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Randall WHITE Raphaëlle BOURRILLON

with the collaboration of **François BON**

AURIGNACIAN GENIUS

Art, Technology and Society of the First Modern Humans in Europe







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Contributions should be addressed to:

P@LETHNOLOGY REVIEW

Vanessa LEA, Research associates

CNRS/UMR 5608 - TRACES

Maison de la recherche 5 allées Antonio Machado 31058 Toulouse cedex 9, FRANCE

Phone: +33 (0)5 61 50 36 98

Fax: +33 (0)5 61 50 49 59

Email: vanessa.lea@univ-tlse2.fr

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EARLY UPPER PALEOLITHIC PARIETAL ART: Shared Characteristics and Different Symbolic Traditions

Stephane PETROGNANI

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EARLY UPPER PALEOLITHIC PARIETAL ART: Shared Characteristics and Different Symbolic Traditions

Stephane PETROGNANI

Abstract

What symbolic traditions can be defined at the beginning of the Upper Paleolithic? Can we characterize specific Aurignacian, Gravettian or Solutrean approaches? This thematic-stylistic analysis applied to a sample of 2000 representations in nearly 110 caves provides some partial answers to these questions and reveals continuity in the "artistic traditions" of early Upper Paleolithic groups. Other observations show the complexity of artistic representations through time-bound and location-bound "traditions" and speak to the plurality of symbolic behavior in prehistoric societies.

We highlight a decrease in the diversity of stylistic resources used by Paleolithic groups throughout the Upper Paleolithic. Graphic standards imposed by the group tend to become more rigid, limiting the scope of the prehistoric artist and leading to a set repertoire of certain formal graphic representations. Due to this decrease in the "freedom" of iconographic codes, which become increasingly standardized, the role of the Paleolithic artist in society is reconsidered and appears to reflect social changes.

Keywords

Parietal art, Upper Paleolithic, style, themes, Aurignacian, Gravettian, Solutrean.

Introduction

The aim of this article is to contribute to current knowledge of the parietal art of the Aurignacian, Gravettian and Solutrean. Several observations emerge from a study of 107 European parietal sites. Some of these are characteristic of the period and emphasize continuity between the "artistic traditions" of early Upper Paleolithic groups. Others bring to light the complexity of artistic representations through time-bound and location-bound "traditions" and illustrate the plurality of symbolic behavior in prehistoric societies. It is these temporal or territorial variations that make these human groups and their successive cultures unique.

What symbolic traditions can be defined at the beginning of the Upper Paleolithic? Can we characterize Aurignacian, Gravettian or Solutrean approaches?

1 - Characteristic traits at the beginning of the Upper Paleolithic

Three main formal pre-Magdalenian traits are present throughout the duration of "early" Paleolithic art: the concave ventral line of mammoths, the frontal view of bisons' horns and the depiction of horses' jaws as "duck bills". These ways of drawing are already visible on the walls of Chauvet Cave and characterize many decorated complexes until the advent of the Magdalenian. As well as highlighting continuity in these stylistic representations throughout time, it is also imperative to focus on their geographic distribution.

