

TITLE: COVA EIRÓS (GALICIA, SPAIN): THE ‘FINISTERRE’ OF PALEOLITHIC CAVE ART

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Abstract: Our knowledge about Paleolithic art is changing substantially. New discoveries and dates are modifying some traditionally accepted considerations, such as its dispersion and the end of this graphic-artistic cycle. The discovery of rock art in Cova Eirós, located in the northwest of the Iberian Peninsula, with animals following geometric / stylized designs with linear interior fills, allows to specify and contextualize the graphic characterization of the final stages of the Paleolithic style portable and rock art, classified as Style V or fini-Paleolithic. A pan-European tradition that began around 12 000-11 500 BP and lasted up to around 9500-9000 BP, in correspondence with the last hunter-gatherer groups.

Key words: rock art, portable art, Paleolithic art distribution, chronology, end Paleolithic art, Iberian Peninsula, Europe

1. Introduction

From the final decade of the last century, Paleolithic cave art studies have been the subject of heated debates concerning the core of our knowledge, as defined in the beginnings of the research. Among the issues dealt with in the past decades the most relevant are the geographic distribution and chronology of Ice Age art. The demise of the long-standing Eurocentric view that permeated the research and the systematic implementation of radiometric dating methods have been key.

Traditionally, Paleolithic rock art had been identified in Western Europe, with the highest densities in the Cantabrian area of Spain and southern France, helping to define the classic concentration of France and Cantabrian region (Bouvier, 1993), notwithstanding the existence of other localities further South in Spain and Italy (Bicho et al., 2007; Sigari, 2018). That European viewpoint has been eroded by the identification of sites in Egypt (Huyge et al., 2011), Azerbaijan (Sigari et al., 2019), Indonesia (Aubert et al., 2014) or Borneo (Aubert et al., 2018), among others. Moreover, in the European core, the Franco-Cantabrian early dominance has given way to a surge of new art locations in Central, South and West Iberia (Bicho et al., 2007), to such an extent that currently as many sites have been reported in those areas than in the traditional Cantabrian region.

On the other hand, the application of radio- and geo-chronological methods have allowed to obtain dates for rock art (Hoffmann et al., 2016, 2018; Ochoa and García-Diez, 2015; Pike et al., 2012), introducing numerical data that qualify, confirm or modify the stylistic proposals about the origin and development of the first symbolic skills. Thus, overlays and comparisons with portable art were supplemented with new information to contextualize styles and themes more accurately (García-Diez and Ochoa, 2015; Ochoa et al., 2018).

Currently, new data are coming forward on the origin and first development of rock art that is allowing to have a different idea about the first artists (Aubert et al., 2014, 2018; Hoffmann et al., 2018; Pike et al., 2012) . Interestingly, the dating and characterization of the latest graphic evidence has not been subjected to intense scrutiny or strong debate, since the traditional paradigm linked the demise of Paleolithic art with the end of the Magdalenian (c. 12 500-12 000 BP), which implied, especially in the figurative

section, its rapid disappearance (Breuil, 1952; Leroi-Gourhan, 1965). However, in recent years, the discovery of new assemblages of portable art has led us to consider a persistence of the figurative Paleolithic style in Europe until about 9,500-9,000 BP (d'Errico, 1996 Fullola et al., 2015; García-Diez and Vaquero, 2006; García-Diez and Cacho, 2015; Guy 1997; Lorblanchet, 1989; Lorblanchet and Welte, 1990; Paillet and Man-Estier, 2014; Roussot, 1990; Santos et al., 2018). Some authors, proposing a graphic continuity with the Magdalenian groups, have defined, in the line of Leroi-Gourhan's proposal (1965), a style V attributed to the last hunter-gatherer-fishermen making up the Epipaleolithic groups (Bueno et al., 2007). Despite the ever-growing occurrences of fini-Paleolithic portable art (Cacho et al., 2013), rock art remains very scarce and, currently, this graphic continuity beyond 12 500 BP is only endorsed at the Gallery of Paintings of the cave of Ojo Guareña (Corchón et al., 1996).

