Proceedings of the Prehistoric Society 88, 2022, pp. 261–284 © The Author(s), 2022. Published by Cambridge University Press on behalf of The Prehistoric Society. This is an Open Access article, distributed under the terms of the Creative Commons Attribution licence (https://creativecommons.org/licenses/by/4.0/), which permits unrestricted re-use, distribution, and reproduction in any medium, provided the original work is properly cited. doi:10.1017/ppr.2022.2 First published online 14 July 2022

Funerary Diversity and Cultural Continuity: The British Beaker Phenomenon Beyond the Stereotype

By ANNA BLOXAM¹ and MIKE PARKER PEARSON²

The Beaker phenomenon in Britain is typically represented by a particular form of pottery and its inclusion in graves with flexed or crouched inhumations referred to as Beaker burials. Analysis of the full range of burial evidence, however, reveals a high degree of variability in funerary rites including cremation and skeletal disarticulation. Summed probability distribution analysis of radiocarbon dates provides evidence for continuity of these other, atypical rites from the pre-Beaker Late Neolithic (c. 3000–2450 cal BC) through the Chalcolithic (c. 2450–2200 cal BC) and into the Early Bronze Age (after c. 2200 cal BC). Regional diversity is apparent in Beaker period funerary treatments and grave good provision between these typical and atypical rites, as is differential selection of rites on the basis of age and biological sex. This evidence for within and between community funerary diversity has implications for understanding the large-scale processes of cultural and genomic transformation across this period of major transition in British prehistory.

Keywords: Beaker phenomenon, funerary archaeology, radiocarbon modelling, culture change

The Beaker phenomenon has been a subject of interest throughout the development of archaeology in Britain. The term 'Beaker' was coined by Abercromby (1912) to define a distinctive type of ceramic vessel often found in prehistoric burial mounds, first described as 'drinking cups' by Thurnam in 1871. Beakers and a selection of associated artefacts, termed the 'Beaker package' (Burgess & Shennan 1976) first appeared in burials in Britain in 2460-2330 cal BC (95% probability), having spread from continental Europe (Parker Pearson et al. 2016; Jay et al. 2019a, 75). Their appearance marks the end of the Neolithic in Britain and the start of the Chalcolithic (c. 2450-2200 cal BC). Subsequently they continued to be placed in burials until 1805-1650 cal BC (95% probability), well into the Early Bronze Age (Jay et al. 2019a, 78). In this paper we use the term 'Beaker period' as a shorthand for the period spanning

¹Department of Classics & Archaeology, University of Nottingham, University Park, Nottingham, NG7 2RD. Email: anna.bloxam@nottingham.ac.uk

²UCL Institute of Archaeology, 31-34 Gordon Square, London, WC1H 0PY. Email: m.parker-pearson@ucl.ac.uk

c. 2450–1950 BC; a range intended to capture the introduction and *floruit* of the Beaker phenomenon in Britain though not a third and final phase when Beaker use had largely ceased (Needham 2005; 2012).

Beaker burials in Britain are distinctive, conventionally characterised as homogeneous in form and seen as providing a marked contrast with the preceding funerary rites of the insular Late Neolithic. The 'typical' Beaker burial, as we term it here, consists of a single inhumed, articulated corpse placed in a crouched or flexed position within either an earth-dug grave pit or a stone-lined cist. The deceased may be accompanied by a Beaker and sometimes other artefacts: tools, weapons and/or ornaments. After its filling, the grave might be left 'flat' with no above-ground monument or it might be marked by a round barrow, cairn, or causewayed/ring-ditch.

Despite more than a century of research into the Beaker phenomenon in Britain, Clarke's (1970) catalogue of burial contexts from this period remains by far the largest. In his efforts to examine all Beaker vessels known at the time he listed nearly 2000 funerary contexts in which they were found. The nature of this

dataset means that, by design, the evidence is heavily skewed towards recognisably funerary contexts with reasonably intact ceramic vessels and focuses on ceramic typology rather than providing detailed information on the human remains. More recent large-scale studies have explored the burial contexts in much greater detail, adding a richness and depth to the funerary evidence that the larger corpus lacks (eg Curtis & Wilkin 2019; Fowler 2013; Heise 2014; Parker Pearson *et al.* 2019b).

However, there has been a growing awareness that the classic image of Beaker period burial practices is unrealistically reductive. Researchers now explicitly recognise that the 'typical' Beaker rite no longer provides an adequate description of funerary diversity in that period (eg Barrett 1994, 88-97, 112-29; Gibson 2007; 2016; Harding & Healy 2007, 224, 228-30; Gibson & Bayliss 2010, 103; Fitzpatrick 2011, 195-202; Vander Linden 2012b, 78; Appleby 2013; Booth & Brück 2020). Even so, the concept of the typical Beaker burial as representative of mortuary practices of that time remains foundational. This is, at least in part, due to the absence of a large-scale re-evaluation of the evidence to characterise the true range of burial practices to be incorporated into new interpretations.

While the typical burials have provided much useful information on Chalcolithic and Early Bronze Age Britain (Parker Pearson *et al.* 2019a), it is now necessary to look beyond this material. Without considering the full range of archaeologically detectable funerary practices, further research risks adopting a circular logic whereby burials are identified as belonging to the Beaker period on the basis of their correspondence to expected norms; and those expected norms are further reinforced by the finding of these additional examples. Burials which deviate from expectations may then not be recognised as Beaker burials and, thus, the artificial homogeneity of the funerary practice is reinforced.

In this paper we re-analyse the burial evidence and reveal that diversity is a widespread and inherent feature of Beaker period funerary practices. We are able to describe several 'atypical' traditions which existed alongside the typical practice and explore patterns in the provision of these rites to shed new light on the nature of the Beaker phenomenon in Britain. This re-evaluation of the burial evidence further provides new insights into the nature of processes of social change across the transition between the Late

Neolithic and the Chalcolithic. To evaluate this impact it is necessary to first summarise current understandings of this transition in Britain and the evidence for the role of inward migration from continental Europe.

BURIAL PRACTICES AND THE TRANSITION TO THE BEAKER PERIOD

Influence from the European continent during the transition to the Beaker period is widely accepted although the degree and contribution of cultural, as opposed to demic, diffusion has been debated. Recent ancient DNA analyses of individuals buried in Britain during the Neolithic and Bronze Age provide fresh evidence to be considered in theorisations of the process. Olalde et al. (2018) demonstrate a 90% or greater turnover in the genomic population of Britain between these two periods: Chalcolithic and Bronze Age individuals' genomic affinity is predominantly with Continental groups displaying 'steppe-related ancestry' rather than with the British Neolithic population. Olalde et al. conclude that migration from the European mainland played a substantial role in the spread of the Beaker phenomenon into Britain, a position contrasting with most interpretations proposed over the previous 40 years. These, instead, have tended to emphasise a lesser role for migration alongside greater influence from cultural diffusion processes, whether through networks of high status or cult affiliation, trade connections, or marriage alliances (Burgess & Shennan 1976; Clarke 1976; Brodie 2001; Vander Linden 2012a).

The typical Beaker burial evidence fits neatly into the new genetically informed replacement narrative: they demonstrate strong affinities with contemporary Continental practices and are argued to differ starkly from those of the British Late Neolithic. While there are relatively few burials from across Britain dating to the latter period, and the evidence is regionally variable, the cremation cemeteries found at monumental sites mean that the corpus of known material from 2700–2450 BC is dominated by unaccompanied cremated remains (Willis 2020, 78–98; 2021, 43–65). The typical Beaker burial rite could thus be taken as evidence that the modelled genomic population replacement was accompanied by a cultural replacement in funerary practices.

However, the suggestion of discontinuity in burial rites from the start of the Chalcolithic is at odds with the continuities observed in other aspects of Late Neolithic economy, lifestyle, monument building traditions, and places of significance within the landscape (Cleal & Pollard 2012). For example, henges and stone circles continued to be constructed and a largely pastoral lifestyle seems to have endured across the transition (Parker Pearson 2019). These continuities are of significance in supporting the move away from culture-historical narratives of invasion and replacement in this period from the 1970s onwards (Wilkin & Vander Linden 2015; Furholt 2018). There has subsequently been concern among researchers in the field that the evidence for genomic replacement or, rather, the essentialising narratives proposed to explain this, risk a return to theories previously rejected by the field on grounds both evidential and ethical (eg Clark 1966; Hofmann 2015; Heyd 2017; Furholt 2019; Carlin 2020).

The genomic evidence for population change derives entirely from unburned remains: fully cremated bone does not preserve DNA. Olalde *et al.* (2018, 195) note that the discovery of a cremating group in Britain in the Beaker period could lengthen the modelled duration of the population transition, allowing for a more gradual period of cultural adaptation and change. The assumption underlying this proposal is that the discovery of such a cremation tradition would reflect cultural continuity from insular Late Neolithic funerary practices and, by implication, a continuation of the Late Neolithic population alongside Beaker-using arrivals.

Utilising the genetic study's supplementary data, Booth *et al.* (2021) argued that the process of genetic transition was indeed gradual and associated with cultural interaction between insular and migrant groups. They further present evidence for a later resurgence of 'Neolithic affinity' genetic admixture *c.* 2100 cal BC which they argue is best explained by the continued presence of a group which was not sampled for genetic analysis – on account of their remains either being cremated or afforded funerary treatments which rendered them less archaeologically visible.

Our analysis aims to provide further depth to the understanding of the dual processes of cultural and genomic continuity and change, in particular, by exploring the potential for this 'genetically invisible' group to help explain the instances of cultural continuity seen in a period typically defined by change.

This investigation goes some way to addressing the two hypotheses ('Beaker colonisation' vs 'Steppe

drift') for the relationship between genetic and cultural phenomena in this period proposed by Armit and Reich (2021), albeit through archaeological rather than genetic analysis. In exploring the processes of transition we must, however, avoid conflating the processes of cultural and population change and instead recognise that the relationship between ancestry (or family) and funerary practices is likely to have been a fluid and dynamic process for communities across this period. New and pre-existing practices should not be taken to represent the competing influence, or existence, of two opposing and homogeneous cultural groups (Jones 1997, 122–4). Rather, they represent a complex interplay of practices during the development of new norms in an environment of hybridity, and any association between archaeologically visible variation and genomic ancestry much be demonstrated rather than assumed.

To explore the nature of the burial practices which emerged during this period we must first briefly demonstrate that diversity and variability were already present in the Continental communities whose influence is felt in the traditions developing in Britain: the rites of continental Beaker-phenomenon groups were themselves more varied than is commonly acknowledged.

