

**The Chalcolitic and ancient-Bronze age engravings of the Mont Bego region:
analysis and comparison of the zone IV group I of the whole valley of the
Merveilles and the region of the Mont Bego (Tende, Maritime Alps, France).**

*Beatriz Menéndez Iglesias**

Directed by: Henry de Lumley**, Marcos García Díez ***

* Institut de Paleoecologia Humana i Evolució Social. Àrea de Prehistòria de la Universitat Rovira i Virgili, Plaça Imperial Tàrraco, 1, 43005 Tarragona (Espanya).

** Département de Préhistoire du Muséum national d'Histoire naturelle UMR 5198 du C.N.R.S. Institut de Paléontologie Humaine 1, rue René Panhard, PARIS, France

*** Prehistoric Caves of Cantabria. Government of Cantabria. 39670 Puente Viesgo, Cantabria, Spain.
bmi@prehistoria.urv.cat

Abstract

The present work is based on our observations of the rock art in the Zone IV Group I of the Mont Bego's region (Vallée des Merveilles, Alps Maritimes, France). The study of the iconography there collected and examined reveals a significant presence of corniformes, which in addition to the indirect datations of weaponry engravings also found, refer us back to the Chalcolitic or Age of the Bronze. According to the representations analysed we elaborate on three hypotheses that try to interpret these engravings and their origin.

Le présent travail est basé sur nos observations de l'art rupestre dans la Zone IV Groupe I de la région du Mont Bego (Vallée des Merveilles, l'Alpes Maritimes, France). L'analyse de l'iconographie a permis d'observer la grande quantité de représentations de corniformes, ainsi que la chronologie du Calcolithique ou l'Âge du Bronze des gravures, à travers des datations indirectes des gravures d'armes. Selon les représentations qui sont observées se sont établies trois hypothèses qui essaient d'interpréter ces gravures et pourquoi du même.

Keywords: Mont Bego, engravings, chronology, corniformes, weapons.

Introduction

The present work is a study of the rock engravings of the zone IV group I of the Mont Bego region, placed in the vallée des Merveilles (Maritime Alps). The main aims of this study centre on the individualization and analysis of the rock engravings of the zone IV group I and the cultural attribution and comparison with other zones with the same chronology. This will enable us to contextualize them and to establish some premises on the territoriality of the populations and their potential beliefs. The valleys surrounding Mont Bego are only accessible during the summer, so the research season in this area is generally limited to the months of July

and August. Nonetheless, fieldwork on the rock engravings found in this region of Mont Bego has allowed to discover more than 4.000 rocks recorded with more than 37.000 engravings (Fig.1).

Antecedents

The research history and references to the vallée des Merveilles begins already in the 15th century with Pierre de Monfort's work (Pellegrini, 1987). After several centuries in that the works of Bicknell (1973) and Conti (1972) contributed extremely valuable information, in 1967 the systematical relief of the engravings was finally accomplished thanks to the work of

H. de Lumley (1992, 1995 and de Lumley *et al.*, 2002b) and his team.

During the first years of the project, in which



Fig. 1. Image of valley des Mereveilles from the zone IV (Photo Beatriz Menéndez).

they conducted a systematic inventory and thorough study of the engravings, H. de Lumley (Echassoux and de Lumley, 1991 and de Lumley *et al.*, 1991) wrote out a lexicon for the description of the rocks, the styles and of the different iconographic topics.

Methodology

The first part of our study of the engravings of the Mont Bego region is carried out on the area and is later on continued in the laboratory.

The field work centres the location of the rocks recorded by means of a methodical exploration of the zone under study, as well as their enumeration by means of Arabic numbers and their precise situation on a map of scale 1/1000 by means of the coordinates X and Y and the altitude by means of GPS (*Global Positioning System*). Geological facies and geomorphologic information (Begin, 1990), as well as the maps of associations vegetal (de Lumley and Machu, 2002b) are then placed on these maps.

Once located, every engraved rock has to be drawn to scale 1/10 in graph paper. The drawing must contain, apart from a report of the orientation and the year of campaign, the contour and the details of the rock (fissures, irregularity, natural holes). Every single figure, both figurative and non figurative, are drawn out and identified with a number like the following: ZIV.GI.R2A.n°1 (ZoneIV.GrupoI.Roca2A.número 1). Every engraving must be drawn to natural scale so as to have a reference that is as faithful

as possible to the original. To attain this, a transparent support (plastic or cellophane) is placed on the rock; then the figures are revised on the transparent support by means of an indelible and not-too-thick felt-tip pen so that the drawing can be specified. The chalcography must be done as precisely as possible and verified by a different researcher at different hours of the day in order to verify whether some other engraving has been missed out. When some extra transparent support is required for the correct drawing of the chalcography, it is necessary to take another fraction and place it so that it partially overlaps the original trace in exactly the same zone of the edge where the engravings appear.