Horses' jaws shaped like "duck bills" were first mentioned and named by H. Breuil in 1910 (Capitan et al., 1910). We suggest the following definition: marked convexity of the upper jaw, marked jowl with a more or less pronounced line at the end of the muzzle: sinuosity running from the concavity of the forehead to the convexity of the nose with at times a pointed end (Chauvet 22; Cosquer 14; La Croze-à-Gontran 01), or a very rounded end (Ardalès 02; Gargas 08; La Pileta 04) (figure 1). It is interesting to develop the study of this criterion, as it remains a strong anchor point in the literature for linking cavities that are sometimes separated by considerable distances and lapses of time. For certain horses, it is difficult to determine whether or not they present this stylistic criterion, and in order to resolve the issue, it is essential to study not only the graphic representation itself, but also the more general parietal context. Which equids are depicted in this way? Why were others not? A number of horses are at the limits of determination, prompting us to widen the corpus of "duck-billed" horses to representations meeting most of the formal criteria when the parietal context includes clear "duck-billed" horses. This is the case in particular for the horses Ardalès 06 and Pair-non-Pair 02. The first shows the characteristic narrowing between the jowl and the chin and is part of a parietal context with unambiguous "duck-billed" horses (Ardalès 02; Ardalès 03; Ardalès 04; Ardalès 07; Ardalès 08). As for the other horses in the cavity, they are very different as far as the morphological criteria used are concerned. The second horse, Pair-non-Pair 02, is very similar to the other horses on the walls of the same chamber of the cavity (Pair-non-Pair 01; Pair-non-Pair 03; Pair-non-Pair 04). On account of its rectilinear forehead, it was initially excluded from the corpus, but due to the jowl and the break in the line between the forehead and the mane, it is similar to the others. This absence of geographic continuity for these two parts of horse anatomy is one of the fundamental elements of "duck-billed" horses for E. Guy: "Another revealing trait of this particular conception, [...] consists in not systematically linking the contours to their intersections [...] with the virtually systematic interruption of the lines intersecting at the mane and the forehead. This is probably a way of affirming the independence of these pre-established lines but also a better way of differentiating the different anatomic parts using a particularly economical representation system (a single contour line)" (Guy, 2004: 3).

This is not a simple graphic convergence issued from universal schematics. The depiction of a "duck's bill" probably represents "a specific intention consisting of abandoning or deliberately neglecting the representation of general details, more or less common to all, in favor of details, such as the jowl, that directly characterize the animal" (ibid.). It is thus a deliberate aspect of early Upper Paleolithic parietal art. On the basis of work on representations from the Côa Valley and using Franco-Iberian examples, E. Guy suggests identifying this particular way of depicting the horse's head as a characteristic element of "Gravetto-Solutrean" graphic culture (Guy, 2000, 2003). However, we are skeptical of this chronological attribution of horses with "duck bills". The author uses this initial axiom to propose a second phase of representations from Chauvet Cave, based on the observation of a characteristic horse (Chauvet 22, figure 34...), "I infer that it is highly probable that the engraved horse from the Skull chamber belongs to the Gravetto-Solutrean" (Guy, 2004: 4). Our reservations concern both the varied character of the Ardeche sanctuary, and the role of the "duck bill" as a Gravetto-Solutrean chronological marker. Indeed, Guy partly bases his arguments on the horses from the cave of Pair-non-Pair. Yet, recent work by G. Sauvet, C. Fritz and G. Tosello, based on data from F. Daleau, shows that the representations from this cavity could well be Aurignacian (Sauvet et al., 2007). This chronological attribution is also favored by B. and G. Delluc (Delluc, Delluc, 1997). In addition, certain cavities cited by the author are not solidly chronologically secured: La Croze-à-Gontran and Ardalès were compared to Pair-non-Pair for a long time on the basis of the equine representations (Cheynier, Breuil, 1963). It is difficult to define the exact chronological role of these complexes in pre-Magdalenian parietal art. More recently, R. Pigeaud pointed out a stylistic complex defined by "[...] Mayenne-Sciences-Roucadour-Pair-non-Pair,