In this context, the discovery of Cova Eirós brings forth new data to the research on the geographical distribution and chronological continuity of Paleolithic-styled motifs. This paper aims at introducing the graphic assemblage ascribed to the terminal stages of the Paleolithic style traditions, also assessing the significance of these new finds in the wider context of Paleolithic rock art.

2. The site and the human occupations

Cova Eirós is located in Cancelo (Triacastela, Lugo, Galicia, Spain) on the northwest area of the Iberian Peninsula (Figure 1).

Archaeological work inside the cave has shown intensive use in prehistoric and Medieval times (Table 1). Human remains were recovered from the inner galleries and are most likely related to burials belonging to the Neolithic and Bronze Age (Fábregas et al., 2012). Moreover, the test pit at the Mammoth Hall retrieved the remains of a Medieval bonfire dated to 969–1046 AD beside a panel with graphic evidences (César et al., 2018; Steelman et al., 2017). A hearth and two storage structures at the entrance of the cave have a similar age (Teira et al., 2012), pointing to intense occupation and exploitation of the cave during this historical period.

Regarding the cave entrance, archaeological excavations up to the present revealed the existence of a 1,5m thick Upper Pleistocene sequence, yielding the remains of Middle and Upper Paleolithic occupations, as well as Neolithic and Medieval (Table 1). On techno-typological and geochronological grounds, the Upper Paleolithic levels can be ascribed to the Aurignacian (Level 2), Gravettian (Level 1) and Final Magdalenian

(Level B) (de Lombera-Hermida et al., 2014; Rey-Rodríguez et al., 2016; Rodríguez-Álvarez et al., 2011). Symbolic and portable art was also found in these levels: a pendant (on a perforated canine) was recovered from Level 1, and two other examples come from disturbed layers, the more relevant a bone *assegai* showing a composite zigzag on both faces (de Lombera-Hermida and Fabregas, 2013). These evidences hinted at the possibility that Paleolithic parietal cave art might also be present at this site.

3. The cave art

3.1. Description

During the 2011 field season, cave art was discovered in Cova Eirós: initial survey of the walls revealed several groups of drawings and engravings (Fábregas et al., 2015; de Lombera-Hermida and Fábregas, 2013). As to 2017, at least 120 graphic evidences have been recorded, clustered in 13 panels distributed along the first half of the cave system (Figure 2). The preservation is generally poor, due to natural weathering (which might explain the isolated black traces), the presence of colonies of microorganisms, modern graffiti, a blackish film caused by natural accretions, the deposition of dust, and soot from Medieval activities.

All depictions are placed in dark spaces, where artificial light sources are necessary. The execution techniques identified are drawing (black charcoal) and engraving (usually thin, shallow and single strokes). The motifs are generally small, constrained by the limited space available amidst cracked and weathered surfaces.

Part of the available evidence consists of simple black spots or tiny tracings, usually placed lower on the panels. Very often, these features might be the result of the frequent visits to the cavity and related to the lighting used by the visitors (García-Diez and González Morales, 2003). On the other hand, the radiocarbon dating of the blackish film covering Panel III confirms the intensity of Medieval activities in that sector (Steelman et al., 2017). On that very section of the wall, two zoomorphic motifs were dated as well, yielding a 9700 to 8600 calBP timespan (Table 2). These dates, corresponding to Mesolithic times, should be considered as minimal, taking into account the contamination detected by colonies of microorganisms and the aforementioned Medieval fires (Steelman et al., 2017).

Apart from the commented shapeless marks, possibly linked to transit within the cave, non-figurative graphic evidences have been recorded, consisting of charcoal tracings

and carvings too. Among them, straight or curvilinear isolated strokes are visible, tending to parallel or convergent lines, criss-cross patterns, parallel double grooves, parallel alignments of dots, ogival shapes, and other closed shapes of difficult interpretation.

