

Rethinking Migrations in Late Prehistoric Eurasia: An Introduction

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Introduction

PEOPLE MOVE. WHETHER at an individual or group level, mobility has been a constant and crucial aspect of the human journey from its very beginnings to the present (Manning 2005; Greenblatt 2010; Bellwood 2013; Fisher 2013; Hahn 2015; Cohen 2019; Daniels 2022). To paraphrase the title of an article by Demoule (1989), the journey of humankind is one of three million years of emigration and immigration. In a way, we could classify the human being as a *homo migrans* (Burmeister 2012), at least from a long-term perspective. Thus, it is not surprising that mobility in general, and migrations in particular, have been a major focus of archaeological study, although the way of conceptualising the topic has changed dramatically over time (Andresen 2004; Hakenbeck 2008; Van Dommelen 2014).

This volume focuses on mobility in late prehistoric Eurasia, from around 3000 BC to the beginning of the Common Era, a period of three millennia in which mobility ebbed and flowed. While the main geographic focus is on temperate Europe, some chapters address the connections to the wider Eurasian steppe. Furthermore, we should consider that, as expressed by Cunliffe (2008), in global terms Europe is a relatively minor peninsula attached to the large Eurasian land mass. The present volume arose from the conference ‘Where Are You Going? Reconsidering Migrations in the Metal Ages’, which was held on 9–10 November 2019 at the University of Edinburgh and organised within the framework of the UISPP (*Union Internationale des Sciences Préhistoriques et Protohistoriques*) Metal Ages in Europe Scientific Commission (Figure 1.1). The two-day conference was focused on rethinking mobility, migration, and movement in later prehistory – from the Chalcolithic to the end of the Iron Age.



Figure 1.1 Participants at the Edinburgh conference (image: authors)

This book includes a selection of the papers presented at the conference (Chapters 2, 5–12, and 14), as well as a number of additional contributions (Chapters 1, 3, 4, 13, and 15). Both the conference and this volume are topical for two main reasons. The first is that we are currently experiencing a ‘Third Science Revolution in Archaeology’ (cf. Kristiansen 2014), due to the development of new, and the improvement of existing, biomolecular scientific methods that are revolutionising our knowledge of past mobility, from ancient DNA (aDNA) to stable isotope analyses. The second is that there has been a so-called ‘migration crisis’ occurring across the globe, which in Europe peaked in 2015–16, leading to important public debates and heterogeneous political responses (Barlai *et al.* 2017; Squire *et al.* 2021; cf. Hamilakis 2018 for an archaeological analysis).

While stories about migrations have become a daily feature of news headlines in the media, discussions concerning the regulation of the flow of people across countries and continents represent one of the key issues in current political discourse. Due to its long-term perspective, archaeology is in an advantageous position to contribute to a deeper reflection on the topic, by counteracting isolationist narratives and showing the complexity of human mobility in the past and present and the challenges and opportunities it poses (Burmeister 2017; Garcia and Le Bras 2017; Baby-Collin *et al.* 2021). Archaeology can and should, therefore, play a role

in present societal debates on population mobility, contributing to the wider field of migration studies by providing a deep-time perspective on the topic (Baker and Tsuda 2015; Altschul *et al.* 2020). This volume aims to scrutinise new and existing studies of prehistoric mobility, from large-scale population movements to the complex biographies of individuals, but equally it aims to explore the contributions that this research can make to wider discourses on the subject.

In this introductory chapter, we will outline the main aim of this volume: to go beyond simplistic narrations about human migrations on the basis of purely either archaeological or bioarchaeological datasets, integrating archaeological, anthropological, and bioarchaeological evidence in order to write new narratives on prehistoric mobility. In order to address this aim, we will briefly discuss key concepts and definitions, refer to the history of research, and review the current debates on migrations in archaeology, some of which have gained new momentum because of recent nuanced narratives produced by collaborative research initiatives. It has become clear that archaeologists have often underestimated human mobility in the deep past, and that it is also necessary to reflect on issues of scale, gender, and age, as well as on the modes, directionalities, and intentionalities of past mobilities in a novel way. In the last section of the chapter, we will entangle the lines of thought and perspectives of the different contributions to this volume, as well as raise questions that can act as inspiration for the reader about the included papers.

The diversity of migratory processes: key concepts

Definitions are always a matter of contest, but although scholars will probably never agree on a single way of understanding the terms, we think that it is important to make explicit what we mean when we speak about key concepts such as *mobility* and *migration*, as well as some of their modalities including *forced migration* and *return migration*. These terms cannot be comprehended without equal consideration of scales, both of time and space. The distance people travelled (physically or conceptually), and how long they did or did not stay, are critical factors. Our focus here is on humans, though we recognise that the movement of objects, animals, and plants is inherently tied to this topic (e.g. Milner-Gulland *et al.* 2011; Hahn and Weiss 2013; Joyce and Gillespie 2015; Meiri *et al.* 2017; Verdugo *et al.* 2019), and that humans and non-humans are intrinsically entangled (Hodder 2012).

As editors, in the introductory and concluding chapters we understand *human mobility* as an ‘umbrella’ term that encompasses any human movement to another place, over variable distances and times. For the case studies presented in this volume, the term *migration* is essential. Being aware of the complexity of the issue and the lack of a common understanding (Burmeister 2000; 2017; Anthony 2020), here we define *human migration* as a particular form of human mobility that involves the movement of people (either individually or as a group) to settle in another destination over a longer period of time. In that sense, we could say that all

human movement to another location can be classified as mobility, but not always as migration (e.g. attending a conference can be considered as mobility – moving to settle in another region, country, or continent as migration).

The relevant factor of distance can be difficult to measure, since from an emic perspective what is relevant is the feeling of distance, of being away from home, rather than a metrical understanding. The same is true for the element of time with regard to the decision of the migrant(s) to either not return home again or only after a longer period. In addition, intention can be an important factor, since when people are involuntarily moved from their home to another place (e.g. captives, slaves) the term *forced migration* should be applied (cf. Cameron 2016; Driessen 2018). Examples of the latter are the deportation of numerous inhabitants of the Kingdom of Judah to Babylon in the 6th century BC (Stökl and Waerzeggers 2015), or the African diaspora caused by the transatlantic slave trade from the 16th to the 19th centuries (Gomez 2019). Imperial powers often imposed large-scale forced migration as a mechanism of exploitation and control. For instance, the Qin state in ancient China forcibly relocated millions of people (Barbieri-Low 2021), and in the case of the Inca Empire it is estimated that the so-called *mitma* policy resettled up to one-third of its subject population (Hu 2019). On the other hand, unintentional but voluntary migration can occur when persons move to a place with no initial intention of remaining, but end up staying for various and originally unplanned reasons (a new family, job, etc.).

