Book Reviews

EXPLORING CELTIC ORIGINS. NEW WAYS FORWARD IN ARCHAEOLOGY, LINGUISTICS AND GENETICS EDS BARRY CUNLIFFE AND JOHN T KOCH

Oxbow Books, Oxford. 2019. 214pp, 57 col figs, 5 tables, hb, ISBN 978-1-78925-088-6, £45.00

This is a complex, important book. The volume is billed as containing 'multi-disciplinary chapters in a lively and user-friendly style', and summarises the findings of a long-running research project into the prehistoric origins of Celtic languages which has already produced a series of related publications (Cunliffe & Koch 2010; Koch & Cunliffe 2013; Koch *et al.* 2017). As an archaeologist specialising in Neolithic, Chalcolithic and Early Bronze Age Britain and Ireland I came to the book more familiar with the archaeological evidence than palaeogenetics and not at all familiar with palaeolinguistics. It is written in a largely accessible style but I found some parts of the argument hard to pin down or trace across chapters. The choice to avoid referencing and instead end each chapter with further reading recommendations may appeal to wider readership but in places hinders its use for university teaching and research. Colour images are used to excellent effect throughout.

Cunliffe's chapter, 'Setting the Scene', introduces the topic succinctly, including a history of how ideas about Celts and Celtic identity shaped interpretations of the Iron Age and led to debates over the antiquity of Celtic languages (which belong to the Indo-European group of languages). It sets out his hypothesis that a Neolithic *lingua franca*, presented as 'proto-Celtic', developed in Atlantic areas from Indo-European 'and that the vector for its extension into middle Europe was the Beaker phenomenon. It was during the Beaker period that the mature Celtic language developed' (p.9). The chapter introduces an interpretation of linguistic development which sets an early date for the emergence of Celtic languages (*c*. 4000 BC), but it was unclear to this reader exactly how the linguistic changes were dated (p.12). This computer-modelled linguistic dating is core to the model, so it is a shame that a detailed exploration is lacking here (or indeed, anywhere in the volume). The introduction sets out the hypothesis that the *Atlantic Europe in the Metal Ages* project would test; the remainder of the book reports on the project's findings, although some of the later chapters do not directly engage with Cunliffe's hypothesis. The second chapter, by Koch presents a thorough and accessible introduction to historical-comparative linguistics. He also sets out the history and methods of the research project that lies behind the book.

Chapter 3, by Koch and Fernández Palacios, provides a detailed and complex exegesis that draws on a range of archaeological, genetic and linguistic evidence, including Celtic names and references to archery from early inscriptions, and Iberian Late Bronze Age stelae. It is somewhat convoluted but sets out the crucial points in the argument underpinning the book. Koch and Fernández Palacios (p.40) write (in bold) that 'The most common way for cultural identity and a first language to be transmitted is from parent to child' before explaining that this '… threefold inheritance [biological, linguistic, cultural] often disentwines' and cite migration as an example of a circumstance in which such separation can occur. The authors argue that the Beaker phenomenon which began in Iberia (home of a 'proto-Beaker people' who spoke a non-Indo-European language), and was then adopted by those living in west central Europe (p.45), including those with notable proportions of 'Steppe ancestry' who spoke a proto-Indo-European language. While acknowledging that there is currently no palaeogenetic evidence for 'Beaker groups migrating out of Iberia into central Europe' the authors also suggest the possibility should not be excluded (p.45). They also argue that genetic evidence, including long-term presence of R1b Y-chromosomes compared with limited evidence for change in MtDNA, indicates that men with Steppe ancestry 'born beyond the Pyrenees' 'and probably speaking Late Proto-Indo-European' came to Iberia 'between *c.* 2500 and 2000 BC' (i.e., including the Beaker period) and 'that these men and their sons and their sons' son's, &c., were uncommonly successful in producing offspring with indigenous Iberian women' (p.48). They argue that the descendants of these incoming men spoke Indo-European and formed 'an expansionist minority' arguing that '[s]ocial inequality favoured males of Yamnaya ancestry in most regions'. Koch and Fernández Palacios focus on this as an 'Early Bronze Age' process in Iberia, where they argue for 'a sociolinguistic situation in which native speakers of Palaeo-Basque (or similar) learned Proto-Indo-European as adults', with the women of local ancestry learning the language but mutating the sounds to fit sounds they had learned to make when they learnt to speak (p.62). The mutated sounds were then transmitted to successive generations. They argue that this Indo-European was 'more useful, more prestigious' than the indigenous language.

