THE TWO CULTURES

An Unfinished Synthesis

Christopher J. Knüsel

Université de Bordeaux UMR 5199 PACEA, Bâtiment B8, Allée Geoffroy Saint-Hilaire CS 50023, Pessac Cedex, France 33615 christopher.knusel@u-bordeaux.fr

In writing this response, I cannot claim to have a complete understanding of the disciplinary terrain of Swedish approaches to burials or burial sites, but I can claim a developed appreciation for many aspects of the study of the anthropology and archaeology of human remains that Liv Nilsson Stutz addresses in her very engaging essay. When asked to respond to this piece. I did not see "burial archaeology" and the "archaeology of death" as separate spheres of study. Fortunately, these are nicely defined in this essay. Burial archaeology "uses archaeological sources from burial contexts to enrich our understanding of the past", whereas the archaeology of death "seeks to understand how people handled death and the dead". Both are encompassed by what I understand as bioarchaeology, which is an established part of both biological anthropology and archaeology, and features at meetings catering to both subject domains in Europe and the Americas. In the past, sessions on "burial archaeology" and the "archaeology of death" seemed occasions for the discussion of funerary patterns based on grave goods, grave types or cemetery and burial ground distributions, often in the absence of detailed analyses of human remains. These presentations were often supported by textual reference to human remains, but on little or no original analysis of them to support quite sophisticated abstractions that often required much more complete and detailed analyses. In some cases, graves and their skeletons became little more than window-dressing in discussions that the original analyses never envisioned.

"Burial archaeology" and the "archaeology of death" are two of the myriad phrases used to describe research pursuits that reflect divisions within the discipline rather than deriving from an established research agenda that provides "research questions, dependent ... on transdisciplinary theoretical frameworks" (p. 10). I can think of few better examples of how the appearance of terms reflects exactly what Nilsson Stutz describes as a consequence of disciplinary divides. These tend to segregate those within the discipline, and, more ashamedly, confuse those in other disciplines, hindering dissemination of research results.

It seems that "burial archaeology" and the "archaeology of death" carry the trappings of the "Two Cultures" divide, as discussed by C. P. Snow, now over half a century ago. Snow (1959) used the concept of the two cultures to represent an educational system that created a communication divide between those pursuing science and subjects in the arts and humanities. Nilsson Stutz characterizes this divide as one between biology and culture or between the natural sciences and the humanities. It is in response to this very real and stubbornly enduring division in subject matter and scholarly affiliation that bioarchaeology and the biocultural approach were formulated and disseminated (Buikstra 1977, 2006; Larsen 1997, among others). Thus bioarchaeology does not so much "gird" the study of funerary contexts (p.1), as provide the holistic framework for study of them.

Admittedly, the term "bioarchaeology" comes with a somewhat confusing history. It has been used to define the study of biota from archaeological contexts more generally (i.e. as in environmental archaeology), as well as solely human remains retrieved from archaeological contexts. There are also subtle differences in approach between two of its leading proponents, Clark Spencer Larsen and Jane E. Buikstra, with Larsen emphasizing links to the natural sciences, while Buikstra sees the endeavour as a closer union between archaeology and biological anthropology (see Knüsel 2010). Even with these discrepancies, what bioarchaeology provides is an interdisciplinary research framework that links the study of ancient biota, whatever their type, with archaeology. For human remains, this approach is based on the following tenets: 1) archaeology and biological anthropology are equal partners, 2) social theory is emphasized in the formulation of research questions, 3) human remains are studied in combination with archaeological contextual information, 4) bioarchaeological study is integrated from the planning stage of the project and not as an afterthought, and certainly not only after the remains have been excavated. The last of these is also the inspiration for *anthropologie de terrain*, the engagement of osteoarchaeologists in field recovery (Duday 2006). With the number of trained osteoarchaeologists in many parts of the world – as the name indicates, often trained in both laboratory and field methods – this is now no longer only an easily dismissed, wistful desire but should be seen as a disciplinary prerequisite for burial excavations.

The situation in Sweden seems to be different in this regard, where few archaeologists are trained in the study of human remains. This situation can be changed with the development of appropriate curricula or by undertaking a master's degree in the UK or France, for example, where several good intensive courses exist. It is important, however, that these individuals be included in archaeological excavation projects, otherwise the training and expertise gained will have been in vain. The breadth and depth of research questions based on human remains and their funerary context that Nilsson Stutz's essay addresses, clearly justifies greater discussion of their disciplinary integration, especially with reductions in funding for the arts, humanities, and social sciences in many parts of the world.

