**Morphometrical analysis of the iron knives of the Can Piteu-Can Roqueta Early Iron Age necropolis**

Tamar Zamora Hinojosa\*, F. Javier López Cachero

SERP-UB, Facultat de Geografia i Història. Universitat de Barcelona, C/ Montalegre 6-8, E-08001 Barcelona

**Abstract**

The appearance of the first iron objects in the Western Mediterranean and the introduction of iron technology to the region have led to a series of debates concerning the cultural agents involved in this process and their contacts, the adoption of this new technology and its periodization. During the 20th century, archaeological studies focused on determining the wide cultural spectrum of the area, interpreting the introduction of iron as a consequence of acculturating contacts between Mediterranean civilizations, such as Phoenicians as well as Greeks and their subsequent colonial establishment, making technical transmission effective, based on the identification of slags from the 6th century BC. The Type Grand Bassin iron knives (rectilinear, pointed tip and riveted handle) played an important role in contacts between Mediterranean merchants and indigenous communities. They are considered the first objects made of iron to be used and frequently employed as grave goods. To understand the cultural and symbolic importance that iron knives had in these communities, it is necessary to carry out an analysis and contextualization of these particular objects, something that until now has not been conducted in extension or depth. This work, therefore, presents a morphometrical variation analysis of approximately one hundred knives from the necropolis of Can Piteu-Can Roqueta (Sabadell, Barcelona). The application of morphometrical techniques helps us to understand the variability of these items, consequently applying multivariant statistics will allow us to study their functionality further and understand the significance that these objects had for those communities.

## **Keywords**

Early Iron Age, Western Mediterranean, knives, morphometrical analysis