



NEW YORK UNIVERSITY  
Proceedings of the International Symposium  
April 08-10 2013, New York (USA)

2015 # 7

<http://www.palethnologie.org>  
ISSN 2108-6532

**directed by**

**Randall WHITE**  
**Raphaëlle BOURRILLON**

*with the collaboration of*  
**François BON**

**AURIGNACIAN GENIUS**

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



Review published by the P@lethnologie association, created and supported by the TRACES laboratory, Inrap and the Ministry of Culture and Communication.

## Director

Vanessa LEA

## Editorial committee

François BON

Pierre CHALARD

François-Xavier FAUVELLE

Karim GERNIGON

Vanessa LEA

Michel VAGINAY

Nicolas VALDEYRON

## Scientific committee

Michel BARBAZA, University Toulouse Jean-Jaurès, Toulouse, France

Marie BESSE, University of Geneva, Geneva, Switzerland

Fanny BOCQUENTIN, CNRS / UMR 7041 – ArScAn, Paris, France

Laurent BRUXELLES, INRAP / UMR 5608 – Traces, Toulouse, France

Adrian BURKE, University of Montreal, Montreal, Canada

Sandrine COSTAMAGNO, CNRS / UMR 5608 – Traces, Toulouse, France

Philippe CROMBÉ, Ghent University, Ghent, Belgium

Jesús GONZÁLEZ URQUIJO, University of Cantabria, Santander, Spain

Jacques JAUBERT, University of Bordeaux / UMR 5199 – Pacea,  
Bordeaux, France

Claire MANEN, CNRS / UMR 5608 – Traces, Toulouse, France

Grégor MARCHAND, CNRS / UMR6566 – CReAAH, Rennes, France

Marco PERESANI, University of Ferrara, Ferrara, Italy

Geneviève PINÇON, National Center of Prehistory, Périgueux, France

Karim SADR, University of Witwatersrand, Johannesburg, South Africa

Isabelle THÉRY-PARISOT, CNRS / UMR 7264 – Cepam, Nice, France

Boris VALENTIN, University Paris 1 Panthéon-Sorbonne, Paris, France

Jean VAQUER, CNRS / UMR 5608 – Traces, Toulouse, France

Randall WHITE, New York University, New York, USA

## Translation

Louise BYRNE

Claire HECKEL

## Layout, graphics

Fabien TESSIER

## 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](mailto:vanessa.lea@univ-tlse2.fr)

## This digital publication received support from



La Maison Française  
NEW YORK UNIVERSITY

THE ANDREW W.  
MELLON  
FOUNDATION

## ANIMATION AND GRAPHIC NARRATION IN THE AURIGNACIAN

Marc AZÉMA

<b>Introduction</b> .....	257
<b>1 - Animation in cave art</b> .....	259
<b>2 - Proposition of a method of analysis for graphic narration in Paleolithic art</b> .....	265
<b>3 - Application of this analysis method to Aurignacian parietal art</b> .....	266
A - Chauvet-Pont d'Arc .....	266
B - Baume Latrone .....	272
<b>Conclusion</b> .....	277
<b>References cited</b> .....	277

### To cite this article

Azéma M., 2015 - Animation and Graphic Narration in the Aurignacian, in White R., Bourrillon R. (eds.) with the collaboration of Bon F., *Aurignacian Genius: Art, Technology and Society of the First Modern Humans in Europe*, Proceedings of the International Symposium, April 08-10 2013, New York University, *P@lethnology*, 7, 256-279.

## ANIMATION AND GRAPHIC NARRATION IN THE AURIGNACIAN

Marc AZÉMA

### Abstract

*What was the purpose of the images conceived and produced by prehistoric groups? Our research into the animation of these images leads us to propose a new method of analysis that shows their primary function to be narrative. The identification of mechanisms for graphic narration can help to decipher the exact content conveyed by these messages beginning as early as the Aurignacian. The main images from two parietal art caves from this period, Chauvet-Pont d'Arc and Baume Latrone in the South of France, provide a remarkable example of the different animation processes and sequencing underlying these first Aurignacian stories.*

### Keywords

*Aurignacian, parietal art, animation, ethology, graphic narration, movement breakdown, sequence, action, Chauvet-Pont d'Arc, Baume Latrone, interpretation.*

## Introduction

Given the current state of knowledge, the earliest evidence of the existence of figurative art goes back to the Aurignacian. What was the purpose of these “first” animal images, mostly large mammals? Although the interpretation of Paleolithic art remains a perilous exercise, impossible for some and feasible for others, it is, in our opinion, possible to identify the mechanisms defining the primary function of these images: narrative. Whatever the message(s) conveyed by this graphic narration, it seems an essential component of the earliest images, as our more than twenty years of research into the study of animation in Paleolithic art (Azéma, 2009, 2010, 2011) has shown.

In the scope of this article, we will first of all summarize the research leading to the formulation of our hypothesis. We have shown that animation played a major role in Paleolithic art, contrary to specialist opinion which regarded these parietal images as simple inert symbols linked between them by basic logic (decorative, sexual, religious...); particularly A. Leroi-Gourhan (1975: 390) when he said: “it is clear that the subject (bison, deer...) takes precedence over the action (running away, charging, falling...), since a majority of the figures are not in a state of animation or are in motionless vertical extension”. In the same way, we established that animation led in a logical and subtle way to the graphic narration process, as the “scene” concept (or “sequences”) is not an exceptional but rather a recurring occurrence, in our opinion.

Secondly, we present the method of analysis of graphic narration in parietal art developed during this research. To conclude, by way of an example, we will apply this analytical tool in a number of ways to the decoration of two neighboring Aurignacian caves with parietal art, where we have had the privilege to work: Chauvet-Pont d'Arc in Ardèche ([figure 1](#)) and Baume Latrone in the Gard ([figure 2](#)). It is clear that Aurignacian art is not limited to these two caves but the more isolated and apparently less animated images from Coliboaia (Romania), Castanet or Blanchard (Dordogne), are less suited to such a demonstration.



**Figure 1** - The eight-legged bison from Chauvet-Pont d'Arc Cave (Ardèche): movement breakdown effect of the legs? (photo: J. Clottes, Chauvet scientific team).



**Figure 2** - Cave lion and mammoths from La Baume Latrone Cave (Gard) (photo: M. Azéma).

## 1 - Animation in cave art

For Upper Paleolithic artists, movement was an integral part of the process of identification and therefore of depicting the animal. In this context, the identification, then the analysis of these animations required good knowledge of animal anatomy, biology and ethology. Our approach is thus part of the naturalist study approach initiated several decades ago, in particular by the work of Léon Pales on the cave of La Marche (1969, 1981, 1989) and, surprisingly, by André Leroi-Gourhan, who, towards the end of his life began to reinterpret parietal art from an ethological viewpoint, as shown by his last lectures at Collège de France (Leroi-Gourhan, 1974, 1975, 1980).

In 2003, we calculated that 41.1% of the animals in French parietal art, or nearly one animal out of two, are represented in movement. If we take into account the dynamic properties of Paleolithic lighting, consisting of flickering torch light or oil lamps, of the interaction of parietal images with the rocky relief they are painted on, and the existence of optical effects such as anamorphism, we can reasonably assume that the majority of the images appeared to be animated by Paleolithic humans. But it is still difficult to quantify statistically these latter parameters, which will require future experiments involving virtual reality.

Animation can affect either the whole or just one part of the animal's body. The head is animated in 86.7% of the studied cases, which is perfectly logical as the head is the most widely represented body part. Limbs are depicted in movement in 52.9% of the cases and the tail in 31%. The importance of segmental animation for the cave lion can be explained by the used of the synecdoche for a considerable proportion of the felids in Chauvet Cave, the predator most represented in parietal art. These movements can be isolated or combined. In this case, we refer to segmental or coordinated animation to simplify the classification proposed by André Leroi-Gourhan (1974: 385-388). According to our calculations, segmental animation is less frequent than coordinated animation for most of the animals: horse (36% compared to 64%), bison (35% / 65%), etc.