BRITISH BEAKER BURIALS IN THEIR EUROPEAN CONTEXT For more than a century the British material has been recognised as belonging to a pan-European (Bell-)Beaker tradition (Abercromby 1912, 9–16). While the Beaker phenomenon was historically characterised in terms of the broad similarities seen across its range, research from the 1970s onwards began to explore its regional differences (see papers in Nicolis 2001; Czebreszuk 2014 and from the 1974 Glockenbechersymposion symposium in Oberried, eg, Shennan 1976). Stylistic similarities to early British Beakers and inhumation practices can be found with material from the Netherlands, northern Germany and north-east France in particular (Lanting & van der Waals 1972; Lanting & van der Plicht 1999-2000; Müller & van Willigen 2001; Sheridan 2008; Lefebvre 2009; Vander Linden 2012b). Needham (2005, 182; 2007) argues for a 'fusion corridor' from Atlantic north-west France to the Low Countries, across which a variety of adjacent traditions were amalgamated into the Beaker vessel styles and inhumation burial traditions that subsequently spread to Britain.

Attention has also turned to the differences within local Beaker burial traditions. That such explorations of local variability can prove fruitful is demonstrated by research in the Netherlands and north-west Germany. These regions are the putative homeland of the British 'typical burial' tradition but the narrative of homogeneity is on unstable ground here as well: researchers have identified disarticulated (Drenth & Hogestijn 2001) and cremated Beaker-accompanied burials (Hille 2001; Lanting 2007-2008; Beckerman 2011-2012; Drenth 2014), while Brandskelet burials may be a transitional form between cremation and inhumation (Lohof 1994, 106; Lohof & Drenth 2016, 72). These practices have few precursors among the earlier Corded Ware burials of the region and may be novel developments within Beaker period communities (Drenth & Hogestijn 2014, 109). The evidence, taken together, indicates that – as in Britain – the 'typical' tradition was not the only burial practice of the Dutch and German Beaker phenomenon. Any assessment of incoming cultural influences in Britain must account for the finding that these were themselves diverse and reflect the complex and developing practices of communities in transition.

EXPANDING THE CONCEPT OF A BEAKER BURIAL

It is necessary to focus on the atypical burial evidence to reconsider Beaker period funerary variability as a whole. We have sought to identify deposits of human remains from Beaker period Britain which are *not* crouched or flexed articulated inhumation burials, whether these are complete burials or single skeletal elements, accompanied by Beaker-package artefacts or not; these can then be compared with the existing corpus of typical Beaker burials.

Utilising archaeological, osteological, radiocarbon, and genetic data, we first examine the chronology and distribution of practices across Britain. We then explore in more detail grave good provision and demographic profiles associated with each funerary practice – cremation, disarticulation, and articulated inhumation – to explore the ways in which these rites were used across the period.

MATERIALS AND METHODS

Archaeological and radiocarbon datasets
Two datasets were analysed. The first consists of records of 'atypical' Beaker period burials from across

Britain dating to *c*. 2450–1950 cal BC and the second is a selection of radiocarbon dates derived from the EUROEVOL project (Manning *et al.* 2015). For the first dataset, archaeological and osteological information were gathered in a systematic search of published and unpublished reports on deposits of human bone, dated radiometrically or contextually to the Beaker period, which were not 'typical' Beaker inhumation burials.

We use the term 'typical Beaker burial' to refer to the traditional image of a crouched/flexed inhumation dating to this period, and the term 'Beaker period burial' to refer to any burial that dates to this period regardless of material culture associations or lack thereof. The latter term is not intended to imply any particular cultural affiliation of the individuals within these burials but rather the time period during which they lived and died.

Inclusion in the atypical burial database required the fulfilment a number of criteria:

- there must be human bone present;
- there must be evidence that it dates to the Beaker period (this could be a direct radiocarbon date, artefacts associated with the burial, or a combination of artefactual, radiocarbon, and stratigraphic evidence);
- it should not be a crouched/flexed articulated inhumation burial, unless mummification or burning have been identified;
- if the remains appear to be disarticulated, there must be evidence that this was done at or shortly after the time of burial.

Furthermore, any such burial deposits associated with non-Beaker Early Bronze Age ceramics (Food Vessels, Collared Urns, etc) were not included since the primary aim was to investigate the emergence of diversity within the Chalcolithic rather than the development of subsequent practices arising from this. The diverse practices of the non-Beaker Early Bronze Age (as described by eg Curtis & Wilkin 2012; Wilkin 2013; 2016) are outside the scope of this paper but we hope to incorporate this material into future studies with a longer chronological view. Unfurnished burials in cemetery sites where all furnished burials had Early Bronze Age artefacts were excluded from data collection; those from sites where accompanied burials had Beaker-package artefacts were included if they met the criteria above. Several osteological analyses were carried out by one of the authors

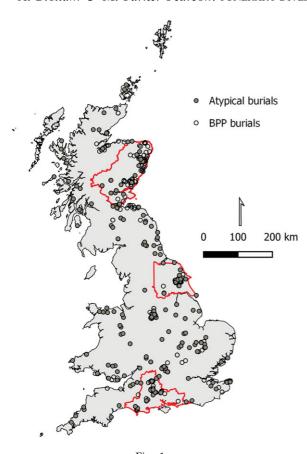


Fig. 1.

The distribution of articulated inhumation burials selected by the Beaker People Project and atypical burials collated for this study, with the three case study regions outlined

(AB) to determine whether burials met the criteria and to estimate the age and sex of individuals (Bloxam 2020).

The resulting dataset contains 272 atypical burials and a minimum of 438 individuals (Bloxam 2020). The *Beaker People Project* (BPP) has been used to provide comparative data on 'typical' Beaker burials (Parker Pearson *et al.* 2019a). Three regions of Britain display high densities of burial activity in both the BPP and atypical datasets – Wessex, the Yorkshire Wolds and environs, and eastern Scotland – and these are compared as regional case studies of demography, grave good association, and analysis of spatial intensity (Fig. 1).

The second dataset, a modified version of the EUROEVOL dataset, comprises an extensive collection of radiocarbon determinations from British archaeological sites (Manning *et al.* 2015; Bevan

2017). We sub-setted this to include only burials, supplementing it with new radiocarbon dates including those acquired for this project. We have tagged each entry with the burial type it relates to, broken down into the three broad categories of 'cremated', 'disarticulated', and 'articulated'. This modified dataset contains 1737 radiocarbon dates spanning the period c. 3000–1500 cal BC and is used for spatial intensity analysis and summed probability distribution analysis, methods aimed at exploring broad patterns of continuity and change across the period. This longer chronological range is needed to contextualise visually the results of our analyses of change over time.

Spatio-temporal analyses

In order to evaluate the changing distribution and prevalence of typical and atypical burial practices we carried out two methods of analysis: intensity mapping and summed probability distribution. Intensity mapping uses kernel density estimation (KDE) to plot the spatial intensity of burials in each of four equally distributed 'time slices' across the study period. Each time slice broadly conforms with established chronological divisions: the first is the second half of the Late Neolithic (2700–2450 cal BC), the second is Needham's (2005; 2007; 2012) Period 1 (2450-2200 cal BC; 'Beaker as circumscribed, exclusive culture'), the third is his Period 2 (2200–1950 cal BC; 'Beaker as instituted culture') and the fourth is his Period 3 (1950-1700 cal BC; 'Beaker as past reference'). The middle two of these are our study period; the outer two are for contextualisation. These plots are generated by calculating the probability of calibrated dates falling into each of the time slices; using a method similar to that used by Collard et al. (2010), the probability density for each burial in each time slice is used to weight the geographic points in a spatial intensity plot, creating a 'heat map' of burials that reflects the likelihood that they belong to each of the four periods (Fig. 2). Radiocarbon dates were calibrated using the IntCal20 calibration curve (Reimer et al. 2020) and plots were created in the programming language and software package R (version 4.0.0; R Core Team 2020) using the packages rearbon (Crema & Bevan 2021) and spatstat (Baddeley et al. 2015). To maximise the representativeness of these maps across relatively under-studied regions we included an additional 135 burials that had not been scientifically

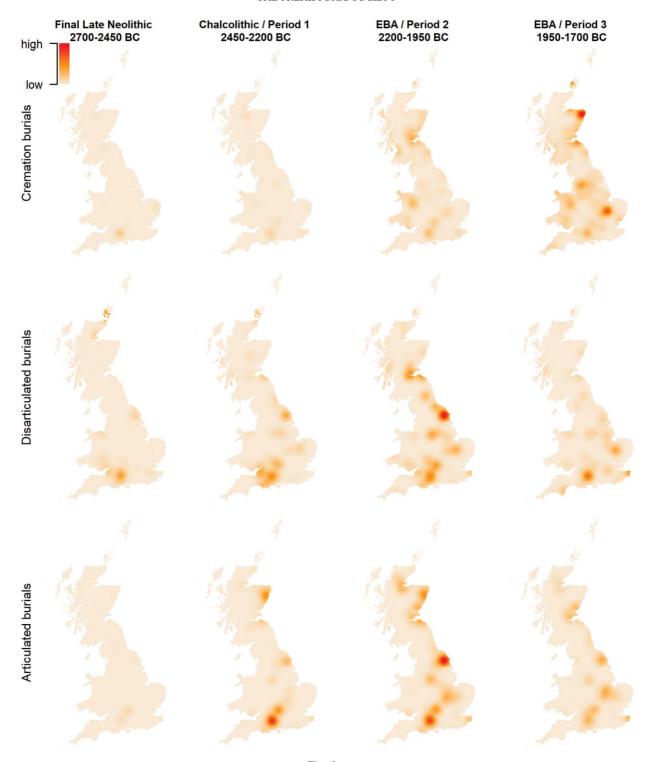


Fig. 2.

Weighted spatial intensity plots of dated and undated articulated, disarticulated, and cremated burial evidence across four time slices spanning the period 2700–1700 BC. Gaussian bandwidth = 20 km, cell resolution = 2 km. Each row is scaled to the highest intensity value for its respective burial type

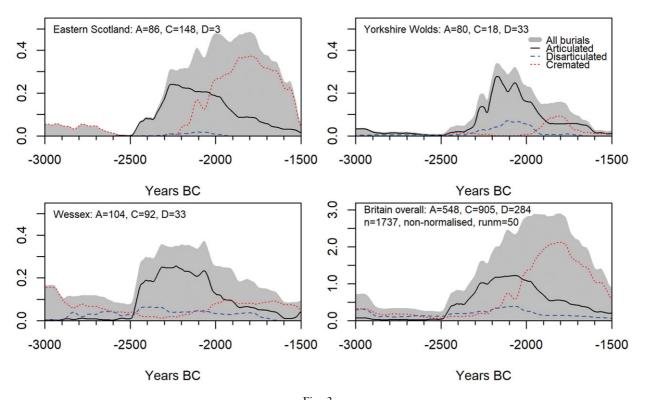


Fig. 3.

