

# IMAGES IN THE CLAY: THE ICONOGRAPHY OF THE LOOM WEIGHTS OF VILA NOVA DE SÃO PEDRO (AZAMBUJA, PORTUGAL)

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The Chalcolithic (c. 3000 BC) settlement of Vila Nova de São Pedro (VNSP), located in the municipality of Azambuja, 80km NE from Lisbon, is one of the most famous Prehistoric fortifications of Portugal.



Excavated mainly by Afonso do Paço between 1937 and 1967, it provided a huge amount of artifacts, including the largest collection of decorated plaques made of clay, traditionally interpreted as "loom weights".



One of the aims of a research project (VNSP 3000) recently initiated by the authors is a systematic study and publication of all the material already collected, completed by a series of surgical interventions, with the aim of collecting contextual and chronological information about these interesting and puzzling artefacts, in parallel with experimental research to investigate their exact function.



Distribution of the typological variety of loom weights in Portugal

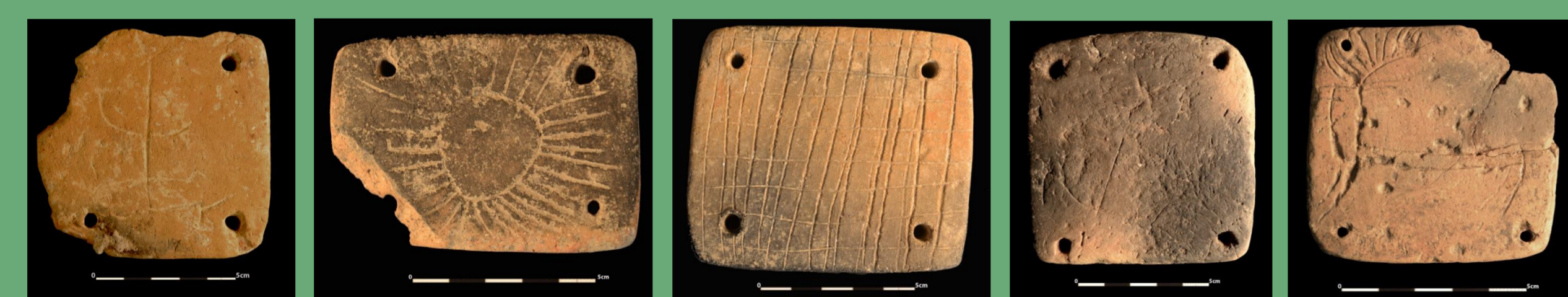
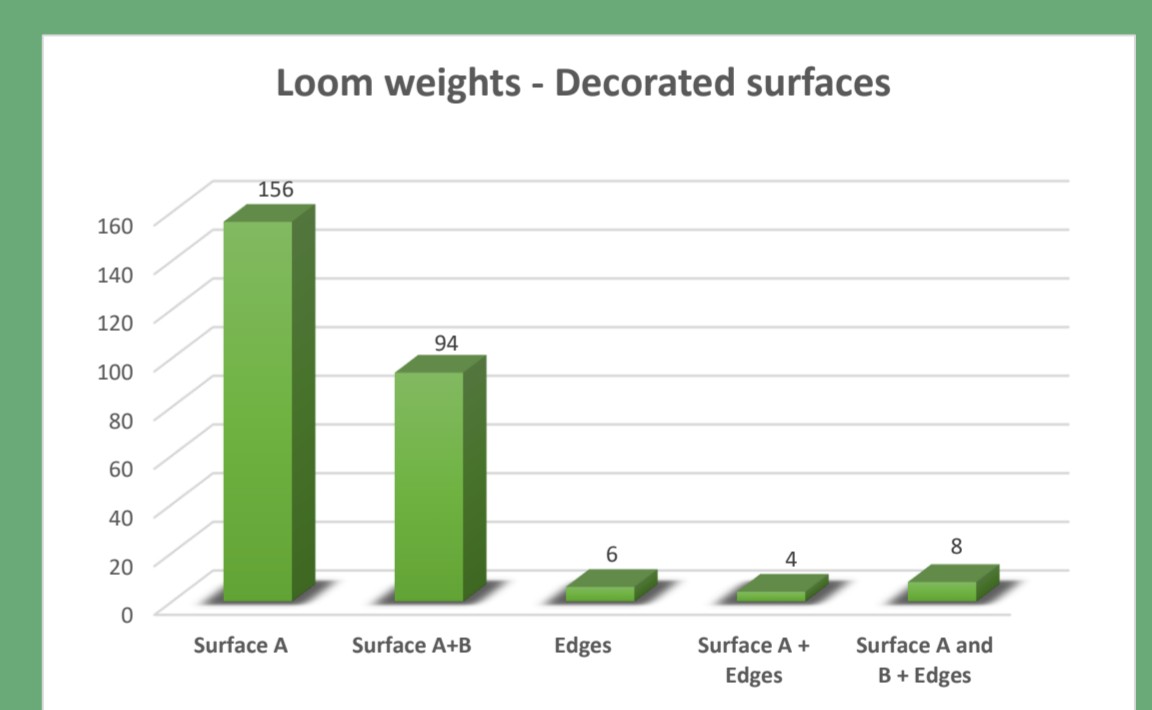
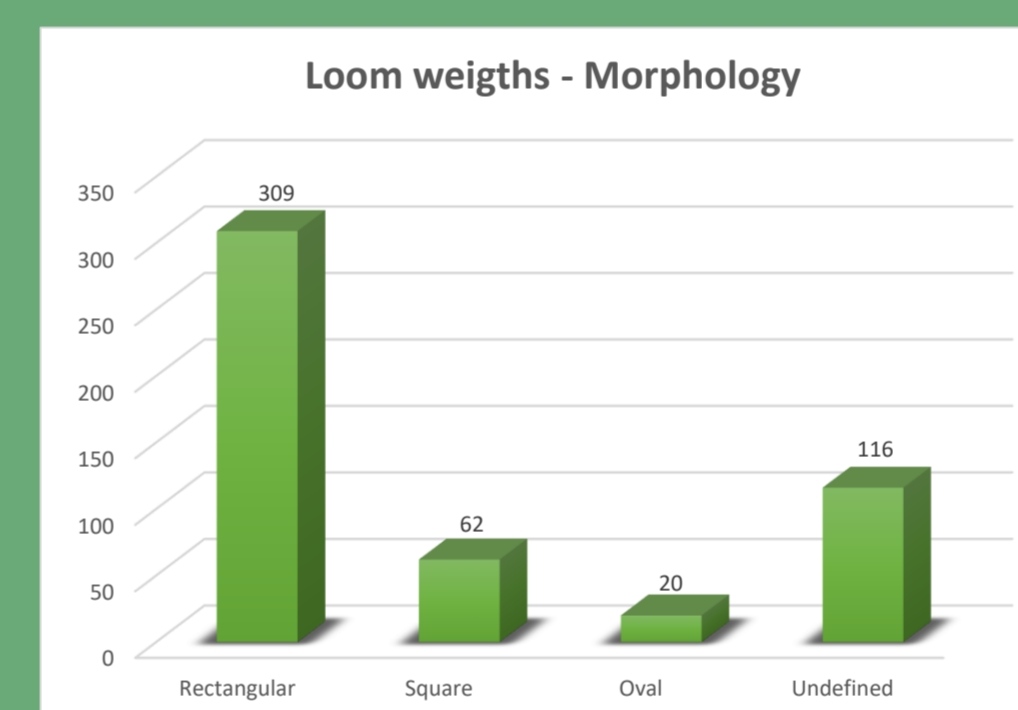
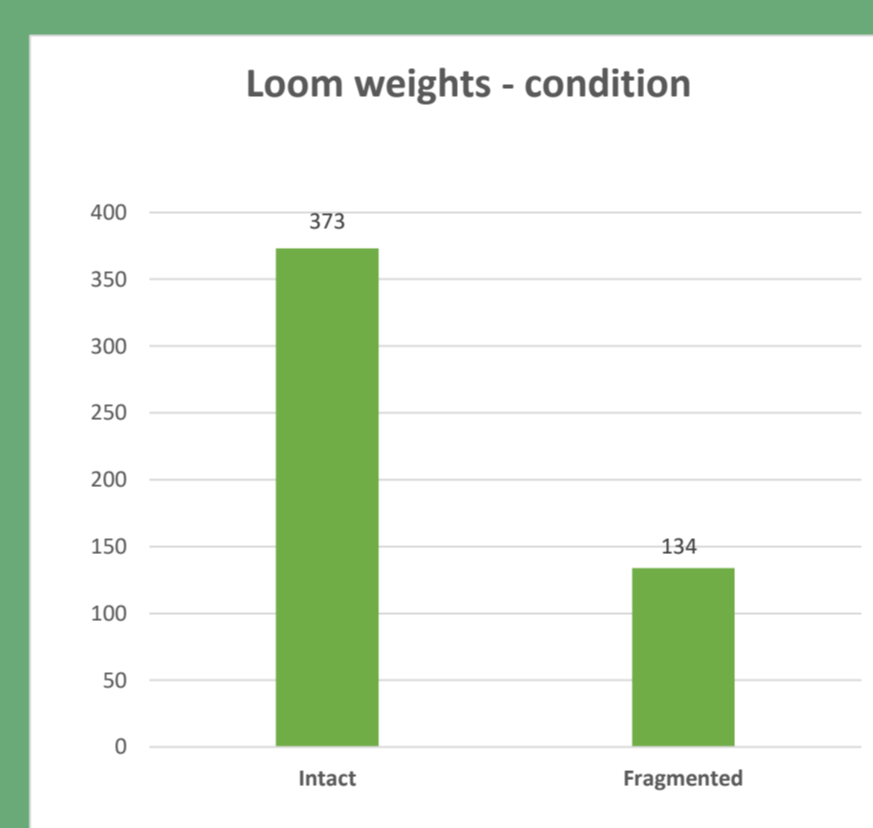
## The Loom Weights

