



THE UNIVERSITY *of* EDINBURGH

Edinburgh Research Explorer

Migration, group agency, and archaeology

Citation for published version:

McSparron, C, Donnelly, C, Murphy, E & Geber, J 2019, 'Migration, group agency, and archaeology: A new theoretical model', *International Journal of Historical Archaeology*. <https://doi.org/10.1007/s10761-019-00519-6>

Digital Object Identifier (DOI):

[10.1007/s10761-019-00519-6](https://doi.org/10.1007/s10761-019-00519-6)

Link:

[Link to publication record in Edinburgh Research Explorer](#)

Document Version:

Publisher's PDF, also known as Version of record

Published In:

International Journal of Historical Archaeology

General rights

Copyright for the publications made accessible via the Edinburgh Research Explorer is retained by the author(s) and / or other copyright owners and it is a condition of accessing these publications that users recognise and abide by the legal requirements associated with these rights.

Take down policy

The University of Edinburgh has made every reasonable effort to ensure that Edinburgh Research Explorer content complies with UK legislation. If you believe that the public display of this file breaches copyright please contact openaccess@ed.ac.uk providing details, and we will remove access to the work immediately and investigate your claim.





Migration, Group Agency, and Archaeology: A New Theoretical Model

Cormac McSparron¹ · Colm Donnelly¹ · Eileen Murphy¹ · Jonny Geber²

Published online: 10 December 2019
© The Author(s) 2019

Abstract

Unlike other social sciences, the archaeological discipline has been lacking a theoretical framework to discuss the mechanism of migration. Traditionally, patterns of population movements were denoted from material culture and interpreted within the context of ethnicity and the diffusion of ideas without considering underlying processes and incentives, despite active consideration of these issues by geographers and sociologists. It was not until the 1990s that a more integrated archaeological discussion on the various stimuli, influences, and mechanisms of why people choose to migrate was beginning to evolve. Since then, the debate on migration in archaeology has not only reflected on patterns of cultural and technological change but also increasingly on aspects of identity and self-realization; both in terms of how migrants themselves adapt and adjust to their new home environment, and how the host-communities themselves respond and interact with newcomers. Using four case studies, the current paper proposes a new theoretical model for how to assess patterns of group migrations. This new model considers the respective mode of agency related to both the intention and size of the group. “Very High and High Group Agency” represent situations where the migrant group is at a technological and quantitative advantage to the host community, while “Medium and Low Group Agency” represent situations where the newcomers are forced to respond to their new environment through adaptation and adjustment to their local host community.

Keywords Diaspora · Identity · Middle-range theory · Population dynamics · Ravenstein · Structuralism

Introduction to Migration Theory

Migration is an established area of research across academic discourse and within archaeological study it has a history of use as a means of explaining cultural and

✉ Cormac McSparron
c.mcsparron@qub.ac.uk

economic change, such as the appearance of new technologies and material culture within the archaeological record. In recent decades theoretical developments made within subjects such as sociology and human geography have begun to impact on archaeology while, in turn, the value that archaeology can bring to migration studies has been increasingly recognized, given our subject's unique time-depth perspective. The starting point for any consideration of migration theory is the work undertaken by the nineteenth-century German scholar Ernst Ravenstein who was the first researcher to examine in detail the nature and mechanisms of migration. Ravenstein's paper of 1885 focused on population movement between England, Scotland, Ireland, and Wales, the four jurisdictions that comprised the United Kingdom of Great Britain and Ireland at that time. Ravenstein calculated the percentage of migrants in each jurisdiction and where they had originated. For example, one might have suspected that the majority of Irish migrants into England and Scotland would have come from the poorer western regions of Ireland, its people forced to move to the new industrial heartlands of Britain in search of work. Ravenstein's research, however, demonstrated this was not actually the case and that there was a disproportionate representation of migrants from the relatively prosperous northeastern county of Antrim, particularly into neighboring Scotland. Ravenstein (1889) followed this work with a second paper in which he reviewed the migration statistics of Europe and America and in composite his research enabled him to formulate a number of overview statements about migration, including its division into three principle types—short-journey, long-journey, and temporary. He also highlighted what he described as "Migration by Stages," observing how individuals may initially migrate to one area, only to migrate again potentially several times, before arriving at a final destination and that "each main current of migration produces a compensating counter current" (Ravenstein 1885: 199) with some return migration back to the place of origin.

Ravenstein was also among the first to specifically look at the demographics of migrants. He noted the preponderance of women in his dataset, observing that they typically made shorter migrations, within their jurisdiction of origin, as opposed to males who more often migrated outside their homeland. He noted that rural dwellers were more likely to migrate than those who lived in towns, and that there was a direct relationship between the distance separating the origin and destination points of a potential migration and the likelihood of a migration between these two places. He also pointed out that long distance migrations were more likely to involve an important urban center as a destination point, while improvement of transport infrastructure, "the means of locomotion," increased the likelihood of migration (Ravenstein 1889: 288). While taxes, climate, and social factors could encourage migration, he noted that most migration was motivated by the desire of the migrants to economically "better themselves" (Ravenstein 1889: 286).