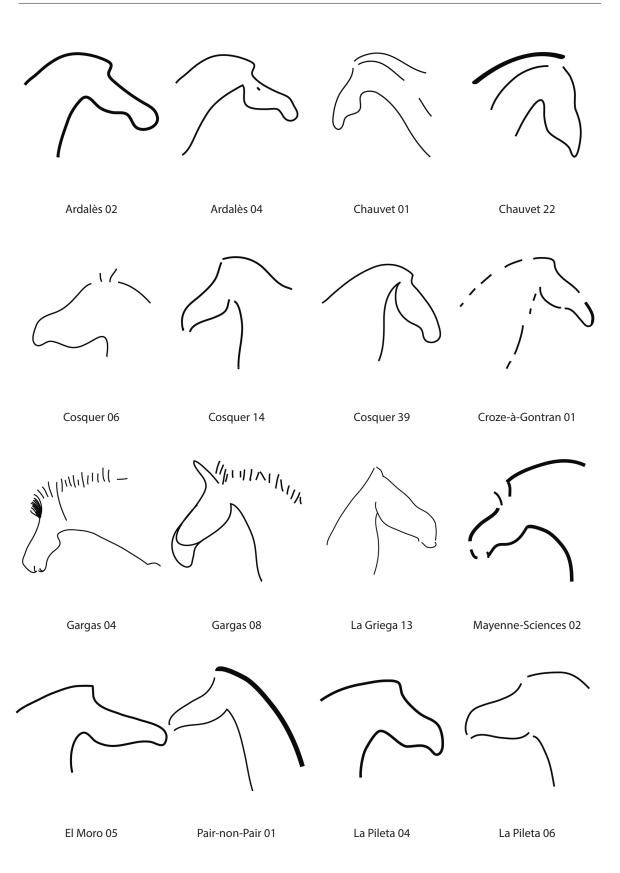


Figure 1 - Horses with "ducks bills" after: Chauvet 01 (D. Baffier/V. Feruglio); Chauvet 22 (E. Guy); Pair-non-Pair 01 (B./G. Delluc); Croze-à-Gontran 01 (B./G. Delluc); Ardalès 02-04 (P. Cantalejo Duarte); Gargas 04-08 (C. Barrière); Cosquer 06-14-39 (J. Clottes); Mayenne-Sciences 02 (R. Pigeaud); La Pileta 04-06 (J. L. Sanchidrian Torti); El Moro 05 (S. Ripoll Lopez); La Griega 13 (G. Sauvet).

all three of which include horses with "duck bills" and linear tails, a comma-shaped nostril and, for Mayenne-Sciences and Pair-non-Pair, a half-twisted ear in perspective" (Pigeaud, 2005: 260). Thus, if we consider the relatively consensual Aurignacian attribution for Pair-non-Pair, and the remaining chronological uncertainties for La Croze-à-Gontran and Ardalès, certain "duck-billed" horses clearly precede what E. Guy calls the "Gravetto-Solutrean". From Foz Côa to Parpalló, from the Andalusian caves to Mayenne-Sciences, "duck-billed" horses span the whole geographic extension of decorated caves and the entire pre-Magdalenian period (figure 2). Several of the most recent complexes in this chronology show the increasing rarity, then the disappearance of this stylistic criterion, which does not materialize stricto sensu in Magdalenian art. The work of V. Villaverde on the Parpalló plaques illustrates this disappearance of the "duck-beaked" horses. The author affirms, on the basis of thousands of portable remains from the Iberian site, that this type of equine head depiction does not continue after the mid-Solutrean (Villaverde et al., 2009). The portable art from Parpalló clearly demonstrates that a stylistic convention can transcend the different materials and the site of Bouil-Bleu backs up this observation. An engraved stone from the site in Charente depicts a "duck-billed" horse. Yet, the records show that the portable art from Bouil-Bleu comes from the Aurignacian layers (Airvaux, 2001). This chronological attribution underlines the presence of formal traits and characteristics from the beginning of the Upper Paleolithic over a very wide geographic area.



 $\textbf{Figure 2} \ - \ Geographic \ distribution \ of "duck-billed" \ horses \ (CAD: S. \ Petrognani, F. \ Tessier).$

The situation is very different for the mammoth and the bison. The proboscidean represents 10.7% of pre-Magdalenian parietal representations and only rarely occurs in the Iberian region, and not at all in Andalusian assemblages. However, the mammoths from Los Casarès, El Arco B, Castillo and El Pindal, all present a concave ventral line. This ventral line also characterizes the engraved mammoth on a plaque from Bouil-Bleu. These observations, associated with the absence of this animal from Magdalenian complexes, underline the importance of this behavior within the scope of the graphic norms chosen by pre-Magdalenian groups for their symbolic depictions.

In the current state of research, the bison is absent from Andalucía and the center of Spain. In the north of France, few bison occurrences are known. The northernmost specimen (Mayenne-Sciences) presents a head-on view of the horns. Like for the ventral line of the mammoth, when the bison is present in a region, the depiction of the horns systematically represents a local domination of frontal perspective. This formal trait becomes rare or disappears during the Magdalenian, when artists opt for more natural perspective.