As mentioned above, migrations are not uniform events, meaning one migration does not necessarily reflect another regarding either the reasons why the movement occurs or the form it takes (Kohl 2006). An important modality of migratory processes is *return migration*, which occurs when persons who have migrated to a new land return to their place of origin. As a modern-day phenomenon it has been studied since the 1960s, but it saw intense debate in the 1980s that allowed for further development of the concept in the social sciences (Cassarino 2004). The recognition of return migrations shifts our understanding of migrations from a unidirectional flow of people to multidirectional movements (Tsuda 2009). In investigating examples of this in the present day, scholars have tended to look at economic reasons for the return, in addition to the sociological ones (Abadan-Unat 1988; Dustmann and Weiss 2007; De Haas *et al.* 2015). Identifying return migration archaeologically has several challenges, especially when there is a lack of written sources. One of the primary difficulties in interpreting the material manifestations of this phenomenon is in how to differentiate between return migration and trade. However, there are some instances in which the former can be convincingly identified, for example with the evidence found for ‘Celtic’ mercenaries (Baray 2017) or Roman auxiliary troops who returned to their homelands, in the latter case often taking with them objects such as Roman *militaria* and military diplomas (Derks and Roymans 2006; Roymans and Derks 2017; see also Roymans and Habermehl, Chapter 14) (Figure 1.2).

Of course, multiple intersections can exist between the concepts discussed above, and many of the chapters in this volume explore their frequently interlinked nature. It is important to note that the various terms are shaped by factors such

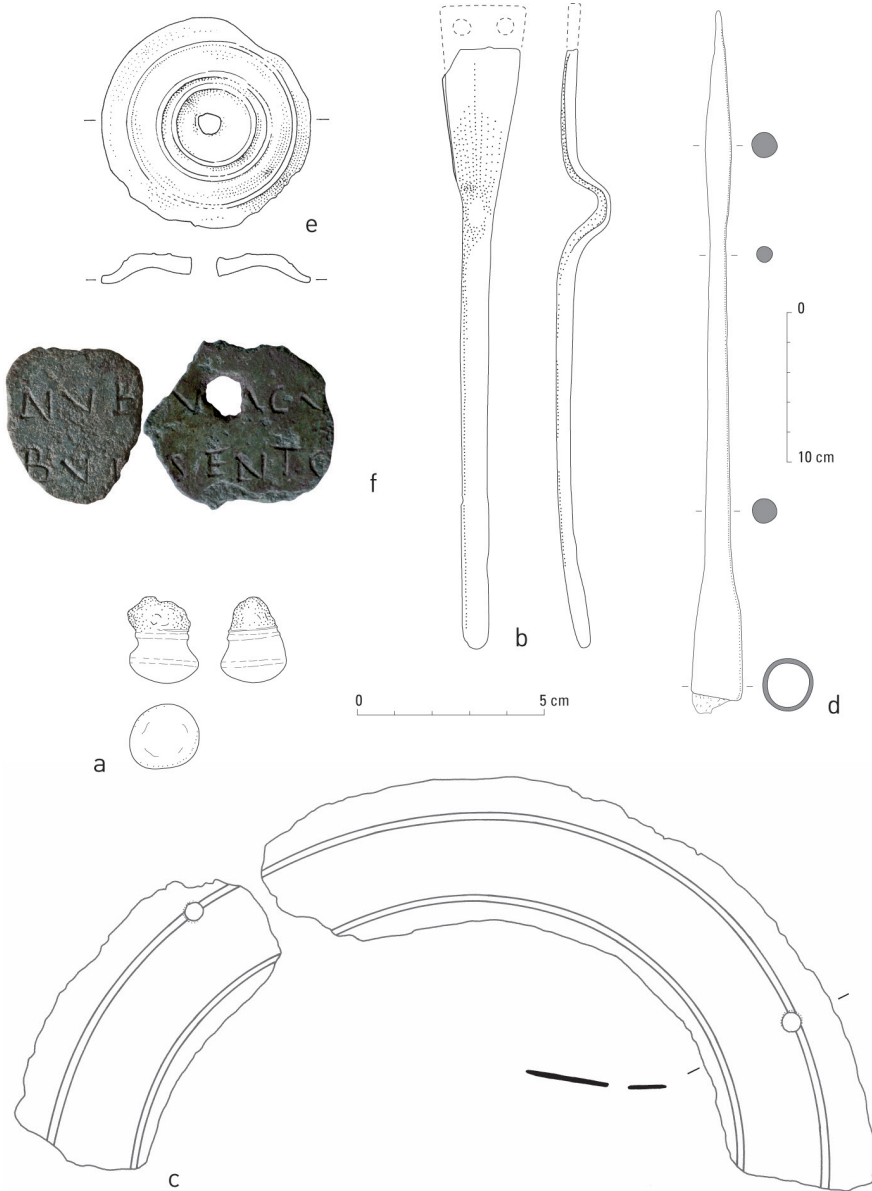


Figure 1.2 Fragments of Roman *militaria* from the Hoogeloon villa settlement. A) Bronze terminal knob from sword scabbard; B) Iron sheath fragment of sword; C) Rim of bronze *umbo*; D) Iron *pilum*; E) Bronze horse gear fitting; F) Fragments of military diploma (after Roymans and Derks 2017)

as distance, scale, time, and identity. Migratory processes can take very different forms, geographically ranging from localised movements within the same region, which we could name *short-distance* or '*local*' migrations, to, on the other extreme, relocating between different continents, which we could term *long-distance migrations*, following the terminology proposed by authors such as Tilly (1978) and Anthony (1990). In terms of scale, migrations can involve from single individuals (e.g. specialist craftspeople or tradespeople) to entire families, communities, or even polyethnic undertakings that brought together large groups of heterogeneous populations. Similarly, migration also includes the crucial factor of time: this encompasses the duration of the migratory process itself (with journeys that can take from less than a day to several years) to the time that the migrant(s) will stay at the new place of residence (temporarily for some months or years to permanently, including several generations of descendants). Finally, aspects of identity need to be taken into consideration: since societies rarely emigrate in their entirety, migrations generally imply a selection that is often based on criteria of social identity such as gender, age, or social class (Anthony 1990; Burmeister 2000; Hakenbeck 2008). These aspects can determine who emigrates and who stays at home: for example, migrant groups frequently consist mainly of young adults, who are more willing to take risks and more in need of carving out a future.