In the first half of the twentieth century migration research tended to focus on individual migration events and there was little effort made to further modify Ravenstein's theories when demographer Everett Lee (1996) re-engaged with the subject and provided an explicit definition of migration, which he defined as a "permanent or semi-permanent change of residence." He included short-range and long-range migrations, and internal and external migration as lying within his definition but did not consider nomads or migratory workers to be true migrants. He identified four broad "self-evident" factors that influenced the decision to migrate: factors

associated with the area of origin; factors associated with the destination; intervening obstacles; and personal factors. He did admit that these factors were a simplification, however, and that many migrations were not the result of a rational evaluation of the evidence, but rather were emotional, impulsive, or—often in the case of women and children—involuntary in origin (Lee 1966: 51).

Lee (1966: 54–56) further examined the migration currents and counter-currents first suggested by Ravenstein (1885) and noted that these often became established along well-defined routes, with familiar points of origin and destination, partly because opportunity was typically geographically restricted and also because the first migrants to overcome the obstacles to migration could then reduce potential difficulties for future migrants. He observed how many migrations proceeded in a “leap-frogging” manner, with trading or military posts forming the focus of initial migration and the spaces between these outposts then subsequently populated. He reaffirmed Ravenstein’s view that every stream of migration had a matching counterstream in which returning migrants brought new resources and skills back to their place of origin thereby leading to change in the migrant’s homeland.

Further definition was provided by Wilbur Zelinsky (1971) who investigated the contrast between ancient and modern migrations. He suggested that migration was probably a rare occurrence in pre-modern societies because of what he believed to be too close a match of birth and death rates in the ancient world, with insufficient population pressure to stimulate migrations. He saw migration as a development in northwestern Europe during the Early Modern period where a “demographic transition” and a “mobility transition” led to a much greater tendency to migrate than had been the situation for earlier periods.

A new approach to migration was signalled by Douglas Massey et al. (1993) who reappraised migration theory and combined many partially developed approaches into a single account. They outlined several separate micro- and macro-economic theoretical approaches as potential causes for the initiation of migration. These included “classical economics” which looked primarily at differentiation in the supply and demand for labor between different regions as well as the “New Economics of Migration” which considered classical economics as overly simplistic and argued that income received by a migrant must be measured against the needs of the migrant, their position within their society of origin, and the needs of their household. They also included “Dual Labor Market Theory” which regarded the labor demands of economies as more important than the agency of either individuals or households, and that societies tended to seek migrant workers to carry out low status jobs, thereby avoiding any disruption to the hierarchical relationship between status and wages while occupying vacancies that might be difficult to fill.

Massey et al. (1993) also examined the implications of Immanuel Wallerstein’s World Systems Theory (1974) for migration studies and suggested that international migration after the emergence of “world systems” in Europe in the sixteenth century was a natural consequence of capitalism. It was suggested that migration was more likely to occur between colonial powers and the colonized and that ultimately migration was not about wage rates but part of the dynamic of market creation and the structure of the economy. They also noted several sub-processes, including the development of migrant networks and various types of institutions that supported migrants and migration, all of which came together to perpetuate migration, a process they call “cumulative causation.”

The distinction between agency and structure was a major point of discussion for Oliver Bakewell (2010) who considered it to be a critical issue for migration studies. He identified two academic schools of thought. The first of these was a “functionalist” tendency that examined structure and process alone and robbed the individual of decision-making power. The second was agency-focused studies which gave too much individual choice to persons caught in a maelstrom of macro-economic change. Bakewell looked to Critical Realists, like Bhaskar (Fleetwood 2014) and Archer (1982), to suggest an alternative ontologically based approach which accepted the reality of social structures, because of the existence of their effects. This perspective considers societal structures, such as migration, as having their own emergent properties once they passed a certain point of complexity, a significance greater than the sum of their parts, and that once they go beyond this point they can exercise their own causal powers.

