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A Mudéjar bone tool workshop (13–14th century AD) in Lisbon, Portugal

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1. INTRODUCTION

Largo da Severa is an archaeological site located in the Moorish neighbourhood (“Bairro da Mouraria”) of Lisbon, that was built after 1170 AD following the Christian conquest of the city to the Moors (FIG.1). The materials here presented belong to the 13–14th century mudéjar occupation (i.e. the Muslims of al-Andalus who remained in Iberia after the conquest). They were collected during the 2012/2013 emergency excavations for the reconstruction of the Casa da Severa building (Valente & Marques 2017). This is the house in which the great fado singer Maria Severa Onofriana lived the last years of her life, having died there at 26 years old, in 1846.



FIG.1. Location of Mouraria in Modern Lisbon and in a 16th century plan of Lisbon (by Georgio Braunio Agrippinate, 1593).

2. MATERIALS & METHODS

The Largo da Severa osseous industry (n=141) is made from mammal bone, mainly cattle (*Bos taurus*). It includes three categories of artefacts, namely preform/finished objects, debris and blanks.

The osseous industry was analysed using macro and micro-wear approaches. We focused our observations on bone surface modifications made during the production and also on post-depositional processes (taphonomical modifications). The analysis was carried out with the use of magnifications lens (10–40x) and not just under the naked eye (Blumenshine et al. 1996, Dominguez Rodrigo et al. 2009, Évora 2014) otherwise some important features would be missed. The bone surface analysis methodology followed modern reference studies such as d’Errico et al. (1984, 1985, 1986a, 1986b, 1993), Bertrand (1999), Averbough (2000) and Goutas (2005).

3. RESULTS

The anatomical elements used are not diversified—this assemblage is mainly composed by metapodial distal epiphyses, followed by diaphyses; the proximal epiphyses are less frequent. The epiphyses were separated from the rest of the bone mainly through direct percussion (FIGS.2,4), on other cases by direct percussion and bending (FIG.2), and also sawing of the condyles (FIG.7). On the diaphysis, the techniques used were mainly bipartition (FIGS.2,5) and direct percussion and bending to obtain blanks (FIG.2). On the blanks, we registered modification techniques such as scraping and abrasion to produce facets (FIGS.2,3,8).

Further data regarding cortical tissue thickness, general measurements and type of fractures can be observed in the graphics and table presented below.

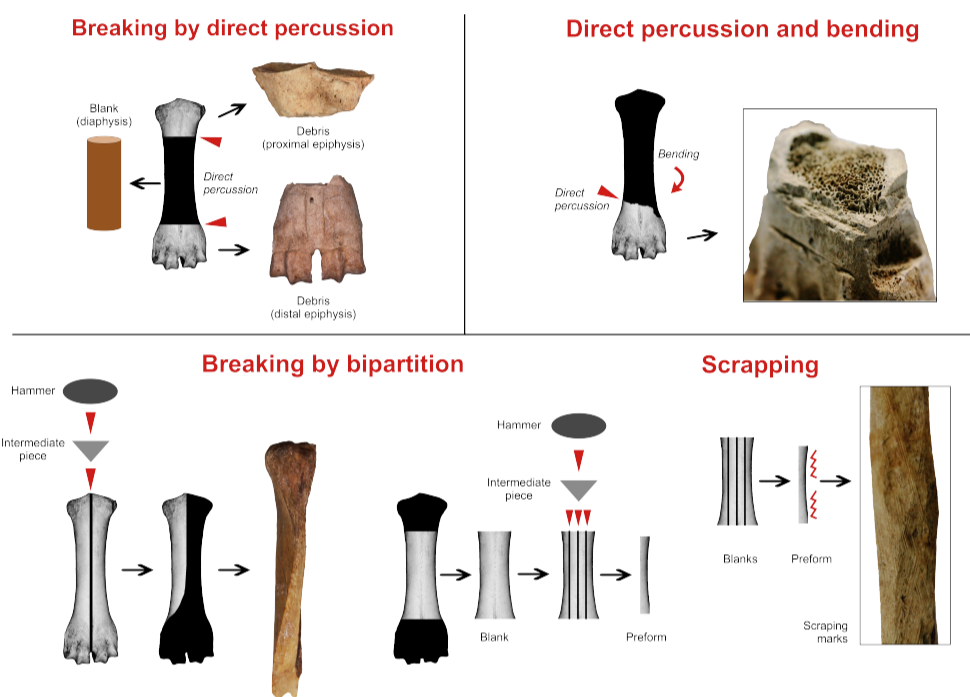


FIG. 2. Transformation schemes.

4. CONCLUSIONS

The osseous industry from the Mudéjar contexts of Largo da Severa is interesting and intriguing. The assemblage is mainly composed by refused epiphyses. It shows that there was a bone workshop at the site, though no clear finished objects were registered to allow a further understanding of their purpose. On the other hand, this assemblage is informative because it shows the techniques and the tools used by medieval Lisbon’s artisans when producing their osseous industry.

