

1 ACQUISITION OF IGNEOUS RAW MATERIALS IN THE UROLA VALLEY: SOURCES OF SUPPLY AROUND THE IRIKAITZ DEPOSIT

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Abstract format: Oral

The Irikaitz archaeological site is located in the north of the Iberian Peninsula, in the Basque Country region. It is an open-air site on the banks of the middle course of the Urola River. Within the framework of the analysis of the capture of resources close to the deposit, we have studied igneous raw materials in the archaeological remains of the Lower and Middle Paleolithic of Irikaitz. Through the study, several tools have been found made of various types of basalt, dacites, and tuffaceous shales, among others. In order to understand how the prehistoric groups that inhabited Irikaitz collected this type of raw materials, we have carried out a geological analysis of the primary and secondary outcrops in the area, detecting several possible sources of supply. The Urola River cuts several geological strata with igneous lithologies that over time have been eroding and accumulating in the form of pebbles, in secondary deposits a few kilometers from the archaeological site. Through Geographic Information Systems (GIS), and based on concepts such as 'accessibility', we have analyzed the environment and the possible routes between the deposit and the sources of supply. These results provide very valuable information on the use of local raw materials, allowing us to understand the management of the territory and its immediate environment, carried out by these Paleolithic groups.

2 ACHEULEAN QUARTZITE PROCUREMENT STRATEGIES AT EL SOTILLO - CIUDAD REAL (SPAIN)

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El Sotillo (Malagón, Ciudad Real) is an open-air site in the upper Guadiana basin. It locates in the central-southwestern area of the Iberian Peninsula within the Palaeozoic synclinalorium of El Robledo-Porzuna-Malagón, a large Variscan structure forming an extended depression in the NW-SE direction.

Sotillo was excavated between 2017-2019 and is the first dated Early and Middle Palaeolithic stratigraphic sequence in a region known for the abundant Palaeolithic superficial findings. Here we present the lithic raw material results from levels 4 and 5, studied under the project CEN154P20, co-financed by the ERDF (European Regional Development Fund) and Junta de Castilla y León. Level 4 contains Acheulean industry (currently under study). The level 5 Acheulean industry was recently published and is the highest concentration of industry recorded in the Iberian Peninsula in fluvial gravel bars, dated by OSL of 303 ± 25 ka and 258 ± 17 ka.

Quartzite represents 99,9% of the exploited raw materials. It is also the most abundant material in the region and seems to be a form of expedient exploitation without many degrees of predetermination or source selection. However, not all quartzites are the same. It is possible to distinguish different grain sizes, degrees of metamorphization, and levels of alteration affected by post-depositional processes and influenced by the spacing between quartz grains and other physical characteristics of the material. Altogether, these aspects influence how the material behaves during knapping and use.

We analyzed the variability of quartzite present in the landscape surrounding El Sotillo and compared it with the proportions present in the archaeological assemblage. In this way, we try to see if it is possible to determine some form of selection and transport of local material. We look to discuss the importance of analyzing local raw materials to understand human interaction with local resources.