Despite the diversity of migratory movements, some attempts can be made in order to establish a certain systematisation (Figure 1.3). Thus, Anthony (1997) distinguishes between five different types of migration: local, circular, chain, career, and coerced. We can also reflect on the social unit or units that take the decision

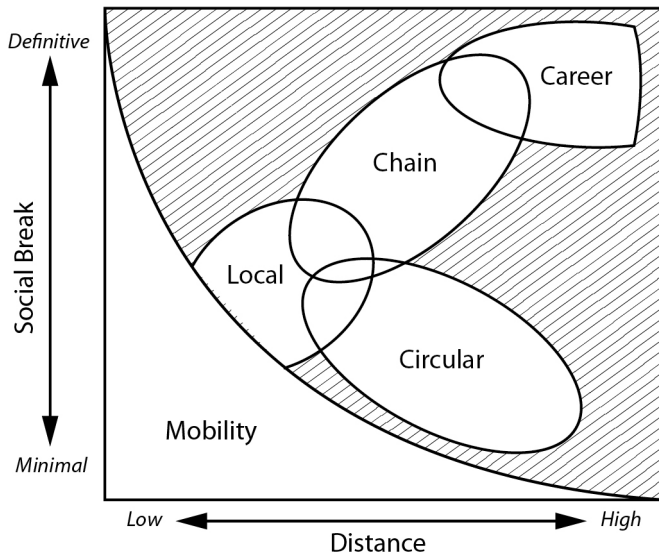


Figure 1.3 Tilly's classification of migration ideal types (redrawn after Tilly 1978)

to emigrate, such as household, extended family, religious community, political group, etc. (McSparron *et al.* 2020). When doing so, as 21st-century scholars, we need to be aware of some of the biases that might affect our interpretations:

When populations worldwide were much more sparsely distributed than they are today and communities much smaller, the circumstances under which a migrant individual or family would be welcomed into a distance community would likely have been much different from those of more recent times ... With our highly individualistic view of the world (which is exacerbated by the current emphasis on ‘agency’), we must be especially cautious in attributing to people in the past the ability to make decisions about movement independent of their kin and other established social relationships.

(Cameron 2000: 555–6)

There is also the issue of evidence. Human migrations do not always leave traces in the archaeological record, or sometimes the evidence is tenuous and/or open to multiple interpretations. A good example is the migration of the Galatians to Anatolia in the 3rd century BC, well attested in ancient written sources and through Hellenistic iconography, but scarcely visible archaeologically, at least not on the scale mentioned by classical authors (Darbyshire *et al.* 2000; Müller-Karpe 2006). In many cases, the ‘traditional’ archaeological record alone only shows us the ‘tip of the iceberg’ of migratory processes, as exemplified by some recent studies in which bioarchaeological methods reveal large-scale patterns of mobility that had been previously completely invisible (cf. Stockhammer and Massy, Chapter 8). Conversely, historical sources sometimes exaggerate population numbers of migrants, so they too need to be analysed cautiously and contextually (cf. Wells, Chapter 11). The temporal resolution of the archaeological data often poses additional challenges, since it frequently does not allow us to clearly locate the kind of migration on the scale between extremes like ‘sudden, short-term migration of a large group of people’ and ‘systematic, long-term migration of individuals, for example due to marital rules’. Both extremes and everything in-between can leave similar traces in archaeological and scientific analyses, although the combination of several approaches usually enables us to narrow down the spectrum of possibilities (cf. Molloy *et al.*, Chapter 7).

While the challenges mentioned above need to serve as cautionary notes to our approaches and interpretations, archaeology has made great advances in the identification of migrations, both through ‘traditional’ means, such as the study of portable items (e.g. pottery, personal ornaments, coinage) and house architecture (e.g. Roymans and Habermehl, Chapter 14), and/or the application of bioarchaeological methods, such as isotopic and archaeogenetic analyses (e.g. Stockhammer and Massy, Chapter 8; Rebay-Salisbury, Chapter 9; Armit, Chapter 13; see also Gregoricka 2021). Archaeological research on migrations represents a multidisciplinary challenge (Burmeister 2016), and whenever possible we should try to incorporate different sources of evidence in order to reach plausible interpretations. The possibilities and problems associated with the identification of past mobility

are discussed in the various contributions to this volume, and we will also come back to some of them in our concluding chapter.

Migrations in archaeology: a long and convoluted relationship

The history of archaeological approaches to migrations has a long tradition, with different shifts in interpretative trends and methodologies (see also Gori and Abar, Chapter 2). Juxtapositions, such as migration versus diffusion and autochthonism versus colonisation, have defined major theoretical shifts within archaeology (Frachetti 2011), with this type of dichotomous thinking too often leading to historiographical oscillations from one extreme to the other (Fernández-Götz 2019). In the 19th and early 20th centuries, migrations were seen as the prime mover for cultural change, with the appearance of new pottery styles, house forms, or burial rites predominantly being interpreted as the result of the arrival of new peoples or ‘tribes’ (Andresen 2004; Trigger 2006). This conceptualisation is encapsulated in the famous expression ‘pots equal people’, and was part of the wider ‘ethnic-cultural paradigm’ *en vogue* during that time (Jones 1997; López Jiménez 2001; Fernández-Götz 2008). Montelius (1888) was one of the forerunners of this thinking, but many others across Europe and beyond adopted similar perspectives.

Interestingly, this broad interpretative framework influenced, with some nuances, scholars who were clearly nationalistic (or even racist) in their thinking, such as Kossinna (Grünert 2002) (Figure 1.4), but also others who held very different political views, for example Childe (Trigger 1980). The latter largely subscribed to the supposed direct correlation between changes in material culture and migration, stating, for example, that ‘when a whole culture replaces another we are quite clearly dealing with a migration’ (Childe 1950: 8). However, in his ‘retrospect’ he self-critically acknowledged that his early work was ‘aimed at distilling from archaeological remains a preliterate substitute for the conventional politico-military history with cultures, instead of statesmen, as actors, and migrations in place of battles’ (Childe 1958: 70).

While Childe clearly distanced himself from any manipulation of the past for nationalistic purposes, the first half of the 20th century saw numerous abuses that reached their peak during the Nazi regime (Legendre *et al.* 2007; Olivier 2012). The (mis)use of archaeology played an important role in supporting the ideology of the Third Reich, with military conquests often claimed to be a ‘recovery’ of supposed ‘ancestral Germanic territories’. Distribution maps of prehistoric objects became an important argument for justifying the expansionist policy of the Nazi regime, serving as legitimation for its desire for supremacy in Europe (Arnold 1990).

In reaction to these abuses and the growing dissatisfaction with many elements of the culture-historical paradigm, Processual (New) Archaeology developed, beginning in the early 1960s, leading to an increasing critique of previous models of

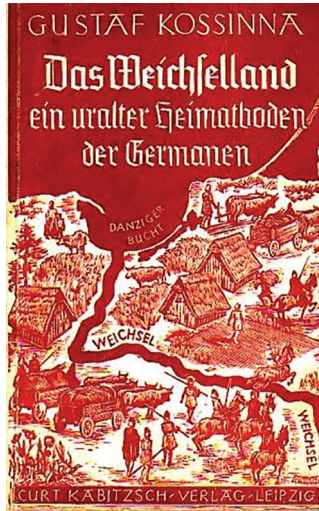


Figure 1.4 Archaeology in the service of modern politics – cover of Kossinna’s book *Das Weichselland. Ein uralter Heimatboden der Germanen* (‘The Vistula Land. An Ancestral Homeland of the Germans’), first published in 1919. The image of this edition shows Germanic Bronze Age settlers inhabiting the land and migrating further east (Kossinna 1940 [1919])

population movement. Thus, the topic of migrations fell out of favour among many archaeologists (see Myhre and Myhre 1972; Adams *et al.* 1978). One of the leading figures within this archaeological approach, Binford (1962), denied any causal link between cultural change and migrations. Likewise, Clark (1966: 173) criticised ‘the invasion neurosis’ that pervaded archaeology. However, rather than denying it any importance, Clark (1966) saw migration as essential for the spread of agriculture and metallurgy, but he considered them to be demonstrated rather than assumed. Renfrew (1969), for his part, regarded trade as the main method by which outside influence enacted cultural change, being largely against the ‘invasionist model’ that had been put forward by archaeologists such as Childe.