Migration Theory and Archaeology

During much of the early twentieth century migration was used as a means of explaining changes identified within the archaeological record. This cultural-historical approach, however, lacked the sophisticated analysis that individuals such as Ravenstein (1885, 1889) had brought to bear within geography and demography and, in general, archaeology eschewed systematic ways of looking at migration. To understand why this was the case it is necessary to examine the history of nineteenth- and early twentieth-century archaeology when there was a general view that innovation was rare in the past and it was suspected that ideas usually had a single place of origin and then spread from that location either through migration or diffusion. These ideas reached their zenith with the hyper-diffusionism advanced by Grafton Elliot Smith and Lord Raglan in the early decades of the twentieth century (Trigger 2008: 220–221). In addition, an association between material culture and ethnicity had been present within European archaeology since the mid-nineteenth century. In his attempts to identify a proto-Germanic homeland, for example, German archaeologist Gustaf Kossinna explicitly believed that collections of similar artifacts in a region were indicative of the ethnicity of that region and together formed a “culture” (Arvidsson 2006: 143). Kossinna’s belief in the superiority of certain peoples, specifically Germanic northern Europeans, led him to reject diffusion as a major driver of change since he believed that those he considered to be inferior peoples were incapable of adopting technologies or cultural practices from those who were superior ethnic groups. He instead viewed apparent spreads of material culture as the likely product of migration, with diffusion relegated to a very secondary position. Vere Gordon Childe (1925) accepted Kossinna’s basic concept of “culture” with relatively little modification, but without the racist tendencies, and suggested that both migration and diffusion were engines of material-cultural change that could be detected by archaeologists. Migration, along with its partner diffusion, continued to be used by archaeologists throughout the mid-twentieth century but it was never clearly defined as a concept other than as an implicit one that involved long range, mass population movement that often resulted in population replacement (Clark 1994: 306). No analysis of migration as a process was undertaken and it was simply an explanatory mechanism that was uncritically invoked.

Change began in 1966 with Graham Clark's (1966: 173) critique of "the invasion neurosis" in British prehistory. Examining the chronology of the southern English Neolithic, he attributed this "neurosis" to the short pre-radiocarbon chronology of prehistory, which required the British Neolithic to commence around 1500 BCE and left little time for the gradual development of artifact styles, such as Windmill Hill or Peterborough Ware pottery. Clark did not entirely negate migration as an explanation for change, however, and continued to view it as having been essential for the spread of farming, and possibly for the introduction of metallurgy, at the end of the Neolithic. He noted, however, that the existence of migration in prehistoric times had to be "demonstrated, not assumed" (Clark 1966: 189). The immediate effect of Clark's paper was to harden a growing antipathy to the use of migration as an explanation for change within the developing "New Archaeology" and his work was followed by papers from leading "new archaeologists," each suggesting that migration as an explanatory mechanism had been greatly overused. William Adams (1968), for example, questioned the "theory of successive populations" in Nubian prehistory, while Lewis Binford (1968) critiqued the use of "invasionist" explanations in Sabloff and Willey's (1967) work on the Mayan collapse.

Migration was also difficult to model using the functionalist, systems-based approach of many processual archaeologists. Furthermore, Zelinsky's (1971) suggestion that migration was dependent on a level of population density, and therefore rare in pre-modern societies, turned many archaeologists away from the topic entirely. In a broad review of migration in archaeology, linguistics, and anthropology, Adams et al. (1978) noted how it was typically used as an ad hoc explanation for anomalous distribution patterns. They also commented upon the lack of an actual theory of migration in these disciplines and contrasted this with the situation for subjects such as sociology and human geography. Faced with such a devastating critique, migration as a concept used by archaeologists largely fell into abeyance, with only a few notable exceptions. Ammerman and Cavalli-Sforza (1984), for example, undertook a radiocarbon analysis on the spread of early Neolithic settlement evidence in Europe, which seemed to show the northerly and westward migration of farmers from an origin point in the Near East. This was, however, a fairly uncontroversial use of migration as an explanatory mechanism, it being difficult to otherwise explain the appearance of the first farmers across the continent. Colin Renfrew (1987), building on their work, proposed the spread of Indo-European language in Europe followed this "wave of advance."

The beginning of a revival of migration theory in archaeology can be credited to David Anthony (1990) and a ground-breaking paper in which the author introduced into archaeology a century of theory from other disciplines. Anthony began by asking how archaeologists could identify migration, but then observed that to identify migration you first had to decide what a migration was and how it functioned—in other words, a theory of migration had to be in place before a methodological approach to identifying migration could be generated. He rejected the contention of Zelinsky (1971), supported by Rouse (1986), that the migration theory of sociologists and geographers was not appropriate for archaeological studies, and concluded they had underestimated the level of migration that had occurred in the ancient past. Anthony reviewed the driving forces behind migration and accepted Lee's (1966) "pull and push" model and the types of societies most likely to produce migrants. He also observed the limitations of "classical economics" in migration studies (noting, almost

in passing, how the individual is not always the body with agency), and the role of ideology, as well as economics, in providing an impetus for migration to occur. He advocated examining the structure of migrations separately from the cause, believing that archaeologists had focused too much on the latter. He was of the view that it may be possible to identify migration events from their structural signature, without any clear idea of the reason for the migration being apparent.

