

Recensiones

The Copper Age in south-west Spain. A bioarchaeological approach to prehistoric social organization

Marta Díaz-Zorita Bonilla

BAR International Series 2840, BAR Publishing, Oxford, 2017, 287 pages.
ISBN: 978-1-4073-1509-6

FERNÁNDEZ-CRESPO T.¹

¹ Research Laboratory for Archaeology and the History of Art, School of Archaeology, University of Oxford, South Parks Road, Oxford OX1 3TG, United Kingdom.

Corresponding author: teresa.fernandez-crespo@rlaha.ox.ac.uk

Recibido: 01-07-2017

Aceptado: 21-09-2017

This version of the author's PhD dissertation (Díaz-Zorita Bonilla, 2013), revised and updated, aims at reconstructing social organisation and evaluating the extent of social inequalities in south-western Iberian Copper Age through the integration of biological and archaeological examinations of human skeletal remains. The volume represents a fine example of a research designed in such a way as to achieve a good fit between the archaeological question and the capabilities of the bioarchaeological studies, and gathers seven chapters, which somehow follow the traditional structure of a research article (i.e. introduction, material, methods, results, discussion and conclusions).

Chapter 1, the introduction, presents a brief state-of-the-art on the appearance of social differences in south-west Spain. The author states that inequalities

emerged in the second half of the 3rd millennium BC in the study area, being fundamentally defined in relation to the diversity of mortuary site-types (megalithic monuments, tholoi, artificial and natural caves, pits, ditches,...), and the quality and quantity of the associated grave goods, as well as the great variability in settlement patterns (e.g. fortifications). However, there is still no consensus on the debate about the formation of a Copper Age state in the region. The chapter also includes sections that are essential in a PhD dissertation as the main aims, the hypothesis to be tested and the significance of the research. All these, which are closely related, can be summarised in the intention of exploring the potential of bioarchaeological evidence to shed light on early social inequalities, especially those linked to divergences in funerary locations (i.e. megalithic vs. non-megalithic structures).

Chapter 2, entitled Bioarchaeology, proposes a definition of this term, including a relatively complete theoretical background with regard to mortuary analysis and a fine overview of the development of the discipline (both worldwide and locally). However, the chapter does not provide any relevant information for the specific aim of the volume and also interrupts the flow of the text.

Chapter 3 offers detailed contextual information. Southern Spain, as many parts of Europe, has a long-standing research interest in megalithic monuments (dating back to the 19th century). However, mortuary practices have not been investigated in detail until very recently. In this regard, it is especially noteworthy the huge diversity of site-types and funerary practices mentioned in local research so far. The chapter describes the sites analysed in the study. Although it would have been preferable (and more reader-friendly) to include a chapter devoted to material, the sites from which the human remains come from are well described. The sample selected is constituted only by one megalithic site (Tomb 3 of La Pijotilla with, at least, 178 individuals) and another mainly non-megalithic site (Valencina-Castilleja with a minimum number of 36 individuals from six different sectors – El Algarrobillo, La Alcazaba, La Cima, La Gallega, Cerro de la Cabeza and PP4-Montelirio) for the full bioarchaeological approach, and by one more site (La Orden-El Seminario) solely used for stable isotope comparative purposes. Despite it is quite obvious that this sample may not be representative enough to provide a reliable answer to the complex archaeological question the research aims to solve, one also feels that the study still can offer interesting insights.

Chapter 4, devoted to the methods, describes the techniques used for the analysis of the human remains (identification, classification and recording, preservation, conservation and taphonomy, age and sex estimation, metric and non-metric traits, paleopathology, isotope analysis, radiocarbon dating, etc.). The vast majority of the techniques selected are quite common in the study of multiple (and sometimes commingled) burials, and generally well considered in the archaeological literature. What is relatively innovative and worth mentioning, especially in the Spanish context, is the completeness of the bioarchaeological study carried out, which includes both conventional

and “modern” techniques as paleodiet, mobility and chronology studies.

Chapter 5, which summarises the results, is concise and easy-to-read following the same structure (showing the results of La Pijotilla firstly, and then those from Valencina-Castilleja) over the different sections (e.g. MNI, distribution by age and sex, etc.). The author defends here an “equal” demographic distribution by age and sex between both funerary site-types. However, this statement (whether correct or not) is based on an over-simplistic assessment. Just a quick analysis of the proportion of males to females (sex ratio) shows evidence for potentially different selective burial practices between both site-types. While the result of La Pijotilla (1.00) reflects a number of males buried similar to the number of females, that from Valencina-Castilleja (1.50) suggests a possible bias against women that may be worth further exploring statistically. Metric and non-metric trait analyses, unfortunately and as usual in this type of funerary contexts, are based on a very small sample size and provide no evidence of differentiation. By contrast, differences in the prevalence of some oral pathologies (namely dental calculus and linear enamel hypoplasias), which seem to be more frequent among those buried in the megalithic sites, have been identified. In the same line of evidence and despite the limitations due to poor collagen preservation, paleodietary stable isotope data also show significantly higher nitrogen isotope values among individuals buried in megaliths. Finally, strontium isotope measurements do not provide clear differences in the ratio of potential foreigners to local people by site-types, being relatively high in both cases.

