Neandertal camps and hyena dens. Living floor 150 of Grotta dei Santi (Monte Argentario, Tuscany, Italy)

Vincenzo Spagnolo*1, Jacopo Crezzini1, Giulia Marciani3.2.1, Giulia Capecchi1, Simona Arrighi1.4, Daniele Aureli5.4.1, and Adriana Moroni1

1Università degli Studi di Siena (UniSI) – Strada Laterina, 8, 53100, Siena, Italia
2Università Rovira i Virgili (URV) – Av. Catalunya, 35, 43002, Tarragona, Espagne
3Università degli Studi di Ferrara (UniFE) – C.so Ercole I d’Este, 32, 44100, Ferrara, Italy, Italie
4Università di Bologna (UniBO) – Via degli Ariani, 1, 48121, Ravenna, Italia
5Université Paris Ouest Nanterre La Défense (UPN) – Université Paris Ouest Nanterre La Défense – 21, Allée de l’Université, F-92023, France

Résumé

The palimpsest-effect in Paleolithic sites has been for some time the focus of vivacious scientific debate. What is fundamental is the possibility of "dissecting" palimpsests into "smaller time units" in order to correctly identify relationships among different activities carried out by the inhabitants of a certain site during a single occupational phase. More extensively, this procedure allows for a better "functional" reading of the economic and settling strategies. Interrelations among several concomitant causes (e.g., fortuitousness, site function, sedimentation rates/occupation intensity, "catastrophic" events) make some Palaeolithic sites ideal contexts for high-resolution chronological investigations. However, even in "short-term" cases, there can be factors affecting the preservation and visibility degree of the archaeological record, such as, for instance, alternation in the site use between humans and carnivores.

Grotta dei Santi turned out to be a very good example for such an enquiry. This cave is located at Monte Argentario (southern coast of Tuscany), almost at sea-level, at the base of a limestone falaise about 50 m high, in an area of the coast reachable only by boat. During MIS 3, when Neandertals occupied this cavity, a wide plain extended in front of the cave. Excavations carried out by the University of Siena in the last 10 years brought to light several Mousterian layers represented, most of the times, by thin living floors separated from one another by a completely sterile sediment. However, another "occupant", the spotted hyena (Crocuta crocuta), had left clear traces of its stay in the cave in layers other than those occupied by humans. Although there was usually a clear-cut stratigraphic separation, sometimes we found evidence of partial overlapping between the two occupations, owing to their closeness in time. This is the case of layer 150 uppermost "living floor", which is the object of our study.

A multidisciplinary integrated analytic methodology has been applied, including lithic technology, taxonomic analysis of faunal remains, taphonomy, use-wear analysis by means of a
digital microscope 3D KH 7700 Hirox and spatial analysis by means of a GIS platform. In this way parameters useful for identifying activities due to these two predators individually and for providing information about their behaviour were defined.

Mots-Clés: Middle Palaeolithic, Neandertal, Crocuta crocuta, Taphonomy, Lithic technology, GIS