On the other hand, the figurative motifs correspond particularly to animal shapes plus a few possible anthropomorphs. Currently, at least ten zoomorphs have been identified (Figure 3 and 4): two black bovids (Panel I-P5, and Panel XI-P2), one black deer (Panel I-P4), and three possible hinds (two carved and another painted in black, PI-G1, PIII-G1 and PII-P2, respectively), an engraved goat (Panel VIII-G8), an engraved bovid (Panel IV-G3), an engraved horse (Panel XI-G2) and another one drawn in black (Panel III-P4).

3.2. Formal and stylistic appraisal

In the present state of the knowledge about the so-called Paleolithic style V, its repertoire is composed of animal silhouettes, geometric signs and just a few human figures and anthropomorphs (Bueno et al., 2007). The figurative motifs are rather simple and cursorily executed, with few morphological details and often filled with parallel or multiple lines. Among the carvings, superficial or shallow incisions predominate and for the drawings the black colour is normally used. Some signs appear outlined or filled inside, as seen in the cave art of Cueva Palomera in Ojo Guareña (Corchón et al., 1996).

The stylistic and formal analysis of the animal figurations of Cova Eirós indicate that a general conception of the figure is achieved by the contour line while, as a rule, little or no attention is paid to secondary anatomical details. A bovid in black (PII-P5) has a partial interior in-fill by near-parallel horizontal lines, which we interpret as a graphic tool to give the representation of mass and suggest volumetric sense in the trunk, a resource equally visible in some figures of Ojo Guareña. Likewise, a carving of an incomplete zoomorph makes use of that same solution by means of incised lines (PIII-G1).

Considering the full format figures, the lack of proportions is very noticeable, particularly between the head and the trunk (i.e. the black bovid and possibly in the equid), extreme elongation of the body (in the equine and hinds in black) and a reduction in the height of the trunk (black bovid and possibly in the equid). Also, in the engraved bovid a remarkably differential treatment of the anterior and posterior

extremes of the trunk suggests a certain lack of unitary conception of the image as a whole.

The marked unrealistic character of the perspective (in the black bovid, especially in the hind legs of the possible engraved bovid (PIV-G3) and in the protome of the painted bovid of the Panel XI-P2) also connects stylistically the complete figures, both in the ones that show a unitary representation of the perspective and in those with differential treatments of perspective in the different anatomical regions.

In most of the zoomorphs, the existence of rigid articulations between anatomical parts and the construction of the trunk and head from triangular, trapezoidal, rectangular or oval shapes show a geometrizing character in the design of the figures. This feature is only reinforced by the linear disposition of the extremities and the interior lines of the black bovid (possibly on the Panel III-G1 zoomorph, too).

These graphic links between paintings and engravings allow us to consider that certain zoomorphic shapes have been executed using the same conception, which would imply a formalized graphic tradition and the possibility of suggesting, at least, a relative cultural synchrony or, at the very least, a relatively short time span for the making of the bulk of the bestiary represented in Cova Eirós, as the radiocarbon dates also do (Steelman et al., 2017).

4. Discussion

4.1. Graphic tradition and chronology of the figurative images of Cova Eirós and the art of the last European hunter-gatherers

The morpho-stylistic characteristics of the animals at Cova Eirós have references in the portable art of the Iberian Peninsula and other regions of Europe (Figure 5). The reappraisal and new discoveries of contextualized art in recent years, allowed us to define a graphic tradition characterized by a geometric conception and formal simplification of the anatomy, beginning about ~12 000-11500 BP ago and lasting up to ~9500 - 9000 BP (Bueno et al., 2007; García-Diez and Cacho, 2015). This cycle follows the figurative tradition that is identified in the portable art around ~14 000 BP, although we can recognise links between both graphic traditions (García-Diez and Vaquero, 2006, Naudinot et al., 2017).