Is it possible to suggest a distribution pattern for these representation modes throughout time? It would be tempting to begin by examining the earliest occurrences, but future discoveries would overturn a theoretical model only based on a very incomplete record of Paleolithic sanctuaries. Currently, we observe that Chauvet Cave presents these three "early" formal treatments and the greatest number of early Upper Paleolithic dates. However, we refuse to deduce from that that this mode of representation began in Ardéche and then spread from there throughout space and time. Several authors have brought to light elements enabling us to place Chauvet Cave in a wider artistic context. Let us cite, in particular, the comparison of the "hand-dots" from Chauvet, recorded by D. Baffier and V. Feruglio (Baffier, Feruglio, 1998, 2001), with their counterparts in the Grotte aux Points (Gély, 2005). D. Sacchi also underlines the formal similarities between the "arc-shaped" rhinoceros ears from Chauvet with Aldène Cave in Hérault (Sacchi, 2000; Tosello, Fritz, 2004), and the almost identical ear on a representation (rhinoceros) from La Baume Latrone (Azéma *et al.*, 2012). This similarity is all the more interesting given that Aldène is now ascribed to a period contemporaneous with the Chauvet parietal art (Ambert *et al.*, 2005), and that the main themes of both these cavities focus on felines, rhinoceroses and mammoths.

The Swabian Jura hosts another concentration of Aurignacian artistic representations. The sites of Geissenklösterle, Hohlenstein-Stadel, Hohle Fels and Vogelherd contain many animal statuettes, also depicted on the walls of Chauvet Cave (Clottes, 1995). We will take a closer look at the impact of this thematic similarity as it gives us the opportunity to compare productions on different types of materials from a stylistic viewpoint. It is difficult to propose morphological analogies between these statuettes and the figures from Chauvet Cave. Some authors have pointed to parallels as regards "[...] highly sinuous necklines also observed on two specimens from Chauvet [...] and a figurine from Vogelherd" (Tosello, Fritz, 2004: 85). However, these formal parallels do not stem from a "shared" pre-Magdalenian stylistic base, but more specifically from an Aurignacian "artistic tradition". They show to what extent certain graphic traits reveal precise chronological moments, bound at times to more or less extensive geographic areas.

2 - Aurignacian symbolic "traditions"?

The publication of the dates of the representations from Chauvet Cave (Clottes, 1995) soon led to a comparison between the thematic range of this site with German portable art from the Swabian Jura (Clottes, 1995). The ivory statuettes from southwest Germany represent species such as the bear, but especially the mammoth and the lion, which dominate the walls of Chauvet Cave. This thematic parallel is all the more striking, given that these animals are only rarely depicted in Paleolithic parietal art and that the portable art from the Swabian Jura, is like Chauvet, associated with a very early Upper Paleolithic phase. Although researchers have been convinced for a long time of the early age of these sculpted, rounded figurines (Riek, 1934; Hahn, 1986), the Aurignacian chronology of these objects was only revealed over the past twenty years through a series of radiocarbon and TL dates, yielding ages between 36 000 and 30 000 BP (Richter *et al.*, 2000; Conard, Bolus, 2003; Conard, 2003, 2005; Conard, Floss, 2010). The sites of Geissenklösterle, Hohlenstein Stadel and Vogelherd contain a concentration of statuettes, in addition to the recent discoveries

from Hohle Fels (Conard, 2003), including a very similar "lion-man" to the figurine from Hohlen-stein-Stadel dated to around 32 000 BP (Conard, Bolus, 2003), as well as a small feminine statuette discovered in 2008 in Hohle Fels. These four sites represent the hub of a chronologically and thematically consistent zone of artistic profusion. The discovery of a mammoth statuette at Vogelherd, during excavations by N. Conard in 2007, underlines the consistency of the Swabian Jura sites.

La Grande Grotte at Arcy-sur-Cure is also probably part of this early "tradition". This site comprises a majority of mammoth representations, but also a bear, a feline, two horses and a bison, all attributed to the Aurignacian-Gravettian (Baffier, 2005). These shared characteristics are also manifest at Aldène Cave, Hérault, which appears to represent the southernmost extension of the Aurignacian symbolic current. The range of themes at this site is dominated by rhinoceroses and felines, as well as one mammoth representation. According to a recent study and flowstone dating, these representations are chronologically situated between 37 000 and 24 400 BP (Ambert *et al.*, 2005). This relationship between the Rhone and Rhine valleys represents a real artistic "tradition" with shared animal themes, but how does Aurignacian art in the southwest of France and in Italy fit into this wider picture?

