

## Iron age pottery from Garvão votive deposit

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### Abstract

The Iberian Peninsula was an attractive area in ancient times due to its abundance in geological resources. Hence, the Iberian Iron Age is a period of successive social and political transformations, sometimes resulting in conflicts [1]. In 1982, an impressive votive deposit was discovered in Garvão (SW Portugal) revealing an important Iron Age II holy site [2]. Beside some uncertainties, this region is marked by very strong Mediterranean cultural influence but the inhabitants are Celtic. The materials recovered (mainly pottery) were intentionally deposited, carefully arranged in order to optimize the available space [2, 3]. The pottery recovered shows that during Iron Age this archaeological site was a merging geostrategic point of the Iberian societies with strong influences of the Mediterranean world and the Iberian Celtic influences.

Pottery fragments are one of the most common signs of human occupation. Its aesthetic aspects are extensively studied as one of mankind's earliest expressions of representational art. But the ceramic characteristics depend also on the technology accessibility, the relationship of the societies with their environment, especially with the availability of raw materials, and on the commercial and cultural connections with other societies [4, 5]. Raw materials used by these communities provide essential information to understand specific historical periods. The geological resources are particularly useful for this purpose because even processed they can figure out identifiable signatures of provenance or technology used. Moreover, their intermittent occurrence and human necessity justify the existence of trade routes.

A detailed study of the pottery based on stylistic analysis was envisaged which allowed the classification into different clusters. Special emphasis will be given to the provenance of the pottery, the technological aspects and the relationship between populations and Garvão holy site. The study of geological raw materials applying and combining modern techniques of earth materials sciences and the principles of physical sciences (e.g. geology and chemistry) can provide answers and a better understanding of the Garvão importance in this area of the Iberian Peninsula. A multi-analytical methodology was setup using optical and electron microscopy, infrared spectroscopy, X-ray fluorescence and X-ray diffraction. The combination of these techniques applied to selected Garvão pottery materials allowed the recognition of the ceramic phase composition, firing temperature, kiln atmosphere, ceramic manufacturing processes and origin of raw materials. With this study, connections with Mediterranean areas and with local production areas were underlined revealing that Garvão was a multicultural area.

### References

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