Based on the classification of movement for each species, we were able to demonstrate the very wide diversity of animations, which is much greater than previously thought and which will probably increase further with future studies. In this way, for the horse, the head is depicted in about a hundred different positions (figure 3). At the scale of a single cave, in this case Chauvet, the sample of feline head movements also shows a wide variety of facial expressions (figure 4).

As we can see, these movements can be discreet, when they concern the subtle animation of an ear, an eye or the tail, or else they can be more spectacular when they evoke rapid movements. In all cases, they made sense for the hunter-gatherer artists who were used to observing nature. These artists went a long way with the representation of movements, particularly for the faster ones that escape our perception due to the limits of our vision. They devised conventions that we find throughout art history, many millennia later.

But they did not just represent snapshot images, or frozen instants of time on the rock. Some of them, probably the most talented artists, sought to expand these short moments. They even managed to graphically simulate the fourth dimension, using two processes of movement deconstruction: deconstruction through the *superposition* of successive images and deconstruction through the *juxtaposition* of successive images.

The first process is easier to define than the second. It consists of the multiplication effect of the body parts in movement (multiple outlines). This generates a sort of "graphic blur" on the most naturalistic representations. This process is present throughout the Upper Paleolithic, on several tens of figures (53, or 3.5% of the animated figures), all species combined; from the Périgord (Lascaux), the Pyrénées (les Trois-Frères, Gourdan, Massat), the Quercy (Sainte-Eulalie) and the Ardèche (abri du Colombier, Chauvet). But we have recorded the most cases of this at Lascaux, nearly always on equids. Magdalenian portable art (La Marche; figure 5, Limeuil, La Madeleine) and parietal art from the Iberian Peninsula (Altamira, Foz Côa) provides other examples.

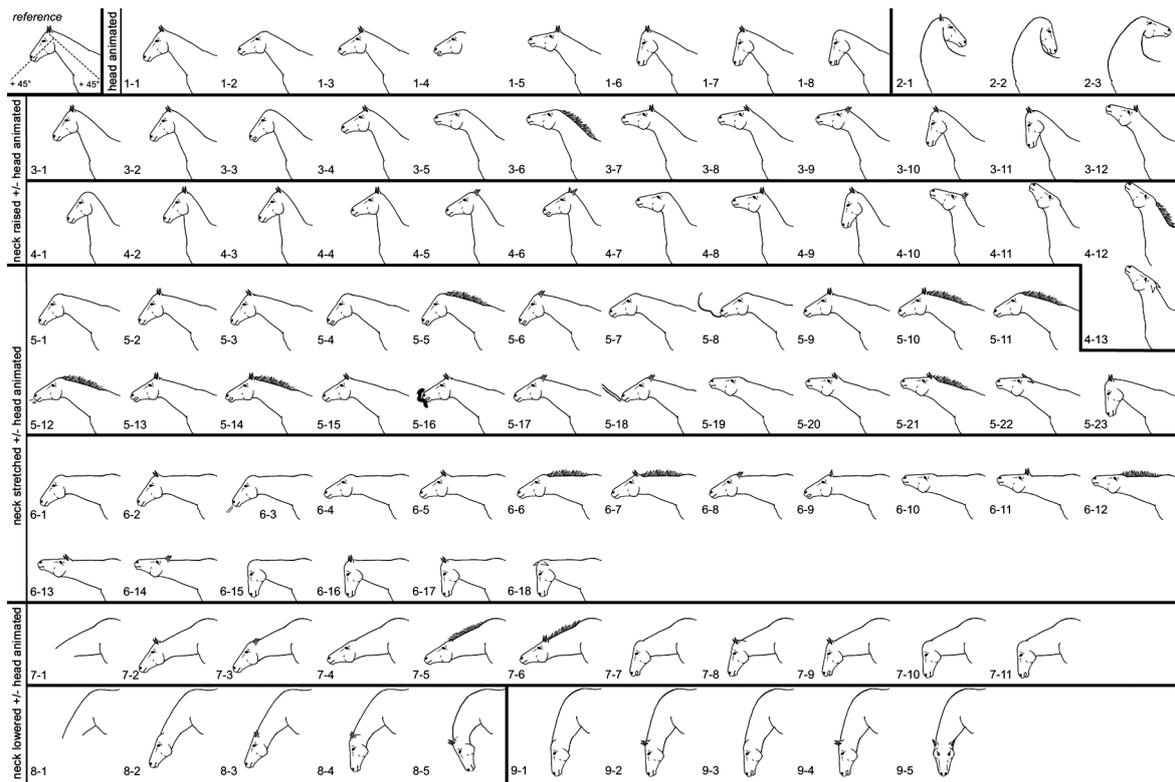


Figure 3 - Inventory of horse head and neck movements in French parietal art (after Azéma, 2003: table 3).