Anthony (1990) addressed the demography of migration and classified short-range and long-range migration as two areas that archaeologists could study. He further subdivided migration into chain or “leap-frogging” migration, stream migration, and return migration. He considered short distance migration as the most common type, but he suggested that the most frequently cited archaeological example of supposed short-range migration—the Neolithic “Wave of Advance” (Ammerman and Cavalli-Sforza 1984)—may have been a mixture of both short-range and long-range migration within a single analytical dataset. Anthony believed long-range migration should be more accessible to archaeological identification as it may cut across cultural and ecological boundaries and leave a signature that can be identified. In relation to chain migration, he noted how some migrations could vault considerable distances through the activities of “scouts” who advanced, sometimes great distances, and who then sent back information, which in turn triggered a second group of migrants to travel to the scouts’ destinations. He noted the farming communities who, following the trappers, advanced across the Great Plains of North America “16 times farther than the wave-of-advance model would predict” and he suggested that the archaeological signature of this type of migration should be “islands of settlement in desirable or attractive locations, separated by significant expanses of unsettled, less desirable territory” (Anthony 1990: 903).

In Anthony’s (1990) concept of stream migration, migrants proceeded along a well-defined migration route, with well-specified origin and destination points. Earlier migrants became founders of “apex families” and provided information and infrastructure to facilitate later migrants. Artifacts from the point of origin should be initially replicated at the destination location, but possibly with rapid evolution in form and design subsequently occurring. One of Anthony’s most significant contributions, however, was his recognition of the importance of return migration, a phenomenon first observed by Ravenstein (1885, 1889), which brings wealth to the regions receiving it, especially if there is a core-periphery relationship between the regions. In an archaeological context he was of the view that this should be identifiable through artifact distributions. Anthony’s work showed migration to be a process, or a set of similar processes, which could be modelled by archaeologists, as opposed to a set of random events that lie beyond human agency.

Also of importance in the recent development of migration theory within archaeology has been the work of Stefan Burmeister (2000) who noted how approaches to migration in archaeology have relied on a simplistic understanding of the relationship between material culture and ethnicity. He regarded the concept of ethnicity as one of some value, with most prehistoric migrations composed of an amalgam of groups organized around a group which provides an ethnic identity, but which does not necessarily contribute significantly to its culture. While broadly accepting the views of Anthony (1990) he considered that it was not possible to develop a theory of migration in isolation from data. Instead Burmeister proposed developing middle-range theory that distinguished transformations caused by migration from other cultural

transformations and he suggested a hermeneutic circle where analysis informed new questions leading to a deeper understanding, which itself generated new questions. He also proposed to offer archaeological proof of a migration. To do this he defined two domains of migrant culture, an internal and external domain, both conditioned by the *habitus* (Bourdieu 1977). He postulated that more adaptation to the host culture is evident in the external domain of migrants, but greater adherence to traditional practices exists within the internal domain, at least in the short term. He suggested that it is in the archaeology of the internal domain that proof of migration should be sought (Burmeister 2000: 542). He noted how the interior of migrant's houses and churches can often be demonstrated to retain conservative elements from their homeland, drawing upon the example of Swedish churches in the United States which externally look like any other American church but internally are easily distinguished as Swedish. It can be noted, however, that Burmeister was sceptical of the use of burial analysis to find migrant groups since he believed the tendency to display social position in funerary ritual may interfere with any tendency toward conservatism within that ritual. He did note, however, how the burials of potentially marginal groups, such as children, may not be affected to the same extent.

Migration and Archaeology—Four Case Studies

The four papers included within this special section all derived from a session held at the twenty-third annual meeting of the European Association of Archaeologists held in Maastricht in 2017. They each have a contribution to make toward the further development of migration theory within archaeology. The paper by María Cruz Berrocal and colleagues examines Spanish and Dutch migration to, and the colonization of, Taiwan during the seventeenth century through the lens of the excavation of a cemetery at the church of San Salvador in Keelung colony where six sets of human remains were uncovered. Five of these comprised extended burials in a typical Christian manner, while the sixth consisted of the disarticulated remains of a child, partly placed within a large pottery vessel. This burial rite was reminiscent of traditional Taiwanese practices in which the human remains were entirely encased by a pottery vessel. DNA analysis of one of the extended burials indicated that the individual was probably European. The wide spacing of the bodies within the graveyard is noted by the authors, who are of the view that it indicates the existence of a relatively small population of European colonists during the period of Spanish colonization. They also speculate that the burial of the child in the Taiwanese manner within the Christian graveyard may be indicative of a merging of European and Taiwanese cultures, caused by the Spanish co-operating, and possibly intermarrying, with the local community. This successful use of cemetery evidence stands in opposition to Burmeister's (2000) contention that analysis of burial is not useful for examining migration because of the tendency for the display of status to overwhelm other types of information. The nature of the migration in Taiwan, however, differs from the migrations examined by Burmeister because of the strong agency of the migrating groups—the Spanish and Dutch Empires—which is qualitatively different from Burmeister's (2000) example of Swedish migrants in the United States.