They refer to this scenario of new arrivals from 'beyond the Pyranees' influencing language development as 'repeated over successive generations' (p.48). Low numbers of Iberian individuals so far exhibit 'Steppe ancestry' and there are only seven males in Olalde *et al's* 2018 dataset with R1b Y-chromosomes (one of which dates to the early fifth millennium). These are small numbers, even if adding three Middle Bronze Age individuals with R1b (Martiniano *et al.* 2017), and indeed, Koch and Fernández Palacios interpret them as a social minority. These aDNA results do indicate some migration into the region and the recurrence of a particular haplogroup introduced through that, but the text does not convince me that these people held some special status or influence, particularly towards the *beginning* of this period, that would set off a process of linguistic and social dominance at the same time I think the authors argue it was beginning elsewhere (see below). A cursory look at the burial styles and grave goods with these R1b individuals suggests little to distinguish them with from those with other Y-chromosome haplogroups at this time. Two males from a mid-late third millennium hypogeum at Paris Street, Barcelona, have R1b Y-chromosomes while two do not (and another six samples were from females); two with R1b in a multiple grave with a rich assemblage of artefacts at Humanejos, Madrid, were second or third degree kin and shared the grave with a male with haplogroup BT and two other individuals; other graves here were similarly well provisioned (Garrido-Pena *et al.* 2019); an R1b burial at La Magdalena, Madrid, also seems in keeping with those elsewhere at the same site. Elsewhere 'in what became Celtic western Europe' a similar linguistic process was underway, Koch and Fernández Palacios argue, since 'deep and prolonged interaction with the original non-Indo-European language of the 'out of Iberia' Proto-Beaker people' … 'put them ['Beakerized' groups with Steppe ancestry] on the linguistic path… to Proto-Celtic' (p.63). By the point they argued that migrants from the Rhine area who brought Beaker cultural traits to Britain probably spoke Indo-European (p.72), I was wondering where this all left the *Neolithic* proto-Celtic or Celtic *lingua franca* of 'the Atlantic zone', presumably including Britain and Ireland, that Cunliffe had introduced ('5000–2700: …was the period when a distinctive Celtic language developed as a *lingua franca'*, p.15) . It found it confusing that different chapters variously referred to Neolithic, Beaker period or Early Bronze Age languages as the start of Proto-Celtic or even Celtic, and the sequence of steps in this process could have been explained more clearly and diagrammatically. Chapter 3 concludes that Proto-Celtic was spoken across most of Atlantic Europe during the Late Bronze Age.

Chapter 3 therefore argues for a third millennium fusion of those with varying genetic and linguistic ancestries during the development of a shared Beaker and then Bronze Age cultural milieux. It presents this as an imbalanced fusion 'north of the Pyranees' which allowed men speaking Indo-European access to the Beaker cultural world (which in the process became Indo-European in character) while men with non-Indo-European heritage would be denied entry (including men from Iberia) (p.66). They also point out that there is no simple blanket equation of genes and language, and note that a non-Indo-European language persisted in Basque-speaking regions 'despite the R1b Y-chromosome' being dominant there today (p.72). Regional variation in processes of change are important to Koch and Fernández Palacios' narrative, then. However, a coarse-grained, reductive perspective seeps through, in which communities at the large scale are subsumed by blanket archetypes so that, for instance '…Beaker society became Indo-Europeanized as Indo-European society became Beakerized. The Beaker way, with its metallurgical know-how and strong warrior aspect, was compatible with the Indo-European value system' (p.66). Statements such as '[f]rom the time of their Beaker conversion they would probably want to speak differently-as well as acting and believing differently-from the 'un-

Beakerized' Indo-Europeans' (p.63) seem to undervalue the subtle interplay between third millennium traditions (cf. Furholt 2019).