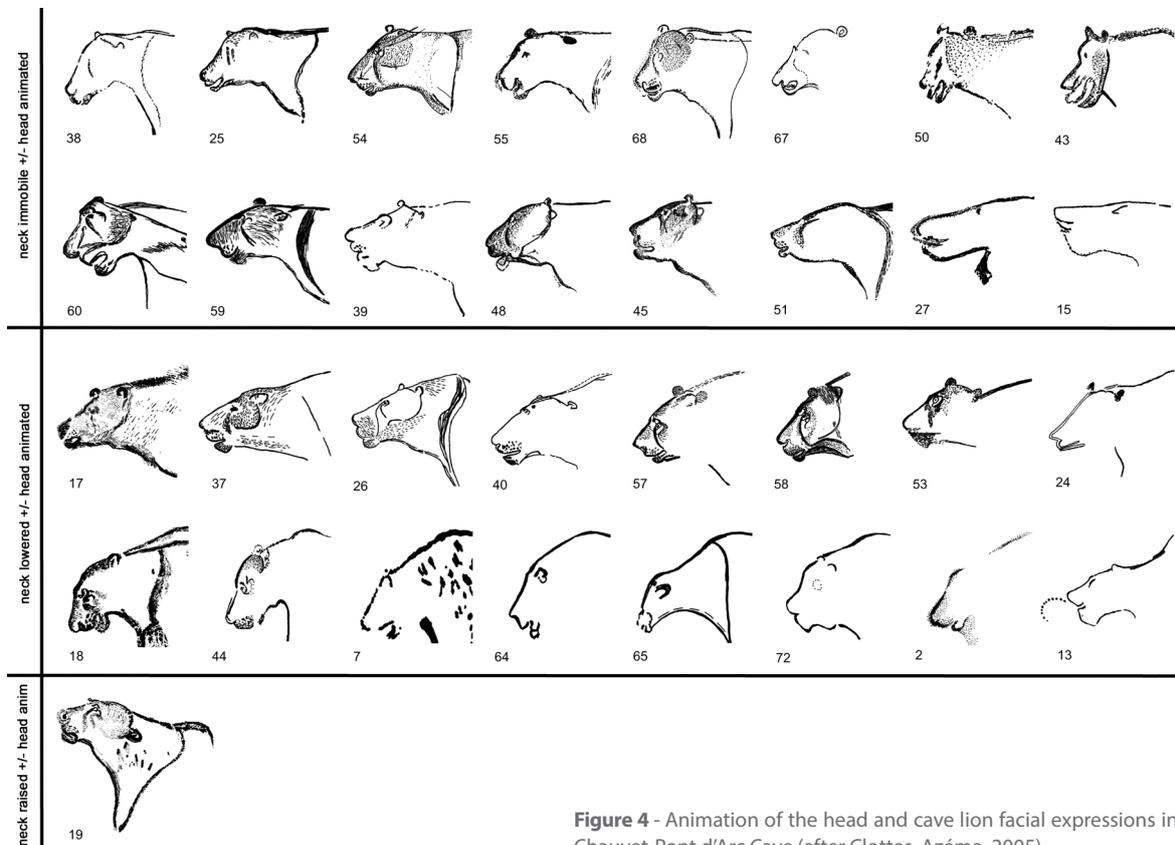
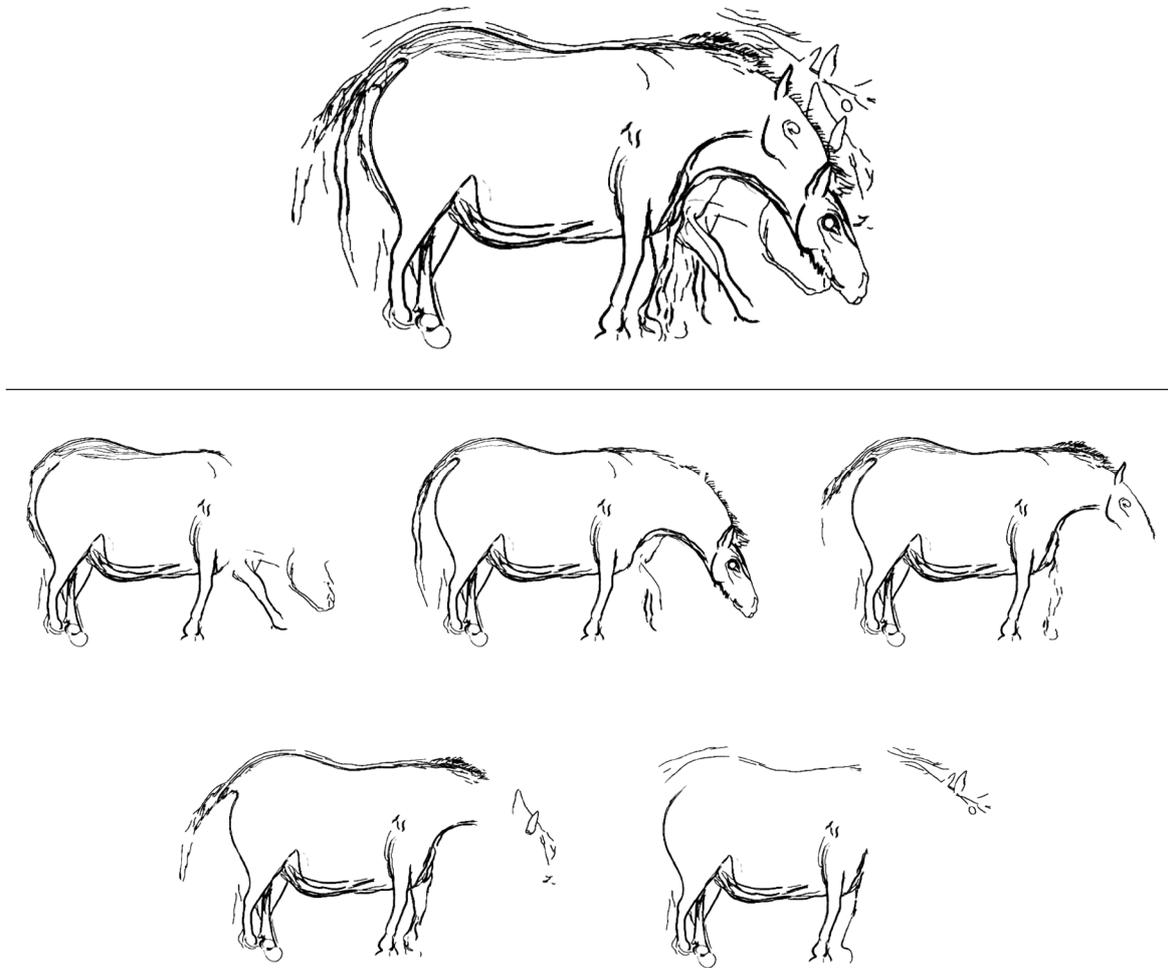


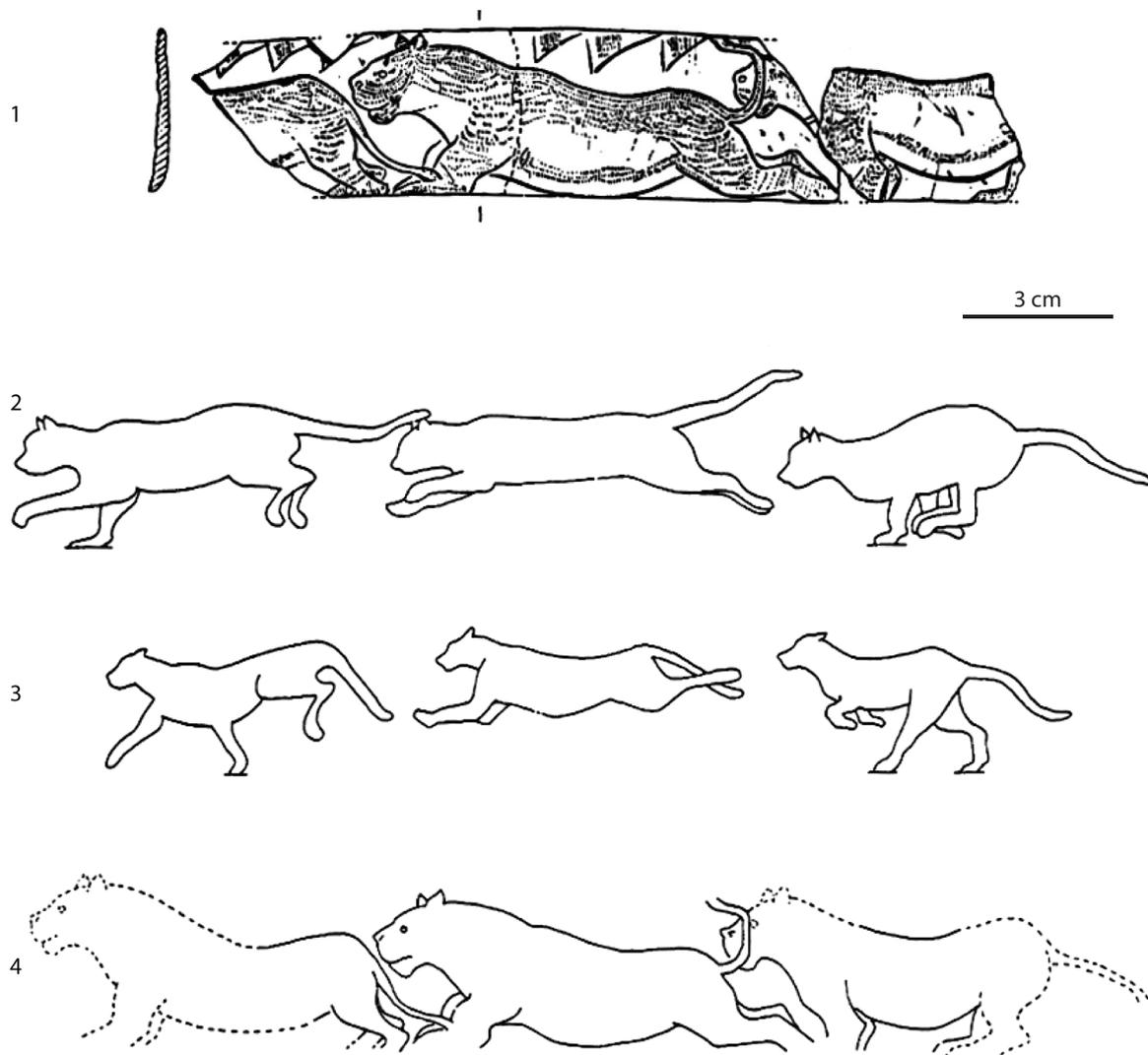
Figure 4 - Animation of the head and cave lion facial expressions in Chauvet-Pont d'Arc Cave (after Clottes, Azéma, 2005).