The migration of Germans and Dutch to Denmark during the sixteenth and seventeenth centuries, as discussed by Jette Linaa, has more in common with the types of migrations studied by Burmeister (2000). Linaa describes how communities of migrants, mainly from Germany and the Netherlands, settled in Denmark when it was emerging as a great power. These migrants included potters, tile makers, iron workers, glass makers, and architects and they were simultaneously integrated with, but separated from, mainstream Danish society. By the mid-sixteenth century the Danish monarchy had decreed that all migrant groups should conform to the Lutheran religion of Denmark. They were particularly concerned that Calvinism was not practiced and punishment for those who did not conform was potentially stern. Conformity was also enforced by rendering migrant names into a Danish form on official documents, although there seems to have been no attempt to compel the migrants to use these in their private lives. At the same time the Danish authorities donated a disused monastic church in the city of Elsinore, which became known as the “German Church,” as a place where all migrants in the city were expected to worship in the Lutheran faith. This had the effect of building a new migrant identity, separate from that of the Danes. Linaa notes the various ways in which the immigrants attempted to negotiate this complex field of conformity and separation. Calvinist religious objects, indicative that secret services were conducted in the homes of migrants, were sometimes itemized in their probate records, while their negotiations of identity were also revealed by the burials of immigrants from the Netherlands who had the main inscriptions on their memorials written in German, in effect the *lingua franca* of the migrant community, but with supplementary inscriptions presented in Dutch.

The story of the large-scale immigration of Irish settlers into Lowell, Massachusetts, during the early nineteenth century is the focus of the paper by Colm Donnelly and colleagues. Their study of the gravestones from the first generation of Irish in the new industrial town shows how these memorials are a source of valuable information about the migrant population and their social position within Lowell. The paper examines the backdrop to Irish migration in the sectarian and difficult economic climate of early nineteenth-century Ireland and highlights the important role played by individuals such as Hugh Cummiskey, a leader of the Irish in Lowell in the 1820s. Cummiskey organized teams of Irish migrants to participate on major construction projects, using members of his family in Ireland to help select suitable young men to travel to Lowell to join his workforce. The necessity for laborers to dig and maintain the canal system that brought water to the textile mills meant that the Irish Catholic population of Lowell grew during the following decade, with St. Patrick’s Church opened in 1831 and St. Patrick’s Cemetery opened in 1832. The headstones in Yard One at the cemetery represent the earliest memorials and the authors note that from as early as 1833 Roman Catholic iconography, specifically the Latin cross with IHS monogram, began to augment the traditional Yankee format of the memorials that included a weeping willow and urn design. In addition, a number of the memorials displayed shamrocks, a recognized contemporary symbol of Irish ethnicity. The paper also examines the biographical information included on the memorials which in many cases included information on the deceased’s place of origin in Ireland. The authors observe that the grave markers at St Patrick’s Cemetery strongly expressed both the Irish and the Roman Catholic identity of the migrants, a situation that was quite remarkable for the time, given that this was a period of anti-Irish and anti-Catholic sentiments in New England.

They conclude that the information on the memorials demonstrates a degree of confidence among the migrant Irish in Lowell.

The aboriginal rock art of Arnhem Land is the focus of the paper by Catherine Frieman and Sally May who note the almost unfathomable antiquity of this form of artistic expression in Australia. Despite great continuity in content over centuries, however, they observe that several episodes of radical change occurred in the rock art during the Contact Period of the seventeenth to early twentieth centuries when European colonialists first arrived. During the Contact Period new images were depicted, including ships, bicycles, guns, men with large noses (Europeans), men smoking exaggerated pipes (Europeans), and new types of animals, such as the water bison. The authors observe how aboriginal rock art in Australia was always highly selective in what it depicted, only ever displaying small aspects of contemporary life—landscape, fauna, and flora—but that what was depicted was chosen because it had evident utility within society. The depiction of Contact Period images has now ceased among present-day Aborigines and more traditional scenes are once again being painted, and this suggests to the authors that the utility of Contact Period images is now at an end. What sets Frieman and May's paper apart from the other three case studies, however, is the fact that it focuses attention on the behavior of a colonized host community as opposed to that of the incoming migrant population.

Group Agency and Migration: A New Theoretical Model

Discussing ancient DNA evidence for large-scale population replacement in Britain during the Anglo-Saxon migrations of circa 400 CE and 600 CE, Härke (2004: 456) noted that aDNA analysis had the potential to demonstrate the reality of large-scale migrations in the past; subsequent studies have shown this to be the case. For example, the aDNA analysis of human remains from Ireland (Cassidy et al. 2015), Britain and western Europe (Olalde et al. 2018) and Iberia (Olalde et al. 2019) indicate a “Y” DNA replacement of a significant part of the population in these regions at some stage either side of the “Bell Beaker” horizon during prehistory that suggest that large-scale migrations were taking place in Europe circa 3000–2500 BCE. In recent decades, analysis of strontium ($^{87}\text{Sr}/^{86}\text{Sr}$) and oxygen ($\delta^{18}\text{O}$) isotopes from human remains has also demonstrated their value for identifying past mobility, with strontium values reflecting underlying geology and oxygen isotopes relating to rain and groundwater (Evans et al. 2012). For example, strontium and oxygen isotope analysis of Early Medieval human remains from Ireland has revealed evidence of Vikings (Knudson et al. 2012; Taylor et al. 2018).