The animal themes from Bernoux Cave in Dordogne have been related to the range of subjects depicted in the Swabian Jura and on the walls of Chauvet Cave (Clottes, 1995). Recently, B. and G. Delluc identified a mammoth, a rhinoceros and a bear in Bernoux (Delluc, Delluc, 1991). For us, the latter representation does not depict a bear (Petrognani *et al.*, in press) (figure 3), but the association of the mammoth and the rhinoceros relates Bernoux to Aurignacian "tradition" sites in the Rhone and Rhine valleys. Other artistic productions, on different types of mediums, provide a regional context for the Aurignacian themes. The engraved stones from Chanlat (Corrèze) are also part of this Aurignacian range of themes "with a bear engraved on one side and a mammoth on the other' and "a plaque of schist presenting traces of a bear or a rhinoceros outline" (Delluc, Delluc, 1991: 298). On the other hand, Jean Clottes notes that 32% of the animals identified by B. and G. Delluc in complexes "considered to be archeologically dated to the Aurignacian" are mammoth, rhinoceros or bear representations (Clottes, 1995: 24). The ibex is predominant at these sites, accounting for 35% of all illustrated animals. They are recorded at Jovelle, Belcayre, Croze-à-Gontran and Abri Pataud-Movius, and establish a link between the six caprid representations



Figure 3 - Engraved feline from Bernoux Cave (drawing: S. Petrognani).

at Pair-non-Pair. These ibex images outnumber the five horses and three mammoths. The proboscideans recall the Aurignacian themes, in keeping with the recent chronological attribution of the site after the re-examination of the François Daleau excavations (Sauvet *et al.*, 2007).

The Aquitaine sites recorded as Aurignacian correspond well to this Aurignacian "horizon". There is no evidence of different "traditions" or of a noticeable rupture between the artistic productions from the Swabian Jura and the Rhone Valley and those from the southwest of France. The predominance of the ibex in Aquitaine and the feline in the Rhone and Rhine valleys represents regional variations. Unfortunately, the collapsed parietal blocks from la Ferrassie and Blanchard do not provide any insights into our perception of the earliest phases of Upper Paleolithic art, but remind us that our knowledge of this period is truncated and subject to the conservation of remains. The abundant vulvas on decorated blocks from Dordogne find echoes in Chauvet Cave, and emphasize the important role of feminine images in this Aurignacian artistic tradition.

The horse is not often brought to the fore in thematic approaches to early phases, yet appears as a constant iconographic element of Aurignacian art. Equine figures are discreetly present and represent 8% of the animals in the southwest of France, 10% of the German representations, and 9.6% in Chauvet Cave (Clottes, 1995; Conard, 2005). But the depiction of horses is often spectacular due to techno-stylistic methods or the topographic location of these animals. The Agnus Dei horses in Pair-non-Pair or the Horse Panel in Chauvet are good illustrations of this. For the time being, no horses have been identified on the decorated stones from the site of Fumane, in the Plain of Veneto. These rock fragments are elements of the colored walls and generally bear incomplete images with paint extending over the fractured surfaces (Broglio et al., 2005). A frontal view of an anthropomorphic silhouette has been identified. The radiometric dating of the archeological layers containing these cave wall fragments, as well as traces of hematite identical to the pigment used for these paintings, indicate ages between 35 000 and 32 000 BP (Broglio et al., 2005). N. Conard suggests different "Aurignacian artistic traditions" for these spatially dispersed symbolic concentrations (Conard, 2005). This cultural diversification of symbolic depictions is also proposed by F. Bon, in his technological study of the early phases of the Aurignacian in the South of France (Bon, 2002). The author recalls that "[...] although it is still impossible to correlate these artistic expressions with industrial facies [...], it appears that, within the artistic domain, the Aurignacian conveys different traditions" (Bon, 2002: 184).