Together with those stylistic features, the in-filling of the bodies with parallel lines is a specific element of the tradition of formal simplification that some authors, following

Leroi-Gourhan's approach, have characterized as style V (Bueno et al., 2007): we find it in La Peña de Estevanbela –dated between $11\,330 \pm 50$ BP and $10\,640 \pm 50$ BP– (García-Diez and Cacho, 2015), Fariseu –dated between 11 000-9500 BP– (Santos et al., 2018), at Molí del Salt –dated between $10\,990 \pm 55$ and $10\,840 \pm 55$ BP– (García-Diez and Vaquero, 2006) and Sant Gregori (Roman et al., 2016). The only dated Paleolithic cave displaying similar characteristics (interior infills included) is the Sala de las Pinturas in the karstic complex of Ojo Guareña, where one of its zoomorphs has been placed by radiocarbon at $10\,950 \pm 100$ BP (Corchón et al., 1996).

In the Mediterranean façade of the Iberian Peninsula, carvings made in open-air shelters have been recently recorded, ascribed by some authors to Style V and, perhaps, related to the origin of Levantine Art: Meliá (Guillem et al., 2001; Martínez et al., 2003); Barranco de l'Espigolar (Guillem and Martínez, 2009); Llaveria and Roca dels Moros del Cogul (Viñas et al., 2012) and Barranco Hondo (Utrilla and Villaverde, 2004). They represent mostly small and medium-sized animals, with stylized features, made with simple lines and filled with multiple and longitudinal lines. Sometimes they occur in association with abstract geometrical elements ("signs") and the occasional human or anthropomorphic figure (Viñas, 2012; Viñas et al., 2012, 2016).

This graphic tradition is also recognized in other European sites (Célerier, 1984; Coulonges, 1963; Lorblanchet and Welté, 1987; Paillet and Man-Estier, 2014), their graphic foundations being present already in the late Magdalenian (d'Errico, 1994), where occasionally animals traced in a naturalistic style share the panel with others of geometric/stylized design. It is not limited to the French territory but found, at least, in southern Italy (d'Errico, 1996; d'Errico and Possenti, 1999; Graziosi, 1973; Vigliardi, 1996) and Portugal (García-Diez et al., 2000; Santos et al., 2018) in sites whose presumed chronology lies between 11 500 and 10 500 BP.

Summing up, it should be noted that from the Atlantic façade to Italy, starting at ~12 000-11 500 BP and lasting up to ~9500-9000 BP, we come across the same graphic tradition characterized by the formal simplification of the figures through stylisation and/or geometrisation, by anatomical disproportions, elongation of trunks and/or necks, little or no description of secondary anatomic details and the presence, in some cases, of internal fillings by multiple and parallel lines.

4.2. The location of Cova Eirós in the European Paleolithic art framework

Cova Eirós is located about 125 km west of the westernmost example of the 'Franco-Cantabrian' group of Paleolithic art, the cave of Peña de Candamo (Hernández-Pacheco,

1919; Corchón et al., 2011). Traditionally, the Nalón valley (Asturias, Spain) was considered the limit of distribution of cave art in the north of the Iberian Peninsula (Rodríguez and Barrera, 2014), and for this reason the peninsular northwest had been disconnected from the dispersal area of that graphic phenomenon. In addition, geologically the latter is a region where the limestone formations are scarce, underdeveloped and located mainly in the eastern mountain ranges. The discovery of this site is a call of attention to the possibility that other Galician sites with parietal art might have gone unnoticed to this day –as in other areas where an intensive examination of cave walls had not traditionally been done–. Thus, the combination of new study techniques with surveys could well lead to increase the corpus of decorated caves in NW Iberia.

This discovery, in the geographical Finisterrae of the Iberian Peninsula and Europe, implies a geographical break (due to its close physical proximity) of the Franco-Cantabrian singularity, for it is now linked to the ever increasing discoveries of sites with Paleolithic rock art in the north-central sector of Portugal and in different areas of Spain (particularly finds in the Meseta and Eastern region). Even at the southern reaches of Iberia, in the territories of Andalusia and Gibraltar, the number of sites has grown similar to the Cantabrian region.