The probability is that in coming years a tsunami of empirical aDNA and isotope evidence will enter archaeological migration studies. It is important, however, that this new empirical evidence is examined in a theoretical context. Building on the work accomplished by Anthony (1990) and Burmeister (2000), and cognisant of Bakewell's (2010) views, we believe that the issue of group agency is one such arena which may make a valuable contribution. How much can the decision to migrate and its associated actions be viewed as the result of the free-will of individuals (agency), and how much is influenced by factors beyond their control, such as social or environmental pressures (structure)? Archaeological research has

the potential to contribute to such discussions. Burmeister (2000), for example, has already suggested that proof of migration may be found in the differentiation between the “internal” and “external” domains, with migrant groups retaining material culture from their place of origin within the internal domain but seeking to integrate with the material culture of their new home within the external domain. Most contemporary migration theory seems to consider and evaluate the arrival of groups with limited agency into a strong society, but do more dominant groups of migrants have the same set of responses in their internal and external domains? The examples provided through the papers in this special section demonstrate that variations exist in the relationships between migrant and host communities, depending on the strength or weakness of the migrating group. We believe that group agency is a concept that can be used to investigate the collective power or influence of a migrant group and, allied to Burmeister’s ideas on external and internal domains, we have identified four groupings into which migration relationships may be placed (Fig. 1):

- Very High Group Agency—The migrant group has such an overwhelming advantage over the host population in terms of numbers, organization, and/or technology that they quickly achieve complete dominance over the latter group. A migrant group with Very High Group Agency would not need to differentiate an external and internal domain since their dominance across society would be complete. Indeed, it may well be the host community who find that they must begin to differentiate their lives into internal and external domains.
- High Group Agency—The migrant group has a clear advantage over the host community, but they are unable to dominate completely and need the assistance

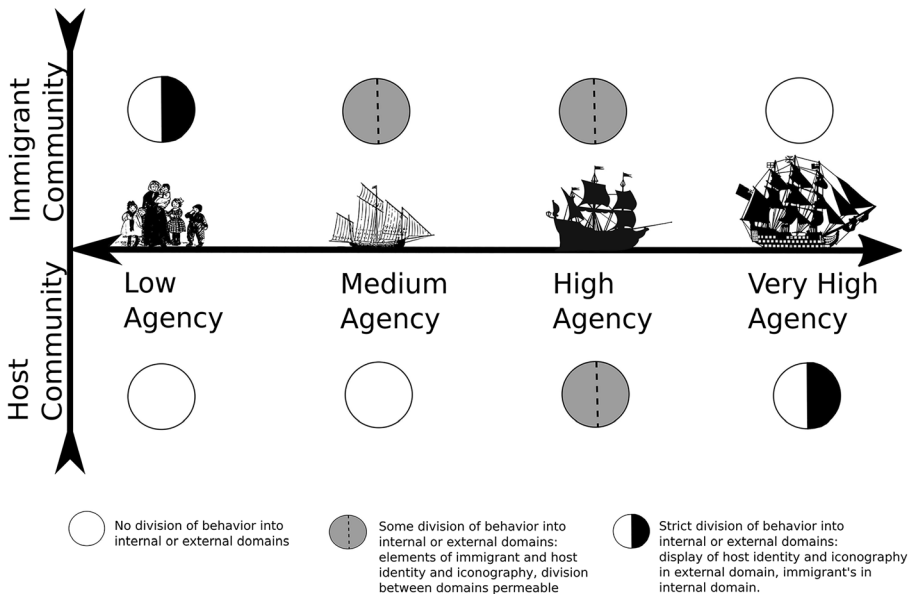


Fig. 1 A diagrammatic representation showing the interrelations of Group Agency, Host and Immigrant Community, and the display of identity in the internal and external domains. Figure: Cormac McSparron

of elements within the host community, although it is perhaps unlikely that the migrant group would wish to openly acknowledge this fact. It is likely that the migrant community would want to keep an external domain which presents the values, iconography and ideology of their group, but it would perhaps be within the internal domain where evidence of compromise and co-operation with the host community would be found. The host community may feel pressure to accept aspects of the culture and technology of the newcomers but may also stubbornly resist change. There may be a subtle performance of resistance and acceptance of change in either the external or internal domains of the host community, which may vary on a case by case basis and over time.