The ceramic loom weights are fairly common in the sites dated to late 4th and early 3rd Millennium BC and usually attributed to Late Neolithic and Chalcolithic, especially in the settlements from the westernmost area of Iberia. Ceramic plaques have several shapes – square, rectangular or oval and usually have two or four perforations. In Portugal, there is a great variety in the shape and size of the loom weights. This diversity seems to be related, in many cases, to the different areas where the objects were found. In northern and central areas, only plaques are found: these are usually square, oval or rectangular-shaped, have two or four perforations and are size-wise and, especially weight-wise very robust. In the southern areas of Portugal, both plaque and crescent-shaped weights are found, and both types are usually lighter and more delicate. These differences in the shape and size may be related to the use of various types of fibres and even different types of looms (tablet weaving, or vertical loom), and could be a sign of the existence of diverse weaving traditions and styles in western Iberia. The reconstruction of looms and experimental weaving with replicas of crescents and plaques should be performed, in order to verify the functionality of these tools. The study of ceramic loom weights becomes an essential component of the understanding of the looms themselves and the cloths which may have been produced by using them.

## VNSP – MAC - LOOM WEIGHT COLLECTION

507 loom weights  
 268 with decoration  
 239 without decoration

The set of loom weights in the Carmo Archaeological Museum (MAC) may correspond to a selection, and for this reason the values of artifacts decorated and intact are rather high. Typologically they are mainly of quadrangular format, presenting decoration in one surface, in both or still in the edges. The technique most used to perform the decorative motifs was the incision, being minority the impression and the conjugation of the two techniques.



The motifs present in loom weights fall into the artistic cycle of schematic art. The conceptual and symbolic uniformity of the Chalcolithic communities of the Iberian Peninsula is reflected in the iconography present in both ceramic artifacts, "votive" artifacts (schist plaques, cylindrical idols, figurines) and in rock artifacts – engravings and schematic paintings. In all of these categories, geometric motifs predominate, with zoomorphic and anthropomorphic ones being devoid of their formal characters that allow the identification of anatomical details. Soliforms emerge as an icon motif of this period of social complexity of agro-pastoral societies, acquiring the "mother-goddess Mediterranean" a central role. Iconography would function as a common code, a language perceived by members of the community, promoting group cohesion.