Fig. 2. Photo of a card and a calque (Photo Beatriz Menéndez).

As with the graph paper, the chalcography must also include information about the orientation with regard to the geographic north, the research year and the code numbering of the rock, as well as contour and details.

Apart from the drawings and the chalcography, the corresponding field cards must be completed. There are two types of feature registration cards attributes: one for data concerning stony supports, and a different one for engravings themselves. The lexicon used in the cards is open and can be modified and amplified depending on the researcher's skill and the information to be taken into account (Fig. 2).

Both cards are complementary and are also accompanied with a photographic record of the engraved rocks, as well as of those engravings that seem more representative. In some cases rock reproductions have been realized to real scale some of these representations are exhibited in the museum of Tende.

Once in the laboratory, the cellophane reliefs are transferred onto graph paper by means of a process of photocopying, paying special attention to the small planes. A wind rose to size 1/5 is also attached to mark the north, together with a scale. The purpose of this is to have a copy of the engraving that is as precise as possible to the original figure and to observe the details of the rock. All the documents produced for the study, including maps and photographs are then conveniently registered on a data base; the latter are also scanned to create an image bank. Cards and planes -1/10 on millimetre- are classified by zone, group and rock, and stored for later consultation.

After information and images have been computerized, a (different) catalogue can be elaborated for every zone, from catalogues of the rocks planes to catalogues of the different signs and motifs. It is important that after the study of a zone both the engraved rocks and the engravings are thoroughly verified, since the case may occur that new rocks or engraved figures appear. In such a case, in the new campaign the location of the new rocks must be registered in the map of way, and should there be any new figure, then new chalcographies must be realized.

Geographical and geological context

The Vallée des Merveilles is situated in the Southern Alps, in the south-east edge of the l'Argentera-Mercantour's crystalline clump, close to the village of Tende and within the Mercantour National Park (Barnier, 1992). Nowadays it is located on the current forest of *alarce* and close to the lakes sarsaparillas rushes and *adélfilas* can be. As regards the fauna, it is made up of *chamois*, *mousses*, viper asp, hares, ... The mounts that surrounds it are the Great Capelet, des Merveilles et the Cime du Diable. Four different series have been formed from its base up to its top that date back to the Permien: l'Inferno, des Meravinglie, Bego and Capeirotto.

For archaeological research purposes, the Mont Bego region has been divided up into 7 sectors, further subdivided into 23 different zones, which occupy an extension of 440 ha. Zone IV, group I (ZIV-GI), is situated between 2300 and 2400 m within the Merveilles sector.

To prepare the present work a description has been realized of each one of the rocks and of the coat *Gias du Chamois*.

Introduction to the study and interpretation of the engravings

Graphic units, which can be easily individualized and clearly identified, can be classified as elementary, syncretic, transformed and compound. These graphic units can appear on the same rock either in isolation or in groups, forming associations, constructions y/o compositions.



Fig. 3. Different compositions in the rock zone IV group I rock 4B.

Engraving techniques have been established through the observation of molds or reproductions, and correspondingly consist in marking the contour of the figure, throbbing with a hard instrument and rotating.

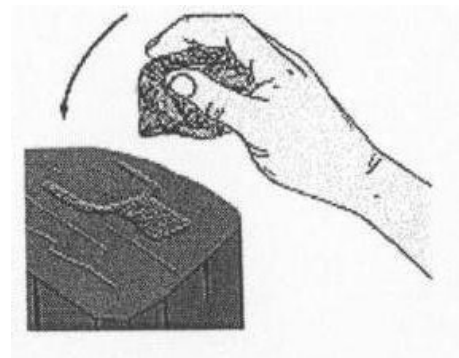


Fig. 4. Technical implementation of the engravings (after Magail, 2004).

This has allowed us to establish four different styles in the production of the engravings as can be appreciated in the pictures most of the figures are pictograms or ideograms, i.e. they are recognizable shapes that don't indicate the word or the sound defining them. On the other hand, the representation of possible religious worries or *mitems* —*mitograms* when they appear in group

form, though, as we know, in the Mont Bego region they are currently called *begograms* (de Lumley *et al.*, 1992).