- **Medium Group Agency**—The migrant group has strengths, marketable skills, technological knowledge, and/or superior organization skills but it lacks the capacity to dominate the host community. Nevertheless, the newcomers are able to construct for themselves a secure niche within the host community. Groups with Medium Group Agency, therefore, are not dominant but are not entirely powerless either. They may have internal and external domains of cultural expression, but they have at least some ability to decide how to express their external domain and may use it as a place to display aspects of their identity. The host community may need the labor or skills of the migrant group, but are unlikely to feel the need to compromise their cultural behavior or to adopt internal and external domains of cultural expression.
- **Low Group Agency**—The migrant group may be large in numbers but with few marketable skills, or it may not be particularly well organized or resourced. Alternatively, it may have skills and marketable talents, but the numbers of migrants are very small. Such groups may be able to survive within the host community but will remain insecure and it is likely that they would seek to be accepted. As such, they would therefore adopt an external domain which de-emphasises points of contrast between themselves and the host community. Migrants with Low Group Agency, however, might still express themselves culturally within the internal domain, away from the gaze of the host community.

Frieman and May's paper considers migration to Australia through the colonial actions of a European imperial power which is a clear example of "Very High Group Agency." The paper, however, is also of importance because it focuses on the impact of migration on the host community. Indeed, the group agency of the European migrants was so great that it was the host Aboriginal community who became the group with "Low Group Agency." The latter continued to create their art—using it as a means of educating, warning, and helping their community negotiate the challenges of European colonization—but it was executed well away from the view of the newcomers. This is the art of the internal domain, but in this case it is that of the host community. The paper supports the proposition that if the group agency of the migrating group is very high (in this case through imperial colonization) then there is no need for a separate internal domain for the migrants since their culture is dominant.

With the Taiwanese case-study prepared by Cruz-Berrocal et al. we are once more dealing with an example of colonial migration. The burial evidence, however, seems to show a lack of complete dominance by the migrants over the host community because

of their relatively small numbers, while compromise between the two groups can be inferred through the possible evidence for a mixed European and Taiwanese burial practise. We might view this as an example of “High Group Agency” where both internal and external domains have become stages for negotiated performances.

In the example of the German and Dutch craftworkers in sixteenth- and seventeenth-century Denmark, the migrants are too weak to in any way dominate their Danish hosts, but the newcomers are not without some power and we can envisage this as an example of “Medium Group Agency.” The migrants provided necessary services for the Danish kingdom, but were required to at least give the appearance of conforming in the external domain, such as the public adoption of Lutheranism. Within the internal domain, however, the migrants retained at least some element of their religious alignment to Calvinism, as witnessed through the religious objects included within probate documents which imply the occurrence of illegal Calvinist services. This might indicate that Danish authorities were reluctant to enforce the law against this useful and wealthy group and in this instance the distinction between the internal and external domains was perhaps more permeable.

The Irish migrants in early nineteenth-century Lowell offer another example of “Medium Group Agency,” comprising a well-organized group who provided much needed labor in the new industrial town. Their confident display of Irish and Roman Catholic iconography on the headstones at St. Patrick’s Cemetery and their high-profile public St. Patrick’s Day parades might suggest that the Irish did not need to create separate external and internal domains, but a degree of compromise with their host community can be detected in the combination of Yankee motifs with their own Irish Catholic cultural iconography on the memorial stones at St Patrick’s Cemetery.

To conclude, this paper has highlighted the importance of *group agency* for both the migrant group and the host community, and for the interaction between both. It is our view that group agency offers a new theoretical model for examining migration. It finally enables all types of migrations, from imperial colonizations to the migration of displaced refugees, to be considered together under a single theoretical umbrella. It allows the advances of one hundred years of migration theory, from Ravenstein (1885) to Burmeister (2000) and Bakewell (2010), to be fully utilized by archaeologists whether they are studying Conquistadores, ancient metalworkers, medieval warlords, or nineteenth-century Europeans in the New World. It is also a model which could have utility in other social science disciplines, such as anthropology or sociology, thereby demonstrating how archaeology, with its unique time-depth perspective, can reveal trends and behaviors less apparent to other social science disciplines.

Open Access This article is distributed under the terms of the Creative Commons Attribution 4.0 International License (<http://creativecommons.org/licenses/by/4.0/>), which permits unrestricted use, distribution, and reproduction in any medium, provided you give appropriate credit to the original author(s) and the source, provide a link to the Creative Commons license, and indicate if changes were made.

References

- Adams, W. Y. (1968). Invasion, diffusion, evolution? *Antiquity* **62**: 194–215.
- Adams, W. Y., Van Gerven, D. P., and Levy, R. S. (1978). The retreat from migrationism. *Annual Review of Anthropology* **7**: 483–532.