In Chapter 4, Cleary and Gibson start by setting out evidence for later Neolithic connections and similarities across Atlantic Europe, including Iberia, western France, and Britain and Ireland, and situate the spread of Beaker-associated practices, artefacts and people in that context. Their discussion of the archaeological patterns is clear, succinct, and a good summary of the state of the field. They offer some important observations, focusing on continuities from the Neolithic in each region, as well as similarities across regions (particularly western Britain, Ireland and Iberia), and highlight continued connections and similarities in the Bronze Age. Their discussion concluding the chapter refers to inter-regional connections but is also careful to point out diversity, including 'many local takes on Beaker practices' and noting that 'the "Beaker package" was not universally adopted' The chapter explains that Iberian early Beaker period material culture did not form a distinctive 'package' for several centuries, and while it discusses the evidence for influences on the development of Beaker-using communities in central Europe from both eastern Europe and Iberia, it only offers the presence of polypod bowls as evidence of influence from central Europe in Iberia (p.94–5). Some direct connections posited in Cleary and Gibson's chapter could equally be independent developments, such as the use of cists in middle Neolithic Ireland, then later third millennium Britain and Ireland, then parts of Iberia (p.97), but overall the chapter convincingly covers much ground in relating the archaeological trends of the third to first millennium. It does not offer direct comment on the linguistic argument pursued in the preceding chapters. Bray's Chapter 5 is a detailed and highly informative discussion of research into copper alloys across Europe which highlights changes in regional and pan-regional mining and alloying, and considers evidence for the movement of metals between mining and deposition. It explains what kinds of interpretations these analyses can – and cannot – support. There are some important points in here (e.g. that some of the copper daggers in early Beaker burials in Britain probably originated in Germany and the Netherlands while copper axes – which are not found in burials – derive from Ireland), but it does not engage with the debate over Celtic language and genetics.

Chapter 6, 'Archaeogenetics and Celtic origins', starts with a superbly clear introduction to archaeologenetics, including in studies of European prehistory. Indeed, it might have been useful to have this chapter precede Koch and Fernández Palacios. The main text is well supported by a series of text boxes outlining key concepts and methods. Silva *et al.* present alternative readings of when Celtic could have developed in the west noting that 'Proto-Indo-European would likely have developed gradually into proto-Celtic over many centuries, well into the Bronze Age, even if the process began in the Copper Age' (p.186) when it could have formed a *lingua franca*. They also suggest proto-Celtic could have developed in Iberia in the

Bronze Age, spreading across Atlantic Europe only in the Late Bronze Age (which Cleary and Gibson highlighted as a time of intensive inter-regional interaction).

Chapter 7 concludes the book under the title ‘A dialogue at the crossroads’. Cunliffe and Koch explain how rapidly archaeological and genetic research changed during the course of the project. By comparison, linguistic research develops slowly. The chapter turns to questions about Indo-European language and genetics at the continental scale, and then back to Atlantic Europe. Here the most recent research is discussed (some of it for the third time in the volume), and a model presented in which multiple branches of Indo-European were introduced to different parts of Europe at different times. It ends with good suggestions for future research to address some of the outstanding questions.

The volume takes a bold approach operating at the large scale and covering a long span of time, considering complex and varied forms of evidence. This always runs the risk of simplification and reduction. The chapters largely resist these risks by tracing the complexity and diversity of the evidence. The discussion itself is complex, which arguably reflects the fact that the origin of anything *is* complex and multi-stranded; part of a process rather than a moment. However, a clearer statement of which linguistic developments were being posited for which centuries in which regions would have helped in a number of places. The three fields are not always well integrated across all the chapters, but the volume as a whole does illustrate the results of such a dialogue. While the text offers some important interpretations of the genetic, linguistic and cultural diversity of people forming and entering the changing Beaker phenomenon, elsewhere terms such as ‘non-Beaker women’, ‘Indo-European men’ and ‘out of Iberia’ Proto-Beaker people’ present crude reifications. But the volume is laudable in setting out some clear hypotheses that can be explored in further research. It closes on the right note: ‘simple answers are likely to be wrong or at best misleading’.

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