- Style A in which the domes are regular and very small, made on a smooth surface;
- Style B characterized by big domes and which generally are less regular;
- Style C with big and spread domes, and commonly very irregular;
- Style D where domes are elongated and spread (de Lumley *et al.*, 1992, 1995a, 1995b).

Regarding the typology of the figures here studied we can say that they include corniformes, weapons and tools, anthropomorphic and geometrical figures, nonrepresentative figures and exceptional engravings, which in case of the zone IV groupe I they have not found.

Presentation of information

The rocks recorded in the ZIV GI are 110, whereas the engraved faces are 123, though most of the rocks present a single engraving.

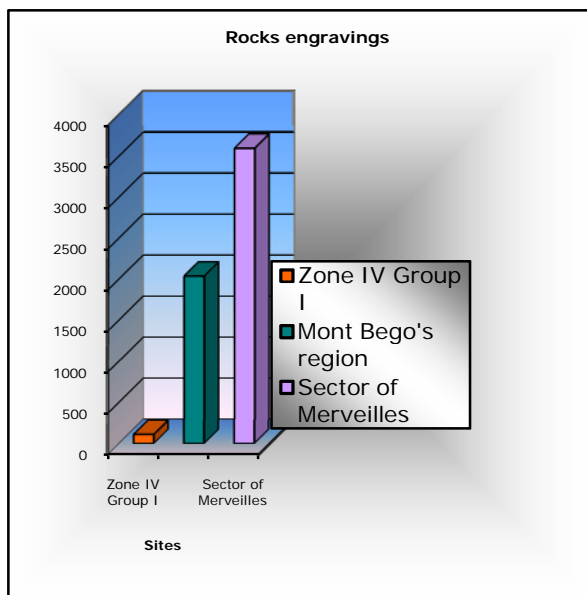


Fig. 5. Graphic of the proportion of rock engraving.

The nature of the rocks is an important factor to take into account in order to know whether the human groups could choose the material they were engraving on; the same holds true for rock colour, for as could be observed most of the engravings were realized on orange rocks.

Another very significant aspect that can contribute a lot of relevant information for the future is the rock orientation, which in the ZIV-GI is frequently East-West (62 rocks).

The iconographic motifs found in the ZIV-GI are in general the same ones that appear in the other groups of the different zones of the Vallée des Merveilles and the Mont Bego region. *Corniformes* are those most frequently represented, being these 159 out of a total 250 figurative engravings. They have been studied with regard to two major characteristics: the horns and the body. However, it is significant to note that two examples of corniforms in yoke formation have also been found in the ZIV-GI area. As for weapons, which also constitute an important motif in the output of Mont Bego and Vallée des Merveilles, only three types were to be found: axes, halberds and daggers.

There were also 15 anthropomorphic figures, most of which were also corniforms with inwardly-directed horns closed. The most frequent motifs in the 56 geometric figures are rectangular or oval beaches or *plages*. Reticulates, specially simple ones, also represent a considerable group.

With regard to our study of the disposition of signs, we must say that 146 associations appear. Most of these associations are between corniforms and domes or groups of domes, whereas the least common is between corniformes and zigzag lines. The constructions are not too numerous—only 10 were found—, the triangular one being the most frequent. Compositions are fairly numerous if we take into account that two types exist: those which are organized depending on the figures or iconographic motifs (55 compositions) and those in which the natural elements of the rocks also intervene (57 compositions).

Cultural attribution

The cultural attribution of the engravings is realized by means of the indirect dating of the weapon engravings (Romain, 1991). The form and length of the leaf is the main that allows us to establish comparisons. But this form of dating presents difficulties, since the figures don't always correspond with the archaeological remains. In zone IV groupe I, engraved axes present a rectangular leaf with parallel edges and with the rectilinear edge. They look like the Chalcolithic copper axes found in the Rhône civilization. Besides, the absence of representations of lances suggests that these motifs are to be attributed to the mid or final Bronze Age (Briard and Mohen, 1983).