- Ammerman, A., and Cavalli-Sforza, L. L. (1984). *The Neolithic Transition and the Genetics of the Population*. Princeton University Press, Princeton.
- Anthony, D. W. (1990). Migration in archaeology: the baby and the bathwater. *American Anthropologist* **92**: 895–914.
- Archer, M. S. (1982). Morphogenesis versus structuration: on combining structure and action. *British Journal of Sociology* **33**: 455–483.
- Arvidsson, S. (2006). *Aryan Idols: Indo-European Mythology as Ideology and Science*. University of Chicago Press, Chicago.
- Bakewell, O. (2010). Some reflections on structure and agency in migration theory. *Journal of Ethnic and Migration Studies* **36**: 1689–1708.
- Binford, L. R. (1968). Some comments on historical versus processual archaeology. *Southwestern Journal of Anthropology* **24**: 267–275.
- Bourdieu, P. (1977). *Outline of a Theory of Practice*, Nice, R. (trans.). Cambridge University Press, Cambridge.
- Burmeister, S. (2000). Archaeology and migration. *Current Anthropology* **41**: 539–567.
- Cassidy, L. M., Martiniano, R., Murphy, E. M., Teasdale, M. D., Mallory, J., Hartwell, B., and Bradley, D. B. (2015). Neolithic and Bronze Age migration to Ireland and establishment of the insular Atlantic genome. *Proceedings of the National Academy of Sciences of the United States of America* **113**: 368–373.
- Childe, V. G. (1925). *The Dawn of European Civilization*. Kegan Paul, London.
- Clark, G. (1966). The invasion hypothesis in British archaeology. *Antiquity* **11**: 172–189.
- Clark, G. A. (1994). Migration as an explanatory concept in Paleolithic archaeology. *Journal of Archaeological Method and Theory* **1**: 305–343.
- Evans, J. A., Chenery, C. A., and Montgomery, J. (2012). A summary of strontium and oxygen isotope variation in archaeological tooth enamel excavated from Britain. *Journal of Analytical Atomic Spectrometry* **27**: 754–764.
- Fleetwood, S. (2014). Bhaskar and critical realism. In Adler, P., Du Gay, P., Morgan, G., Reed, M. eds., *Oxford Handbook of Sociology. Social Theory and Organisation Studies: Contemporary Currents*. Oxford University Press, Oxford, pp. 182–219.
- Härke, H. (2004). The debate on migration and identity in Europe. *Antiquity* **78**: 453–456.
- Knudson, K. J., O'Donnabhain, B., Carver, C., Cleland, R., and Price, T. D. (2012). Migration and Viking Dublin: paleomobility and paleodiet through isotopic analyses. *Journal of Archaeological Science* **39**: 308–320.
- Lee, E. S. (1966). A theory of migration. *Demography* **3**: 47–57.
- Massey, D. S., Arango, J., Hugo, G., Kouaouci, A., Pellegrino, A., and Taylor, J. E. (1993). Theories of international migration: a review and appraisal. *Population and Development Review* **19**: 431–466.
- Olalde, I. et al. (2018). The Beaker phenomenon and the genomic transformation of northwest Europe. *Nature* **555**: 190–196.
- Olalde, I. et al. (2019). The genomic history of the Iberian Peninsula over the past 8000 years. *Science* **363**: 1230–1234.
- Ravenstein, E. G. (1885). The laws of migration. *Journal of the Royal Statistical Society* **48**: 167–235.
- Ravenstein, E. G. (1889). The laws of migration. *Journal of the Royal Statistical Society* **52**: 241–305.
- Renfrew, C. (1987). *Archaeology and Language: The Puzzle of Indo-European Origins*. Jonathan Cape, London.
- Rouse, I. (1986). *Migrations in Prehistory*. Yale University Press, New Haven, CT.
- Sabloff, J. A., and Willey, G. R. (1967). The collapse of Maya civilization in the southern lowlands: a consideration of history and process. *Southwestern Journal of Anthropology* **23**: 311–336.
- Taylor, G. M., Murphy, E. M., Mendum, T. A., Pike, A. W. G., Linscott, B., Wu, H., O'Grady, J., Richardson, H., O'Donovan, E., Troy, C., and Stewart, G. R. (2018). Leprosy at the edge of Europe—Biomolecular, isotopic and osteoarchaeological findings from medieval Ireland. *PLoS ONE* **13**(12): e0209495. <https://doi.org/10.1371/journal.pone.0209495>.
- Trigger, B. B. (2008). *A History of Archaeological Thought*. 2nd ed. Cambridge University Press, Cambridge.
- Wallerstein, I. (1974). *The Modern World System Volume 1: Capitalist Agriculture and the Origins of the European World Economy in the Sixteenth Century*. Academic Press, New York.
- Zelinsky, W. (1971). The hypothesis of the mobility transition. *Geographical Review* **61**: 219–249.

Affiliations

Cormac McSparron¹ · Colm Donnelly¹ · Eileen Murphy¹ · Jonny Geber²

Colm Donnelly
c.j.donnelly@qub.ac.uk

Eileen Murphy
eileen.murphy@qub.ac.uk

Jonny Geber
jonny.geber@ed.ac.uk

- ¹ Cormac McSparron, Archaeology and Palaeoecology, School of Natural and Built Environment, Queen's University Belfast, Belfast BT7 1NN, Northern Ireland
- ² School of History, Classics and Archaeology, University of Edinburgh, William Robertson Wing, Old Medical School, Teviot Place, Edinburgh EH8 9AG, Scotland