SPD plots for all burial activity and for each burial type, for Britain as a whole and for the three case study regions indicated in Fig. 1. All SPD plots are smoothed over a 50 year period (indicated by 'runm=50') to reduce spurious spikes in the shape of the distribution.

dated but which could be assigned aoristically on the basis of archaeological information (see Crema *et al.* 2010; Crema 2012).

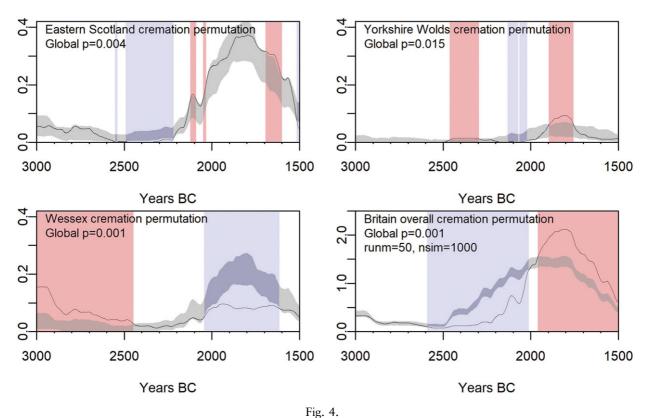
Summed probability distributions (SPDs) of radiocarbon dates for burials were used to assess and compare the changing frequency of dated burials over time (Rick 1987). While much of the development of this 'dates as data' method has centred on its applicareconstructing prehistoric population dynamics (see Shennan et al. 2013; Timpson et al. 2014), it is used here to directly assess the dated features (burials; Fig. 3). We compared our SPD results with those obtained from two Kernel Density Estimation methods during analysis as a means of checking for stochastic noise in the results (Bloxam 2020: methods from Bronk Ramsey 2017: McLaughlin 2019).

For SPD analysis, radiocarbon dates for burials were calibrated and their probability densities summed using the *rcarbon* package. We present the results directly but also compare the data for different

burial types and for the case study regions using permutation testing, following Crema *et al.* (2016). This approach allows for significance testing of differences between groups of dates, using mark permutation to create a null model with a 95% confidence envelope (Fig. 4). This null model reflects the pattern that would be obtained if the labels of these groups (burial type or region, depending on the analysis) were randomly reassigned. We can then compare our empirical data to the model to see whether the variations observed could have arisen by chance or whether they require archaeological explanation.

Artefact assemblage analysis

Grave good assemblages from typical and atypical burials were evaluated to explore the extent to which atypical burials shared 'Beaker-package' artefacts (Fig. 5). Grave goods were recorded as present or absent following the BPP's categories with further entries to record charcoal and pyre refuse (Parker Pearson *et al.* 2019b, 172–99). We used the Jaccard



SPD permutation test results for cremation burial in relation to all burial types (bottom right) and for cremation evidence in each of three case study regions compared to cremation in Britain as a whole. The black line in each plot is the empirical SPD for the region or burial type indicated; the grey band around this is the 95% envelope showing the result of 1000 simulations (indicated by 'nsim') in which the labels of dates (their region or burial type) were randomly re-assigned. Chronological ranges in which the empirical SPD deviates significantly from the expected pattern, ie falls outside the 95% simulation envelope, are shaded on the plot, with the darker grey shading (red online) indicating a significant positive deviation and lighter shading (blue online) a significant negative deviation. The overall goodness-of-fit for each plot is indicated by its global p-value

similarity coefficient to explore combinations of cooccurring artefacts (Riris & Oliver 2019). Jaccard similarity between artefacts can be displayed as an empirically generated diagrammatic network of the various 'Beaker packages' associated with each of the three burial types (see Fig. 6). Analyses were carried out in R using the *statnet* package (Handcock *et al.* 2003).

RESULTS

Spatial intensity and regionality in Beaker period burial activity

The changing intensity of burial activity across Britain over the Late Neolithic and Early Bronze Age is shown in Figure 2. Each row in this figure is scaled to the

highest intensity value for the given burial type during the entire range to allow for assessment of change over time in each of the three rites.

The plots demonstrate clear differences in the intensity and regionality of the three burial practices. There are low levels of cremation activity in both the Late Neolithic and the Chalcolithic, with an increase in prevalence and dispersal during the Early Bronze Age. Disarticulated burial in the Late Neolithic has foci in Wessex and East Yorkshire, known for its Middle Neolithic (3400–3000 cal BC) inhumation tradition (Petersen 1972; Lucas 1996; Gibson & Bayliss 2010; Jay *et al.* 2019b, 493). The disarticulation rite increases in intensity in these locations during the Chalcolithic and appears in additional 'hotspots' in subsequent periods. Conversely, there is very little

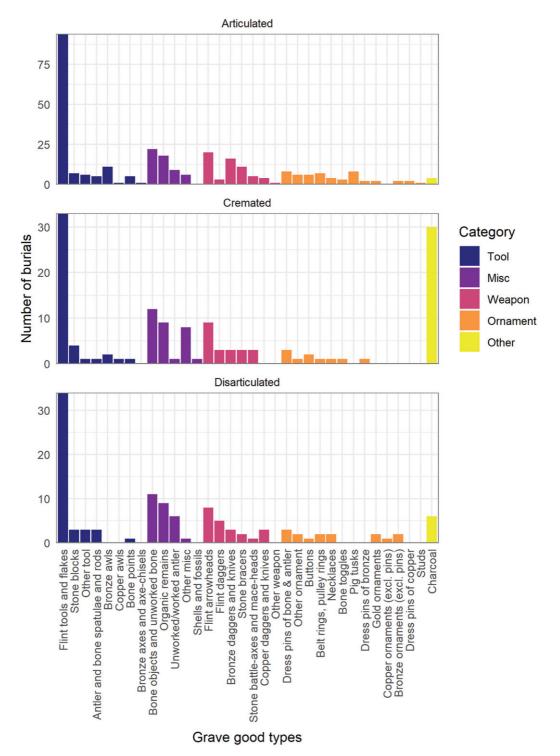


Fig. 5.
The frequency of burials with each grave good type by burial category

articulated inhumation in the Late Neolithic and the first appearance of this rite is concentrated within a few regions, Wessex and Aberdeenshire being two of the earliest. This tradition then expands until Period 3, when cremation becomes the most widespread practice.

Diachronic variation in burial rites

While the intensity plots demonstrate broad patterns of changing activity across the Late Neolithic and Early Bronze Age, summed probability distribution (SPD) analyses can explore this variation in finer detail (Fig. 3).

Across Britain, a low level of burial activity in the Late Neolithic is followed by a sharp increase in 2500–2450 cal BC, rising to a peak of activity in 2000–1800 cal BC before declining again. Prior to 2500 cal BC, burial activity is composed of similar levels of cremated and disarticulated burial with almost no articulated inhumations. The increase in overall burial activity at the start of the Chalcolithic (c. 2450 cal BC) is caused by the sudden appearance of articulated inhumation, ie, the typical Beaker practice. At the same time, both cremation and disarticulated burial practices continue throughout the c. 250 years of the Chalcolithic. Cremation then increases from 2200 cal BC, becoming the predominant practice by 2000 cal BC.

The regional case studies reveal that this sequence for Britain is underlain by substantial regional variability in both the nature of practices and their timing. For the earlier part of the sequence, Wessex most closely corresponds with the pattern for Britain as a whole: continuation of Late Neolithic practices is evident and the appearance of the articulated inhumation rite is especially clear from just after 2500 cal BC. In contrast, neither eastern Scotland nor the Yorkshire Wolds see any continuity of practice across 2500 cal BC; the level of dated activity before this is very low for each.

Regional differences in the timing of the first Beaker burials across Britain have been previously identified, with Wessex probably seeing the earliest (Jay et al. 2019a, 75–80). The SPD method adds to this by enabling analysis of the changing prevalence as well as the start/end dates. The early and sharp increase in articulated inhumation seen in Wessex can be matched with an equally early start but more gradual rise in eastern Scotland. The Yorkshire Wolds display

a late and brief flourishing of the tradition during *c*. 2300–1900 cal BC. Kernel Density Estimate (KDE) analysis of the dates corroborates these results; this complementary approach indicates a slightly slower rise in the initial boom of activity in Wessex, though a slight 'smearing' of signals in this method is not unexpected (Bronk Ramsey 2017).

The pattern of burial practices going into the Early Bronze Age also differs between regions. Though remains from Wessex are relatively well-dated overall, the marked peak of Early Bronze Age cremation activity seen in the Britain-wide data is under-expressed: the vast majority of the well-provisioned 'Wessex culture' burials from this region, for example, are not radiocarbon-dated (Needham etal. Conversely, the Early Bronze Age cremation tradition in Scotland is well-represented, due largely to National Museums Scotland dating programmes (eg, Sheridan 2003; 2004; 2007a; 2007b). SPD and other datesas-data approaches are thus best carried out alongside a programme of archaeological analysis to understand which patterns are genuine and which reflect differing research histories.

Permutation testing provides a means of empirically comparing traditions and regions. Focusing on cremation, Figure 4 shows four test results: three comparing cremation in the case study regions to the overall cremation pattern, and one comparing all cremations to the full burial dataset. This latter plot demonstrates that cremation occurred at expected levels (the level if, theoretically, mourners were selecting burial rites at random) during 3000-2600 cal BC, at lower than expected levels during 2600-2000 cal BC, and at higher than expected levels during 1950-1500 cal BC (p<0.001). All three regional cremation permutations vary significantly from the overall pattern (p<0.05), indicating that the differences are unlikely to have arisen by chance and instead require archaeological explanation.

Funerary rites

The spatio-temporal analyses discussed above have grouped burials into a small number of categories: cremated, articulated and disarticulated. Yet archaeological and osteological analysis reveal greater diversity than this might suggest. Table 1 compares the burials of the BPP dataset with the newly collated atypical burials, utilising an expanded range of categories including those describing mixed rite deposits.

In the case of the atypical burials, the burial type is given for the burial deposit as a whole: while the BPP burials are mostly individual inhumations, the atypical burials often contain multiple individuals who may display different funerary treatments (as in the Boscombe Bowmen grave: Fitzpatrick 2011). While all the BPP burials have been analysed osteologically, only 175 (64%) of the atypical burials have any available osteological information, with fewer than half of these meeting modern osteological reporting standards. Across the 175 analysed atypical burials, the minimum number of individuals (MNI) present is 341 (\bar{x} =1.95). MNI varies by burial type, however, with some disarticulated and mixed rite burials containing five or more individuals and all analysed cremation only deposits having a MNI of either one or two. If the 97 unanalysed burials each contain at least one individual this brings the MNI for the atypical group to 438; the true number likely being higher.

