Wood-charcoal in a ritual context at La Bastida de les Alcusses (Moixent, Valencia, Spain)

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Summary: *Fieldwork carried out in 2010 at the Iberian* oppidum *of La Bastida de les Alcusses has revealed the existence, under the floor of the main gate, of a layer with abundant wood-charcoal and metal objects. Both the typology of the objects and their stratigraphic-spatial layout suggest that this is a ritual deposition related to the foundation of the site. Among the timber remains two species have been identified (Aleppo pine and holm oak) and they might be interpreted as lumber pieces or wooden objects that were consciously burnt before being deposited, although we do not rule out the possibility that it was wood harvested specifically for this purpose.*

Key words: *Iron Age, Iberian* oppidum*, timber, gate, ritual/foundational context.*

INTRODUCTION

La Bastida de les Alcusses is an Iberian *oppidum* built on a hilltop dominating the surrounding plains. The settlement has a 4-metre thick wall delimiting an area of about 4 hectares and an unfinished second wall to the west delimiting an area of 1.5 hectares. The *oppidum* has four gates (three to the west and one to the east) and three towers (two between the west and south gate and another larger one, by the east gate). The urban layout of the settlement is structured with a main road, a perimeter circuit and a net of smaller streets and *plazas*. Blocks of houses of different size are built within this network of roads and *plazas*. The settlement was occupied during the 4th century BC and was abandoned due to a violent conflict with other Iberian groups of the area.

During the excavation carried out in 2010 an outstanding deposition of objects was recorded beneath the floor of the west gate, on a paved area belonging to an earlier building. The typology of the materials -iron weapons, wooden structures, seeds and fruits, and ceramic vessels, its treatment -most of them were burnt- and its layout lead us to consider that this was a ritual deposit.

A preliminary inventory of the objects recovered lists iron objects, pottery and other finds. Among the iron objects, there are nails and pieces for assembling wooden objects and a set of 4th century BC southeast Iberian weapons, including falcata swords, shields, spears and *soliferrea* –a type of javelin made out of iron. Pottery vessels –among them a red-figure krater- and other organic materials such as seeds -cereals and olives- and animal bones were also recovered. It is important to note that these objects were part of a ritual performance and for this reason the weapons should not be considered as remnants of a conflict but ritualized objects instead: in fact they are bent, following the treatment of weapons deposited as grave goods in Iberian cemeteries, although the present contexts are not tombs (Bonet and Vives-Ferrándiz, 2011). In this abstract, we present the results of the analysis of the wood remains and of the associated iron pieces.

MATERIAL AND METHOD

In the above described layer, 33 pieces of wood of varied morphology and size have been recovered and analyzed. The wood was in a fragile state of conservation as it was very fragmented and, in some cases, only partially burned, which had resulted in the complete degradation of the non-charred parts. During fieldwork, drawing and measurement of every single piece was undertaken, as was their disposition on the floor. Before their removal, obtaining a complete section of each wooden piece was attempted, not without difficulty because of the above mentioned poor conservation.

The analysis included the following observations: botanical identification; reconstructing the pieces in order to assess their original morphology; trying to get a whole section and identify any traces of woodworking; estimating the minimum diameter of the timber (the fragments were large enough to work it out with a circle grid); assessing the cutting season from the presence of bark; and analysis of wood decay caused by xylophages.

RESULTS OF THE WOOD ANALYSIS

All the timber belongs to two species: almost all are of Aleppo pine (*Pinus halepensis*) while only two are of holm oak (*Quercus* sp. evergreen). Some of them are square-worked, but other branches maintain their natural morphology including the bark: we are not able to assess if they ever formed part of a wooden structure

(e.g. lattice of the roof or beams) or if they would have been used specifically as fuel for burning during the ritual performance. In this sense, the identification of the cutting season (on the basis of the presence of bark), shows a rather uniform pattern, as all the wood was cut during an unfavorable season for plant growth, i.e. from beginning of the summer to winter. This homogeneity might indicate that the set of branches represents a specific, one-time occurrence.

It has also been possible to measure the exact diameter of branches that conserve their bark. They are quite varied, ranging between 11.6 and 2.3 cm, but most were 5 cm or less. Regarding the pieces which do not preserve their whole radius, the minimum diameter has been estimated between 11 and 15 cm.

The wood had a significant microorganism attack pattern (fungal hyphae and ducts of xylophages); this alteration is more visible on larger timbers, whereas the branches are apparently less altered. This could be related to the use of two kinds of wood in this context: on the one hand, reused wooden structures and/or objects contaminated during their lifetime, and on the other, wood cut and provided as fuel, although this hypothesis will be confirmed in a later stage of the study.

DISCUSSION AND CONCLUSIONS

Wood and fire played a central role in the formation of this record. Almost all the timber recovered belongs to Aleppo pine. This is precisely the most frequent species in other contexts of the settlement (Table I) and it is also present in the abandonment levels of other gates and houses, therefore confirming in its use for different purposes as a species widely available in the environment.

Taxa/Context	Soils	Dumps	Construction	Objects
Erica sp.	*	*	*	
Fraxinus sp.		*	*	*
Juniperus sp.		*		
Leguminosae	*	*		
Olea europaea	*	*		
Pinus halepensis	*	*	*	*
Pinus pinaster	*	*		
Pistacia terebinthus				*
Prunus sp.	*	*	*	
Quercus sp. deciduous	*	*		
Quercus sp. evergreen	*	*	*	*
Rosmarinus officinalis	*	*	*	
Salix-Populus		*	*	*

TABLE 1. Taxa identified in the different contexts of La Bastida

In this sense, no specific plant species was selected for this ritual performance. The presence of "natural" wood represents either the collection of firewood for this purpose, or that they might have formed part of uncarved structures. In fact, construction elements and other objects were probably reused –and burnt– because they were of exceptional significance.

So far, no wood sample has been clearly identified as weaponry parts (e.g. handles), despite the sampling strategy, which separately selected the charcoal laying near the pieces from other wood structures. In other contexts of La Bastida as well as in other Iberian sites the use of high-quality woods for making handles and wooden tools has been documented (Carrión and Rosser, 2010; Pérez *et al*., 2011), but in this case, no other species apart from pine and holm oak have been identified. The available evidence suggests that the wooden objects were manipulated after their burning and before being deposited. In fact, nails and other iron pieces for assembling wooden structures were removed from the objects before being deposited.

A preliminary interpretation for this finding is that it is a ritual deposit. Although we need to be aware of the fact that the material is still under study, we suggest that it could be a heroic, collective ritual performed by the elites that inhabited the settlement. It might have been a foundational ritual that was performed in what was going to be a highly significant public space, the main gate of the village. Another avenue of interpretation under consideration is that this is a memorial of a singular act, or featured events, like cenotaphs (graves without burials) or warrior memorials.

In any case, the similarity of this practice with funeral ritual is remarkable: not only were the weapons bended following the treatment of those deposited in Iberian tombs (Quesada, 1997), but also fire played an essential role, as wooden objects and structures were intentionally burned before being deposited. The study of the rest of the materials will help to better understand the characteristics of this outstanding context.

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