

Middle Palaeolithic in the Basque Country (western Pyrenees). Palaeoenvironmental context, archaeological evidences and subsistence strategies

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Abstract

The Basque Country is located on both sides of the western Pyrenees, respectively Iberian and continental. During the Pleistocene, it constitutes a strategic point of transit of the Pyrenees for human and animal groups, which distributed between different regions and biomes. This character of geographical crossroads causes a special concentration of paleoenvironmental sites and records frequented by Neanderthals, such as Amalda, Aranbaltza, Arrillor, Murba, Zerratu, Axlor, Koskobilo, Zerratu, Mugarduia norte, Abautz, Isturitz, Gatzarria, Hareguy, Lezetxiki or Olha, among others.

The biogeographic characteristics of the territory, in which a whole series of environments follow one another, from montane to coastal, have made it possible to preserve the record, preferably in karst contexts. Although much more difficult to locate, the open area sites provide interesting additional information about the patterns of exploitation of lithic raw materials. This, in turn, allows us to obtain a novel vision about the economy, territoriality and mobility. For example, is common to identify raw material dispersion range over >100km including exchanges between both slopes of the Pyrenees.

Unlike other regions in Europe where the Acheulian / Mousterian binomial established the boundary between Lower and Middle Paleolithic. In the Basque Crossroads, lithic industries not characterized by handaxes. Likewise, Mousterian exploitations appear in relatively recent phases, starting with MIS5. This circumstance originates a strip of indeterminacy (twilight zone), including at least MIS7 and MIS6, in which industries produced with heterogeneous raw materials, bifacial technique is rare, and dominant supports are still massive. This uncertainty extends to paleoanthropology and ancient occupations in Irikaitz or Lezetxiki lower levels. These sites were alternately ascribed to recent forms of *Homo heidelbergensis* or ancient forms of *Homo neanderthalensis*. However, from the beginning of MIS5 and up to, more or less, the 43,000 cal BP, the industries will be characteristically Mousterian and human fossils, unequivocally Neanderthal.

The studies carried out have identified a paleoenvironmental evolution (vegetal and animal) since OIS 7 to OIS 3. Archaeological record (biotic and abiotic) preserved in the aforementioned sites, has allowed us to go in-depth into the Neanderthals subsistence strategies. Small groups occupied occasionally, but recurrently, the cavities. Archaeozoological and taphonomic studies have determined the existence of an incipiently specialized hunting strategy, including up to three co-dominant taxa by site. The location, its altitude and the environmental circumstances at the time of the occupation strongly condition the target taxa. However, as the investigation progresses, it is established that the hunting behavior and subsistence strategies of Neanderthals are far from deserving the "opportunistic" label with which they were characterized for a long period.