As a highly pertinent example, Nilsson Stutz laments the slow acceptance and scepticism that has greeted archaeothanatology outside of its founding home in France. Greater acceptance for what is already a method offering renewed rigour for observing and recording human remains will no doubt come with confirmation from forensic anthropological taphonomic studies applied to specifically funerary archaeological scenarios. Some of these are currently underway. These experimental studies will aid in substantiating what appear to many to be anecdotal observations of repeatedly observed patterns of human remains that are linked to what are still hypothetical disarticulation sequences and movements within the grave.

INTENTIONAL BURIALS AND THEIR STUDY

The mere discovery of human remains often occasions the use of the term "burial". This tendency is encouraged by the use of "burial" (i.e. the inhumed individual) and "grave" (i.e. the depositional feature) interchangeably in English. This causes much confusion. In the absence of a grave cut, the human remains become a proxy for this, at times, elusive but all-important indicator of a prepared grave. Even in the absence of evidence for a grave cut, the deposition of human remains is often ascribed to funerary ritual performance, even if formal burial rites have not been demonstrated.

This interpretive tension is made poignantly clear in the continuing controversy over the earliest evidence for intentional burial in the Middle Palaeolithic (see Gargett 1989, 1999; Dibble *et al.* 2015; Rendu *et al.* 2014, 2016). At this time depth funerary practices remain of critical importance for the development of human cognition and thus must be demonstrated to have occurred, rather than assumed. As a consequence, find-locations receive fine-grained analysis as much as the human remains themselves, with detailed recording of features and taphonomic studies of both the archaeological context and the human remains. This type of detailed analysis is rarely attempted in later periods and thus indicates untapped potential to achieve a fuller understanding of funerary rites and ritual sequences in other periods.

Oddly placed or unusually positioned human remains may signal the absence of funerary rites, as at the attacked and burned enclosure at Bronze Age Velim Skalka (Czech Republic) (Harding *et al.* 2007), or in natural disasters, such as the 1806 landslide at Harmettlen, Arth-Goldau (Canton Schwyz, Switzerland) (Meyer *et al.* 2013). In both cases the presence of perimortem fractures in conjunction with unusual skeletal dispositions suggests that these remains were buried but not in a funerary context. By considering the physical injuries and context of such injuries bioarchaeology moves beyond "theoretical discussions about structural violence" (p. 10) to, first, identify them and then consider these events as an outgrowth of the socio-political environment (see papers in Knüsel and Smith 2014).

Rarity of study as much as rarity in past practices means that controversy – over three decades since their first publication – has plagued what may be the earliest evidence for "floral tributes" in the Neandertal Shanidar IV burial (Leroi-Gourhan 1975, 1998). Pollen analysis and analysis of burial soils for macro-botanical remains are rare for any period. These accompanying features of burials provide for broadened consideration of funerary symbolism, as well as for considerations of funerary processing of the corpse that is ultimately tied to perceptions and beliefs (see Knüsel & Robb (2016) for a fuller review of "funerary taphonomy").

Although aDNA studies address long-standing and unresolved research questions in renewed detail from NextGen genomic sequencing in archaeogenomics, as Nilsson Stutz notes, there is a tendency to mine archaeological human remains for their biochemical constituents that, due to lack of integration with archaeological context, fail to address the social aspects of the migrations they claim to demonstrate and do not broach the nature of the context for such movements. Research findings from analysis of aDNA should be viewed as preliminary, based as

they are on incomplete and generally small samples of variably contextualized human remains. To date they rarely consider complementary bioarchaeological datasets, such as those previously used to study biological distance, to support interpretations. In this they rehearse the same intellectual terrain that earlier craniometric studies did, and one must wonder if the findings are thus prone to overstatement and hyperbole because they are based on static models of human variation. Ancient DNA should not be seen as the most recent "Holy Grail", but as a powerful tool that permits comparison with complementary bioarchaeological datasets in order to address not only biological questions, but also social ones. For example, few studies have addressed within-site comparisons (although see Deguilloux et al. 2014). To date, few studies employ aDNA analysis to re-associate skeletal elements or fragments of the same individual (cf. Hanna et al. 2012). This would prove very interesting for a variety of funerary contexts, and especially collective and commingled graves, or in cases where parts of skeletons may be distributed in more than a single context or place.