**Figure 5** - The breakdown of movement through the superposition of successive images in portable art from La Marche (Haute-Vienne): a horse portrayed using multiple outlines (after Pales, Tassin de Saint-Péreuse, 1981, pl. 71-73).

The second process is more difficult to discern: the positions of the animal throughout time must be juxtaposed and oriented in the same direction, following the single file principle. The hypothetical cases of the “swimming deer” panel from Lascaux (Prudhommeau, 1984: 12) and the rotunda frieze of horses from Villars (Groenen, 1997: 71-72) suggest this process in parietal art, without being fully convincing. On the other hand, the feline panel from the grotte de la Vache in Ariège (figure 6) is sufficiently convincing to affirm that it at least existed in portable art at the end of the Magdalenian.

In this way, Paleolithic artists would have prefigured the modern concept of animation. Better still, some Magdalenian objects may have been used to reconstruct these broken down movements: cut out discs, like the one from Laugerie Basse (Roussot, 1984) where two successive images of a chamois in the process of falling are engraved on each side of a bone disc could represent an optical game prefiguring pre-cinema “thaumatropes” (Azéma, Rivère, 2012: 320-323). For the time being, there are no comparable objects of this type in the Aurignacian (figure 7).



**Figure 6** - Movement breakdown through the juxtaposition of successive images in French Paleolithic art: the lion frieze from la Vache (1: bovine rib) along with the broken down sprint of a cat (2) and a leopard (3); suggestion for interpreting the frieze (4) (after D. Buisson in Buisson, Delporte, 1988; Azéma, 1992).

Through ethological studies, these animations, representing instantaneous or broken down movements, can in many cases be compared to specific animal behavior observed in the artist's environment. We established behavioral inventories for each animal represented in the bestiary (table 1). The identified themes have been classified into three main categories, "non-aggressive behavior", "aggressive behavior" and "hunting behavior". Several patterns emerge: majority of male specimens, predominance of herbivores represented just before or during the mating season, preponderant role of felines (predators) when they are represented on the cave walls, etc.

These behavioral themes imply individual or collective actions. These actions can be associated with each other and make up a coherent unit within a composition, on a cave wall or on an object, at the scale of a cave chamber, and define in this way the basis of the earliest graphic narration.



**Figure 7** - The disc with chamois in movement from Laugerie Basse (Magdalenian): experiment conducted by Florent Rivère (after Azéma, 2011: 155).

	Behavior non aggressive		Behavior aggressive		Behavior hunting				
Attitude of the animal on site	listening, attentive	49	(4?)	alert	10	(1?)	wounded	6	(1?)
	listening; mutual observation	8		breathing	2		wounded; hunt	1	
	listening			calling or belling	7	(1?)			
	<i>mutual observation in maternal; behavior</i>	2		agitated	26	(3?)	slipping	1	
							slipping; wounded	7	
	listening; <i>mutual nostril flaring</i>	1	(1?)	female in heat	5	(4?)			
	listening			female in heat; before copulation	4	(2?)	laying down; at rest	2	
	<i>(nostril flaring in maternal behavior</i>	3					laying down; dead ?	7	
				excited male; before copulation	2				
	listening; <i>pre copulation</i>	1		male, with tongue out	6	(1?)	overturned	2	
				male with erection	3	(1?)	falling	1	(1?)
	feeding	3		male with erection					
				<i>pre copulation</i>	1				
	giving birth	1		pawing the ground	6	(3?)			
				threatening	4				
				on the defensive	17	(4?)			
				nostrils flaring, intimidation	2	(2?)			
			agitated; in confrontation	5	(2?)				
			head to head confrontation	2	(2?)				
			threatening; confrontation	1					
			on the defensive; confrontation	6	(3?)				
			upright	1	(1?)				
Attitude about the locomotion	trotting	15		walking, calling	2		walking, wounded	2	
	trotting while listening	9		trotting, with tongue out	2				
	walking, feeding	1		trotting, excited; pre copulation	2	(2?)			
				trotting, agitated	6				
				trotting, agitated; confrontation	1				
				trotting, agitated; intimidation	4	(3?)			
				galloping	15		galloping with tongue		
				galloping with head high, alert	21		out suffering?	1	
				galloping, calling	1				
				galloping agitated	25				
				galloping with tongue out	4				
				galloping, agitated or excited	1				
				galloping, excited; pre copulation	1				
				galloping with erection	3				
				galloping, excited; intimidation	6	(1?)			
				galloping, intimidation	1				
				charging	10	(3?)	charging, hunt	1	
			charging, confrontational	6	(1?)				
			falling, confrontational	1	(1?)				
	<b>Total</b>	93	(5?)		222	(40?)		31	(2?)

**Table 1** - Behavioral themes for the bison in parietal art in France (after Azéma, 2003).

## 2 - Proposition of a method of analysis for graphic narration in Paleolithic art

The identification of such a degree of image association fills the “conditions for iconic narration”, according to the terms established by Philippe Sohet, professor of social communication at the University of Québec. We drew on his work on “recital images” (Sohet, 2007) to propose a grid of analysis for the different levels of narration present in Paleolithic art. This grid is made up of four successive levels:

- **Level 1 corresponds to individual “action”**

The action designates a posture, a static or dynamic animal (attitude, pace) and depicts a moment, a precise behavioral state. It is important to add that the fact that there appears to be no action does not necessarily signify that there is no narration: ethology shows that an animal depicted in a static, immobile position can potentially convey a specific form of behavior: sleep, listening...

- **Level 2 corresponds to the “co-relation”, according to the term used by Philippe Sohet**

This consists of the association of at least two individual simultaneous actions, or a collective action. This association can, but does not necessarily involve a level of interaction: such as a troop of animals moving together or a confrontation. In the history of art, this is referred to as a “scene”, but in the scope of our naturalist approach, the use of this term could create confusion as its meaning differs from one domain to another: in theater, it is used to evoke a segment of the staged show. In cinema, it is used to fragment parts of narration presenting unity in terms of time or place. It is also used by forensic experts to refer to the place of crime, etc.

- **Level 3 is the sequencing level (“succession”)**

Several actions follow each other in space and time and make up a sequence in the same graphic space. This succession is linear and includes more or less spread out temporal ellipses. Based on our work, P. Sohet classifies the process of movement deconstruction in this level, and the successive images then correspond to distinct moments. In art history, this level of narration is reached in “multi-scene” paintings.

- **Level 4 is the “interlinking” level**

Several sequences are associated in space and time: narration can be continuous or can integrate actions and sequences taking place at the same time in the overall tale. This complexification of the narrative process can introduce several levels of interpretation, at the scale of a graphic composition or a chamber, the cavity itself or a complex of sites.

We have successfully implemented this method of analysis in the naturalist context of Paleolithic art from the Aurignacian to the Magdalenian (Azéma, 2011). It is of course, just a theoretical tool and as such, it can evolve, namely by integrating the symbols, abstract lines and anthropomorphic figures (especially in portable art) often associated with images of animals. It can be adapted to different forms of rock art and other cultural contexts.