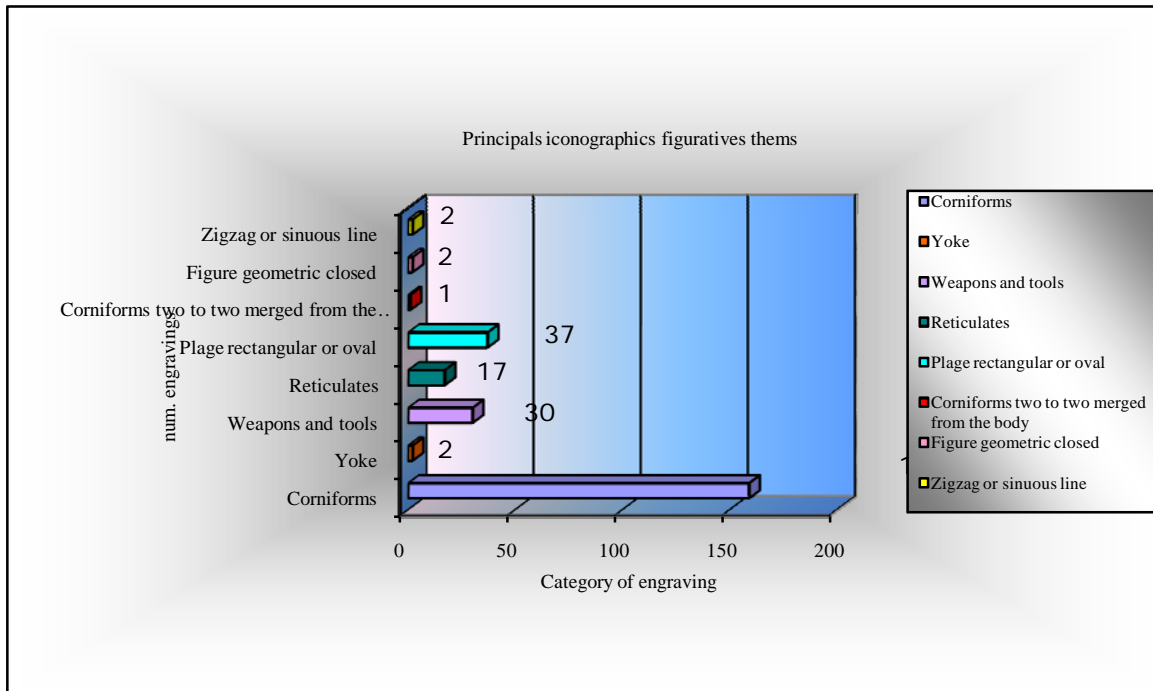


Fig. 6. principal iconographics figurative themes .

Discussion

Three hypotheses have been proposed to explain the origins and characteristics of the rock engravings of the Vallée des Merveilles and the Mont Bego region:

- de Lumley suggests what we might call a magic-religious vision of the mountain as a place where the bull god and the earth goddess would be venerated, as it is the case in many protohistoric civilizations (de Lumley *et al.*, 1995a, 2002a and 2002b).

- Guilaine, on the other hand, sees the figures and scenes represented in the engravings, as evidence that these societies had a good command of weaponry, and thinks that those representations have to be interpreted in relation with rites of passage from adolescence into adulthood. Furthermore he also establishes that they were patriarchal societies and that women did not take part in these ceremonies (Guilaine, 2002).

- Magail and other researchers, however, give less idyllic a vision, taking into consideration other aspects, such as the orientation of the rocks or the E-W engravings, to explain that these were agrarian and cattle-growing societies whose representations would take concern on the solar and time cycles (Magail, 2004).

Studies have also been realized on the meaning of the term Bego which conclude that: “be” would mean sacred mountain and bull god,

whereas “go” means bull or cow or earth goddess (Lincoln, 1991), which seems to demonstrate that these societies were agrarian, regardless of whether they dominated weapons or not.

On the other hand, S. Mithen’s theory on the evolution of cognitive capacities (Mithen, 1998) could also be useful to explain the appearance of schematic art as dependant on the appearance of new resources of exploitation.

Conclusion

From an iconographic perspective, we can conclude then that in the ZIV-GI zone we find most of the figures that appear in the Mont Bego region, but not so with regard to all the different types of associations, constructions and compositions (Serres, 2001 and Saulieu, 1998), compositive diversity being significantly lower than in other zones of the region. As for the orientation of the rocks, comparisons cannot be established between the Mont Bego region and the sector des Merveilles, since there has not been any comprehensive and exhaustive study yet.