In the late 1970s some archaeologists tried to restore the study of migrations in the past (Duke *et al.* 1978; Ammerman and Cavalli-Sforza 1979), but it was not until the 1980s that it was truly revived within the field (Bettinger and Baumhoff 1982; Ammerman and Cavalli-Sforza 1984). Even Renfrew (1987) began to reconsider migrations, proposing that Indo-European languages spread following the first wave of Neolithic agriculturalists. But it was Anthony (1990) who truly reinvigorated the study of human mobility in archaeology, introducing methods for investigating migrations from a variety of other disciplines, most notably demography and geography. This seminal work by Anthony (1990) divided migrations into short- and long-distance movements and included the further subdivisions of leapfrogging, migration streams, and return migration. These divisions outlined

migration as a process and thus something that archaeologists should be capable of modelling.

Burmeister (2000) further elaborated on the approaches that archaeologists can take in order to view and understand past migrations, developing a middle-range theory that could help distinguish cultural change caused by migrations as opposed to other transformative processes. The distinction between diffusion (e.g. through trade, as well as other cultural transmission and knowledge exchange activities), independent development, and migration has been a significant short-fall in archaeological research (Burmeister 2016). With the coming of the ‘Third Science Revolution in Archaeology’, which has introduced the usage of aDNA and isotopes in studying mobility (Kristiansen 2014), archaeology has the potential to overcome many of its methodological issues by integrating ‘reliable proof of pre-historic migrations’ (Burmeister 2016: 44).

Traditionally, archaeologists thought of migrations as large groups of people on the move. This was certainly influenced by the culture-historical view of ‘tribes’ as the main actors in (pre)history, as exemplified in Childe’s 1958 quote noted above. However, this perspective has changed considerably in recent decades, and now we witness among many archaeologists an emphasis on the small-scale mobility of individuals, rather than the movement of larger groups/communities. This, again, might be reflecting current trends in archaeological thinking, being to a certain extent related to the growing importance that has been attributed to individuals as ‘free agents’ since the rise of post-processualism in the 1980s (for a critique, cf., for example, Bintliff 2016). Looking at the historical, archaeological, and anthropological evidence, we can go beyond these dichotomies and acknowledge that both large-scale and small-scale migrations took place in the past, as they do in the present. At the risk of overgeneralising, we could state that small-scale mobility is a common and rather continuous phenomenon in most societies, while mass migration occurs only occasionally but can then have a significant impact. At the same time, the complexity of possible scenarios is reflected by the fact that long-term individual mobility, e.g. in the framework of patrilocal systems, might sometimes have a comparable transformative impact on societies as the sudden migration of larger groups (cf. Stockhammer and Massy, Chapter 8) – and even produce similar archaeological evidence, which is often difficult to understand in its temporal resolution. Thus, the diversity of migration processes and their various causes and consequences should be acknowledged (Manning 2005; Cabana and Clark 2011).

Attempts to understand migrations in the past and present must begin by looking at the reasons behind human mobility. Anthony (2006) discusses several potential ‘push’ factors which might cause migrations; while these are frequently theorised to be demographic, with overpopulation and lack of resources leading to emigration, they should be viewed principally as socially driven by a desire to locate improved prospects in other lands. Any migration is always a symptom, not a primary cause, so it needs to be explained within a broader framework of socioeconomic organisation, power relations, and ideology (Kristiansen 1998). As

expressed by Anthony (2007: 110): ‘People do not migrate, even in today’s crowded world, simply because there are too many at home. ... But there are other kinds of “push” factors – war, disease, crop failure, climate change, institutionalized raiding for loot, high bride-prices, the laws of primogeniture, religious intolerance, banishment, humiliation, or simple annoyance with the neighbours’. In cases of diaspora, for example, the primary ‘push’ factor is often an episode of unrest or a traumatic event in the homeland (Clifford 1997; Hayes 2015). The attractive qualities of a new territory are called ‘pull’ factors and if found to be enticing by people who have been provided with information about them can cause immigration to the area (Anthony 2006). It goes without saying that in many cases ‘push’ and ‘pull’ factors are entangled in a complex manner (Figure 1.5). The recently proposed ‘aspirations–capabilities framework’ provides a further way to reconceptualise the dimensions of human mobility and in particular the relationship between agency and structural factors (De Haas 2021).

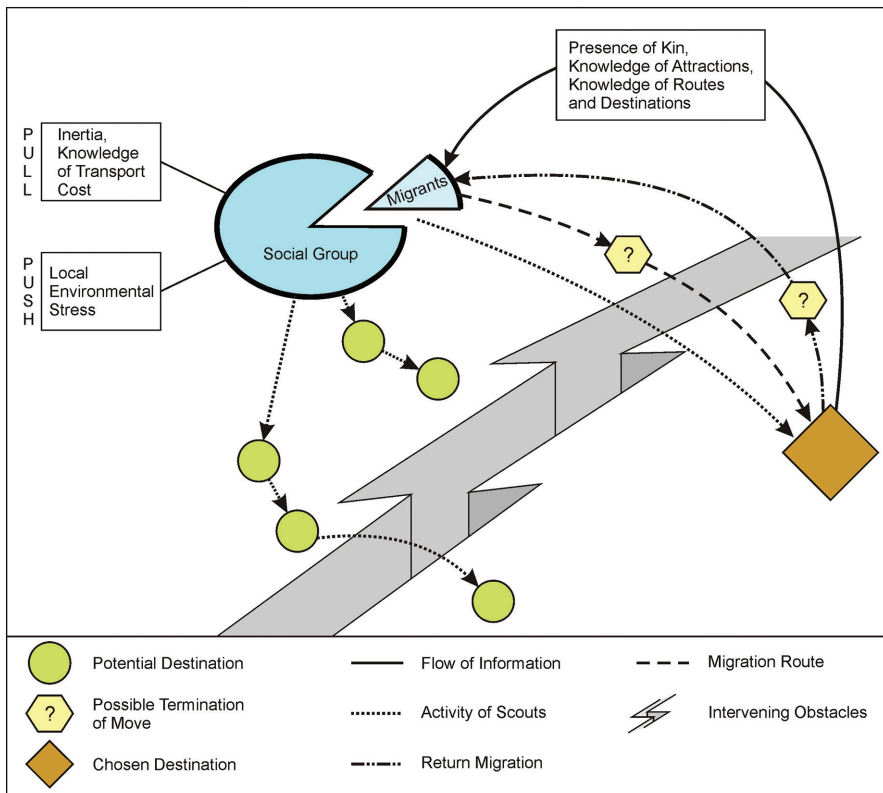


Figure 1.5 Diagram of a migratory process, including some possible push and pull factors (redrawn after Anthony 1990)

Different phases within the migratory process can also be explored and differentiated. For instance, Prien (2005) identifies four phases in any migration process: contact/exploration phase, migration phase, establishment phase, and reverse current phase. This further illustrates the complexities of migrations and human mobility. Within migration studies, it has become increasingly evident that the initial causes of a population movement, as well as the social transformations that occur throughout, can be crucial for our understanding of the process. In examining present-day migrations, Castles (2010) promotes the conceptual framing within migration studies around social transformations, as this framework aids in building understanding of the variability, complexity, contextuality, interconnecting nature, and multifaceted negotiations of migratory processes. The interdisciplinary approaches available and utilised within archaeology today are transforming our understandings of past migrations and allowing for the development of improved methodology for the interpretation of these processes.