3 - Gravettian images: between continuity and originality

The Pyrenean site of Gargas Cave is the most important rock art complex associated with the Gravettian. This site contains a corpus of over a hundred animal figures and 250 hands. The animals depicted are dominated by the horse/bison combination which represents nearly 75% of the identified animal representations. Due to this fact, as well as the absence of the rhinoceros and felines in the cave, J. Clottes advanced the hypothesis of a "[...] thematic change [...] in the South of France from the beginning of the Gravettian onwards" (Clottes, 1995: 29). The seven mammoth representations in Gargas qualify this conclusion and reflect the proboscideans from other complexes from the same epoch. The mammoth is predominant at Pech-Merle with 27 occurrences and represents 28% of the identified animal figures at Cougnac. For the time being, our knowledge of the parietal art from Cussac Cave is limited, but the presence of mammoths also appears to be characteristic of the site. These complexes are directly related to the Gravettian period and underline the important role of a major Aurignacian theme. The mammoth depiction from the Chouettes du Tréfonds gallery at Trois Frères is also consistent with this idea and reinforces the techno-stylistic link between the gallery of this cave and Volp and Gargas (Bégouën, Clottes, 1987).

The presence of the mammoth points towards relative thematic continuity with earlier sites and this continuity is underscored by the occurrence of hand prints. The latter are present in Chauvet Cave, but also in the Grande Grotte of Arcy-sur-Cure during an early period (Baffier, 2005), and herald the geographic and quantitative explosion of these representations during the course of the Gravettian period. The irrefutable importance of hand prints during the Gravettian remains unmatched during subsequent periods. Another theme related to the Aurignacian tradition that also undergoes a spectacular pan-European expansion during the Gravettian is that of feminine representations. The latter are depicted by vulvar images on decorated blocks in Dordogne and in Chauvet Cave, where they denote a marked change of image. Gravettian groups abandoned segmented feminine representations and opted for more complete, very stylized depictions. From cave walls in the southwest of France to the plains of Ukraine, Gravettian Venuses are represented on all kinds of mediums: on blocks (Laussel), portable clay art (Dolni Vestonice), in stone (Willendorf), or in ivory (Lespugue). This characteristic portrayal of the feminine image denotes symbolic unity across the continent between 22 000 and 21 000 BP, and points to the tight cultural unity of Gravettian groups over long distances. The feminine image is still present in symbolic Gravettian imagery, but the animal themes from Central and Eastern European sites display the most spectacular continuity with Aurignacian subjects.

Portable Pavlovian and Kostienkian art provides the best illustration of this Aurignacian-Gravettian continuum in the form of the symbolic animal bestiary in the East of Europe. The Pavlovian includes statues of 21 bears, 8 mammoths, 9 felines, 6 horses, 6 birds, 4 rhinoceroses, 1 caprid, 1 cervid and 11 small carnivores, "[...] at Dolni Vestonice, for example, the most frequently represented animals are felines and bears" (Kozlowski, 1992: 68). This range of themes is similar to Kostienkian portable art for which J. Hahn identified 36 mammoths, 11 birds, 8 rhinoceroses, 6 felines, 5 bears, 3 horses, 2 bison, 1 caprid, 1 cervid, 1 small carnivore and 17 non-identified animals (Hahn, 1990). These themes are strikingly similar to those represented in Chauvet Cave, but also to the ivory statuettes from the Swabian Jura. Given the persistence of certain parietal themes like the mammoth or the megaloceros, but also hand prints, there would appear to be relative continuity between the Aurignacian "artistic tradition" and Gravettian themes. However, in the light of the immense geographic and temporal expanse under consideration here, it is imperative to remain cautious.

For C. Fritz and G. Tosello "[...] it appears that Aurignacian and Gravettian parietal art presents thematic [...] and perhaps even stylistic affinities. Considering the available dates and records, a certain Aurignacian-Gravettian continuum exists and at times it is not easy to resolve the matter solely on the basis of formal criteria" (Tosello, Fritz, 2005: 84). Although we can discard the idea of a rupture between these two chronological phases, the omnipresence of hand prints or the characteristic representation of the feminine image are original elements typical of the Gravettian "symbolic tradition" in Europe between 28 000 and 22 000 BP.