Although analysis of burial activity necessitates some form of categorisation, variability is perhaps the defining characteristic of the burial rites explored in this study. The burial groupings also demonstrate a degree of blurring at the edges of established categories. For example, alongside fully oxidised cremated remains we find articulated inhumations which have been charred within the grave (Brandon, Co. Durham; Trechmann 1914), disarticulated burials charred elsewhere (Aldwincle, Northamptonshire; Jackson 1976) and mixed deposits of cremated and disarticulated material (Marsden Cist 2 at Bee Low, Derbyshire; Marsden 1970). Similarly, disarticulation can be seen as a spectrum: from bodies with elements removed (Babraham Road, Cambridgeshire; Hinman 2001), to scattered groups of bones (Stanton Harcourt XV, Oxfordshire; Hamlin & Case 1963), to isolated skeletal elements (An Corran, Skye, Highland; Saville et al. 2012). Collectively, the burials suggest the existence of a spectrum of practices involving the application of fire and the separation of skeletal elements, rather than cremation/inhumation or intact/disarticulated dichotomies.

Grave good associations

This study primarily conceptualises the typical Beaker burial in terms of treatment of the body, but association with 'Beaker package' artefacts also plays a role in the conventional definition of this group. Of course,

many Beaker period burials are unaccompanied by either Beakers or other surviving grave goods. Among the BPP's 'typical' burials, 39% are without a vessel and 23% have no recorded grave goods. While some individuals were provided with large and diverse artefact assemblages, almost half of the accompanied typical burials had just one artefact type - most commonly flint tools and flakes (Parker Pearson et al. 2019b; our analysis). The atypical burials are slightly less likely to be furnished: 43% were without a vessel and 28% were entirely unaccompanied. As with the BPP dataset, rich assemblages of artefacts are present (potentially including a rare gold 'sun disc' ornament at Farleigh Wick, Wiltshire; Underwood 1946, 1947). However, such associations are not the norm: flint tools/flakes are the most common artefact type. Figure 5 demonstrates the similarity of profiles for non-ceramic grave goods between burial types.

The conventionally understood 'Beaker package' furnished burial is therefore rare. However, it is possible to identify groupings of co-occurring objects among those burials which do contain multiple artefacts. Figure 6 presents a Jaccard similarity network for inter-relationships between grave goods for each of the three burial groupings. Several differences can be observed between these. Artefacts with cremated remains have the lowest degree of relatedness reflecting fewer multi-object grave good assemblages. There are two main networks of inter-related cremation 'packages'. Stone blocks (a broad category, here comprising sponge fingers, a quern rubber, a stone pendant, and 'utility stones') are found with flint daggers, jet buttons, and bone dress-pins. Flint daggers and arrowheads are found together but arrowheads also form part of the second 'cremation package', which centres on organic remains and flint flakes; recognisable artefacts such as bone toggles and antler spatulae are rare.

Among the disarticulated burials there are two separate clusters of artefacts: a small group containing one or more ornaments only and a second group containing a wide range of classic Beaker-package artefacts. The latter group most commonly centres on flint daggers and charcoal, co-occurring with a variety of tools. The articulated (BPP) assemblages are more varied: flint daggers form a focal point for many but other package subsets are identifiable. These assemblages are more likely to contain a wide

TABLE 1. SUMMARY OF RITES PRACTISED AMONG ATYPICAL AND TYPICAL BURIALS OF THE BEAKER PERIOD

Burial type	Atypical (deposits)	Atypical %	BPP (individuals)	BPP %
Typical (crouched, articulated)	0	_	263	78.5
Typical – double burial	0	_	11	3.3
Articulated, tightly flexed (bound?)	1	0.4	11	3.3
Articulated, in an unusual position	2	0.7	4	1.2
Articulated, with charring	2	0.7	1	0.3
Cremated	136	50.0	1	0.3
Mummified	4	1.5	1	0.3
Disarticulated	77	28.3	14	4.2
Disarticulated scatter/isolated element	21	7.7	5	1.5
Mixed rite: disarticulated with articulated	8	2.9	0	_
Mixed rite: cremated with disarticulated	10	3.7	0	_
Mixed rite: cremated with articulated	9	3.3	2	0.6
Mixed rite: articulated, disarticulated, & cremated	2	0.7	3	0.9
Unknown	0	-	19	5.7
Total	272	100%	335	100%

variety of object categories: tools, ornaments, and weapons co-occur, while metal objects are found most commonly in these graves.

While many of the artefacts are complete, the vessels associated with atypical burials are notably fragmentary: among those with Beaker associations 36% (49) were accompanied only by sherds. Some burials contained only one or two sherds while others contained large ceramic assemblages, such as pit 1374 at Beechbrook Wood, Kent, a 'domestic' deposit containing cremated human bone alongside 1616 g of Beaker sherds from several different vessels (Booth & Smith 2011). This is in marked contrast to the BPP vessels, almost all of which were complete. However, Late Neolithic cremation assemblages have no whole vessels, only sherds, and then in only 10% of burials. Other Late Neolithic grave goods are similarly sparse but the most commonly occurring are flint flakes, animal bone, antler, bone dress pins, and stone tools (Willis 2020; 2021), items that also co-occur in Beaker period cremation deposits.

Demographic profiles

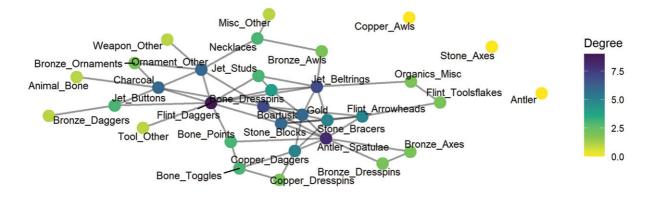
The demographic profile differs between funerary practices. Figure 7 compares the BPP's 263 typically buried individuals to the 341 atypically buried individuals with available osteological data. The BPP burials are dominated by young adults, particularly males. Selection criteria for the BPP focused on presence of the permanent 2nd molar thereby excluding aged individuals with missing or severely worn molars. Since the 2nd molar is not usually complete until the age

of 8, these criteria also largely excluded young children and especially infants and neonates (but not older subadults) from the sample (Montgomery et al. 2019, 29, 375).

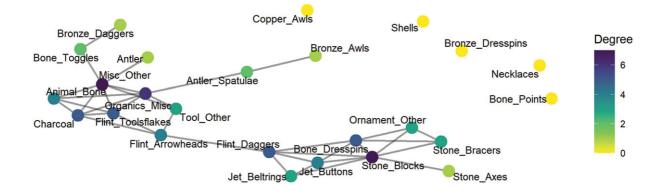
In both atypical burial groups many individuals have no specific age or sex estimate. The adults with an estimated age category show a similar profile to the typical burials. Males are more common than females and older adults, particularly older adult women, are scarcer; common findings in archaeologdemography (Chamberlain 2006, 89–91). However, the demographic profiles differ markedly from each other in the non-adult age categories. While subadults comprise only 14% of the BPP sample, they account for 29% and 45% respectively of the cremated and disarticulated individuals with age estimates. The atypical subadult prevalence can be compared more fruitfully with the large sample of British Bronze Age individuals compiled for Roberts and Cox's (2003) multi-period pathology review. They identify 291 Bronze Age inhumations (2500-800 BC, though the vast majority are from the Beaker period/Early Bronze Age), 26% (75) of which were subadults (Roberts & Cox 2003, 75). Using a 2×2 contingency table to compare this to the atypical disarticulated burials, the proportion of subadults is significantly higher among the disarticulated group $(\chi^2(1)=19.885, p<0.001)$. There is no such difference with the cremation burials.

The cremation burials reveal clear differences with those of the Late Neolithic in Britain which, like those of the Middle Neolithic before them, include more women than men (Willis 2020; 2021). In terms of

Articulated



Cremated



Disarticulated

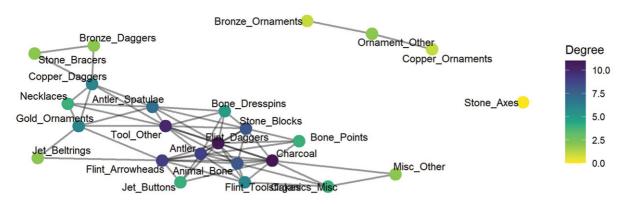
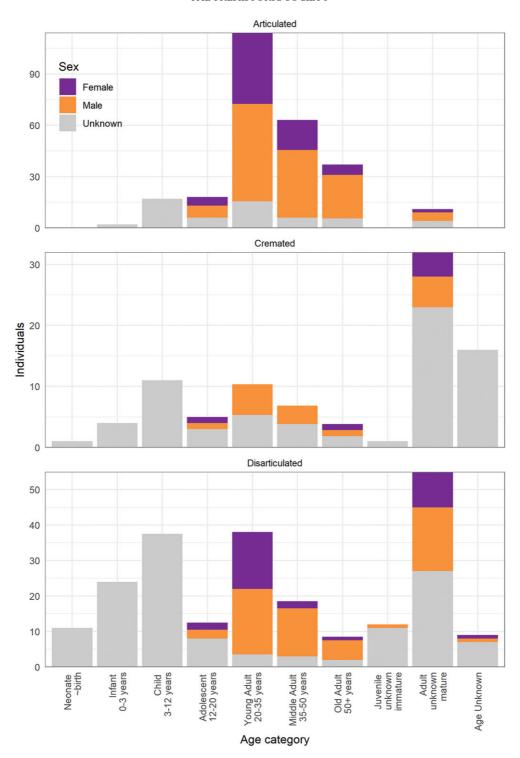


Fig. 6.

Network plots presenting the Jaccard similarity between co-occurring artefacts in graves for each burial type. Unconnected nodes are grave goods which are not found alongside other artefact types



 $\label{eq:Fig.7.} Fig.~7.$ The demographic profile of individuals within each Beaker period burial type

age profiles, children account for a greater proportion of individuals with age estimates – 34% as opposed to 29% – but the difference is not significant.

Since many of the burials in the atypical dataset contain multiple individuals, Figure 8 demonstrates the different demographic profile between atypical burials containing one, two, or more individuals. Adult males are mostly found in single burials; subadults are more common in burials containing multiple individuals.

DISCUSSION

These results demonstrate the widespread existence of atypical burial practices throughout the British Beaker period. These took many forms and, while the rites principally involve cremation, disarticulation, and articulated inhumation, many variations occur within these three broad categories. Our spatio-temporal analyses demonstrate continuity in cremation and disarticulation practices from the Late Neolithic to the Early Bronze Age, even though their relative frequency varied across Britain. Many of these atypical burials are associated with 'Beaker package' material culture, while demographic patterns indicate that communities sometimes selected different rites according to the age and sex of the deceased. These findings and their implications can now be further explored.

