Stone tool technology at the Cabeço da Amoreira shellmidden (Muge, Portugal): a diachronic perspective

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Abstract

Ongoing archaeological works at the Cabeço da Amoreira shellmidden have allowed the excavation of new areas within the mound, using Total Stations and thorough excavation methodologies. The latter allowed for comprehensive data, which contributed to a fuller understanding of the stratigraphic sequence, the existence of radiocarbon dates and the possibility of spatial analysis.

There are currently two excavated areas within the shell midden (S1 and S2), each showing different layers. Lateral variation of the layers has also been verified for each area. These layers often show different lithic and raw material concentration patterns, which may be understood as different occupation patterns.

This study aims to understand the technological and raw material variability within the two areas of the archaeological site, as a way to understand different patterns and occupations.

To do so, a typological and attribute analysis was applied to all lithic artifacts with individual IDs (superior to 2 cm or inferior, if complete), from sampled units from both areas, including the macroscopic identification of thermal alterations. Raw materials were individualized by type when concentrated in clusters and with macroscopic similarities, in some cases being possible to do a small number of refitting.

Finally, the present study also ran spatial analyses, using the spatial information recovered on the field, correlating it with the technological and raw material data.

All statistical and spatial analyses were performed in R environment, using the RMarkdown software.

The results suggest the functional separation of the lithic assemblages and its association with differences detected in the composition of the several identified layers. This separation can be seen mainly in the raw material patterns, but also in the presence and frequencies of techno-typological diversity.

Keywords: Lithic analysis, Coastal adaptations.

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