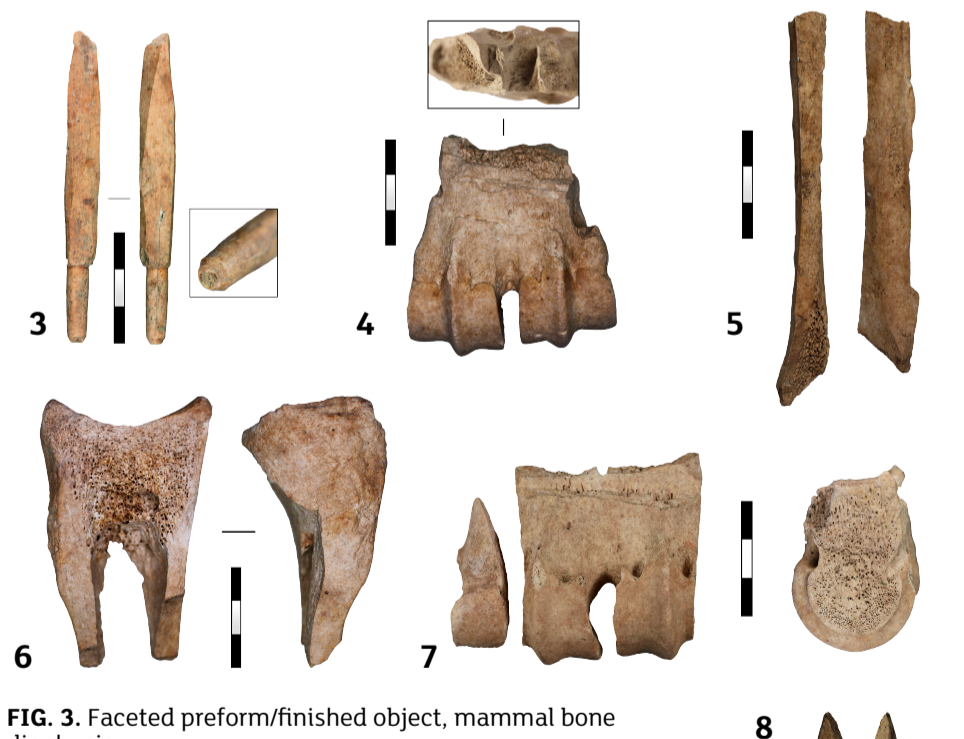


FIG. 3. Faceted preform/finished object, mammal bone diaphysis.

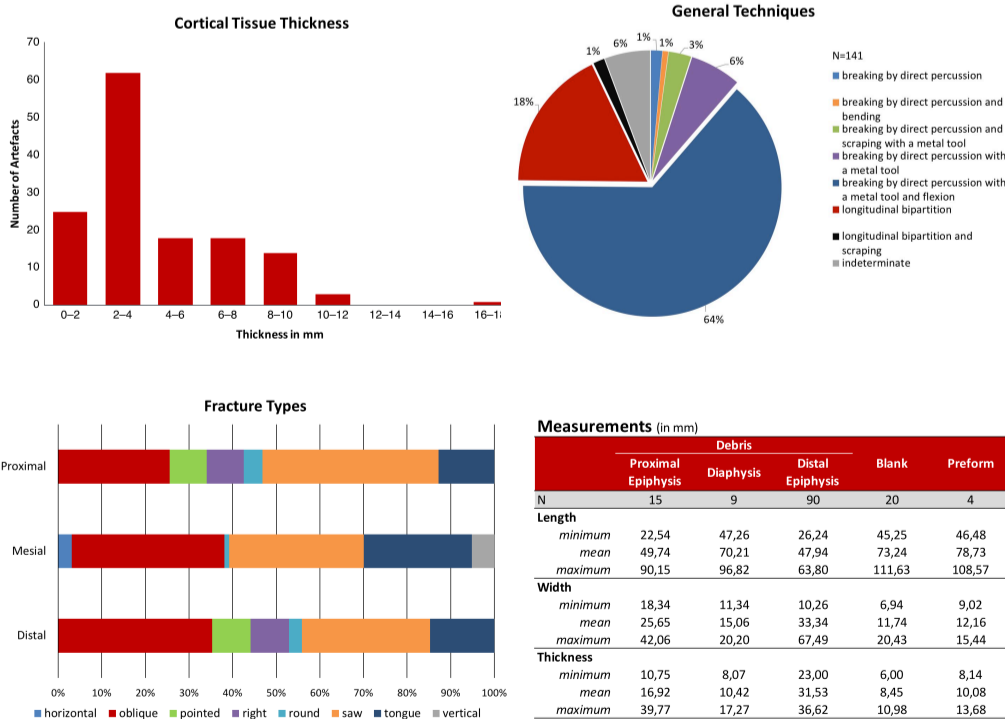
FIG. 4. Marks of direct percussion, cattle metapodial distal epiphysis.

FIG. 5. Bipartition of the diaphysis.

FIG. 6. Debris, cattle metacarpal proximal epiphysis.

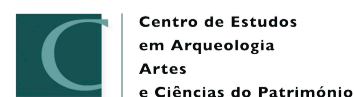
FIG. 7. Marks of direct percussion and sawing, cattle metapodial distal epiphysis.

FIG. 8. Faceted preforms, mammal bone diaphysis.



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