Chapter 6, the Discussion, is divided into two main parts. The first part shows an integrative analysis of the results obtained in the study within the south-western Spanish context. There is no doubt that the approach is useful but it would have been much more interesting if the data had not been compared generally, but directly differentiated by megalithic and non-megalithic sites. The second part explores the potential link between social inequalities and funerary practices, estimated health status, dietary practices and population movements. In this regard, the meaningful higher frequencies of linear enamel hypoplasias found among those buried in megalithic graves are interpreted, after

the Osteological Paradox premises (Wood et al. 1992), as evidence of higher status (since the individuals seem to have survived to stress episodes more frequently than those inhumed in non-megalithic structures). The more elevated nitrogen isotope ratios and the more usual presence of dental calculus (a diet-related oral pathology) among megalithic individuals are similarly interpreted. Thus, those buried in megalithic sites would have had access to a higher proportion of animal protein (meat, dairy products) in their diet, due to their presumably higher social standing compared to those inhumed in non-megalithic graves. At this point, one misses a mention to the very small but relevant number of studies in Neolithic and Chalcolithic Europe showing a link between burial type and diet (as inferred from stable isotope analysis) to stress the great significance of this unusual finding (Schulting, 2007; Le Bras-Goude et al., 2013; Waterman et al., 2016; Fernández-Crespo & Schulting, 2017). The section “Exchange of goods, trade and mobility in the south-west Spanish Copper Age” is particularly well conducted in closer integration with other aspects of archaeological research programmes and, contextualised in the European scope, it is probably the most enjoyable section for a specialised reader. Despite the debatable reliability of the bioavailable strontium baseline provided and the fact that no differences between megalithic and non-megalithic structures are detected, the strontium analysis offers very intriguing data. More specifically, the interpretation of the studied sites as “important central places, where people from the vicinity might meet to trade and exchange, as a social gathering place, or to participate in rituals” seems to be very reasonable in light of the high percentages of individuals identified as non-locals together with other lines of archaeological evidence (large settlement sizes, exotic grave goods, diversity of funerary site-types). The chapter ends with a particularly well written summary that shows the enormous potential of Bioarchaeology for further examination and additional insights, even with badly preserved human assemblages.

Chapter 7, the Conclusions, summarises –as expected– the main results and interpretations related to age, sex and stature, diet, mobility and settlement and funerary contexts, and tries to provide an answer to two key questions: 1) whether social differences are manifested in mortality, morbidity, diet and mobility patterns in the sample studied, and 2) whether there is

a relationship between Copper Age social differences and funerary patterns. Despite the limited paleodemographic approach and the small sample sizes, the results seem to demonstrate, at least in this context and preliminarily, that the treatment of the dead does reflect to some extent who they were in life. This goes some way to challenging the post-processual critique of mortuary archaeology, in which it was argued that the treatment of the dead is part of an idealised image created by the survivors, and may or may not reflect ‘real’ aspects of their lives (Parker Pearson, 1999). The text follows acknowledging the principal limitations derived from the study of commingled, very fragmented and poorly preserved human remains (e.g. difficulties in age and sex estimation, identification of pathologies, recording metric and non-metric traits, poor collagen preservation due to hot climate, linking individuals with grave goods). The work ends establishing the need for new research strands in the study of prehistoric social inequalities in the region, namely the creation of a biosphere map for south-west Spain, and the extension of the current corpus of stable isotope data and radiocarbon measurements for Copper Age populations.

Literature Cited

- Díaz-Zorita Bonilla M. (2013) The Copper Age in south-west Spain. A bioarchaeological approach to prehistoric social organization. Durham theses, Durham University. Available at Durham E-Theses Online: <http://etheses.dur.ac.uk/9470/>
- Fernández-Crespo T., Schulting R.J. (2017) Living different lives: early social differentiation identified through linking mortuary and isotopic variability in Late Neolithic/ Early Chalcolithic north-central Spain. *Plos One* 12(6). DOI:10.1371/journal.pone.0177881
- Le Bras-Goude G., Herrscher E., Vaquer J. (2013) Funerary practices and foodstuff behaviour: What does eat meat mean? Stable isotope analysis of Middle Neolithic populations in the Languedoc region (France). *J Anthropol Archaeol* 32: 280-287.
- Parker Pearson M. (1999) *The Archaeology of Death and Burial*. Stroud: Sutton.
- Schulting R.J. (2007) Non-monumental burial in Britain: a (largely) cavernous view. In: L. Larsson, F. Lüth & T. Terberger (Eds.). *Non-megalithic Mortuary Practices in the Baltic - New Methods and Research into the Development of Stone Age Society*: 581-603. Bericht der Römisch-Germanischen Kommission 88. Römisch-Germanischen Kommission. Schwerin.

Waterman A.J., Tykot R.H., Silva A.M. (2016) Stable isotope analysis of diet-based social differentiation at Late Prehistoric collective burials in South-Western Portugal. *Archaeometry* 58(1): 131-151.

Wood J.W., Milner G.R., Harpending H.C., Weiss, K.M. (1992) The osteological paradox: problems of inferring prehistoric health from skeletal samples. *Curr Anthropol* 33(4): 343-370.