guerre et paix. In M. Gandelin, V. Ard, J. Vaquer, and L. Jallot (eds.), *Les sites ceinturés de la préhistoire récente: nouvelles données, nouvelles approches, nouvelles hypothèses*. Archives d'Écologie Préhistorique. Toulouse: 7–10.

Harris O. J. T. 2021. *Assembling past worlds: materials, bodies and architecture in Neolithic Britain*. Routledge. Abingdon.

Harris O. J. T., Cipolla C. N. 2017. *Archaeological theory in the new millennium: introducing current perspectives*. Routledge. Abingdon.

Hensey R. 2015. *First light: the origins of Newgrange*. Oxbow Books. Oxford.

Hirsch E., Rollason W. 2019. Introduction: the challenge of Melanesia. In E. Hirsch, W. Rollason (eds.), *The Melanesian world*. Routledge. Abingdon: 1–40.

Ingold T. 2018. *Anthropology: why it matters*. Polity Press. Cambridge.

2022. *Imagining for real: essays on creation, attention and correspondence*. Abingdon. Routledge.

Jeunesse C. 2017. From Neolithic kings to the Staffordshire hoard. Hoards and aristocratic graves in the European Neolithic: the birth of a 'Barbarian' Europe? In P. Bickle, V. Cummings, D. Hofmann, and J. Pollard (eds.), *The Neolithic of Europe*. Oxbow Books. Oxford: 175–187.

Johnston R. 2020. *Bronze Age worlds: a social prehistory* of Britain and Ireland. Abingdon. London.

Jones A. M., Quinnell H. 2024. Grooved Ware in the southwest peninsula. In M. Copper, A. Whittle, and A. Sheridan (eds.), *Revisiting Grooved Ware: understanding ceramic* *trajectories in Britain and Ireland, 3200–2400 cal BC.* Oxbow Books. Oxford: 249–270.

Kuper A. 1982. Lineage theory: a critical retrospect. *Annual Review of Anthropology for 1982(11): 71–95*.

1988. *The invention of primitive society: transformations of an illusion*. Routledge. London.

1999. *Culture: the anthropologists' account*. Harvard University Press. Cambridge, Massachusetts.

2018. We need to talk about kinship. *Anthropology of This Century 23*. <u>http://aotcpress.com.articles/talk-kinship</u>

Leach E. 1982. Social anthropology. Fontana. Glasgow.

Leary J., Field D., and Campbell G. 2013. *Silbury Hill: the largest prehistoric mound in Europe*. English Heritage Publishing. Swindon.

Lévi-Strauss C. 1949. *Les structures élémentaires de la parenté*. Presses Universitaires de France. Paris.

Lynch A., McCormick F., Shee Twohig E., +4 authors, and Sternke F. 2014. Newgrange revisited: new insights from excavations at the back of the mound 1984–5. *Journal of Irish Archaeology 23: 13–82*.

Madgwick R., Lamb A., Sloane H., Nederbragt A. J., Alberella U., Parker Pearson M, and Evans. J. A. 2019. Multi-isotope analysis reveals that feasts in the Stonehenge environs and across Wessex drew people and animals from throughout Britain. *Science Advances* 5(3): eaau6078. https://doi.org/10.1126/sciady.aau6078

Maine H. 1861. Ancient society. John Murray. London.

Marshall P., Greaney S., Dee M., and Hajdas I. 2024. Maumbury Rings, Dorchester: radiocarbon dating and chronological modelling. *Historic England Research Report Series 02/2024 (online)*. <u>https://historicengland.org.uk/research/results/reports/2-2024</u>

Meadows J., Barclay A., and Bayliss A. 2007. A short passage of time: the dating of the Hazleton long cairn revisited. *Cambridge Archaeological Journal 17(1) supplement: 45-64*. https://doi.org/10.1017/S0959774307000169

Meller H., Krause J., Haak W., and Risch R. (eds.). 2023. *Kinship, sex, and biological relatedness. The contribution of archaeogenetics to the understanding of social and biological relations.* Landesamt für Denkmalpflege und Archäologie Sachsen-Anhalt. Halle.

Miller D. n.d. What is a relationship? Kinship as negotiated experience. <u>https://www.ucl.ac.uk/home/UCL anthro</u> pology/people/academic and teaching staff/Daniel Miller Moore H. L. 2010. Anthropological theory at the turn of the century. In H. L. Moore (ed.), *Anthropological theory today*. Polity Press. Cambridge: 1–23.

Morgan L. H. 1871. *Systems of consanguinity and affinity of the human family*. Smithsonian Institution. Washington.

1877. Ancient society; or; researches in the lines of human progress from savagery, through barbarism to civilization. Kerr and Company. Chicago.