Big questions, complex answers

As mentioned above, population movements in late prehistoric Eurasia have become a major focus of research in recent years (e.g. Frachetti 2011; Allentoft *et al.* 2015; Haak *et al.* 2015; Racimo *et al.* 2020). In light of new analytical tools and a growing corpus of archaeological data, it is now time to rethink human mobility in this crucial period by integrating all possible data, from traditional typological analysis to new aDNA approaches. Whereas human mobility – especially of elites and women – has long been assumed by archaeologists, it has been the dawn of new bioarchaeological approaches that has forced us to rethink the scales of migratory processes, their correlation with social identities, and their societal impact. What was the scale and temporality of population movements? How was travel organised? What routes did people follow and by what means did they travel? How did patterns of mobility change during later prehistory? To what extent were ‘migrations’ just the outcome of long-term institutionalised mobilities of individuals, e.g. due to patrilocal residence rules? How can we link global and local perspectives on mobility? And, very importantly, what can we learn from the past in order to build a better understanding of population movements in the present?

Genetic analyses in particular are revolutionising the field of later prehistory (Reich 2018), and will continue to do so through the ongoing development of new methods such as the so-called Identity by Descent (IBD) (cf. Nimura *et al.*, Chapter 15). New publications are continuously creating big headlines, with influential studies published within the last few years addressing aspects such as the spread of the Bell Beaker phenomenon (Olalde *et al.* 2018) and the migration of populations from the Eurasian steppe belt to Central/Northern Europe in the 3rd millennium BC (Allentoft *et al.* 2015; Haak *et al.* 2015). However, caution is needed when interpreting the new data (e.g. Vander Linden 2016; Eisenmann *et al.*

2018; Furholt 2018; 2021). In addition to the ever-evolving nature of the technical side of the analysis and the still rather small – although rapidly growing – number of samples, which includes considerable gaps both geographically and chronologically, there is a temptation to provide quick, simple answers to complex questions (Callaway 2018). Even more concerning, in some cases we can observe a return to simplistic equations between population mobility, culture, ethnicity, and even language, which resonate with old culture-historical approaches of the early 20th century (Heyd 2017; Frieman and Hofmann 2019). In this sense, we should keep in mind the cautionary words expressed by Collis: ‘Genetics must not be confused with language groups, ethnic groups, social structures, or material culture; these are all separate categories which can be fruitfully compared, but they cannot be equated with one another’ (Collis 2009: 42). Connecting empirical studies with social theory is necessary when studying migrations of the past and present (Castles 2010).

Contents of the volume

In this book, we aim to present a middle-ground approach that combines new data from natural science analyses, a careful and contextual study of the archaeological evidence, and theoretical and methodological perspectives that consider the complexity and diversity of population mobility. We identify important case studies in European later prehistory where an interdisciplinary focus on traces and impacts of mobility allows us to gain a deep historical perspective on the scale and gender-, status-, and age-related issues of this phenomenon. Whereas we are hardly able to grasp the long-term impact of present-day mobilities, the past enables such long-term views. How often did migrations happen? What were the main reasons/triggers? How were groups of migrants (trans)formed on their way and how did they interact with other communities? What was the long-term impact of institutions of mobility (e.g. patrilocality) as well as mobile groups on local economies, subsistence strategies, settlement patterns, etc.?

The diversity of realisations of human mobility requests manifold histories and narratives, zooming in and out of case studies and integrations that do not simplify, but rather entangle, the complexities. This volume approaches this task through a group of scholars who all agree on: first, the importance of human mobility for past societies; second, the relevance of integrating archaeology and anthropology with cutting-edge scientific analyses; and third, the need for building a bridge from the past into the present in order to contribute to ongoing public discourses.

The chapters are organised roughly chronologically, starting with this introduction. Chapter 2 by Maja Gori and Aydin Abar delves into the history of migration studies and its relationship to archaeology, providing an introduction to many of the arguments presented in the chapters of this volume. It calls for a more integrated, interdisciplinary approach to be employed by archaeologists regarding mobility and migration. In Chapter 3, Volker Heyd examines four movements of people

associated with the archaeological phenomena of so-called Yamnaya, Early Corded Ware, Late Corded Ware, and Bell Beaker. He uses a combination of genetic evidence and archaeological data in order to provide an overview of these migrations, putting forward several paradigms through which these movements should be viewed. Chapter 4 by Andrew Fitzpatrick provides an up-to-date overview of the late 3rd millennium BC mobility and migration of the Bell Beaker network across Central and Western Europe. He presents recent work from different evidence types at varying spatial scales, from large-scale aDNA studies to smaller-scale isotopic analyses. Interpreting the available data, Fitzpatrick focuses on the aspect of shared worldviews as opposed to genetic relatedness. Movement is a process, and safe movement from one place to another might have required an extensive political infrastructure. This is partly also the topic of Chapter 5 by Kristian Kristiansen, who moves us further into the Bronze Age. He explores the evidence for political economies, using case studies from Denmark *c.* 1500–1100 BC and drawing on ideas of fosterage, kinship, and guest-friendship.

Moving to Central Asia in Chapter 6, Thomas Stöllner, Hande Özyarkent, and Anton Gontscharov discuss the research carried out on the Andronovo culture. They explore this group's mobility through an analysis of metallurgical activities and animal husbandry. In Chapter 7 discussion of the Bronze Age continues with a contribution by Barry Molloy, Caroline Bruyère, and Dragan Jovanović, who compare the emergence of complex settlement networks in the South Pannonian Plain and the Po Valley. By examining the life- and deathways of these two regions, they show sustained mobility between them with episodes of more intense interaction around 1600 and 1200 BC. Philipp Stockhammer and Ken Massy give an overview of the comprehensive, interdisciplinary work undertaken in the Lech Valley (southern Germany) in Chapter 8. Bringing together the results from multiple studies on Late Neolithic to Middle Bronze Age burials, they show through archaeogenetics and isotope analyses the complex lives of people residing in a group of farmsteads. In addition, they discuss the evidence and potential impact of an infectious disease on the existing population. This chapter has much to say about women and their social role, which leads neatly into a discussion on female mobility/gendered migration by Katharina Rebay-Salisbury in Chapter 9. She explores the specifics of marriage and motherhood in the European Bronze and Iron Ages, from parenting practices to childbearing age and breastfeeding, tying these aspects of women's lives to their patterns of mobility.

