

Diversity of thought and data enrich archaeology



Our understanding of the human past is changing rapidly, and this does not come from new evidence alone. We are seeing an increasing diversity of perspectives among archaeologists, and they are asking new and important questions. But the field still has a long way to go.

Men are generally taller than women, but to what extent is this a 'natural' sex difference? Undergraduate textbooks tell us that human height is a sexually dimorphic trait. This implies that human height differences have an evolutionary basis, and controversial theories have arisen from this basic premise. For example, Steven Goldberg argued that men's 'superior' stature over women led to the rise of patriarchy¹. Although this theory has been widely criticized, it is closely linked to the narrative that the physical capacity of men for hard labour was an important driver of patriarchy during the transition to agriculture – an explanation that is still influential in scholarship today².

In this issue, Cox et al. show that sex disparities in height in early farming societies 7,000 years ago are different between regions. In northern Europe, femurs from male skeletons are 14% longer than female femurs, whereas in the Mediterranean region the difference is reduced to just 5%. We would always expect a small sex difference in height due to baseline biological factors such as the effects of sex hormones during puberty. But hormonal sex differences cannot explain this huge contrast between two farming societies. Yet, ancient DNA evidence reveals no differences in genetic predictors of height between sexes in these populations.

These findings do not fit neatly with 'natural' explanations for sex differences in stature. Cox et al. examine dietary and genetic evidence, and propose that a cultural preference for male individuals explains disparities in the north, whereas the Mediterranean society was likely to have been more egalitarian. Newly available ancient DNA data are one strength



of this study, but what struck us editorially is that this question is so rarely asked. When we asked the lead author of the study, Samantha Cox, why this is, she told us that "the pushback against [sexual] dimorphism being completely 'natural' is quite new".

The word 'natural' implies a biological and/or evolutionary basis. But as this study shows, 'natural' is a poor descriptor for sex differences in human height. So why does this flawed premise form the basis of grand narratives, such as those explaining the drivers of patriarchy and agriculture?

Grand narratives are 'alluring' to archaeologists, explains Michael Rivera, lecturer at the University of Hong Kong, but they risk "flattening the diversity of different populations." Such grand narratives tend to be shaped by the undue influence of a single, dominant worldview, often driven by the biases of archaeologists themselves.

We can see evidence of this in the grand narrative of the Swahili coast in East Africa: under British colonialism, Swahili elites were thought to have non-African origins that meant they were socially superior to neighbouring African communities. Recent genetic data have challenged this. A study led by a team that included 17 African and Swahili researchers tells a more complex picture:

skeletons in elite Swahili cemeteries show evidence of longstanding admixture – with patrilineal Asian ancestry and matrilineal African ancestry – that pre-dates social stratification in the region³.

Chapurukha Kusimba of the University of South Florida, who is senior author of this paper on Swahili ancient DNA, was not surprised to see these results, which reinforce the importance of African ancestry to communities living on the Swahili coast. He explains that "in Swahili society, women were always in charge ... power rested within the matrilineal household." Ancient DNA confirms that Swahili society has maintained a strong African matrilineal heritage throughout its history of encounters with foreign traders. This is a very different story to the dominant narratives of British imperialism.

Many of the most prominent theories in archaeology were originally advanced by wealthy white men, and many of its data have been gathered through exploitation, looting and illegal – or at best, inequitable – practices. Its grand narratives have traditionally been driven by a desire for neat classification, and a presumed natural order that encompasses patriarchy, hierarchy and racial superiority⁴. Archaeology today is a discipline that is still heavily rooted in its colonial past, and is

woefully lacking in **ethnic or racial** and geographical⁵ diversity.

But there is definitely cause for celebration. These more recent papers illustrate just some of the game-changing insights that arise from a greater diversity of perspectives in archaeology – and it is crucial that we highlight them. We now have access to exciting new sources of data, including the ancient DNA evidence that was so crucial for the studies described above. And we also benefit from greater diversity among archaeologists, which enriches (but does not have a one-to-one relationship with) diversity of thought. Together, this is giving us a far richer understanding of our human past.

Archaeology still faces enormous structural inequalities in terms of both access to data and perspective. And we are an editorial team that – similar to many others – lacks the geographical diversity that we wish to see in our authors. Archaeologists and editors alike need to do better at addressing these inequalities.

Ancient DNA is a good example of the problem at hand. It is a really exciting new source of data. But the technology necessary to analyse it is still largely located in resource-rich, often formerly colonial countries. This means that scientists who wish to conduct studies using ancient DNA are beholden to scientists in these countries, and may be vulnerable to inequitable and exploitative collaborations.

As editors, we are keen to receive papers with ancient DNA evidence, but is this at the expense of insightful work by authors without access to this technology? Similarly, we publish papers that align with grand narratives, but is this at the expense of those that tell more nuanced accounts? And do we consider the effort that goes into challenging traditional narratives in the same way that we value ‘hard-earned’ data⁶? These are some of the questions that we are asking ourselves as we encourage more submissions in archaeology.

So here is our bid for change. Archaeology is enriched by diverse perspectives, yet continues to have a diversity problem. This is exacerbated by structural issues and grand narratives, which both have imperial roots. We welcome robust archaeological research that challenges this. We encourage initiatives to diversify the field (and we would love to hear about them). And we have high hopes that an increasingly diverse field will yield a deeper and more nuanced understanding of our human past.

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