4 - The Solutrean:

a move towards a regionalization of artistic representations

Between approximately 22000 and 17000 BP, Europe underwent a very cold and dry period corresponding to the Last Glacial Maximum. Groups of hunter-gatherers were no longer bound by strong cultural unity across the continent and the Solutrean technocomplex developed in a relatively limited western European territory (Aubry, 1991). The decorated sites related to this chronological period cover a relatively extensive zone. The complexes of Placard, Gabillou or the sculpted art from Roc-de-Sers, Fourneau du Diable and Abri du Poisson are examples of Solutrean

art in the southwest of France. The sites of Oulen, Chabot, Bayol, Ebbou, or Tête-du-Lion are part of the parietal corpus from the Rhone during the same period, whereas the Iberian Peninsula, with the complexes from the Côa Valley, Parpalló, or the Andalusian sites of Ardalès or La Pileta, illustrates the southernmost extension of Solutrean art.

The Cantabrian region in the North of Spain is also marked by the presence of Solutrean art. However, most of the early parietal art in this region is associated with Magdalenian representations and Solutrean art is thus difficult to identify due to the scarcity of direct absolute dates. From a thematic viewpoint, regional traits can be observed. On one hand, the doe and the horse are predominant, accounting respectively for 31.8% and 17.9% of the animal representations. On the other hand, the abstract patterns, in particular quadrangular signs, make up a key element in the interpretation of pre-Magdalenian Cantabrian art. This thematic originality is emphasized by the almost systematic use of red pigment for parietal representations (González Sainz *et al.*, 2003; Garáte Maidagan, 2006). This iconographic unit, which also encompasses techniques, brings to light a phenomenon of symbolic regionalization. No evidence currently relates the Cantabrian artistic representations to those of other regions. What of the other symbolic territories? Do they confirm this trend?

Cave art from sites in the Rhone Valley such as Oulen, Chabot, Bayol, Ebbou, or la Tête-du-Lion, is similar to "early" parietal art from Quercy (Combier, 1984; Lorblanchet, 1989). The high frequency of the mammoth and certain graphic conventions, such as portraying the limbs in an "X" shape or the ventral mammoth line in a "horse shoe" shape, are traits representing a parallel between Quercy and Solutrean art from the Rhone. These parietal complexes attributed to a Solutrean phase illustrate the development of a regionalization trend. Red does are predominant in Cantabria, the mammoth is widespread in the Rhone Valley and the horse is the principal animal in Aquitaine. Portable art from Central and Eastern Europe presents few Solutrean traits; Gravettian art subsists and is directly followed by the Magdalenian with "inversed themes", such as the predominance of the horse / bison combination for sculpted objects. In our opinion, this thematic Solutrean regionalization is part of the development of graphic rigidity, a theme developed below.

5 - Diversity and formal rigidity: discussion and conclusion

The conclusions of our formal analysis of horses, the inter-specific comparison of the portrayal of limb extremities, cervid antlers or bovine horn perspective, emphasize the decrease in diversity in the range of stylistic resources used by Paleolithic groups. Given these data, we advocate a "pre-Magdalenian parietal" art sequence (figure 4). The graphic standards imposed by the group become more rigid and the range of graphic possibilities decreases considerably for prehistoric artists, to such an extent that they become set and limited to certain formal representations. The establishment of a coding process is already in motion in Chauvet Cave and is just one stage of the process. The standardization of bison heads or the ventral line of the rhinoceros illustrates the existence of mental schemas at Chauvet. The formal analysis by C. Fritz and G. Tosello underlines that "[...] Chauvet Cave is double-faceted. A certain stability transpires through the respect of affirmed graphic conventions, but the dominant impression is one of originality, creative effervescence prompting the artists to test various formulas, for each representation, each panel or monumental composition" (Tosello, Fritz, 2005: 167). The spectacular use of the third dimension heightens this impression of creativity and opportunism at Chauvet: a bison head depicted from a frontal view on a first wall, and with a profile view of its body on a second wall orthogonal to the first, giving this representation exceptional perspective (figure 5). The formal aspect of certain

