

Piecing together terminology in Bioarchaeology: defining concepts

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Abstract: Recent data has shown that there is a great diversity of vocabulary related with bioarchaeology and funerary archaeology employed both in technical and scientific documents produced in Portugal. This phenomenon reflects, the lack of an uniform criteria in the application of concepts reflecting the circumstances and scientific preferences of the author, and as such revealing the subjectivity associated with the gathering of on field information during archaeological work.

The lack of a standard framework limits data interpretation, by restricting a systematic approach to the information gathered and, consequently, impairing the comparisons amongst bio-demographic and socio-cultural main features of Past Populations.

Identifying this problem and its consequences led to the work that is currently being developed and that comprises the standpoint of reference authors in this matter, considering their contribution and presenting a proposal for the definition of the selected concepts. This strategy intends to produce a uniform language to be adopted in technical reports. It's our hope that this approach could lead to a better understanding of archaeological field reports, increasing their informative potential that could later feed a bioarchaeological database.

Thus it is our aim, with the present communication, to present the first effort of an ongoing project, to establish a common standard of main concepts on bioarchaeology.

Keywords: bioarchaeology; funerary archaeology; concepts; definition;

Introduction

In Portugal the lack of a uniform bioarchaeological vocabulary and recording system for human archaeological remains from excavation sites is limiting data analysis on past populations. This is not a recent concern among researchers working with skeletal vestiges (CRUBÉZY, 2000; CRUBÉZY et al., 1990; DUDAY, 2009; KNÜSEL, 2014; SPARGUE, 2005; PEARSON, 1999) but in Portugal, only recently, attention has been drawn on this matter (CRUZ & CUNHA, 2009; CRUZ et al., 2010; CRUZ, 2011, 2013; CRUZ & CABRAL, 2013; NETO et al., 2007; NETO & DUARTE, 2013; DUARTE & NETO, 2010; 2013; NETO et al., 2007;).

A recent formed working-group, under the supervision of Direção-Geral do Património Cultural (General-Directorate for Cultural Heritage - DGPC), is developing efforts in order to create a bioarchaeological thesaurus to work as a guideline to be implemented on field reports and consequently applied in DGPC database allowing for a better management of this cultural heritage. Here we present the strategies that will, ultimately, lead the creation of a clear and standardize Portuguese bioarchaeological vocabulary.

Conceptual framework

The awareness about the need to develop a uniform vocabulary regarding funerary practice dates back to 1942 when the Society for American Archaeology gathered James B. Griffin and Georg K. Neuman to form the Subcommittee on Burial Terminology with the intent to create a precise terminology regarding funerary behaviours (SPRAGUE, 2005). Since then, several other researchers have made important endeavours in order to establish a common communication base.

During the late 1980 and early 1990, French anthropologists became a reference on funerary analysis and terminology. By defining a number of procedures at excavation sites Duday, Crubezy and Leclerc (to name a few) exposed the need to a more standardize approach. With *Anthropologie de terrain* (CRUBÉZY et al., 1990) provided precious insights on the need and the importance of a systematic and precise approach to funerary contexts, in order to gather detailed and significant information on human remains and their circumstances. More recently, DUDAY (2009) published *The archaeology of the dead: lectures in archaeoethnology* (studies in funerary archaeology) that is now the reference to anthropologists.

In 1994 was published, by BUICKSTRA and UBELAKER, one of the most influential works in *Physical Anthropology*. Standards for data collection from human skeletal materials has guided many of the recent researchers. Latter that decade (1999), Mike P. PEARSON, has developed an important effort with the *Archaeology of death and burial*. By presenting concept definitions on the analysis of human remains and funerary contexts he reinforced the idea that it is important to have a common conceptual ground.

Despite different policies between Portuguese and the United Kingdom, the documents produced by the British Association for Biological Anthropology and Osteoarchaeology (BABAO) – Guidelines to the standards for recording human remains (BRICKLEY & MCKINLEY, 2004) – and the English Heritage – Human bones from archaeological sites: guidelines for producing assessment documents and analytical reports (MAYS, BRICKLEY & DODWELL, 2002) – represent an essential inspiration of what the DGPC working group wants to produce.

More recently, Knüsel (2014) presented definitions and reflections on some important concepts on his *Crouching in fear: terms of engagement for funerary remains*.