### 3 - Application of this analysis method to Aurignacian parietal art

To illustrate these points within the chronological framework of this article, this method of analysis was applied to two painted caves in the South of France, Chauvet-Pont d'Arc (Ardèche) and Baume Latrone (Gard). The chronological attribution of the parietal art from Chauvet Cave to the Aurignacian is irrefutable, given the abundant  $^{14}\text{C}$  dates made directly on paintings, yielding an average age of 37 000 cal BP (Valladas *et al.*, 2004, 2005). Our recent work in Baume Latrone revealed that thematic, technological, stylistic and even geographic evidence, associated with the discovery of charcoal welded into the soil by calcite several meters away from the decorated panels and dated by  $^{14}\text{C}$  to 37 464 cal BP, enable us to date the parietal art from this cavity to the early Aurignacian (Azéma *et al.*, 2012). These two caves are thus part of the short-list of Aurignacian art sites and contain the most accessible images for our demonstration. We will focus on the large representations in which the image of the cave lion appears to have fascinated the Aurignacians.

#### A - Chauvet-Pont d'Arc

At Chauvet-Pont d'Arc, the "Salle du Fond" is located 400 m from the cave entrance and hosts a concentration of the cave's decoration. This space contains abundant representations and clear scenography, including "dangerous" species typical of Aurignacian art, such as mammoths, cave lions, woolly rhinoceros, then, bison, cervids, symbols and schematic vulvae. However, the horse is absent from this area, unlike in other parts of the cave. In the center of the chamber, the left wall bears a frieze over 10 m long, referred to as the "large panel". Within this panel, several actions portray the cave lion ([figure 8](#)).



**Figure 8** - "The large panel" from the "Salle du Fond" from Chauvet-Pont d'Arc Cave (Ardèche), an example of Paleolithic graphic narration with, on either side, two successive hunting actions depicting the cave lion in action (inset) (photo: J. Clottes, Chauvet scientific team).

On the left, on the edge of the cave wall, several life-sized felines are drawn in characteristic look-out posture, with their heads down and their ears turned back (figure 9). They seem to be looking at a virtual prey outside the picture, unless they are watching the small rhinoceros drawn on another part of the cave wall, in the background. In our opinion, the artists could have associated actions on several cave walls and this is not an isolated case, as we will see below. The notion of the association of the depicted figures must not be reduced to the physical limits of panels and complexes but must approach the whole parietal space in three dimensions. The ethological approach helps us to do this.



**Figure 9** - Left side of the Large Panel from the Salle du Fond in Chauvet-Pont d'Arc Cave (Ardèche): cave lions on the lookout, perhaps watching a prey out of the picture, a rhinoceros on a cave wall in the background (photo: J. Clottes, Chauvet scientific team).

Another collective action is visible on the right hand side of the “large panel” where the well known “lion panel” features 16 felines pursuing a troop of bison (figure 10). Some of the predators are growling, others are roaring. These individual actions are associated in a fast movement towards the left. The dynamism of the different stances increases from right to left, with the heads facing to the front and the jaws more widely open, until they are deformed as the predators approach their prey. This time, the prey are depicted on the same part of the panel: on the left several bison are just represented by the head or nearly-whole fleeing figures. Predators and prey in action are thus co-related. According to C. Packer (in Clottes, 2001), a specialist in lion behavior, the pack is a mixture of females and males (who had no manes at that time). This presents a problem as present-day male lions do not generally intervene in the pursuit of game. Several explanations are possible: either the distribution of tasks within the pack was different during the Paleolithic, which does not seem probable, or the artist did not take account of this distinction, adopting a symbolic, rather than a realist perspective.



**Figure 10** - Lion panel from the Large Panel in the Salle du Fond in Chauvet-Pont d'Arc Cave (Ardèche): a pack of lions pursues a troop of bison (photo: J. Clottes, Chauvet scientific team).

As we have just seen, the two collective actions drawn on either side of the large panel represent the successive instants of a hunting sequence (level 3 of sequencing). But other moments of this type are present in the “Salle du Fond”.

On the right of the lion panel, a young bison drawn in perspective using a cave wall angle bravely faces two aggressive lions (figure 11). It is raising a leg against the forehead of the first feline as if it was pushing off the attack. We can thus wonder if these individuals were part of the groups depicted in the panel of the lions or if another hunting action is occurring at the same time. The young bison could have been left behind by its herd and trapped by predators aiming to isolate the weakest prey.

A little further to the right, on a rocky overhang, several juxtaposed lions are in characteristic lookout positions (figure 12). They seem to be watching the two large bison drawn further down on another wall panel in the background. As for the left side of the large panel, the predator-prey co-relationship takes depth of field into account, such as it is defined in photography. In the same way as for the left side of the large panel, the level of the predator-prey relationship operates in three spatial dimensions, and must have been based on the lighting of the underground cavity.

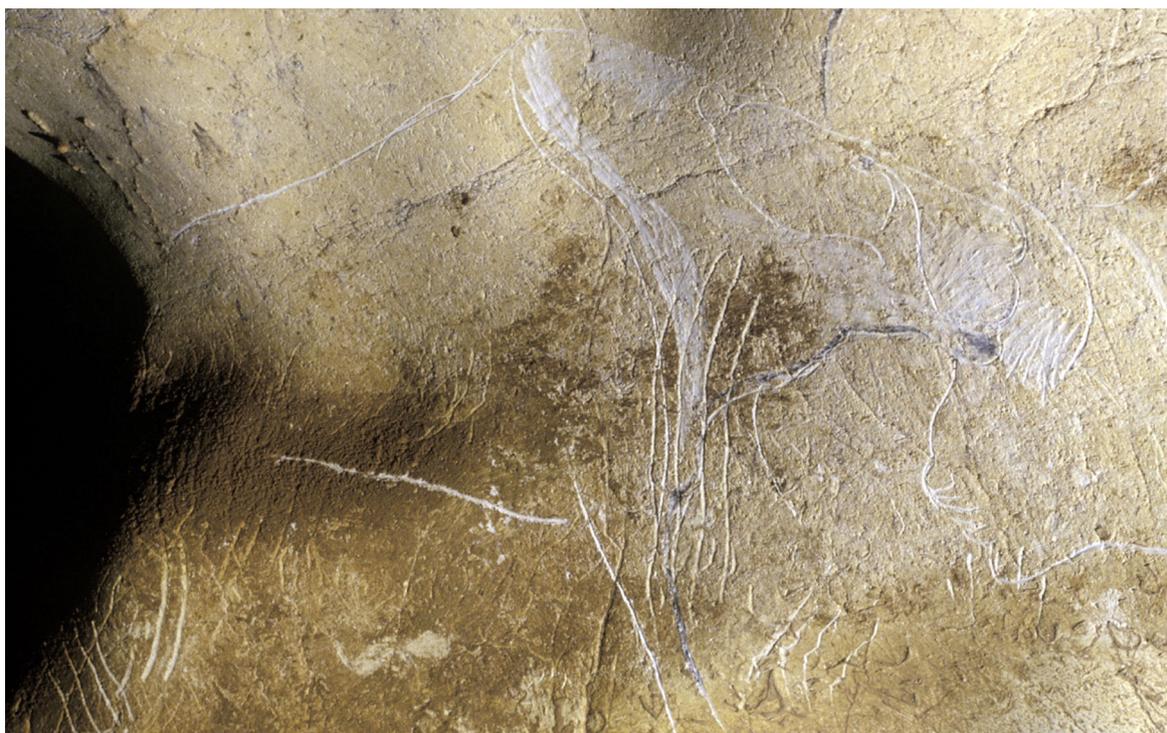
Opposite this, on the right-hand wall, the large panel situated above the passage towards the Belvedere shows a finely-engraved feline in the process of devouring what is probably its prey (figure 13): the half-open mouth of the predator seems to be tearing off the bison's horns. This intense moment symbolizes the end of the hunt. It is also materialized by a line common to both protagonists: the outline of the predator's inner eye and cheek also merges into the left horn of its prey. Through this graphic effect, the artist affirms his virtuosity but also adds a symbol of naturalist inspiration to the narrative association.