The timing, spread, and distribution of Beaker period burial practices

Our summed probability distribution (SPD) analysis of the burial evidence confirms the results of the BPP's Bayesian analysis of the radiocarbon data (Jay et al. 2019a; Parker Pearson et al. 2016) that the timing and speed of the spread of typical Beaker burial traditions varied across Britain, with Wessex and eastern Scotland both revealing early Beaker burial activity. Our results further reveal that eastern Scotland saw a slower uptake of typical burial practices than Wessex, despite the comparable start dates in the two regions. The earliest dates in the Yorkshire Wolds region are much later, potentially after Needham's fission horizon (2005), but thereafter the uptake of articulated inhumation was rapid.

Reasons for the differential timing and speed of uptake of Beaker burial across these three regions may be found in the evident mortuary variability of the preceding period. The Late Neolithic of Britain was a period in which cremation traditions were dominant (Willis 2020; 2021; Willis *et al.* 2016). Yet our SPD analyses demonstrate that disarticulated inhumation burials reached a level comparable to that of cremation across Britain as a whole.

Into a context of regional variability we can place the appearance and proliferation of Beaker-associated articulated inhumation burials. These new practices added to the repertoire of available mortuary rites rather than replacing pre-existing traditions: cremation and disarticulated burial continued with roughly the same prevalence across the Neolithic–Chalcolithic transition. SPD and KDE analyses confirm that in no modelled scenario does cremation cease in Britain within this time frame.

When considering regional variation, the sparseness of the dated Late Neolithic evidence becomes problematic for SPD analysis. Neither eastern Scotland nor the Yorkshire Wolds provide evidence for continuity of practices either side of 2500 cal BC: the former because we find a hiatus in dated cremation deposits during the Chalcolithic and the latter because the earliest dated cremation falls within the Chalcolithic. Our intensity analysis, incorporating undated evidence as well, indicates that in some cases the absence of dated burial evidence in a region reflects disparities in research coverage rather than an absence of evidence; further programmes of analysis targeting under-studied regions would be valuable to improve comparability across Britain, particularly in the Late Neolithic.

In each region where we see a different pattern of Neolithic and Chalcolithic burial activity we can use this evidence to explore the variable interaction between incoming Beaker-associated inhumation traditions and the region's pre-existing practices. The variable rate at which typical Beaker burials proliferated within each area may be taken to indicate differences in the success of incoming groups or in their reception by existing communities. However, a closer inspection of the nature of the burial evidence argues against interpreting these rites as competing traditions belonging to separate communities. Instead, burials of different types co-occur at the same sites, even within the same grave, and frequently show hybrid features that are more suggestive of a meeting and merging of traditions. The regional differences emerging from these interactions may then develop through the complex pattern of diverse practices previously demonstrated for the Early Bronze Age (eg Healy & Housley 1992; Jones & Quinnell 2006;

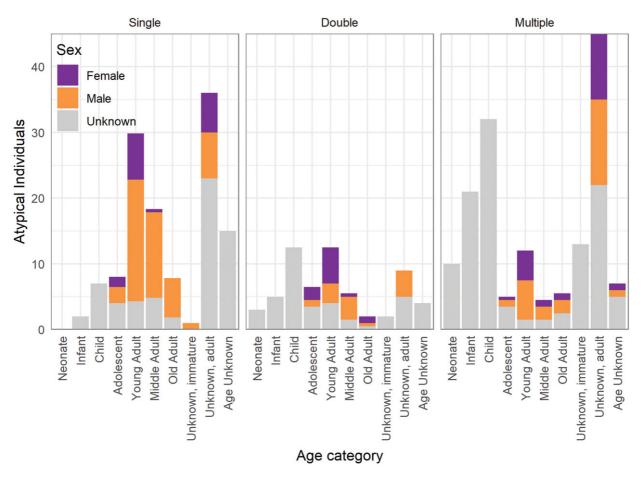


Fig. 8.

The demographic profile of atypical (cremated and disarticulated) burials containing one, two, or more individuals

Curtis & Wilkin 2012; Fowler 2013; 2015), with a lack of interaction potentially also leaving its own traces (eg Mullin 2001).

Funerary diversity and social identity during the Beaker period

Regional variation in Beaker form and style is well-established (Clarke 1970; Lanting & van der Waals 1972; Boast 1995), as are differences in body positioning and grave alignment norms (Shepherd 2012, 274) and grave good associations (Parker Pearson *et al.* 2019a, 115–69). The atypical burials add to this evidence: some regions, such as the Yorkshire Wolds, utilised a narrow range of artefacts as grave goods, provided them sparingly, and left a high proportion of burials unaccompanied. In contrast, Wessex has

an unusually high proportion of burials accompanied by multiple artefact types across all burial categories. Yet there is no strong evidence that these trends reflect differential access to resources; the same materials and artefact types that appear throughout Britain were instead deployed in different ways. We suggest that this emerging pattern adds to existing evidence for differing cultural norms between contemporary communities in Britain.

Turning to the different forms of burial practice, assemblages associated with cremation burials tend more towards non-diagnostic and organic artefacts (especially charred plant remains). This does not preclude the presence of other artefacts earlier in the funerary process, including pyre goods (McKinley 1994), and some burials contain both. For example, cremation F34 at Broomhouses, Dumfries &

Galloway, was buried with a burnt dress pin and flints but an unburnt wristguard (Kirby 2011, 29). The historically presumed link between grave goods and personal wealth/status has already been widely critiqued (eg, Brück 2019) and likewise we see no reason to interpret burials with sparser furnishings as necessarily those of lower status individuals.

The greatest factor affecting funerary variability is revealed through the demographic characteristics of the deceased. Our research confirms the long standing association between Beaker-associated burials and adult male individuals, with men outnumbering women 2:1 across both the typical and atypical datasets. Young adult males in particular are overrepresented, a finding which has historically been taken to indicate that the Beaker phenomenon was in some way associated with masculine identities or classically male coded activities, from high status cult membership to long distance travel (Frieman et al. 2019). We find instead that the typical Beaker burial rite was one of several funerary practices utilised by contemporaneous groups in Britain. A subset of younger adult men was preferentially selected for articulated inhumation burial while other demographic groups had different normative funerary rites. The historical focus on articulated inhumations has led to an over-emphasis of the significance of adult men in the Beaker period and the systematic underrecognition of women and children.

Although the atypical rites appear to have been less restrictive in application we still find a substantial under-representation of women, particularly those in older age categories. Few cremation burials allow for estimates of biological sex but, for those that do, our results reproduce McKinley's (1997) findings of a disproportionately low weight for female burials compared to their male counterparts (Wilcoxon rank sum test: W=25, p=0.04).

Children are present in low numbers among both cremation and articulated inhumation burials of the period but are significantly more numerous among disarticulated inhumation burials, predominantly reflecting their increased presence among burials containing multiple individuals. In this period, most identified subadults were found in disarticulated inhumation burials; whether placed alongside other children in entirely disarticulated deposits such as that at Mill Road, West Lothian (Cook 2000), or paired with articulated adults to create mixed rite deposits as at Dryburn Bridge, East Lothian (Dunwell 2007).

This practice seems to apply to infants and pre-adolescent children up to around 12 years of age, a finding which corresponds with emerging evidence for Chalcolithic and Bronze Age funerary treatment of subadults elsewhere in Europe (Herrero-Corral *et al.* 2019; Haughton 2021).

The reasons for pairing individuals together, whether in the same grave or inside the same vessel (as in grave 919 at Barrow Hills, Oxfordshire; Barclay & Halpin 1999, 55–9), can in most cases only be guessed at. However, aDNA analysis reveals that some individuals were buried alongside relatives, and co-burial reflecting other (genetically invisible) relationships also occurred (Rebay-Salisbury 2018; Brück 2021; Fowler *et al.* 2022).

The nature of the Beaker transition

Alongside evidence for regional variation and the differential treatment of individuals on the basis of their age and sex, the significance of different rites in this period should also be considered in terms of their potential associations with individuals' genetic ancestry. The SPD analysis demonstrates that cremation and disarticulation both continued at unchanged levels from the Late Neolithic into the Chalcolithic. This would, at first glance, suggest that a cremating community persisted in Britain after the appearance of the Beaker phenomenon. However, British Late Neolithic practices are not the only possible source of these rites: they could also be influenced by minority practices within incoming groups, or novel developments arising from the meeting of communities, as suggested in the Dutch and German material previously discussed. Contextual analysis is needed to establish if these traditions are the genuine hypothesised 'survivals'.

To this end, we find cremation and disarticulation adopted in contexts which are otherwise normative for the period: our artefact analysis suggests that at least some of the atypical practices were situated within the same cultural sphere as the typical ones. On the other hand, the similar choices for the more common grave goods between Late Neolithic and Beaker period *cremations* could suggest a degree of continuity in this aspect of the funerary rite. In terms of the demographic profile of the cremations, the Late Neolithic burials – with more women than men and a relatively high percentage of children (Willis 2020; 2021) – is substantially different to that for the

Beaker period which is much more closely aligned with the profile for contemporaneous articulated inhumation burials. Other burials of the Beaker period lack features outwardly similar to the typical Beaker burials and could feasibly represent persisting 'culturally Neolithic' practices. Taken together, these lines of evidence — including discontinuity in demographic profiles but some continuity in the grave goods — suggest Beaker period cremation rites reflect the activities of communities who were aware of and influenced by a complex mix of traditions.

The difficulty of creating such a distinction - and attempting to infer wider cultural or genomic affinity through burial practices - is compounded by the genetic evidence presented by Olalde et al. (2018). Although the majority of individuals included in their study were buried in a typical manner, several disarticulated burials were sampled for aDNA analysis. There is no difference between the gpADM modelled Neolithic ancestry proportion for the articulated (N=47, \bar{x} =0.0535) and disarticulated (N=20, \bar{x} =0.0597) Chalcolithic and Early Bronze Age inhumations in their study (t(24.32)=0.182, p=0.86). While this does not preclude the existence of genetically isolated communities, particularly if they practised cremation exclusively, the burial evidence here provides little support for the suggestion of culturally isolated groups on the basis of a dichotomy between articulated and disarticulated burial.

Analysis of these patterns of admixture by Booth *et al.* (2021) confirms the overwhelming association of typical and disarticulated Beaker period burials with high proportions of steppe related ancestry. However, their analysis also finds individuals as late as 2100 BC with substantial levels of Neolithic type ancestry, implying that Neolithic descended groups are likely to have persisted alongside those displaying mixed ancestry even though there is no sign of them in the inhumation funerary rites. Alongside the evidence for atypical rites presented here we should, of course, bear in mind that the vast majority of people who lived in Britain during the 3rd millennium BC must have received funerary rites that have left little or no archaeological trace at all (Parker Pearson 2016).