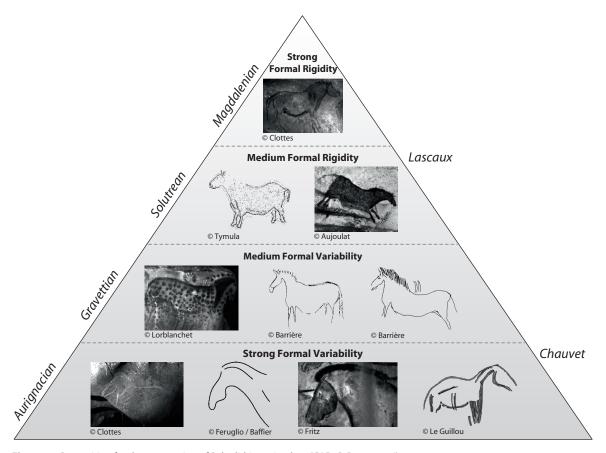


Figure 4 - Proposition for the sequencing of Paleolithic parietal art (CAD: S. Petrognani).

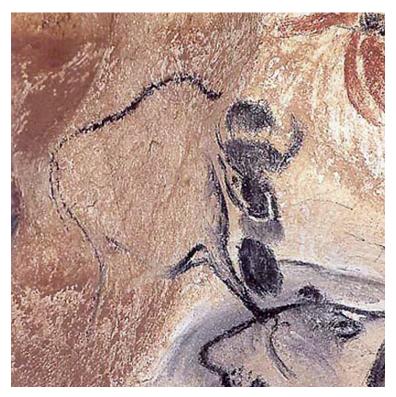


Figure 5 - Black bison from Chauvet Cave (photo: J. Clottes/Ministry of Culture and Communication, DRAC Rhône- Alpes).

figures from Chauvet Cave or ivory statuettes from the Swabian Jura clearly shows that the full range of iconographic possibilities was already mastered by the first Upper Paleolithic artists. "It appears that progress is an alien concept to the world of art and representation, or at least as far as figurative art is concerned […]. The opinion focusing on the storage and improvement of artistic knowledge with the sole aim of achieving a "perfect" naturalism is based on the concept of technical progress, as if art shared the same ultimate aim as the efforts of subsequent generations" (Tosello, 2003: 537).

At the end of the "early" period, complex and repetitive geometric symbols appear in several sites, raising the question of a possible regional dimension. The presence of these signs at the end of this period, perhaps even at the junction of the early period and the Magdalenian could herald the emergence of constructed Magdalenian signs. The tectiform symbols in Dordogne and the claviform symbols in the Pyrenees would thus represent the outcome of increased codification and the regionalization of complex abstract shapes. D. Vialou underlines that "[...] the abundance and the extreme typological diversity of Magdalenian parietal signs provides evidence of a profound change in relation to previous cultures, [...] the abstract codification of graphic representations is preponderant" (Vialou, 1989: 182). What are the implications of this decrease in graphic representations and the increase in codification throughout time? If we consider the terms diversity and rigidity through the prism of social analysis, we can attempt to evoke the concept of "artistic freedom" (Petrognani, 2013). Does this decrease in "freedom" throughout time, with increasingly stricter representation codes, reflect an ever more complex social organization, with increasing control over its images and symbolic productions? The relationship between the prehistoric artist and the group appears to evolve throughout the Upper Paleolithic. The influence of society on the formal characteristics of the figures is increasingly important, leading to a reduced stylistic range. C. Lévi-Strauss recalls that "art is [...] the conveyor of collective language; in order to remain significant, it must be incorporated into a system of stable codes controlled by the group, which is its guarantor" (Lévi-Strauss, 1961: 65). The study of art from "early" periods shows to what extent prehistoric society becomes increasingly "normative" until the advent of Magdalenian art. Collective images are ever more important and leave less and less leeway for the individuals responsible for portraying symbolic imagery on cave walls, representing the group to which they belong.

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Stephane PETROGNANI

UMR 7041 - ArScAn, Ethnologie préhistorique MAE René-Ginouvès 21 allée de l'Université, 92 023 Nanterre cedex, FRANCE stephanepetrognani@yahoo.fr