**Figure 11** - On the right of the Large Panel, another hunting action is represented: an isolated bison wards off an attack by two cave lions (photo: J. Clottes, Chauvet scientific team).



**Figure 12** - Near the Large Panel, several lions are drawn on rocky overhangs, visible from top to bottom. They seem to survey their future prey, bison portrayed in the background (photo: M. Azéma, Chauvet scientific team).



**Figure 13** - Opposite the Large Panel, the right cave wall depicts the end of the hunt: the cave lion seems to devour its prey (photo: J. Clottes, Chauvet scientific team).

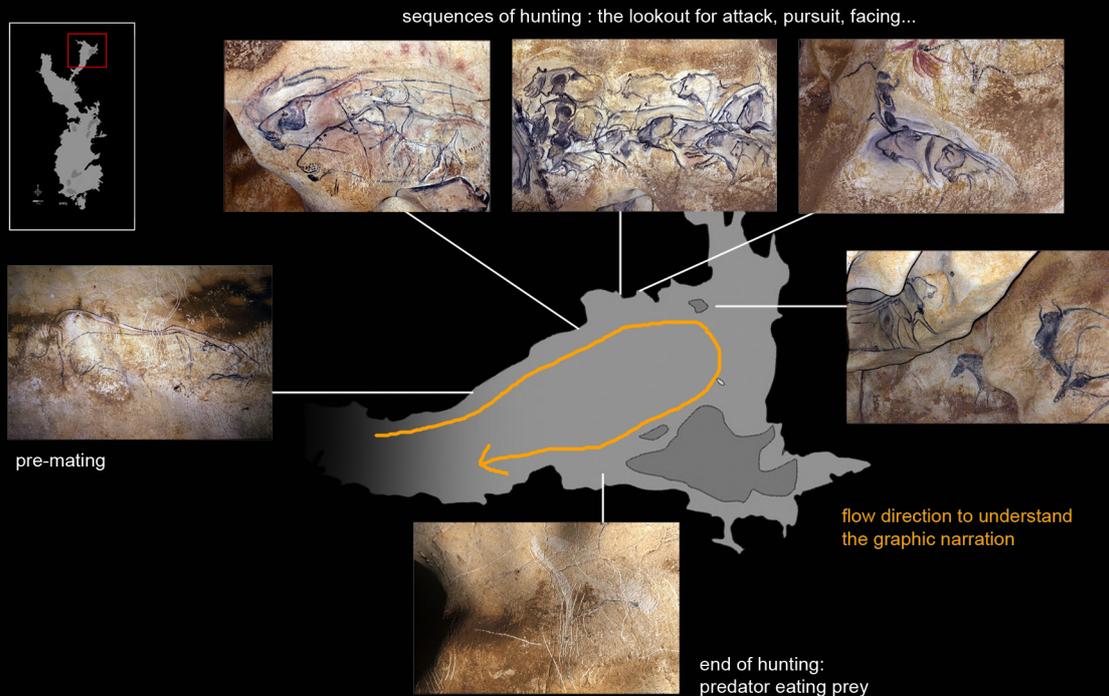
The Salle du Fond contains another fundamental moment in the life cycle of the cave lion. If we move back near the entrance to this chamber on the left side, two felines are depicted beside each other (figure 14). The smaller of the two animals has its head raised as though it was rubbing against the larger animal. This is an exceptional image in Paleolithic art as it depicts the scrotum. This association was interpreted by C. Packer (in Clottes, 2001) as a couple of lions just before mating: the female rubs against the male in this way just before the act of copulation.

Let us now put all this data from the Salle du Fond together (figure 15). It is clear that this is not a final result, but rather the state of present research and these observations will be refined when all the walls have been studied. The first observation is that actions involving cave lions are positioned all around the chamber. Secondly, they seem to follow on from each other in time if we approach them moving from the entrance towards the back of the cave, following the walls from left to right. We can imagine an Aurignacian moving in this way with a torch to discover the story unfolding along the cave walls, in much the same way as people during the Middle Ages, for example, to discover the scenes of Christ's life in cathedrals or the exploits of William the Conqueror in the Bayeux Tapestry.

In this case, the story recounts different moments or fundamental episodes in the life cycle of cave lions. The four narrativity levels presented above are all effectively reached here. The link between the mating sequence and the hunting sequences meets the criteria for the fourth inter-linking level. Better still, the presence of actions and sequences depicting other animals from the bestiary alongside or at the same time as the lion story, shows that there are probably several narration levels in these large Paleolithic compositions. This representation from the Salle du Fond is one of the masterpieces of Paleolithic art. The complexity of the narrative escapes us but reflects the extent of creative thought of these prehistoric artists.



**Figure 14** - Another instant in the cave lion life cycle represented in the Salle du Fond: a female rubs against a male, before mating (photo: J. Clottes, Chauvet scientific team).



**Figure 15** - A graphic story developing in the Salle du Fond of Chauvet Cave: one of the main themes of this cave, the cave lion, is depicted at different stages of its life cycle (reproduction, food) (photo: M. Azéma, Chauvet scientific team).

These essential episodes in the life of the lion (reproduction, food, hunting technique, social organization...), fascinated the artist-hunters, who could identify with their behavior. The symbol of life itself is depicted through the feminine genitals near the felines, clear signs of fertility. At the center of the panel on the right-hand wall, a vulva drawn in charcoal dominates two lions facing each other, depicting a possible confrontation between two young adults. Opposite the panel of the lions, the “pendant du sorcier” illustrates two or three felines, a bison and the lower half of a female figure portraying the genitals. This rocky overhang is located at the center of the Salle du Fond and could operate as a sort of narrative and symbolic pivot encapsulating the whole story.

The shape of the cavern itself could also be part of the narration. In this way, the natural niche at the center of the large panel resembles a vulva. The same observation applies to another part of the cavity, the horse sector. The median part of this large frieze, which presents similar graphic and thematic construction to the large panel in the Salle du Fond, also presents a hollow space shaped like an inversed triangle, where a trickle of water sometimes flows. The “Alcôve des Lions”, as it is called, contains several predation actions but this time the lion’s prey is no longer a bison but a horse (figure 16). On the left, a lion is closing in on a horse. In the center, two felines intersect: either they are interacting (a young animal soliciting a female?), or else each of them is pursuing a prey. The animal turned towards the left is raising its hind legs towards a horse on the run, the animal facing right is looking at a bison escaping at full speed (its eight legs express movement deconstruction). Inside the alcove a vertically depicted feline is pouncing on a horse, represented by the head and neckline. In what appears to be a sort of natural den, felines are causing intense agitation that seems to spread towards the exterior. On the left part of the horse sector, the horses and aurochs in the horse panel seem to be escaping towards the Skull Chamber.

The famous horse panel is the greatest work of art in this part of the cave (figure 17). It was studied in detail by C. Fritz and G. Tosello (2004) and is the subject of much discussion. The dynamism of these four drawn and partly juxtaposed horses is fascinating. We can question whether these four images represent four horses involved in a collective gallop, or if the same individual is portrayed in four successive positions. R. White (2003: 79) favors the latter option: “From left to right, a horse at a steady pace is followed by a second animal with a more aggressive attitude, with its ears back; then a third animal at rest, perhaps asleep, with its ears up facing forwards; and a fourth, which looks like a pony, quick, with its jaw open suggesting that it is snorting or neighing. Yet it is impossible to come across four horses so close together in nature with such different attitudes. Thus it is not a scene painted in perspective, but the representation of a single horse in different positions or at different periods of its life”.

## B - Baume Latrone

The Baume Latrone Cave, in the Gardon gorges north of Nîmes, is just 70 km away. One of the many similarities between Baume Latrone and Chauvet-Pont d’Arc is the view. For the former site, the view from the entrance porch of a meander in the Gardon is reminiscent of the view from the entrance of the Ardèche cave of the Cirque d’Estre fossil meander.

