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Neandertals at Atapuerca: the MIS3 Galería de las Estatuas site

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Cave sites with Mousterian occupations in the Iberian Peninsula are mainly limited to the Northern, Eastern and Southern mountain ranges. Thus, the information available for the interior part of the Iberian Peninsula is very limited. Since 2008, we are working on a new cave site in the Sierra de Atapuerca (Burgos, Spain): Galería de las Estatuas (GE). GE is a subhorizontal cavity located at the upper level of the Cueva Mayor-Cueva del Silo karst system [1]. This gallery was an ancient entrance to the cave system which is currently closed and sealed by a stalagmitic crust whose base has been dated in ca. 14 ka BP [2]. Two test pits, GE-I (9m²) and GE-II (6m²) have been excavated. They reveal, below the stalagmitic crust, the presence of a detrital sedimentary sequence of more than 2 m which has been divided into 5 geological levels [3] with a rich assemblage of faunal and lithic remains. The macromammal assemblage (ca. 1100 specimens) is composed by both ungulates and carnivores. The most common prey species are red deer (*Cervus elaphus*) and equids (*Equus* sp.). Mitochondrial analysis on the latter have provided evidence of the presence of, at least, *E. hydruntinus*. Large bovids (in which, *Bison* cf. *priscus* has been identified) are also present, though in a lower proportion. Carnivores, which represent ca. 7% of the macromammal assemblage, are mainly represented by foxes (*V. vulpes*) and hyenas (*C. crocuta*). The taphonomic analysis of the macromammal assemblage reveals both anthropic, and to a lesser extent, carnivore activities. Small carnivores and owls are likely the main responsible for the accumulation of the microfaunal assemblage. 228 specimens have been identified to the species level. The small mammals are dominated by open habitat dwellers, such as humid to dry meadows, such as *Marmota* sp., *Microtus arvalis* and *M. agrestis*. Somewhat warm rodent species, as *Hystrix* (*Acanthion*) *vinogradovi* are present, though their presence is definitively small. Beaver (*Castor fiber*) is also present, but poorly represented. The pollen sequence shows two different polinic zones. The lower levels would correspond to an open landscape dominated by Asteraceae; cold conditions were present in this first part of the sequence. The upper part of the sequence corresponds to a warmer-humid moment with greater development of forests, dominated by *Pinus*, though other taxa are present (e.g., *Quercus*, *Corylus*). A total of 499 lithic objects have been found. Flint is the most common raw material (83.8%). The raw materials are locally available but there is a clear selection towards those that show the best quality. The retouched flakes represent the 8% (n=40) of all the lithic industry and from a typological point of view, the most common elements are side-scrapers (n=18; some of which show the “Quina” type retouch), and denticulates (n=12). The study of the cores and some of the flakes reveals centripetal knapping, some of which shows the characteristic *Levallois débitage*. One quartzite core shows evidence of bipolar-on anvil technique. However, the low amount of cores (n=8) and the fact that 64.3% of the remains have a maximum length <20mm suggest that retouching activities were more common than those of *débitage*. In sum, the lithic industry shows a clear Mousterian affinity. The radiocarbon datings of bone and tooth remains from both test pits locate this archaeo-paleontological assemblage from 43.5 ka uncal BP to older than 46.3 ka uncal BP. This is consistent with the archaeopaleontological evidence and would be roughly contemporaneous with the Neandertal site of Valdegoba [5]. Galería de las Estatuas would correspond to a site used by Neandertals, and also sporadically by carnivores providing important information regarding Neandertal occupations and landscape changes during MIS3 in the Northern Plateau of the Iberian Peninsula prior to the demise of this species.

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