Olalde I., Brace S., Allentoft M. E., +144 authors, and Reich D. 2018. The Beaker phenomenon and the genomic transformation of northwest Europe. *Nature* 555: 190–196. <u>https://doi.org/10.1038/nature25738</u>

Oswald A., Dyer C., and Barber M. 2001. *The creation of monuments: Neolithic causewayed enclosures in the British Isles.* English Heritage. Swindon.

Papadaki E., Chiu H.-C., Carsten J., Reece K. M., and Magee S. 2019. Talking about kinship. *Anthropology of This Century* 25. <u>http://aotcpress.com/articles/talking-kinship</u>

Parker Pearson M. 2012. *Stonehenge: exploring the greatest Stone Age mystery*. Simon & Schuster. London.

2023. *Stonehenge: a brief history*. Bloomsbury Academic. London.

Parker Pearson M., Pollard J., Richards C., Thomas J., Tilley C., and Welham K. 2020. *Stonehenge for the Ancestors: Part 1, Landscape and monuments*. Sidestone Press. Leiden.

2022. *Stonehenge for the ancestors: Part 2, Synthesis*. Sidestone Press. Leiden.

Parker Pearson M., Ramilisonina 1998. Stonehenge for the ancestors: the stones pass on the message. *Antiquity 72(276)*: *308–320*. https://doi.org/10.1017/S0003598X00086592

Parkin R., Stone L. (eds.). 2004. *Kinship and family: an anthropological reader*. Blackwell. Malden, MA.

Pechtl J. 2009. A monumental prestige patchwork. In D. Hofmann, P. Bickle (eds.), *Creating communities: new advances in central European Neolithic research*. Oxbow Books. Oxford: 186–201.

Pronk T. 2023. Mobility, kinship and marriage in Indo-European society. In K. Kristiansen, G. Kroonen, and E. Willerslev (eds.), *The Indo-European puzzle revisited : integrating archaeology, genetics, and linguistics*. Cambridge University Press. Cambridge: 289–295.

Radcliffe-Brown A. R. 1952. *Structure and function in primitive society*. Cohen & West. London.

Ray K., Thomas J. 2003. In the kinship of cows: the social centrality of cattle in the earlier Neolithic of southern Britain. In M. Parker Pearson (ed.), *Food, culture and identity in the Neolithic and Bronze Age*. British Archaeological Reports. Oxford: 37–44.

Ray K., Thomas J. 2018. *Neolithic Britain: the transformation of social worlds*. Oxford University Press. Oxford.

Renfrew C. 1973. Monuments, mobilization and social organization in Neolithic Wessex. In C. Renfrew (ed.), *The explanation of culture change: models in prehistory*. Duckworth. London: 539–558.

1979. *Investigations in Orkney*. Thames and Hudson. London.

Reich D. 2018. *Who we are and how we got here: ancient DNA and the new science of the human past.* Oxford University Press. Oxford.

Richards C., Jones R. (eds.). 2016. *The development of Neolithic house societies in Orkney*. Windgather Press. Oxford.

Rivollat M., Rohrlach A. B., Ringbauer H., +17 authors, and Haak W. 2023. Extensive pedigrees reveal the social organization of a Neolithic community. *Nature 620: 600–606.* https://doi.org/10.1038/s41586-023-06350-8

Robb J. E., Harris O. J. T. 2018. Becoming gendered in European prehistory: was Neolithic gender fundamentally different? *American Antiquity* 83(1): 128–147. https://doi.org/10.1017/aaq.2017.54

Sahlins M. D. 1968. *Tribesmen*. Prentice-Hall. Englewood Cliffs, New Jersey.

Sahlins M. 2013. *What kinship is...and is not*. University of Chicago Press. Chicago and London.

Sánchez-Quinto F., Malmström H., Fraser M., +14 authors, and Jakobsson M. 2019. Megalithic tombs in western and northern Neolithic Europe were linked to a kindred society. *Proceedings of the National Academy of Sciences 116(19):* 9469–9474. https://doi.org/10.1073/pnas.1818037116

Saville A. 1990. *Hazleton North, Gloucestershire, 1979–82: the excavation of a Neolithic long cairn of the Cotswold-Severn group*. English Heritage. London.

Schneider D. 1968. *American kinship: a cultural account.* Prentice Hall. Englewood Cliffs, New Jersey.

1984. *A critique of the study of kinship*. University of Michigan Press. Ann Arbor.

Schulting R., Bronk Ramsey C., Reimer P., Eogan G., Cleary K., Cooney G., and Sheridan J. A. 2017. Dating Knowth. In

G. Eogan, K. Cleary (eds.), *Excavations at Knowth, volume* 6: the passage tomb archaeology of the Great Mound at Knowth. Royal Irish Academy. Dublin.