In the following Chapter 10, Carola Metzner-Nebelsick presents two case studies of migration. The first focuses on the interaction of mobile pastoralists from the Eastern European steppe and sedentary Carpathian and Central European communities in the 9th–8th centuries BC. The second presents the results of a six-year interdisciplinary research project that examined Late Bronze Age Urnfield transalpine mobility. In both case studies, Metzner-Nebelsick thinks critically about the intersections of biomolecular analyses and humanistic approaches. In Chapter 11, Peter Wells proposes a model for examining the scale of migrations, using three

case studies that have both archaeological and textual evidence available. Using this model, he reflects on the likely number of people involved in the 5th–4th-century BC Gallic migrations to the Italian Peninsula, described by Livy, among others. Continuing with Italy, in Chapter 12 Veronica Cicolani and Lorenzo Zamboni discuss Iron Age mobility in the Po Valley and Circum-Alpine regions. Through the re-evaluation of small finds and clothing elements and the use of spatial analysis, they attempt to reconstruct the social complexities and interactions of the Iron Age groups of these areas.

In Chapter 13, Ian Armit introduces readers to the European Research Council (ERC)-funded COMMIOS project, the results of which should have a major impact on our understanding of Iron Age society. Although this chapter is an introduction to an ongoing project, it provides a helpful example of an interdisciplinary framework and also presents some preliminary results. In the latest time period covered in this book, Nico Roymans and Diederick Habermehl take us on a tour of Roman military expansion in North-West Europe in Chapter 14. They tackle changing power relations and emerging communities that occurred along the Roman frontiers, focusing particularly on the evidence from the Lower Rhine. The consequences of fusion, fission, and migration on the edge of the Empire are shown through material culture and written sources. Finally, the concluding Chapter 15 by the editors summarises the key threads that tie together the chapters included in the volume, and looks ahead in order to highlight the potential of archaeology for contributing to our understanding of migrations in the past, present, and future.

New scientific and archaeological approaches have forced us to radically rethink mobility in the prehistoric past and develop new pathways of integrating all available evidence to move beyond simplistic narratives of human migration. By considering the complexity of anthropological and archaeological evidence, the chapters in this volume comprise one of the first large-scale archaeological reactions to these new lines of evidence. It is our goal that the volume will be of interest not only to archaeologists specialised in late prehistoric Eurasia, but also to a wider audience interested in the ever-developing field of migration studies.

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References

- Abadan-Unat, N. (1988), 'The socio-economic aspects of return migration in Turkey', *Migration*, 3: 29–59.
- Adams, W.Y., Van Gerven, D.P., and Levy, R.S. (1978), 'The retreat from migrationism', *Annual Review of Anthropology*, 7: 483–532.
- Allentoft, M.E., Sikora, M., Sjögren, K.-G., Rasmussen, S., Rasmussen, M., et al. (2015), 'Population genomics of Bronze Age Eurasia', *Nature*, 522: 167–72.
- Altschul, J.H., Kintigh, K.W., Aldenderfer, M., Alonzi, E., Armit, I., et al. (2020), 'Opinion: to understand how migrations affect human securities, look to the past', *Proceedings of the National Academy of Sciences of the United States of America*, 117(34): 20342–5.
- Ammerman, A.J. and Cavalli-Sforza, L.L. (1979), 'The wave of advance model for the spread of agriculture in Europe', in C. Renfrew and K.L. Cooke (eds), *Transformations: Mathematical Approaches to Culture Change* (New York, Academic Press), 275–94.
- Ammerman, A.J. and Cavalli-Sforza, L.L. (1984), *The Neolithic Transition and Genetics of Populations in Europe* (Princeton, Princeton University Press).
- Andresen, M. (2004), *Studien zur Geschichte und Methodik der archäologischen Migrationsforschung* (Münster, Waxmann Verlag).
- Anthony, D.W. (1990), 'Migration in archeology: the baby and the bathwater', *American Anthropologist*, 92(4): 895–914.
- Anthony, D.W. (1997), 'Prehistoric migration as social process', in J. Chapman and H. Hamerow (eds), *Migrations and Invasions in Archaeological Explanation* (Oxford, Archaeopress), 21–32.
- Anthony, D.W. (2006), 'Three deadly sins in steppe archaeology: culture, migration and Aryans', in D.L. Peterson, L.M. Popova, and A.T. Smith (eds), *Beyond the Steppe and the Sown: Proceedings of the 2002 University of Chicago Conference on Eurasian Archaeology* (Leiden and Boston, Brill), 40–62.
- Anthony, D.W. (2007), *The Horse, the Wheel, and Language: How Bronze-Age Riders from the Eurasian Steppes Shaped the Modern World* (Princeton, Princeton University Press).
- Anthony, D.W. (2020), 'Ancient DNA, mating networks, and the Anatolian split', in M. Serangeli and T. Olander (eds), *Dispersals and Diversification: Linguistic and Archaeological Perspectives on the Early Stages of Indo-European* (Leiden, Brill), 21–53.
- Arnold, B. (1990), 'The past as propaganda: totalitarian archaeology in Nazi Germany', *Antiquity*, 64(244): 464–78.
- Baby-Collin, V., Collin-Bouffier, S., Mourlane, S., and Pentsch, P. (2021), *Atlas des migrations en Méditerranée: De l'Antiquité à nos jours* (Paris, Actes Sud).
- Baker, B. and Tsuda, T. (eds) (2015), *Migration and Disruptions: Toward a Unifying Theory of Ancient and Contemporary Migrations* (Gainesville, University Press of Florida).
- Baray, L. (2017), *De Carthage à Jéricho: Mythes et réalités du mercenariat celtique (Ve–Ier siècle a.C.)* (Bordeaux, Ausonius Éditions).
- Barbieri-Low, A. (2021), 'Coerced migration and resettlement in the Qin imperial expansion', *Journal of Chinese History*, 5(2): 181–202.
- Barlai, M., Faehnrich, B., Griessler, C., and Rhomberg, M. (eds) (2017), *The Migrant Crisis: European Perspectives and National Discourses* (Münster, LIT Verlag).
- Bellwood, P. (2013), *First Migrants: Ancient Migration in Global Perspective* (Chichester, Wiley-Blackwell).

