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JOÃO ZILHÃO (ed.) Arte rupestre e pré-história do Vale do Côa (Trabalhos de 1995-1996), 1998, 453 p., illustrations and photos in text.

Our knowledge of the European cave art has been essentially improved following the research undertaken by a team of specialists under the coordination of João Zilhão, and subsidized by the Ministry of Culture of Portugal.

The core team consisted of Antonio Faustino Carvalho, Antonio Martinho Baptista, Fernardo Almeido, Jose Meireles, Mario Varela Gomes, Thierry Aubry, with the assistance of Cristina Gaspar, Fernando Barbosa, João Felix, Manuel Almeida, specialists in cave art, and Carlo Megalhaes Jorge Sampaio, archeologists.

Until now, the European cave art had been predominantly acknowledged through discoveries in the central and the Mediterranean massif from France (especially Lascaux and Costier) and Spain (Altamira). But it is now the Iberian Peninsula offering extremely rich information concerning the oldest art manifestations on the continent. It was a program of national economic interest (the full exploitation of the hydroelectric potential of the Côa River) that led to such discoveries. The Côa River is tributary to the Douro, in the northern part of Portugal, collecting the waters from the mountain chains of Sierra da Estrela and Sierra da Gata (on the western part of the Castilian plateau. The river flows from south to the north on a distance of approx. 130 km (parallel to the Atlantic coast). As the title of the volume suggests, the program was developed between 1995 and 1996 but the results of the research could only be made public in 1998.

The volume starts with a Foreword signed by the Portuguese Minister of Culture, followed by five main chapters: Main results of the scientific research, Geology, Archeology, Cave Art, Addendum.

João Zilhão is the author of the first chapter, dealing with the geo-archeological context, the dating of the Paleolithic cave art, the importance of the discovery from the point of view of the Portuguese heritage. The chapter stands as an abstract of the whole volume.

The next three chapters present in detail the main results, all in Portuguese. The dating problems only, discussed in the Addendum, are presented in English.

The second chapter (Geology) is further subdivided into two parts: The Quaternary of the Côa Valley (by Jose Meireles) and the Geophysical prospection of the Quaternary deposits (by Fernando Almeida). The chapter is concerned with climate issues, hydrology, the geology and geomorphology of the area, types of deposits (including a Pleistocene terrace – at Quinta Maria – with a Pleistocene lake). The maps (showing the concerned sector of the Douro basin) are extremely useful for the understanding of the debated problems, especially through the presentation of a longitudinal sector of the valley and several local maps.

But the chapters of the book we would like to present in more detail are Archeology and Cave Art.

The chapter begins with a brief catalogue of the 63 sites from the Côa basin, sites that were studied in 1995-1996. There are 5 Paleolithic sites (two from the Lower Paleolithic and four from the Upper Paleolithic, with one particular site covering both periods), 7 Neolithic sites, 5 dating back to the Bronze Age (and maybe Neolithic also) and 7 are Roman. The chapter illustrates the joint efforts of Thierry Auby, António Faustino de Corvalho and João Zilhão.

In what the Lower Paleolithic is concerned, of great importance are the finds at Quinta do Vale do Meão. The excavations brought to light choppers, chopping tools and quartzite splinters (with patina), similar to the ones on the Darjov Valley. The artifacts from Quinta da Granja were manufactured in the Levalloisian technique (the same as the ones from Cladova and Zabrani).

Also from the Lower Paleolithic dates the site from Quinta da Barca Sul. Most interesting are the finds from layer 2, where flint, ryolite or rock crystal microliths (backed bladelets, triangles) bear typologic similarities to the Clisurean artifacts from the Danube valley. Some of the finds at Quinta da Barca Sul were made of quartz or rock crystal (layer 3). The chopping technique draws it near to the Schela Cladovei culture. It is worth noting that during the Stone Age, over large cultural areas, at the chronological level, the chopping techniques are so similar.

From the point of view of the microlithic industry, also important is the site at Salto do Boi-Cardinal, layer 4. The large number of burins, backed tips, backed bladelets (Dufour) is remarkable. The main raw materials were flint, rock crystal, ryolite but also quartz.

The rest of the sites are presented more briefly, partly because of the poorer results they provided.

But the most interesting (and probably the most important) is the chapter concerning the cave art of the Côa valley. Maybe this is the reason why it stands as an independent part of the volume.

The research revealed the existence of 23 sites bearing traces of cave art. Out of 214 engraved rocks, 15 were assigned to the Upper Paleolithic, 10 to the Neolithic and the Chalcolithic, 11 to the Iron Age and 4 to historical times. A map presents their spread throughout the river course.

35 ornamented rocks were identified in the perimeter of Canado da Inferno. The means of investigation are presented in detail. Most of the procedures for copying of the engravings took place during the night time, under artificial light, for a better quality of the recording. All the duplication respected the original colors. The rocks had been decorated through very fine incising or hammering, with tools made of flint or rock crystal. A most tedious work was distinguishing among the micro-stratigraphy of the various figures, assigned to different ages, but overlapped on the same area. Part of the art-work

had suffered natural or anthropic damages, as some of the rocks had been used in construction. Therefore, parts of the ornamentation are missing. The most numerous figures count ovine, bovid, deer, fish. Some of the drawings could not be identified as belonging to any group. 66 figures were incised and 80 hammered. Modern drawings were also identified, painted in black and other colors.

At Canada do Inferno, the most frequent representations are on rock 24 where dominant are hammered bovids (17) and on rock 14, decorated with equus (5), deer (5) and unidentified figures (10).

Another group was found at Rego da Vide. 9 rocks bore traces of decoration, out of which 4 were assigned to the Paleolithic and 5 to modern times. The former group consisted of cattle and goats whereas the latter (dating back to the 1940s) showed crosses, anchors, fish or personal names.

Ribeira de Piscos revealed vet another group of engraved rocks: 15 dating from the Upper Paleolithic, 2 from the Neolithic and the Chalcolithic, one from the Iron Age and two modern. The Paleolithic ones count cattle, deer, horses and signs, organized as realistic animal displays. The figures, overlapping at times, were hammered. Their positions were various: lying down or with their head turned. Of interest are the bovids, with a clear contour at times, the body covered with hairs represented through thin incisions, with indications of various body parts and limbs. Extremely important is that among these representations two humans were figured. Rock no. 2 displays a human bust, giving thus important information on the look of the Upper Paleolithic man. The second representation is a a naked male, his penis in erection. His cranium shows a close resemblance to the one of the modern man, but with a pronounced prognatism. The human figure (nicknamed Homen da pescos) was overlapped by a bovid.

No doubt that the second site – both in the importance of the findings and their number – is Penascosa where the research was not complete at the time the book was written. 19 ornamented rocks were identified. Rock no. 3 displays 9 goats, 6 bovids, 3 deer (out of 20 representations in all). It is followed by rock no. 5 (A-C) with 28 figures, incised or hammered, out of which 6 are horses, 7 cattle, 6 goats and 7 unidentifiable. The largest number of figures is on rock no. 10 (A-D) with 32 representations in all: 10 cattle, 8 deer, 7 goats, 5 unidentifiable. There is a total of 120 figures on all the rocks on this site.

The papers on rock art are signed by Antonio Mostinho Baptista and Mario Varela Gomes.

The discussions in the Addendum suggest that the majority of the cave art representations in the Coa Valley go back to the Solutrean and the Late Gravettian, probably around 20,000 BP. The conclusions were reached based on the stylistic analysis of the figures.

Vasile Boroneant