Without the possibility of recovering genetic material from cremated remains, the models of Booth *et al.* (2021) and Armit and Reich (2021) proposing that Neolithic-descended groups persisted across the transition and continued their traditional practices are difficult to test conclusively. Currently, genomic

affinity remains highly correlated with typical Beaker burial practices, as well as rites involving disarticulation (although the sample is small), after 2450 cal BC. In the case of cremation burial, there are hints that it did not remain predominantly a rite of those with largely or entirely insular Neolithic ancestry. More likely, cultural syncretism and diversity of practice were the norm, regardless of the degree to which genetically distinct communities practiced intermarriage. The Beaker transition in Britain involved extended interaction between incoming and pre-existing communities but genetic admixture and cultural diversity have to be considered as two separate dimensions of this process.

CONCLUSIONS

By moving beyond established stereotypes of what constituted Beaker burial practices in Britain we can widen their definition to encompass funerary diversity that includes cremation, disarticulation, and other combinations of these. Integrated analyses of archaeological, osteological, radiocarbon, and genomic evidence reveals patterns within the funerary record that sheds light on contemporaneous social practices and processes. Some if not most children were treated differently in death, for example, and were frequently selected for rites involving the disintegration of the body.

As well as prompting a reconsideration of how Beaker period burial should be defined, the evidence presented here contributes to wider understandings of the Neolithic-Bronze Age transition in Britain. While 'Neolithic' practices of cremation and disarticulation continued into the Chalcolithic, these were not necessarily restricted to communities of largely or entirely insular Neolithic derived genomic ancestry. In fact, after the arrival of the Beaker phenomenon, the currently small sample of disarticulated individuals with recovered genetic information suggests that this rite appears to have been primarily utilised by groups with steppe related ancestry. All these observations imply considerable complexity in the processes of cultural and genetic interaction and change across the Chalcolithic. We propose that the archaeological evidence is best explained by a long process of transition involving multi-directional cultural exchange between communities across Britain who had regional, cultural and even local group-specific differences in their ways of life and death.

Note

¹The calibration and summing of radiocarbon dates produces SPD plots of varying shapes. To establish if these curves indicate meaningful change over time we can compare them to an expected pattern, as a form of hypothesis testing. One approach to this is to compare our empirical SPD to an existing shape, such as uniform distribution ('no change over time') or exponential growth. Permutation testing is another approach, in which we compare the shape of defined groups of dates within our dataset (eg those from Wessex) against randomly sampled groupings of dates from the same dataset. If they differ significantly then our grouping is not a random occurrence and any significant deviations from the 'expected' curve we have generated are deserving of further archaeological investigation.

Acknowledgements This paper contains research by AB which was funded by an AHRC PhD studentship award through the LAHP Doctoral Training Partnership at UCL Institute of Archaeology. Radiocarbon determinations for the project were funded through a NERC NCRF grant (NF/2017/2/12), and Alison Sheridan assisted with additional dates for Scottish material at NMS. AB wishes to thank the curators who facilitated data collection at Dorset County Museum; Heritage Eastbourne; Hull and East Riding Museum; Sussex Past; Salisbury Museum; Wrexham Museum; and Birmingham Museums and Art Galleries, where Mike Hodder was also particularly helpful and generous with his time. We would also like to extend our thanks to Enrico Crema and Andy Bevan for rearbon guidance; to Tom Booth for many helpful discussions of the material; to Ulrike Sommer, Stephen Shennan, and Joanna Brück for their suggestions and support during the research process; and to Christie Willis for kindly allowing access to unpublished results. Thanks are also due to the anonymous reviewers for their helpful comments.

BIBLIOGRAPHY

- Abercromby, J. 1912. A Study of the Bronze Age Pottery of Great Britain and Ireland and its Associated Grave-Goods. Oxford: Clarendon Press
- Allen, M.J., Gardiner, J. & Sheridan, J.A. (eds). 2012. Is There a British Chalcolithic? People, Place and Polity in the Later 3rd Millennium. Oxford: Prehistoric Society Research Papers 4
- Appleby, J. 2013. Temporality and the transition to cremation in the late third millennium to mid-second millennium BC in Britain. *Cambridge Archaeological Journal* 23(1), 83–97

- Armit, I. & Reich, R. 2021. The return of the Beaker folk? Rethinking migration and population change in British prehistory. *Antiquity* 95, 1464–77
- Baddeley, A., Rubak, E. & Turner, R. 2015. Spatstat: Spatial Point Pattern Analysis, Model-Fitting, Simulation, Tests [https://CRAN.R-project.org/package=spatstat]
- Barclay, A. & Halpin, C. 1999. Excavations at Barrow Hills, Radley, Oxfordshire. Volume 1: The Neolithic and Bronze Age monument complex. Oxford: Oxford Archaeological Unit Thames Valley Landscapes 11
- Barrett, J. 1994. Fragments from Antiquity: An archaeology of social life in Britain, 2900–1200 BC. Oxford: Blackwell Beckerman, S.M. 2011–2012. Dutch Beaker chronology reexamined. Palaeohistoria 53/54, 25–64
- Bevan, A. 2017. Radiocarbon dataset and analysis from Bevan, A., Colledge, S., Fuller, D., Fyfe, R., Shennan, S. & Stevens, C. 2017. Holocene fluctuations in human population demonstrate repeated links to food production and climate [Dataset]. *UCL Institute of Archaeology* [http://dx.doi.org/10.14324/000.ds.10025178]
- Bloxam, A. 2020. *The Other Beaker People: funerary diversity in Britain* c. 2450–1950 BC. Unpublished PhD Thesis. University College London
- Boast, R. 1995. Fine pots, pure pots, Beaker pots. In I. Kinnes & G. Varndell (eds). *Unbaked Urns of Rudely Shape: Essays on British and Irish pottery for Ian Longworth*, 69–80. Oxford: Oxbow Monograph 55
- Booth, P. & Smith, A. (eds). 2011. On Track: The archaeology of High Speed I Section I in Kent. Oxford: Oxford & Wessex Archaeology
- Booth, T.J. & Brück, J. 2020. Death is not the end: radiocarbon and histo-taphonomic evidence for the curation and excarnation of human remains in Bronze Age Britain. *Antiquity* 94, 1186–203
- Booth, T.J., Brück, J., Brace, S. & Barnes, I. 2021. Tales from the supplementary information: ancestry change in Chalcolithic–Early Bronze Age Britain was gradual with varied kinship organization. *Cambridge Archaeological Journal* 31(3), 379–400
- Brodie, N. 2001. Technological frontiers and the emergence of the Beaker culture. In Nicolis (ed.) 2001, 487–96
- Bronk Ramsey, C. 2017. Methods for summarizing radiocarbon datasets. *Radiocarbon* 59(6), 1809–33
- Brück, J. 2019. Personifying Prehistory: Relational ontologies in Bronze Age Britain and Ireland. Oxford: Oxford University Press
- Brück, J. 2021. Ancient DNA, kinship and relational identities in Bronze Age Britain. *Antiquity* 95, 228–37
- Burgess, C. & Shennan, S. 1976. The Beaker phenomenon: some suggestions. In C. Burgess & R. Miket (eds), Settlement and Economy in the Third and Second Millennia B.C., 309–26. Oxford: British Archaeological Report 33
- Carlin, N. 2020. Haunted by the ghost of the Beaker folk? *The Biochemist* 42(1), 30–3
- Chamberlain, A.T. 2006. *Demography in Archaeology*. Cambridge: Cambridge University Press
- Clark, G. 1966. The invasion hypothesis in British Archaeology. *Antiquity* 40, 172–89

- Clarke, D.L. 1970. Beaker Pottery of Great Britain and Ireland. Cambridge: Cambridge University Press
- Clarke, D.L. 1976. The Beaker network social and economic models. In Lanting & van der Waals (eds) 1976, 459–77
- Cleal, R. & Pollard, J. 2012. The revenge of the native: monuments, material culture, burial and other practices in the third quarter of the 3rd millennium BC in Wessex. In Allen *et al.* (eds) 2012, 317–32
- Collard, M., Edinborough, K., Shennan, S. & Thomas, M.G. 2010. Radiocarbon evidence indicates that migrants introduced farming to Britain. *Journal of Archaeological Science* 37(4), 866–70
- Cook, M. 2000. An Early Bronze Age multiple burial cist from Mill Road Industrial Estate, Linlithgow, West Lothian. Proceedings of the Society of Antiquaries of Scotland 130, 77–91
- Crema, E.R. 2012. Modelling temporal uncertainty in archaeological analysis. *Journal of Archaeological Method and Theory* 19(3), 440–61
- Crema, E.R. & Bevan, A. 2021. Inference from large sets of radiocarbon dates: software and methods. *Radiocarbon*. 63(1), 23–39
- Crema, E.R., Bevan, A. & Lake, M.W. 2010. A probabilistic framework for assessing spatio-temporal point patterns in the archaeological record. *Journal of Archaeological Science* 37(5), 1118–30
- Crema, E.R., Habu, J., Kobayashi, K. & Madella, M. 2016. Summed probability distribution of ¹⁴C dates suggests regional divergences in the population dynamics of the Jomon period in Eastern Japan. *PLOS ONE* 11(4), e0154809
- Curtis, N.G.W & Wilkin, N.C.A. 2012. The regionality of beakers and bodies in the Chalcolithic of north-east Scotland. In Allen *et al.* (eds) 2012, 237–56
- Curtis, N.G.W & Wilkin, N.C.A. 2019. Beakers and bodies in north-east Scotland: a regional and contextual study. In Parker Pearson *et al.* (eds) 2019b, 211–52
- Czebreszuk, J. (ed) 2014. Similar but Different. Bell Beakers in Europe. Leiden: Sidestone Press
- Drenth, E. 2014. Cremation graves of the Bell Beaker Culture from the Netherlands: social, spatial and temporal aspects. In M. Besse (ed.), Around the Petit-Chasseur Site in Sion (Valais, Switzerland) and New Approaches to the Bell Beaker Culture, 307–18. Oxford: Archaeopress
- Drenth, E. & Hogestijn, W.J.H. 2001. The Bell Beaker Culture in the Netherlands: the state of research in 1998. In Nicolis (ed.) 2001, 309–32
- Drenth, E. & Hogestijn, W.J. 2014. A cremation grave with AOO pottery at Vaassen (Epe, prov. of Gederland, NL). *Notae Praehistoricae* 34, 105–13
- Dunwell, A. 2007. Cist Burials and an Iron Age Settlement at Dryburn Bridge, Innerwick, East Lothian. Edinburgh: Scottish Archaeological Internet Report (SAIR) 24
- Fitzpatrick, A.P. 2011. The Amesbury Archer and the Boscombe Bowmen: Bell Beaker burials at Boscombe Down, Amesbury, Wiltshire. Salisbury: Wessex Archaeology Report 27