- Bettinger, R.L. and Baumhoff, M.A. (1982), 'The Numic spread: Great Basin cultures in competition', *American Antiquity*, 47: 485–503.
- Binford, L.R. (1962), 'Archaeology as anthropology', *American Antiquity*, 28: 217–25.
- Bintliff, J. (2016), 'Agency, structure and the unconscious in the *longue durée*', in M. Fernández-Götz and D. Krause (eds), *Eurasia at the Dawn of History: Urbanization and Social Change* (New York, Cambridge University Press), 243–53.
- Burmeister, S. (2000), 'Archaeology and migration: approaches to an archaeological proof of migration', *Current Anthropology*, 41(4): 539–67.
- Burmeister, S. (2012), '*Homo migrans*: Migration und die plurale Gesellschaft, eine Herausforderung für die archäologischen Museen', *Museumskunde*, 77(2): 30–7.
- Burmeister, S. (2016), 'Archaeological research on migration as a multidisciplinary challenge', *Medieval Worlds*, 4: 42–64.
- Burmeister, S. (2017), 'The archaeology of migration: what can and should it accomplish?', in H. Meller, F. Daim, J. Krause, and R. Risch (eds), *Migration und Integration von der Urgeschichte bis zum Mittelalter* (Halle/Saale, Landesmuseum für Vorgeschichte), 57–68.
- Cabana, G. and Clark, J. (eds) (2011), *Rethinking Anthropological Perspectives on Migration* (Gainesville, University Press of Florida).
- Callaway, E. (2018), 'Divided by DNA: the uneasy relationship between archaeology and ancient genomics', *Nature*, 555: 573–6.
- Cameron, C.M. (2000), 'Comment to S. Burmeister "Archaeology and migration: approaches to an archaeological proof of migration"', *Current Anthropology*, 41(4): 555–6.
- Cameron, C.M. (2016), *Captives: How Stolen People Changed the World* (Lincoln and London, University of Nebraska Press).
- Cassarino, J.-P. (2004), 'Theorising return migration: the conceptual approach to return migrants revisited', *International Journal on Multicultural Societies*, 6(2): 253–79.
- Castles, S. (2010), 'Understanding global migration: a social transformation perspective', *Journal of Ethnic and Migration Studies*, 36(10): 1565–86.
- Childe, V.G. (1950), *Prehistoric Migrations in Europe* (Oslo, Instituttet for Sammenlignende Kulturforskning).
- Childe, V.G. (1958), 'Retrospect', *Antiquity*, 32(126): 69–74.
- Clark, G. (1966), 'The invasion hypothesis in British archaeology', *Antiquity*, 40(159): 172–89.
- Clifford, J. (1997), *Routes: Travel and Translation in the Late Twentieth Century* (Cambridge, Harvard University Press).
- Cohen, R. (2019), *Migration: The Movement of Humankind from Prehistory to the Present* (London, Welbeck Publishing Group).
- Collis, J. (2009), 'Celts and Indo-Europeans: linguistic determinism?', in M. Vander Linden and K. Jones-Bley (eds), *Departure from the Homeland: Indo-Europeans and Archaeology* (Washington, Institute for the Study of Man), 29–45.
- Cunliffe, B. (2008), *Europe between the Oceans: 9000 BC to AD 1000* (New Haven, Yale University Press).
- Daniels, M. (ed) (2022), *Homo Migrans: Modeling Mobility and Migration in Human History* (Albany, SUNY Press).
- Darbyshire, G., Mitchell, S., and Vardar, L. (2000), 'The Galatian settlement in Asia Minor', *Anatolian Studies*, 50: 75–97.
- De Haas, H. (2021), 'A theory of migration: the aspirations–capabilities framework', *Comparative Migration Studies*, 9, DOI: 10.1186/s40878-020-00210-4.
- De Haas, H., Fokkema, T., and Fihri, M.F. (2015), 'Return migration as failure or success?', *Journal of International Migration and Integration*, 16(2): 415–29.

- Demoule, J.-P. (1989), 'Trois millions d'années d'immigration', *Le Genre Humain*, 19: 19–37.
- Derks, T. and Roymans, N. (2006), 'Returning auxiliary veterans: some methodological considerations', *Journal of Roman Archaeology*, 19: 121–35.
- Driessen, J. (ed) (2018), *An Archaeology of Forced Migration: Crisis-Induced Mobility and the Collapse of the 13th c. BCE Eastern Mediterranean* (Louvain-la-Neuve, Presses Universitaires de Louvain).
- Duke, P.G., Egbert, J., Langemann, G., and Buchner, A.P. (eds) (1978), *Diffusion and Migration: Their Roles in Cultural Development* (Calgary, University of Calgary Archaeological Association).
- Dustmann, C. and Weiss, Y. (2007), 'Return migration: theory and empirical evidence from the UK', *British Journal of Industrial Relations*, 45(2): 236–56.
- Eisenmann, S., Bánffy, E., Van Dommelen, P., Hofmann, K.P., Maran, J., et al. (2018), 'Reconciling material cultures in archaeology with genetic data: the nomenclature of clusters emerging from archaeogenomic research', *Scientific Reports*, 8: 13003, DOI: 10.1038/s41598-018-31123-z.
- Fernández-Götz, M. (2008), *La construcción arqueológica de la etnicidad* (Noia, Editorial Toxosoutos).
- Fernández-Götz, M. (2019), 'Migrations in Iron Age Europe: a comparative view', in P. Halkon (ed), *The Arras Culture of Eastern Yorkshire: Celebrating the Iron Age* (Oxford, Oxbow), 179–99.
- Fisher, M.H. (2013), *Migration: A World History* (Oxford, Oxford University Press).
- Frachetti, M.D. (2011), 'Migration concepts in Central Eurasian archaeology', *Annual Review of Anthropology*, 40: 195–212.
- Frieman, C.J. and Hofmann, D. (2019), 'Present pasts in the archaeology of genetics, identity, and migration in Europe: a critical essay', *World Archaeology*, 51(4): 528–45.
- 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. (2021), 'Mobility and social change: understanding the European Neolithic period after the archaeogenetic revolution', *Journal of Archaeological Research*, 29: 481–535.
- García, D. and Le Bras, H. (eds) (2017), *Archéologie des migrations* (Paris, Éditions La Découverte).
- Gomez, M.A. (2019), *Reversing Sail: A History of the African Diaspora* (New York, Cambridge University Press).
- Greenblatt, S. (ed) (2010), *Cultural Mobility: A Manifesto* (Cambridge, Cambridge University Press).
- Gregoricka, L.A. (2021), 'Moving forward: a bioarchaeology of mobility and migration', *Journal of Archaeological Research*, 29: 581–635.
- Grünert, H. (2002), *Gustaf Kossinna (1858–1931) – Vom Germanisten zum Prähistoriker: Ein Wissenschaftler im Kaiserreich und in der Weimarer Republik* (Rahden/Westf., Verlag Marie Leidorf).
- Haak, W., Lazaridis, I., Patterson, N., Rohland, N., Mallick, S., et al. (2015), 'Massive migration from the steppe was a source for Indo-European languages in Europe', *Nature*, 522: 207–11.
- Hahn, H.-P. (2015), 'Migration, Mobilität und kultureller Wandel als Grundlage menschlicher Gesellschaften', in T. Otten, J. Kunow, M.M. Rind, and M. Trier (eds), *Revolution Jungsteinzeit: Archäologische Landesausstellung Nordrhein-Westfalen* (Darmstadt, Theiss Verlag), 103–9.