Shanks M., Tilley C. 1982. Ideology, symbolic power and ritual communication: a reinterpretation of Neolithic mortuary practices. In I. Hodder (ed.), *Symbolic and structural archaeology*. Cambridge University Press. Cambridge: 129–154.

Shapiro W. 2016. Why Schneiderian kinship studies have it all wrong: with special reference to adoptive kinship. *Structure and Dynamics: eJournal of Anthropological and Related* Sciences *9(2): 218-239.* https://doi.org/10.5070/SD992032334

Shennan S. 2018. *The first farmers of Europe: an evolutionary perspective*. Cambridge University Press. Cambridge.

Sheridan A., Armit I., Reich D., +22 authors, and Brown L. 2019. A summary round-up list of Scottish archaeological human remains that have been sampled/analysed for DNA as of January 2019. *Discovery and Excavation in Scotland 19: 227-250*. <u>https://nms.iro.bl.uk/concern/articles/595a91ee-3042-4439-ae0f-9152284576ac</u>

Snoeck C., Pouncett J., Claeys P., +6 authors, and Schulting R. 2018. Strontium isotope analyses on cremated human remains from Stonehenge support links with west Wales. *Scientific Reports 8: 10790*.

https://doi.org/10.1038/s41598-018-28969-8

Souvatzi S. 2017. Kinship and social archaeology. *Cross-Cultural Research 51(2): 172–195.* https://doi.org/10.1177/1069397117691028

Strathern M. 1992. *After nature: English kinship in the late twentieth century*. Cambridge University Press. Cambridge.

Thomas J. 2015. House societies and founding ancestors in Early Neolithic Britain. In C. Renfrew, M. Boyd, and J. Morley (eds.), *Death shall have no dominion*. Cambridge University Press. Cambridge: 138–53.

Thurnam J. 1869. On ancient British barrows, especially those of Wiltshire and the adjoining counties. (Part I. Long barrows). *Archaeologia 42: 161–244*.

Trigger B. 2006. *A history of archaeological thought* (second edition). Cambridge University Press. Cambridge.

Vondrovský V., Kovačikova L., and Smejtek L. 2022. Neolithic rondels in central Europe and their builders: an analysis of

multi-rondel sites. *Antiquity 96(389): 1105–1123*. https://doi.org/10.15184/aqy.2022.75

Whitley J. 2002. Too many ancestors. *Antiquity 76(291):* 119–126. <u>https://doi.org/10.1017/S0003598X00089870</u>

Whittle A. 1997a. Remembered and imagined belongings: Stonehenge in its traditions and structures of meaning. *Proceedings of the British Academy 92: 145–166.*

1997b. Sacred mound, holy rings. Silbury Hill and the West Kennet palisade enclosures: a Later Neolithic complex in north Wiltshire. Oxbow Books. Oxford.

2014. The times and timings of enclosures. In A. C. de Valera (ed.), *Recent prehistoric enclosures and funerary practices in Europe*. Archaeopress. Oxford: 1–11.

2018. *The times of their lives: hunting history in the archaeology of Neolithic Europe*. Oxbow Books. Oxford.

2022. Ethnography and history: early Neolithic enclosures in southern Britain. In R.-M. Arbogast, A. Denaire, S. Grando-Válečková, P. Lefranc, M. Mauvilly, and S. van Willigen (eds.), *D'Oberlarg à Wesaluri, itinéraire d'un préhistorien: mélanges offerts à Christian Jeunesse*. Mémoires d'Archéologie du Grand Est n° 8. Strasbourg: 143–152.

Whittle A., Bayliss A., and Healy F. 2022. A decade on: revised timings for causewayed enclosures in southern Britain. In J. Last (ed.), *Marking place: new perspectives on Early Neolithic enclosures*. Oxbow Books. Oxford: 203–222.

Whittle A., Healy F., and Bayliss A. 2011. *Gathering time: dating the early Neolithic enclosures of southern Britain and Ireland*. Oxbow Books. Oxford.

Whittle A., Healy F., Bayliss A., and Cooney G. forthcoming. Enclosures in the making: the case of Britain and Ireland.

Willis C. 2021. *Stonehenge and Middle to Late Neolithic cremation rites in mainland Britain (c.3500–2500 BC).* Archaeopress. Oxford.

Wolf A. P. 2014. *Incest avoidance and the incest taboos: two aspects of human nature.* Stanford University Press. Stanford, CA.

Wysocki M. P. 2022. Neolithic people of the Black Mountains: human remains from Penywyrlod, Pipton and Ty Isaf. In W. Britnell, A. Whittle (eds.), *The first stones: Penywyrlod, Gwernvale and the Black Mountains Neolithic long cairns of south-east Wales*. Oxbow Books. Oxford: 157–206.