Currently, the Iberian Peninsula is a large geographical area where Paleolithic cave art is found nearly everywhere. The paradigm shift derived from this fact is not just geographic, but also cultural: the existence of formal and stylistic similarities between distant sites both at the peninsular and European scale implies that the concept of the cultural unit of "Franco-Cantabrian" art must be definitively discarded. Territorial connections based on graphic concepts are variable and dependent on the mobility of hunter-gatherer groups and information exchange systems (Barton et al., 1994; García-Diez et al., 2016; Petrognani and Robert, 2017; Sauvet, 2017; Wengrow and Graeber, 2015).

More to the point, the fini-Paleolithic graphic tradition in which a large part of the figurative rock art of Cova Eirós is enlisted presents parallels at an Iberian and European scale. In the Peninsular area, examples of cave and portable art displaying its already commented formal and stylistic traits are found in the central, Atlantic and Mediterranean sectors and, to a lesser extent, in sites from North Iberia (Bueno et al., 2007; Fábregas et al., 2015; García and Vaquero, 2006; García-Diez and Cacho, 2015; Santos et al., 2018). In such a vast area, the existence of graphic peculiarities in some of

the sites could be due to graphic variability within the scope of a global artistic tradition where 'regionalisms' arise.

Graphic links with the French and Italian regions have also been documented, revealing the existence of a wide area sharing social and symbolic assets. This observation should lead in the coming years to the re-evaluation of the chronological and cultural positioning of portable and rock art manifestations in other European areas.

5. Conclusions

The cave art of Cova Eirós provides significant information about the symbolic sphere of the prehistoric human groups of hunter-gatherer tradition. Its figurative art confirms the existence of an important graphic activity in the final moments of the Paleolithic industrial complexes, linked to Pleistocene moments or to the Pleistocene/Holocene transition. This consideration implies necessarily an acceptance of the temporal extension of the prehistoric art of Paleolithic style beyond the Paleolithic itself and linking it to Epipaleolithic or even Mesolithic cultural stages, definitively parting with Leroi-Gorhan's notion that, with the Magdalenian, figurative art had come to an end.

This graphic complex is linked to a visual tradition that encompasses most of the Iberian Peninsula and beyond, incorporating other European territories too. The zoomorphic motifs with a geometric/stylized character point to the existence of a pan-European graphic tradition whose precise spatial distribution must be progressively defined from new discoveries and revisions of already known assemblages. The existence of iconographic and formal convergences between different sites is indicative of social ties, human mobility and the existence of a common visual language for the transfer of information.

The location of Cova Eirós in the westernmost corner of Iberia, an area traditionally detached from the Paleolithic graphic phenomenon, opens the possibility of further finds of this kind in territories not considered, until now, a part of the 'Paleolithic rock art geography'. In this context, the phenomenon of Paleolithic rock art has been documented on a global scale in recent years, leading to fill in geographical gaps in Western Europe and also qualifying its alleged exceptionality, as it is spreading well beyond its primeval distribution around the World.

Summing up, the discovery of Paleolithic rock art of Cova Eirós acquires a relevance due to its western location in Europe and its fini-Paleolithic chronology, thenceforth representing a veritable *Finisterre* of Ice Age art.

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Figure captions

Figure 1. A) Location at Cova Eirós cave (Galicia, Spain) and B) view of the Canelo valley and Cova Eirós.

Figure 2. A) Location of the decorated panels at Cova Eirós. B) Its relationship with the topography of the cave (in red). C) View of the Panels I, II, and III located in the Main Hall.

Figure 3. Selection of main painted and engraved zoomorphic motives of Cova Eirós cave mentioned in the text.

Figure 4. A) D-strech applied on photograph from Panel I showing the bovid and cervid motifs (PI-P4; PI-P5). B) D-strech applied on photograph from Panel II showing a cervid figure in black (Panel II-P1). C) Bovid protome (Panel XI-P1). D) Equid protome (Panel III-P4). E) engraved bovid (Panel IV-G3). F) Geometric engraved motif (PIV-G4).

Figure 5. Animal representations with formal and stylistic references in other Spanish sites (A: Estevanbela; B: Molí del Salt; C: Sant Gregori; D: Farizeu; E: Ojo Guareña).