- Hahn, H.-P. and Weis, H. (eds) (2013), *Mobility, Meaning and Transformations of Things: Shifting Contexts of Material Culture Through Time and Space* (Oxford, Oxbow).
- Hakenbeck, S. (2008), 'Migration in archaeology: are we nearly there yet?', *Archaeological Review from Cambridge*, 23(2): 9–26.
- Hamilakis, Y. (ed) (2018), *The New Nomadic Age: Archaeologies of Forced and Undocumented Migration* (Bristol, Equinox Publishing).
- Hayes, K.H. (2015), 'Indigeneity and diaspora: colonialism and the classification of displacement', in C.N. Cipolla and K.H. Hayes (eds), *Rethinking Colonialism: Comparative Archaeological Approaches* (Gainesville, University Press of Florida), 54–75.
- Heyd, V. (2017), 'Kossinna's smile', *Antiquity* 91(356): 348–59.
- Hodder, I. (2012), *Entangled: An Archaeology of the Relationships between Humans and Things* (Chichester, Wiley-Blackwell).
- Hu, D. (2019), 'Making space under the Inca: a space syntax analysis of a mitmaq settlement in Vilcas Huamán Province, Peru', *Antiquity*, 93(370): 990–1008.
- Jones, S. (1997), *The Archaeology of Ethnicity: Constructing Identities in the Past and Present* (London, Routledge).
- Joyce, R.A. and Gillespie, S.D. (eds) (2015), *Things in Motion: Object Itineraries in Anthropological Practice* (Santa Fe, School for Advanced Research Press).
- Kohl, P. (2006), 'The early integration of the Eurasian steppes with the Ancient Near East: movements and transformations in the Caucasus and Central Asia', in D.L. Peterson, L.M. Popova, and A.T. Smith (eds), *Beyond the Steppe and the Sown: Proceedings of the 2002 University of Chicago Conference on Eurasian Archaeology* (Leiden and Boston, Brill), 3–39.
- Kossinna, G. (1940 [1919]), *Das Weichselland: Ein uralter Heimatboden der Germanen* (Leipzig, Curt Kabitzsch Verlag).
- Kristiansen, K. (1998), *Europe before History* (Cambridge, Cambridge University Press).
- Kristiansen, K. (2014), 'Towards a new paradigm: the Third Science Revolution and its possible consequences in archaeology', *Current Swedish Archaeology*, 22: 11–34.
- Legendre, J.-P., Olivier, L., and Schnitzler, B. (eds) (2007), *L'archéologie nazie en Europe de l'Ouest* (Paris, Infolio).
- López Jiménez, O. (2001), 'Europa y la creación de los modelos "célticos": El origen del paradigma étnico-cultural', *Trabajos de Prehistoria*, 58: 69–88.
- Manning, P. (2005), *Migration in World History* (London and New York, Routledge).
- McSparron, C., Donnelly, C., Murphy, E., and Geber, J. (2020), 'Migration, group agency, and archaeology: a new theoretical model', *International Journal of Historical Archaeology*, 24: 219–32.
- Meiri, M., Stockhammer, P.W., Marom, N., Bar-Oz, G., Sapir-Hen, L., et al. (2017), 'Eastern Mediterranean mobility in the Bronze and Early Iron Ages: inferences from ancient DNA of pigs and cattle', *Scientific Reports*, 7: 701, DOI: 10.1038/s41598-017-00701-y.
- Milner-Gulland, E.J., Fryxell, J.M., and Sinclair, A.R.E. (eds) (2011), *Animal Migration: A Synthesis* (Oxford, Oxford University Press).
- Montelius, O. (1888), 'Über die Einwanderung unserer Vorfahren in den Norden', *Archiv für Anthropologie*, 17: 151–60.
- Müller-Karpe, A. (2006), 'Zur historischen Deutung von Funden keltischer Trachtelemente in Anatolien', in M. Szabó (ed), *Celtes et Gaulois, l'archéologie face à l'histoire 3: Les civilisés et les barbares du Ve au IIe siècle avant J.-C.* (Glux-en-Glenne, Centre Archéologique Européen), 119–23.

- Myhre, B.M. and Myhre, B. (1972), 'The concept "immigration" in archaeological contexts illustrated by examples from West Norwegian and North Norwegian Early Iron Age', *Norwegian Archaeological Review*, 5(1): 45–61.
- Olalde, I., Brace, S., Allentoft, M.E., Armit, I., Kristiansen, K., *et al.* (2018), 'The Beaker phenomenon and the genomic transformation of northwest Europe', *Nature*, 555: 190–6.
- Olivier, L. (2012), *Nos ancêtres les Germains: Les archéologues au service des Nazis* (Paris, Tallandier).
- Prien, R. (2005), *Archäologie und Migration: Vergleichende Studien zur archäologischen Nachweisbarkeit von Wanderungsbewegungen* (Bonn, Habelt).
- Racimo, F., Woodbridge, J., Fyfe, R.M., Sikora, M., Sjögren, K.-G., *et al.* (2020), 'The spatio-temporal spread of human migrations during the European Holocene', *Proceedings of the National Academy of Sciences of the United States of America*, 117(16): 8989–9000.
- Reich, D. (2018), *Who We Are and How We Got Here: Ancient DNA and the New Science of the Human Past* (Oxford, Oxford University Press).
- Renfrew, C. (1969), 'Trade and culture process in European prehistory', *Current Anthropology*, 10(2/3): 151–69.
- Renfrew, C. (1987), *Archaeology and Language: The Puzzle of Indo-European Origins* (London, Jonathan Cape).
- Roymans, N. and Derks, T. (2017), 'Rural habitation in the area of the Texuandri (southern Netherlands/northern Belgium)', in M. Reddé (ed), *Gallia Rustica 1: Les campagnes du nord-est de la Gaule, de la fin de l'Âge du Fer à l'Antiquité tardive* (Bordeaux, Ausonius Éditions), 97–123.
- Squire, V., Perkowski, N., Stevens, D., and Vaughan-Williams, N. (2021), *Reclaiming Migration: Voices from Europe's 'Migrant Crisis'* (Manchester, Manchester University Press).
- Stökl, J. and Waerzeggers, C. (eds) (2015), *Exile and Return: The Babylonian Context* (Berlin and Boston, Walter de Gruyter).
- Tilly, C. (1978), 'Migration in modern European history', in W. McNeill and R. Adams (eds), *Human Migration: Patterns and Policies* (Bloomington: Indiana University Press), 48–74.
- Trigger, B.G. (1980), *Gordon Childe: Revolutions in Archaeology* (London, Thames & Hudson).
- Trigger, B.G. (2006), *A History of Archaeological Thought* (Cambridge, Cambridge University Press).
- Tsuda, T. (ed) (2009), *Diasporic Homecomings: Ethnic Return Migration in Comparative Perspective* (Stanford, Stanford University Press).
- Vander Linden, M. (2016), 'Population history in third-millennium BC Europe: assessing the contribution of genetics', *World Archaeology*, 48(5): 714–28.
- Van Dommelen, P. (2014), 'Moving on: archaeological perspectives on mobility and migration', *World Archaeology*, 46(4): 477–83.
- Verdugo, M.P., Mullin, V.E., Scheu, A., Mattiangeli, V., Daly, K.G., *et al.* (2019), 'Ancient cattle genomics, origins, and rapid turnover in the Fertile Crescent', *Science*, 365(6449): 173–6.