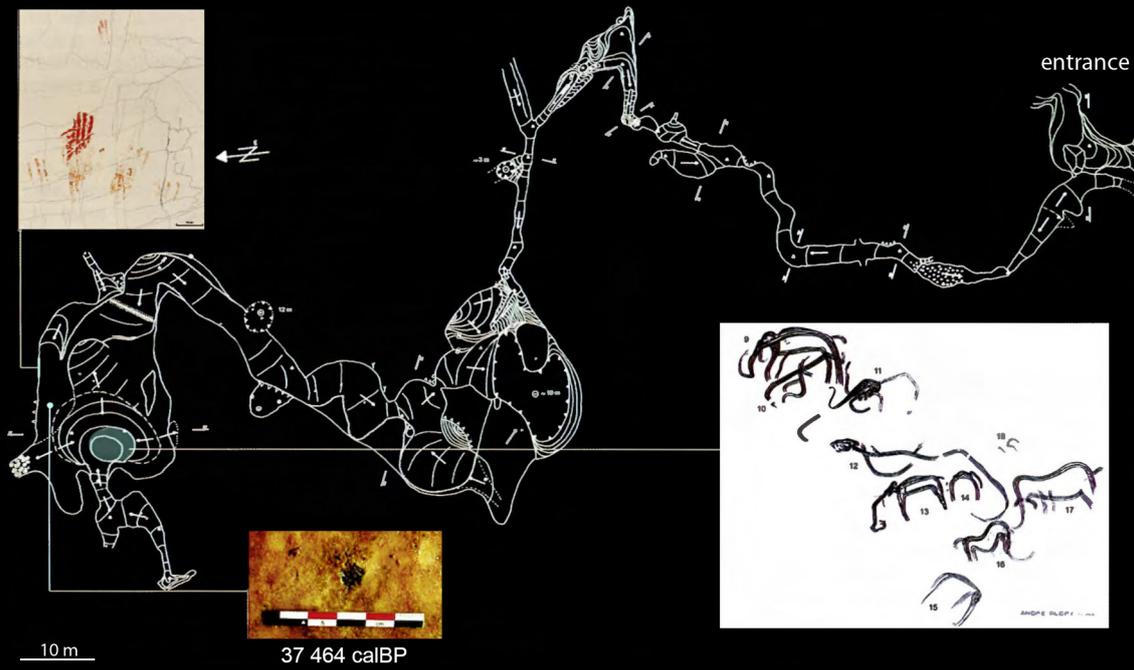
About 20 parietal images, situated more than 240 m from the entrance (figure 18), were discovered in 1940 by a group of high school students from Nîmes. Around twenty animals and hands were recorded. They are located in the “Salle Bégouën” and a number of them are part of the “Grand Plafond” (figure 19). They portray a rather particular style. The animal profiles are limited to the essential. This reflects a will to reduce the shapes, rather than any kind of awkwardness. The artists drew with clay, the coated hand was used as a paintbrush and left three or four parallel marks on the wall, depending on the number of fingers in contact with the rock. This technique using several fingers is atypical, unique in Paleolithic art and renders the images very expressive, or even expressionist.



**Figure 16** - At the center of the Sector of the Horses in Chauvet Cave, the Alcôve des Lions and its immediate surroundings show several actions depicting the cave lion: here the predators are hunting horses (photo: M. Azéma, Chauvet scientific team).



**Figure 17** - The Horse Panel from Chauvet-Pont d'Arc Cave: collective action (co-relation) or breakdown effect (consecution)? (photo: M. Azéma, Chauvet scientific team).



**Figure 18** - La Baume Latrone Cave. Topographic survey Blancart, Le Bret, Rouquette, 2000-2001; Panel of the hands, diagram M. Azéma; Charcoal in context, photo: B. Gély; Large ceiling, diagram A. Glory (after Azéma *et al.*, 2012).



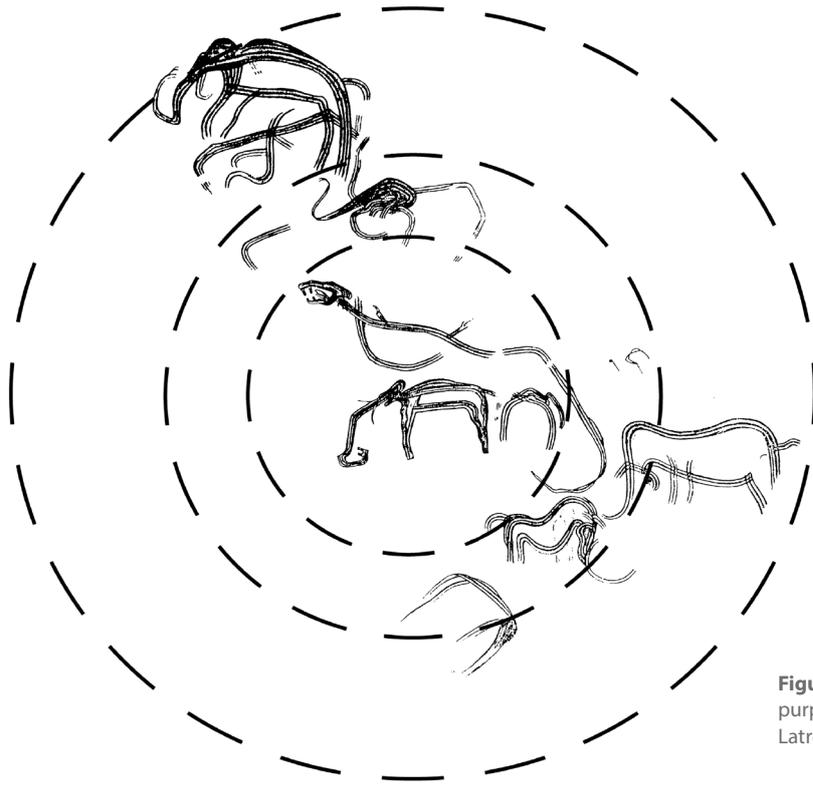
**Figure 19** - The Large Ceiling in La Baume Latrone (photo: M. Azéma).

The drawing technique with clay is specific to Baume Latrone (figure 20), but can be related to the multi-fingered lines visible in the Salle Hillaire in Chauvet Cave. At Baume Latrone the image was drawn by adding matter (clay), whereas at Chauvet, matter was removed (soft cave wall). In both cases, this results in very similar drawings. Another stylistic comparison can be made: an indeterminate animal on the Grand Plafond in Baume Latrone displays far set ears on either side of the skull. This specific depiction of ears is only used in Chauvet-Pont d'Arc and Aldène (Hérault), another Aurignacian parietal cave (Ambert *et al.*, 2005).



**Figure 20** - Diagram of a mammoth on the Large Ceiling of La Baume Latrone drawn in lines using several fingers (drawing: M. Azéma).

Another of the shared characteristics between Baume Latrone and Chauvet, is related to the way animation and graphic narration focus on the cave lion. However, there are several noticeable differences between the two sites. The circular composition of the Grand Plafond in Baume Latrone catches the observer's eye (figure 21): the representations are arranged around a central figure, a large 3 m long feline, in order to depict several different moments (in much the same way as a painting with several scenes from the Middle Ages). When it was discovered, the very schematic head, shown in profile, was interpreted as a snake's head (figure 22). This lion is roaring and attacking a troop of mammoths on its own, even though mammoths are more dangerous than the Chauvet bisons or horses.



**Figure 21** - Circular composition for narrative purposes from the Large Ceiling of La Baume Latrone (drawing: Azéma, 2003).



**Figure 22** - The schematic and very expressive cave lion's head portrayed in the center of the Large Ceiling at La Baume Latrone (photo: M. Azéma).