- Fowler, C., 2013. The Emergent Past: A relational realist archaeology of early Bronze Age mortuary practices. Oxford: Oxford University Press
- Fowler, C. 2015. Change and continuity in Early Bronze Age mortuary rites: a case study from Northumberland. In J.R. Brandt, H. Roland & M. Prusac (eds), *Death and Changing Rituals: Function and meaning in ancient funer-ary practices*, 45–91. Oxford: Oxbow Books
- Fowler, C., Olalde, I., Cummings, V., Armit, I., Büster, L.,
 Cuthbert, S., Rohland, N., Cheronet, O., Pinhasi, R. &
 Reich, D. 2022. A high-resolution picture of kinship practices in an Early Neolithic tomb. *Nature* 601, 584–87
- Frieman, C.J., Teather, A. & Morgan, C. 2019. Bodies in motion: narratives and counter narratives of gendered mobility in European later prehistory. *Norwegian Archaeological Review* 52(2), 148–69
- Furholt, M. 2018. Massive migrations? The impact of recent aDNA Studies on our view of third millennium Europe. *European Journal of Archaeology* 21(2), 159–91
- Furholt, M. 2019. Re-integrating archaeology: a contribution to aDNA studies and the migration discourse on the 3rd millennium BC in Europe. *Proceedings of the Prehistoric Society* 85, 115–29
- Gibson, A.M. 2007. A Beaker veneer? Some evidence from the burial record. In Larsson & Parker Pearson (eds) 2007, 47–64
- Gibson, A.M. 2016. Who were these people? A sideways view and a non-answer of political proportions In K. Brophy, G. MacGregor & I. Ralston (eds), *The Neolithic of Mainland Scotland*, 57–73. Edinburgh: Edinburgh University Press
- Gibson, A.M. & Bayliss, A. 2010. Recent work on the Neolithic round barrows of the Upper Great Wold Valley, Yorkshire. In J. Leary, T. Darvill & D. Field (eds), Round Mounds and Monumentality in the British Neolithic and Beyond, 72–107. Oxford: Neolithic Studies Group Seminar Papers 10
- Hamlin, A. & Case, H. 1963. Excavations of ring ditches and other sites at Stanton Harcourt, Oxoniensa 28, 1–52
- Handcock, M.S., Hunter, D.R., Butts, C.T., Goodreau, S.M. & Morris, M. 2003. Statnet: Software tools for the Statistical Modeling of Network Data. [http://statnet.org]
- Harding, J. & Healy, F. 2007. A Neolithic and Bronze Age Landscape in Northamptonshire: The Raunds Area Project. Swindon: English Heritage
- Healy, F. & Housley, R.A. 1992. Nancy was not alone: human skeletons of the Early Bronze Age from the Norfolk peat fen. Antiquity 66, 948–55
- Heyd, V. 2017. Kossinna's smile. Antiquity 91, 348-59
- Haughton, M. 2021. Seeing children in prehistory: a view from Bronze Age Ireland. Cambridge Archaeological Journal 31(3), 363–78
- Heise, M.E. 2014. Heads North or East? A Re-Examination of Beaker Burials in Britain. Unpublished PhD Thesis, University of Edinburgh
- Herrero-Corral, A.M., Garrido-Pena, R. & Flores Fernández, R. 2019. The inheritors: Bell Beaker children's tombs in Iberia and their social context (2500–2000 cal BC). *Journal of Mediterranean Archaeology* 32(1), 63–87

- Hille, A. 2001. Cremation burials at the periphery of the distribution area (Nordharzvorland). In Nicolis (ed.) 2001, 613–6
- Hinman, M. 2001. Ritual activity at the foot of the Gog Magog Hills, Cambridge. In J. Brück (ed.), *Bronze Age Landscapes: Tradition and transformation*, 33–40. Oxford: Oxbow Books
- Hofmann, D. 2015. What have genetics ever done for us? The implications of aDNA data for interpreting identity in Early Neolithic Central Europe. European Journal of Archaeology 18(3), 454–76
- Jackson, D.A. 1976. The excavation of Neolithic and Bronze Age sites at Aldwincle, Northants 1967–71. Northamptonshire Archaeology 11, 12–70
- Jay, M., Richards, M.P. & Marshall, P. 2019a. Radiocarbon dates and their Bayesian modelling. In Parker Pearson et al. (eds) 2019, 43–80
- Jay, M., Montgomery, M., Parker Pearson, M. & Sheridan, J.A. 2019b. Appendix 1: The pre-2500 BC individuals. In Parker Pearson et al. (eds) 2019b, 492–500
- Jones, A.M. & Quinnell, H. 2006. Cornish Beakers: new discoveries and perspectives. Cornish Archaeology 45, 31–69
- Jones, S. 1997. The Archaeology of Ethnicity: Constructing identities in the past and present. London: Routledge
- Kirby, M. 2011. Lockerbie Academy: Neolithic and early historic timber halls, a bronze age cemetery, an undated enclosure and a post-medieval corn-drying kiln in south-west Scotland Edinburgh: Scottish Archaeological Internet Report (SAIR) 46
- Lanting, J.N. 2007–2008. De NO-Nederlandse/NW-Duitse Klokbekergroep: culturele achtergrond, typologie van het aardewerk, datering, verspreiding en grafritueel. *Palaeohistoria* 49/50, 11–326
- Lanting, J.N. & Plicht, J. van der 1999. De ¹⁴C-chronologie van de Nederlandse pre- en protohistorie, III: Neolithicum. *Palaeohistoria* 41/42, 1–110
- Lanting, J.N. & Waals, J.D. van der 1972. British Beakers as seen from the Continent. *Helinium* 12, 20–46
- Larsson, M. & Parker Pearson, M. (eds). 2007. From Stonehenge to the Baltic: Living with cultural diversity in the third millennium BC. Oxford: British Archaeological Report S1692
- Lefebvre, A. 2009. Les sépultures du Néolithique final/ Bronze ancient en Lorraine: vers l'émergence de nouvelles problématiques. In C. Jeunesse & A. Denaire (eds), Du Néolithique Final au Bronze Ancien dans le Nord-Est de la France: Actualité de la recherche, 103–18. Zimmersheim: Association pour la Promotion de la Recherche Archéologique en Alsace
- Lohof, E. 1994. Tradition and change: burial practices in the Late Neolithic and Bronze Age in the north-eastern Netherlands. *Archaeological Dialogues* 1(2), 98–118
- Lohof, E. & Drenth, E. 2016. Reflections on Early and Middle Bronze Age dynamics in burial ritual and house building in the Netherlands. In A. Müller & R. Jansen (eds), *Metaaltijden 3: Bijdragen in de studie van de metaaltijden*, 65–80. Leiden: Sidestone Press

- Lucas, G.M. 1996. Of death and debt: a history of the body in Neolithic and Early Bronze Age Yorkshire. *Journal of European Archaeology* 4(1), 99–118
- Manning, K., Timpson, A., Colledge, S., Crema, E. & Shennan, S. 2015. The Cultural Evolution of Neolithic Europe (EUROEVOL) Dataset [http://discovery.ucl.ac.uk/1469811/]
- Marsden, B.M. 1970. The excavation of the Bee Low round cairn, Youlgreave, Derbyshire. *Antiquaries Journal* 50(2), 186–215
- McKinley, J.I. 1994. A pyre and grave goods in British cremation burials: have we missed something? *Antiquity* 68, 132–4
- McKinley, J.I. 1997. Bronze Age 'barrows' and funerary rites and rituals of cremation. *Proceedings of the Prehistoric Society* 63, 129–45
- McLaughlin, T.R. 2019. On applications of space–time modelling with open-source ¹⁴C age calibration. *Journal of Archaeological Method and Theory* 26(2), 479–501
- Montgomery, J., Evans, J. & Towers, J. 2019. Strontium isotopic analysis. In Parker Pearson *et al.* (eds) 2019b, 369–406
- Müller, J. & Willigen, S. van 2001. New radiocarbon evidence for European Bell Beakers and the consequences for the diffusion of the Bell Beaker phenomenon. In Nicolis (ed.) 2001, 59–80
- Mullin, D. 2001. Remembering, forgetting and the invention of tradition: burial and natural places in the English Early Bronze Age. *Antiquity* 75, 533–7
- Needham, S. 2005. Transforming Beaker Culture in Northwest Europe: processes of fusion and fission. *Proceedings of the Prehistoric Society* 71, 171–217
- Needham, S. 2007. Isotopic aliens: Beaker movement and cultural transmissions. In Larsson & Parker Pearson (eds) 2007, 41–6
- Needham, S. 2012. Case and place for the British Chalcolithic. In Allen *et al.* (eds) 2012, 1–26
- Needham, S., Parker Pearson, M., Tyler, A., Richards, M. & Jay, M. 2010. A first 'Wessex 1' date from Wessex. *Antiquity* 84, 363–73
- Nicolis, F. (ed.). 2001. Bell Beakers Today: Pottery, people, culture, symbols in prehistoric Europe. Trento: Ufficio Beni Archeologici
- Olalde, I., Brace, S., Allentoft, M.E., Armit, I., Kristiansen, K., Booth, T., Rohland, N., Mallick, S., Szécsényi-Nagy, A., Mittnik, A., *et al.* 2018. The Beaker phenomenon and the genomic transformation of northwest Europe. *Nature* 555, 190–6
- Parker Pearson, M. 2016. From corpse to skeleton: dealing with the dead in prehistory. *Bulletins et Mémoires de la Société d'Anthropologie de Paris* 28, 4–16.
- Parker Pearson, M. 2019. Economy and society in Beakerperiod Britain. In Parker Pearson *et al.* (eds) 2019b, 81–114.
- Parker Pearson, M., Needham, S. & Sheridan, J.A. 2019a. The Beaker People Project individuals, their funerary practices and their grave goods. In Parker Pearson *et al.* (eds) 2019b, 115–210