## Iconographic motifs - 364

Typology	Description	Number
<b>Geometric</b>	<ul style="list-style-type: none"> <li>Reticulated</li> <li>Straight lines – parallel</li> <li>Irregular lines</li> <li>Curved and semi-curved lines</li> <li>Broken lines</li> <li>Winding lines</li> <li>Perpendicular lines</li> <li>Mixed lines</li> </ul>	322
<b>Zoomorphic</b>	<ul style="list-style-type: none"> <li>Cervid</li> <li>Quadrupeds</li> </ul>	9
<b>Anthropomorphic</b>	<ul style="list-style-type: none"> <li>Schematic representation of humans or human characteristics</li> </ul>	2
<b>Astral</b>	<ul style="list-style-type: none"> <li>Circular or sub-circular motifs, with straight lines arranged around them, forming a solar motif</li> </ul>	30
<b>Others</b>	<ul style="list-style-type: none"> <li>Mixture of geometric and anthropomorphic motif</li> </ul>	1

## Same motifs, different artifacts:



## The decoration of loom weights – open questions:

- VNSP - large percentage of decorated weights. Why?
- Specialization area in the village?
- Method of using the weights and visualization of the decoration on the loom
- Execution of loom weight: artefactual specialization?
- Implementation of the iconographic motif: personal choice or normative choice of the community?
- Meaning of the iconographic motif - relation with the production of the loom?
- Symbolism of the figures: cervid, soliform, anthropomorphic and geometric
- Relationship with other artifacts - conceptual uniformity?

**Bibliography**  
 - ARNAUD, J. M. (2013) – "Reflexões em torno das placas de cerâmica com gravuras de Vila Nova de S. Pedro (Azambuja)". ARNAUD, MARTINS e NEVES (coords.) *Arqueologia em Portugal – 150 Anos*. Associação dos Arqueólogos Portugueses, Lisboa, p.447-455.  
 - ARNAUD, J.; DINIZ, M.; NEVES, C.; MARTINS, A. (2017) – Vila Nova de São Pedro, de novo no 3º milénio – novas interpretações e novo projecto. *Arqueologia e História*, Revista da Associação dos Arqueólogos Portugueses, 66-67, Associação dos Arqueólogos Portugueses, Lisboa, pp. 7-17.  
 - COSTEIRA, C. (2017) – No 3º milénio a.n.e., o sítio de São Pedro e os dinâmicos de povoamento no Alentejo Médio. Tese de doutoramento apresentada à Faculdade de Letras da Universidade de Lisboa.  
 - COSTEIRA, C.; MATAIOTO, R. (2018) – Loom weights and weaving in the archaeological site of São Pedro (Redondo, Portugal). In SIENICKA, M.; RAHMSTORF, L.; ULANOWSKA, A. (eds.) – *First Textiles: The Beginnings of Textile Production in Europe and the Mediterranean*.  
 - DINIZ, M. (1994) – Pésos de tear e tecelagem no calcolítico em Portugal. *10 Congresso de Arqueologia Peninsular. Actas IV. Trabalhos de Antropologia e Etnologia*. Porto, 34: 3-4, p.133-149.  
 - DINIZ, M.; MARTINS, A.; NEVES, C.; ARNAUD, J. (2017) – Vila Nova de São Pedro (Azambuja), no 3º milénio, um sítio calcolítico no ocidente peninsular – contributos para um debate. ARNAUD e MARTINS (Coord.) – *Arqueologia em Portugal 2017 – Estado da Questão – Textos*. Associação dos Arqueólogos Portugueses, Lisboa, pp.593-604.  
 - PÁCO, A. (1943) – Placas de barro de Vila Nova de S. Pedro. *Congresso do Mundo Português*, Porto, 1, p.233-251.