Although the essence of the narration is naturalist, it is also symbolic. First of all, it is naturalist as present-day African lions sometimes attack elephants when they are starving; in which case they seek to isolate the weakest animals, such as the young. This appears to be the case at Baume Latrone. The large feline is represented in a position that could correspond to two successive actions in time, depending on the body part in question: on one hand, it is roaring in the direction of a small group of mammoths running away towards the top (pursuit), on the other, it seems to be picking up two small mammoths with its long tail, perhaps isolated young (capture). This spectacular hunt seems to suggest a second, more symbolic interpretation. Indeed, the size of the predator is disproportioned in comparison to its prey and it appears to be gigantic. This is not an error as the reduced-sized mammoths are all portrayed using the same scale, if we assume that the smaller animals are the youngest. The lion is magnified by the artist, in both its size and its position at the center of the Grand Plafond. It is more than AN isolated feline, unlike at Chauvet where predators hunting in packs respect ethological reality; it is THE cave lion, in all its splendor, depicted as a symbol (totem?).

## Conclusion

In the first stories of Chauvet and Baume Latrone, partly brought to light by our ethological approach and the application of an analysis of graphic narration, the natural role of each protagonist, both predator and prey, is respected. The Aurignacians must have felt close to large herbivores, mainly bison, in terms of social organization and struggle for survival (Azéma, 2010). But they seem to be fascinated by lions with which they shared a fundamental preoccupation: access to meat resources and thus predation. The hunting story from Chauvet is more than a naturalist report; it must be considered as an allegory probably signifying the identification of man with the cave lion. The same must be true of the mythic “larger than life” lion at Baume Latrone taking on a troop of mammoths by itself. We concur with the anthropologist J. Robert-Lamblin (2005: 204) who uses analogies between hunter-gatherer-fishermen from arctic regions and Aurignacians from Chauvet to evoke the hypothesis of a belief in an “identity between Man and the lion (...)”. The lion would be the image of Man, of the hunter: the incarnation of virility”. The Aurignacian statuette of the man with a lion’s head from the site of Hohlenstein-Stadel in the Swabian Jura (Conard, 2003) may be the symbiosis of this.

## References cited

- Ambert P., Guendon J.-L., Galant P., Quinif Y., Gruneisen A., Colomer A., Dainat D., Beaumes B., Requirand C., 2005 - Attribution des gravures paléolithiques de la grotte d’Aldène (Cesseras, Hérault) à l’Aurignacien par la datation des remplissages géologiques, *Comptes rendus Palevol*, 4, 275-284.
- Azéma M., 1992 - La décomposition du mouvement dans l’art animalier paléolithique des Pyrénées, *Préhistoire et anthropologie méditerranéennes*, 1, 17-31.
- Azéma M., 2003 - *La représentation du mouvement dans l’art pariétal français. Approche éthologique du bestiaire*, Université de Provence, Aix-Marseille 1, Thèse de doctorat, 3 vol.
- Azéma M., 2008 - Representation of movement in Palaeolithic parietal art. An ethographical approach, *Anthropozoologica*, 43 (1), 117-154.

- Azéma M., 2009 - *L'art des cavernes en action*, 1, Paris, Errance, 224 p.
- Azéma M., 2010 - *L'art des cavernes en action*, 2, Paris, Errance, 224 p.
- Azéma M., 2011 - *La Préhistoire du cinéma*, Paris, Errance, 350 p.
- Azéma M., Rivère F., 2012 - Animation in Palaeolithic art: a pre-echo of cinéma, *Antiquity*, 86, 316-324.
- Azéma M., Gély B., Bourrillon R., Galant P., 2012 - L'art paléolithique de la Baume-Latrone (France, Gard) : nouveaux éléments de datation, *International Newsletter on Rock Art*, 64, 6-12.
- Bégouën H., 1941 - La grotte de La Baume Latrone à Russan-Sainte-Anastasie (Gard), *Mémoires de la Société archéologique du Midi de la France*, 20, 101-130.
- Buisson D., Delporte H., 1988 - Intérêt du raccord pour l'authentification d'une œuvre d'art, *Bulletin de la Société préhistorique française*, 85 (1), 4-7.
- Clottes J., Azéma M., 2005 - *Les félins de la grotte Chauvet*, Paris, Le Seuil, 226 p.
- Clottes J. (dir.), 2001 - *La grotte Chauvet : l'art des origines*, Paris, Le Seuil, 226 p.
- Conard N.J. 2003 - Palaeolithic ivory sculptures from southwest Germany and the origins of figurative art, *Nature*, 426, 830-832.
- Fritz C., Tosello G., 2004 - Grotte Chauvet-Pont d'Arc : approche structurelle et comparative du Panneau des Chevaux, in Lejeune M., Welté A.-C. (dir.), *L'art du Paléolithique supérieur*, Actes des colloques 8.2 et 8.3, XIV<sup>e</sup> Congrès de l'UISPP, Liège, 2001, ERAUL, 69-86.
- Leroi-Gourhan A., 1974 - Résumé des cours 1973-1974 : Préhistoire, *Annuaire du Collège de France*, 381-389.
- Leroi-Gourhan A., 1975 - Résumé des cours 1974-1975 : Préhistoire, *Annuaire du Collège de France*, 388-399.
- Leroi-Gourhan A., 1980 - *Introduction à l'art pariétal paléolithique*, Milan, Jaca Book, 77 p.
- Pales L., Tassin de Saint-Péreuse M., 1969 - *Les gravures de la Marche. I : Félins et ours*, publications de l'Institut de Préhistoire de l'université de Bordeaux, 79, Impr. Delmas, Bordeaux, 136 p.
- Pales L., Tassin de Saint-Péreuse M., 1981 - *Les gravures de la Marche. III : Équidés et bovidés*, Ophrys, Paris, 145 p.
- Pales L., Tassin de Saint-Péreuse M., 1989 - *Les gravures de la Marche. IV : Cervidés, mammoths et divers*, Ophrys, Paris, 121 p.
- Robert-Lamblin J., 2005 - La symbolique de la grotte Chauvet-Pont-d'Arc sous le regard de l'anthropologie, in Geneste J.M. (dir.), *Recherches pluridisciplinaires dans la grotte Chauvet*, Actes de la séance de la Société préhistorique française, Lyon, 2003, Société préhistorique française, 6, 199-208.
- Rousot A., 1984 - La rondelle "aux chamois" de Laugerie Basse, in *Eléments de pré- et protohistoire européenne. Hommages à Jacques-Pierre Millotte*, Annales Littéraires de l'Université de Besançon, Paris, Les Belles Lettres.

Rousot A., 1994 - *L'art préhistorique*, Bordeaux, Sud-Ouest, 127 p.

Sohet P., 2007 - *Images du récit*, Presses universitaires du Québec, 358 p.

Valladas H., Clottes J., Geneste J.M., 2004 - Chauvet, la grotte ornée la mieux datée du monde, Dossier Le Temps des datations, *Pour la Science*, 82-87.

Valladas H., Tisnérat-Laborde N., Cachier H., Kaltnecker E., Arnold M., Oberlin C., Évin J., 2005 - Bilan des datations carbone 14 effectuées sur des charbons de bois de la grotte Chauvet, *Bulletin de la Société préhistorique française*, 102 (1), 109-113.

White R., 2003 - *L'art préhistorique dans le monde*, Paris, La Martinière, 240 p.

**Marc AZÉMA**

PhD and associated researcher  
CNRS, UMR 5608 - TRACES / CREAP Cartailhac (Toulouse Jean Jaurès)  
Member of the scientific team studying Chauvet Cave  
Leader of the study of La Baume Latrone  
Director of documentary films and exhibitions  
marc.azema.11@gmail.com



 **P@LETHNOLOGY**  
*Bilingual review of prehistory*