- Parker Pearson, M., Sheridan, J.A., Jay, M., Chamberlain, A.T., Richards, M.P. & Evans, J. (eds). 2019b. *The Beaker People: Isotopes, Mobility and Diet in Prehistoric Britain*. Oxford: Prehistoric Society Research Papers 9
- Parker Pearson, M., Chamberlain, A.T., Jay, M., Richards, M., Sheridan, J.A., Curtis, N., Evans, J., Gibson, A., Hutchison, M., Mahoney, P., Marshall, P., Montgomery, J., Needham, S., O'Mahoney, S., Pellegrini, M. & Wilkin, N. 2016.
 Beaker people in Britain: migration, mobility and diet. Antiquity 90, 620–37
- Petersen, F. 1972. Traditions of multiple burial in Later Neolithic and Early Bronze Age England. Archaeological Journal 129(1), 22–55
- R Core Team. 2020. R: A Language and Environment for Statistical Computing. Vienna: R Foundation for Statistical Computing [https://www.R-project.org]
- Rebay-Salisbury, K. 2018. Personal relationships between co-buried individuals in the central European Early Bronze Age. In G. Lillehammer & E.M. Murphy (eds), Across the Generations: The old and the young in past societies, 35–48. Stavanger: Childhood in the Past 8.
- Reimer, P.J., Austin, W.E.N., Bard, E., Bayliss, A., Blackwell, P.G., Ramsey, C.B., Butzin, M., Cheng, H., Edwards, R.L., Friedrich, M., Grootes, P.M., *et al.* 2020. The IntCal20 Northern Hemisphere radiocarbon age calibration curve (0–55 cal kbp). *Radiocarbon* 62(4), 725–57
- Rick, J.W. 1987. Dates as data: an examination of the Peruvian Preceramic radiocarbon record. American Antiquity 52, 55–73
- Riris, P. & Oliver, J. 2019. Patterns of style, diversity, and similarity in Middle Orinoco rock art assemblages. Arts 8(2), 48
- Roberts, C.A. & Cox, M. 2003. Health and Disease in Britain: From prehistory to the present day. Stroud: Sutton.
- Saville, A., Hardy, K., Miket, R. F. & Bjarke Ballin, T. 2012.

 An Corran, Staffin, Skye: A rockshelter with Mesolithic and later occupation. Edinburgh: Scottish Archaeological Internet Report (SAIR) 51
- Shennan, S. 1976. Bell Beakers and their context in Central Europe. In J.N. Lanting & J.D. van der Waals (eds), Glockenbechersymposion Oberried 1974, 231–9, Bussum: Fibula-Van Dishoeck
- Shennan, S., Downey, S.S., Timpson, A., Edinborough, K., Colledge, S., Kerig, T., Manning, K. & Thomas, M.G. 2013. Regional population collapse followed initial agriculture booms in mid-Holocene Europe. *Nature Communications* 4, 2486
- Shepherd, A. 2012. Stepping out together: men, women, and their Beakers in time and space. In Allen *et al.* (eds) 2012, 257–80
- Sheridan, J.A. 2003. New dates for Scottish Bronze Age cinerary urns: results from the National Museums of Scotland Dating Cremated Bones Project. In A. Gibson (ed) *Prehistoric Pottery: People, pattern and purpose*, 201–26. Oxford: British Archaeological Report S1156
- Sheridan, J.A. 2004. Scottish Food Vessel chronology revisited. In A. Gibson & J. A. Sheridan (eds), From Sickles to

- Circles: Britain and Ireland at the time of Stonehenge, 243-69. Stroud: Tempus
- Sheridan, J.A. 2007a. Dating the Scottish Bronze Age: 'There is clearly much that the material can still tell us'. In C. Burgess, P. Topping & F. Lynch (eds), Beyond Stonehenge: Essays on the Bronze Age in honour of Colin Burgess, 162–85. Oxford: Oxbow Books
- Sheridan, J.A. 2007b. Scottish Beaker dates: The good, the bad and the ugly. In Larsson & Parker Pearson (eds) 2007, 91–123
- Sheridan, J.A. 2008. Upper Largie and Dutch–Scottish connections during the Beaker period. Analecta Praehistorica Leidensia 40, 247–60
- Thurnam, J. 1871. On ancient British barrows, especially those of Wiltshire and the adjoining counties. Part II, Round barrows. *Archaeologia* 43, 285–552.
- Timpson, A., Colledge, S., Crema, E.R., Edinborough, K., Kerig, T., Manning, K., Thomas, M.G. & Shennan, S. 2014. Reconstructing regional population fluctuations in the European Neolithic using radiocarbon dates: a new case-study using an improved method. *Journal of Archaeological Science* 52, 549–57
- Trechmann, C.T. 1914. Prehistoric burials in the county of Durham. *Archaeologia Aeliana* 11, 119–76
- Underwood, G. 1946. Early British settlement at Farleigh Wick and Conkwell, Wiltshire. Wiltshire Archaeological & Natural History Magazine 51, 440–52
- Underwood, G. 1947. Farleigh Wick. Wiltshire Archaeological & Natural History Magazine 52, 270-71
- Vander Linden, M. 2012a. Demography and mobility in North-Western Europe during the third millennium cal.
 BC. In C. Prescott & H. Glørstad (eds), Becoming European: The transformation of third millennium northern and western Europe, 19–29. Oxford: Oxbow Books
- Vander Linden, M. 2012b. The importance of being insular: Britain and Ireland in their north-western European context during the 3rd millennium BC. In Allen *et al.* (eds) 2012, 71–84
- Wilkin, N. 2013. Food Vessel Pottery from Early Bronze Age Funerary Contexts in Northern England: A typological and contextual study. Unpublished PhD thesis, University of Birmingham.
- Wilkin, N. 2016 Pursuing the penumbral: the deposition of Beaker pottery at Neolithic and ceremonial monuments in Chalcolithic and Early Bronze Age Scotland. In K. Brophy, I. Ralston & G. MacGregor (eds), *The Neolithic of Mainland Scotland*, 261–318. Edinburgh: Edinburgh University Press
- Wilkin, N. & Vander Linden, M. 2015. What was and what would never be: changing patterns of interaction and archaeological visibility across North West Europe from 2500 to 1500 cal BC. In H. Anderson-Whymark, D. Garrow & F. Sturt (eds), Continental Connections: Exploring cross-Channel relationships from the Mesolithic to the Iron Age, 99–121. Oxford: Oxbow Books
- Willis, C. 2020. Stonehenge and Middle to Late Neolithic Burial Practices in Mainland Britain, 3400–2400 BC. Unpublished PhD thesis, University College London.

Willis, C. 2021. Stonehenge and Middle to Late Neolithic Cremation Rites in Mainland Britain (c. 3500-2500 BC). Oxford: British Archaeological Report 668. Willis, C., Marshall, P., McKinley, J.I., Pitts, M., Pollard, J., Richards, C., Richards, J., Thomas, J., Waldron, T., Welham, K. and Parker Pearson, M. 2016. The dead of Stonehenge. *Antiquity* 90, 337–56

RÉSUMÉ

Diversité funéraire et continuité culturelle: le phénomène campaniforme britannique au-delà du stéréotype, par Anna Bloxam et Mike Parker Pearson

Le phénomène campaniforme en Grande-Bretagne est typiquement représenté par une forme particulière de poterie et son dépôt dans des tombes avec des inhumations fléchies ou en chien de fusil qualifiées de sépultures campaniformes. L'analyse de l'ensemble des sépultures révèle cependant un haut degré de variabilité dans les rites funéraires, y compris la crémation et la désarticulation du squelette. L'analyse de distribution de la probabilité cumulée des dates radiocarbone fournit des preuves de la continuité de ces rites autres, atypiques, depuis le Néolithique final pré-campaniforme (c. 3000–2450 cal BC) jusqu'au Chalcolithique (c. 2450–2200 cal BC) et au début de l'âge du Bronze (après c. 2200 cal BC). La diversité régionale est manifesté dans les traitements funéraires et les viatiques de la période campaniforme entre les rites typiques et atypiques, tout comme la sélection différentielle des rites selon l'âge et le sexe biologique. Ces témoins d'une diversité funéraire au sein d'une même communauté et entre communautés ont des implications pour la compréhension des processus à grande échelle de transformation culturelle et génomique au cours de cette période de transition majeure de la préhistoire britannique.

ZUSAMENNFASSUNG

Funeräre Diversität und kulturelle Kontinuität: das britische Becherphänomen jenseits von Stereotypen, von Anna Bloxam und Mike Parker Pearson

Das Becherphänomen in Großbritannien wird typischerweise durch eine bestimmte Form von Keramik und deren Niederlegung in Gräbern mit Bestattungen in Hockerstellung charakterisiert, die als Becher-Bestattungen bezeichnet werden. Die Analyse der gesamten Daten zu den Gräbern zeigt jedoch ein hohes Maß an Variabilität bei den Bestattungsriten, einschließlich von Leichenverbrennung und der Zerlegung von Skeletten. Die Analyse der summierten Wahrscheinlichkeitsverteilung von Radiokarbondaten lässt die Kontinuität dieser anderen, atypischen Praktiken erkennen, vom vorbecherzeitlichen späten Neolithikum (ca. 3000–2450 cal BC) über das Chalkolithikum (ca. 2450–2200 cal BC) bis in die frühe Bronzezeit (nach ca. 2200 cal BC). Die regionale Vielfalt der Bestattungsformen und der Grabausstattungen in der Becherzeit und die unterschiedliche Auswahl ritueller Praktiken auf der Grundlage von Alter und biologischem Geschlecht sind offensichtlich. Diese Belege für die Diversität von Bestattungsformen innerhalb wie zwischen den Gemeinschaften haben Auswirkungen auf das Verständnis der wesentlichen kulturellen und genomischen Transformationsprozesse in dieser großen Umbruchsphase in der britischen Vorgeschichte.

RESUMEN

Diversidad funeraria y continuidad cultural: el fenómeno campaniforme británico más allá del estereotipo, por Anna Bloxam y Mike Parker Pearson

El fenómeno campaniforme en Gran Bretaña está típicamente representado por una forma particular de cerámica y su inclusión en estructuras funerarias junto a inhumaciones flexionadas o encogidas consideradas enterramientos campaniformes. El análisis de una amplia evidencia funeraria, sin embargo, refleja una gran variabilidad en los ritos incluyendo la cremación y la desarticulación esquelética. El análisis de la suma de distribución de probabilidad de las dataciones radiocarbónicas evidencia una continuidad de estos ritos atípicos desde el Neolítico final pre-campaniforme (c. 3000–2450 cal BC) hasta el Calcolítico (c. 2450–2200 cal BC), e incluso, hasta la Edad del Bronce inicial (después del 2200 cal BC). La diversidad regional es aparente en los

tratamientos funerarios del período campaniforme y en la composición de los ajuares entre estos ritos típicos y atípicos, al igual que en la selección realizada en base a la edad y al sexo biológico. Esta evidencia de la diversidad funeraria dentro y entre comunidades tiene implicaciones para la comprensión de los procesos de transformación cultural y genómica a larga escala a lo largo de este período de transición en la Prehistoria británica.