Despite being the authors who have most influenced Portuguese anthropologists, the need for an epistemological approach on bioarchaeology hasn't been felt, until now. Only a few authors, (CRUZ & CUNHA, 2009; CRUZ et al., 2010; CRUZ, 2011, 2013; CRUZ & CABRAL, 2013; NETO et al., 2007; NETO & DUARTE, 2013; DUARTE & NETO, 2010; 2013; NETO et al., 2007;) have started to reflect on the need to create a standardize approach to the analysis of human remains in Portugal.

In Portugal, the lack of a uniform vocabulary and report system has limited the quality and amount of information gathered from excavation sites with human remains. The DGPC working-group goal is to develop a standard vocabulary that in the future will allow the maintenance of a bioarchaeological database that will, expectantly, improve bioarchaeological research and, consequently, lead to a better knowledge of past populations. It could be argued that it would be more useful to resort to already settled terminology in other languages, but cultural idiosyncrasies don't concur with the use of foreign vocabulary, even when translated. Here we present the first steps in this process:

- identifying the main obstacles in the development of a uniform bioarchaeological vocabulary to human remains analysis in Portugal;

- present the next steps towards the development of the standard vocabulary in bioarchaeology;

The first evidence of the terminology problem in Portuguese context: what to call what we do?

In Portugal, the first steps in the analysis of human remains date back to the 19th century but the academic degree in Anthropology, it's only a few decades old (1992-1996). Despite the scientific quality of the researchers, a proper reflection on the conceptual framework that has influenced this scientific area has not yet been done. Nowadays the multiplicity of academic backgrounds, from both undergraduate and graduate students, has introduced diversity on the approach to the study of human remains and in the vocabulary used to report the analysis. This may lead to some unclear situations making difficult to understand what the authors are referring to precisely. A clear example that reflects the lack of uniformity and consensus regarding the terminology are the terms used to denominate the scientific area in which Portuguese anthropologists work:

- *Antropologia física* (Physical anthropology);
- *Bioantropologia* (Bioanthropology);
- *Bioarqueologia* (Bioarchaeology)
- *Antropologia biológica* (Biological anthropology);
- *Paleoantropologia* (Paleoanthropology);

It is expectable that, due to historical influence, different terms would be used. In fact, in Portugal, after a first moment when the French influence was dominant, the Anglo Saxon terminology was gradually adopted. Despite being close and related terms, these are not synonymous. There are subtle but important differences that must be considered for the sake of clarity. The nature of bioarchaeological data does not respond well to a closed or strict terminological system because each case represents a very specific human and cultural context, but it is important to find a common ground of understanding. A recent analysis to anthropological field reports showed that there are inconsistencies on the use of technical terminology. This evidence was particularly relevant regarding funerary structures and paleopathology, as had noted, ROBERTS and COX in 2003. This does not mean that the terms are being used incorrectly instead it reveals a lack of a commitment to a scientific line or influence. It may seem that this is a minor question but

Standardised recording will enable greater comparability between human bone assemblages from different sites . . . Comparisons are required for all levels of work, from standard bone reports where comparative data is required to set an assemblage in its wider context

(BRICKLEY & MCKINLEY, 2004, p.5).

For that reason, it is imperative to arrange for a strategy that will promote the development of a common vocabulary to be used by all of the bioarchaeologists.

Reflecting on the vocabulary standardize process in Portugal

In order to produce solid knowledge it is important to establish a common vocabulary. The simplicity of this principle contrasts with the complexity of establishing a bioarchaeological thesaurus since there are numerous factors that contribute to the slow and demanding nature of this process. In Portugal there are a

few matters that seem to have influenced current state of this subject. On a first instance, the lack of a debate among researchers to share work perspectives, findings and the conceptual foundation generates situations where anthropologists create new terms for situations that have already been defined. In this way, concepts are being multiplied with very small differences and being perpetuated by several researchers and student generations.

One of the other difficult obstacles to overcome is related with the interdisciplinary nature of this field of work. The analysis of human remains depends on theoretical framework and technique from different scientific areas with specific terminology. It happens that sometimes, different terminology from different scientific domains is referring to the same features but since there is no uniformity it could lead to different understandings of what is being reported. Despite this obstacle, most scientists are not comfortable to leave their academic jargon. Another difficulty lies on the cultural diversity related with funerary practices that many times, can't be articulated or related with a standard and limited vocabulary creating the need to produce more terms. Other times, appropriate concepts are already defined but are not used. The cultural factor reflects also on the linguistic dynamics combined with cultural specificities which makes difficult the translation of already defined terms in other geographic and linguistic contexts.