SCIENTIFIC VERSUS THE IDENTITY VALUE OF HUMAN REMAINS

There is a conundrum in debates surrounding human remains. Despite the fact that all human groups practise funerary rites for the dead, there is very little detail recorded about the specifics of them. This means that this information forms a largely unwritten history, which in turn means that when human remains are encountered, whether in identifiable, but often forgotten burial grounds and certainly when placed in unmarked locations, there is no way to predict where exactly human remains will be found, and if found, what their extent and disposition will be. Thus, in order to know about the physical remains of past people, one must rely on archaeological and anthropological investigation. Without this, the histories of people and sites remain unknown. Human remains are continually disturbed in earth moving, quarrying, and urban renewal. This is the tragedy of the general lack of acknowledgement of human remains in national laws. They are also overlooked in international conventions to protect cultural patrimony; the UNESCO 1972 World Heritage Convention for the protection of cultural and natural patrimony does not mention human remains, nor does the Valetta Agreement (Treaty of Malta), even though it addresses archaeological resources specifically (Polet et al. forthcoming). Human remains have the potential to elucidate not only the past history of people, but can also be of benefit for the health and well-being of the living (see Smith *et al.* 2012) as much as to address social, economic, and intellectual concerns that impinge on the lives, biological and social, of past and present people. This point needs to be considered and re-articulated repeatedly when demonstrating the value of research and teaching.

When human remains become of interest to lawmakers, the lack of understanding of them becomes excruciatingly and frustratingly obvious. For example, one response is to deny or hinder study of them, which blocks the only way to establish their origin, antiquity, and significance. The social identities of the dead remain unknowable in the absence of such study. There are no documentary records relating to the grand majority of humans who lived in the past, including most who lived during historic periods. The scientific and identity value of human remains are thus interdependent and indivisible.

Misperceptions lead to many ethical dilemmas – for example, that the dead rest forever without being disturbed. If nothing else, the bioarchaeological record indicates that for much of the past, the dead did not rest peacefully but were subject to customary manipulation and use by the living and played a part in their lives for periods of time after death, just as the dead continue to exert influence today. A definition of "respect" predicated on non-disturbance is anachronistic and ahistorical, if not entirely futile, but certainly forms a highly visible focus for protest for those lacking socio-political and economic opportunities.

CONCLUDING REMARKS

Perhaps the most pertinent disciplinary question to ask is: Why has the "archaeology of death and burial" not played a more central role in the intellectual trends in archaeology? It does not seem to be so much that these subjects have not played a part in major trends but that archaeology has not yet fully assimilated them.

In a climate of increasingly globally competitive research funding, with human remains playing an even greater role in analyses and interpretation, future research projects should be specifically constituted to include teams of researchers bearing complementary skills in the field and the laboratory to realize the clear research potential outlined by Nilsson Stutz. This funding could also benefit modern people, in general, those living in the areas under investigation through opening training and employment opportunities and through dissemination of research results and knowledge about the human past. Archaeological enquiry should be seen as investigative investment, rather than extractive and exclusive ownership.

In these strained economic times, the course of action seems clear: try to limit the size of excavated areas, and prepare to more thoroughly analyse and record remains and their contexts (through greater use of 3D technology, for example), including in this, isotopic, aDNA, phytolith, pollen, organic and inorganic residues, geoarchaeological analysis of soils – employing the whole panoply of archaeological scientific methods to understand the depositional circumstances as much as the remains themselves. More time should be spent in the preparation to excavate in order to gather the requisite expertise – at least as much as in the excavation itself. These fuller results will have, in turn, greater impact for living people, intellectually, economically, and socially, and permit preparation for the curatorial integrity of collections and records for the future. This is the ultimate sign of respect for the dead. Further insights into death, deathways, and the links between the living and the dead will continue to come from syntheses of existing well-excavated, recorded, and curated remains, as much as from novel technological approaches to their study. The human past is intrinsically important and interesting. We should continue to endeavour to better organize our enquiries to enable realization of the full benefits of study of the remains of people from the past for the people of today and tomorrow.

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