Because data can't be crossed analysed without a standard terminology, the scientific growth is being delayed as well as a better understanding of past populations is being compromised since unstandardized terminology used at field reports is an obstacle to a clear comprehension of human remains at excavation sites. Furthermore, a standardize vocabulary is relevant because of the intense pace in which scientific knowledge is produced demanding for platforms where data can be analysed and combined, otherwise, data gathered on excavation sites won't be suitable to be used. This goal can only be achieved if all researchers have a common understanding of the concepts they use.

The standardization process

The creation of a homogeneous vocabulary has many nuances that are not easily controlled: the different scientific influences, the linguistic dynamics, the culture specificities that reflect on both the funerary behaviour and linguistic selection, the recognition and acceptance of the terminology by professionals and researchers. In order to manage all these variables it is important to establish a plan that will ultimately help to decide in what terms to use. The DGPC working group proposal is developing the methodology to accomplish the creation of a standard terminology, in an attempt to develop a similar work to the one produced by the Museum of London with its database and The Human osteology method statement (Powers, 2008). To do so it was important to determine the several steps that should be considered to accomplish the goal of creating a thesaurus. Because it is important not to create a disruption between the terms that are currently being used and what is being proposed, it is important to gather information from grey literature (field reports and technical reports) but also from academic documents. Afterwards research on the similarities with the terminology used in other scientific contexts with the intent to create a close relation amongst different languages. The following step depends on a linguistic analysis of the terminology selected in order to guarantee the use a clear notion or concept (Fig. 1).

This strategy is currently being putted to test and it is expected that in a near future it will be possible to implement some of the concepts established has the concepts to be used in the on-line bioarchaeological database.

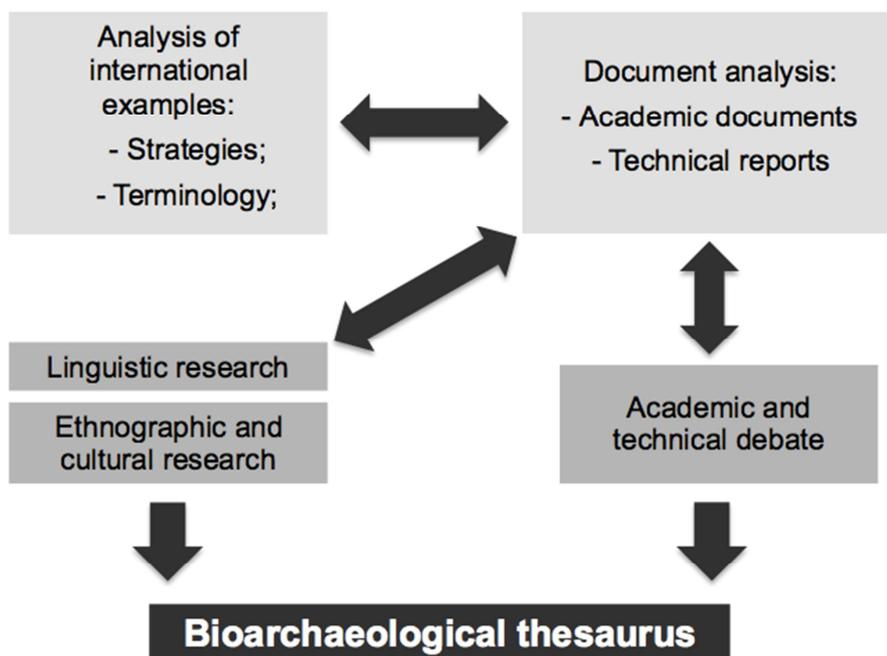


Fig. 1 – Illustration of the steps towards the establishment of a standardise bioarchaeological vocabulary in Portugal.

Future Perspectives/Conclusion

The establishment of bioarchaeological vocabulary in Portugal since represents a much-needed stepping-stone for the refinement and improvement of already available online database, Endovélico. Once the thesaurus is created and applied to the database, it will allow multiple applications for researchers and general public, for instance, epidemiological features can be researched, as well as demographic, cultural funerary practices and space management covering some of the main scientific and research areas in both archaeology and anthropology. On a long term perspective the use of standard terminology could, and should, be used to both field and laboratory reports. This way, the contents of the grey literature that is not being used currently to the scientific development of bioarchaeology, could be considered since it would become more accessible to researchers. There is still a long way ahead in the process of establishing concepts and having them recognized by the scientific community, but, has other institutions have showed – BABAQ, Museum of London, The Smithsonian – it is a journey that must be finished.

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