The representations in the engravings of the Vallée des Merveilles offer a chronology that goes from the proto-historic moment up to the present. The analysis of ZIV-GI engravings through indirect weaponry dating place them between the Chalcolitic and the Bronze Age (approx. 2500-1800 BC), coinciding with the civilizations of the Rhône, of the Polada or of

Remedello (Cornaggia Castiglioni, 1971 and Peroni, 1997). Close to the Alps, but in the Italian zone we find Valcamónica, which presents a few similar characteristics to Mont Bego, because it is



Fig. 7. Map of different civilizations between the 1800 and 700 ae (image courtesy of the *Laboratoire départementel de Préhistoire du Lazaret*).

both a major spot for rock art and a strategic crossing zone. That was also a time when a new type of raw materials, the metals, were coming into use in Europe, while the Mediterranean saw the beginning of stone architecture — characterized by big monumental works such as those in Egypt, Çhatal Huyuk, Petra, Crete or Har Karkom—, as well as the development of navigation and trade.

A time, also, abundant manifestations of rock art were appearing in Scandinavia, the British Isles and the Iberian Peninsula (Guilain, 2005 and Harding, 2003).

To fill the gaps in our knowledge of the Bronze civilization of the Mont Bego region, new excavations and further research projects are still pending. From our experience so far it is our firm belief that they should concentrate on the analysis of the spatial distribution of the rocks, regarding both the iconography of the engravings as well as rock orientation.

References

- Begin J. 1990. Contexte géologique et géomorphologique de la région du mont Bego. Répartition des gravures rupestres de l'âge du Bronze dans le site. Tésis doctoral del muséum national d'Histoire naturelle: Quaternaire: géologie, paléontologie humaine, préhistoire. Option : préhistoire. Institut de Paléontologie humaine. París.
- Bicknell C. 1973. Guide des gravures rupestres préhistoriques dans les Alpes Maritimes. Institut International d'Etudes Ligures. Bordighera.
- Briard J., Mohen J-P. 1983. Typologie des objets de l'Age du Bronze en France, Tomo II. Société Préhistorique Française. París.
- Conti C. 1972. Corpues delle incisioni rupestri di Monte Bego. Prefazione di P. Barocelli. Collección de monografías prehistóricas y arqueológicas VI tomol. Institut international d'études ligures. Bordighera.
- Cornaggia Castiglioni O. 1971. La cultura di Remedello. Memoire della Società italiana di Scienze Naturali e del Museo Civico di Storia Naturale di Milano. Volumen XX. Fac. 1. Milán.
- Echassoux A., Lumley H. de. 1991. Historique de l'étude des gravures rupestres de la région du mont Bego. Le mont Bego. Une montagne sacrée de l'Age du bronze. Sa place dans le contexte des religions protohistoriques du Bassin Méditerranéen. Tende (Alpes Maritimes) du Vendredi 5 au Jeudi 11 Juillet 1991, Tome 1. Tende.
- Guilaine J. 2002. El camino a la guerra. Ariel Prehistoria. Barcelona.
- Guilaine J. 2005. La mer partagée. La Mediterranée avant l'écriture 7000-2000 avant J. Ch. Pluriel (ed.). París.
- Harding A.F. 2003. Sociedades europeas en la Edad del Bronce. Ariel Prehistoria. Barcelona.
- Lincoln B. 1991. Sacerdotes, guerreros y ganado. Un estudio sobre la ecología de las religiones. Akal Universitaria. Madrid.
- Lumley H. de et al. 1992. Le mont Bego. La vallée des Merveilles et le val de Fontanalba. Ministère de la Culture et de la Communication.
- Lumley H. de et al. 1995. Le Grandiose et le Sacré. EDISUD (ed.).
- Lumley H. de et al. 2002a. Gravures protohistoriques et historiques de la région du mont Bego, tome 5, zone III. EDISUD (ed.).
- Lumley H. de et al. 2002b. Gravures protohistoriques et historiques de la région du mont Bego, tome 14, zone XII. EDISUD (ed.).
- Magail J. 2004. La mesure du temps saisonnier au mont Bego. Archéam n°11. Nice. pp. 6-13.
- Mithen S. 1998. Arqueología de la mente. Crítica (ed). Barcelona.
- Park Y-H. 1993. Les gravures rupestres corniformes de la région du mont Bego, Secteur des Merveilles, Tende (Alpes-Maritimes). IPH. Tesis Doctoral. París.
- Romain O. 1991. Les gravures de mont Bego. Etude des gravures d'armes : typologie, attribution culturelle et datatio . IPH. Tesis Doctoral. París.
- Saulieu G. de. 1998. Contribution a la compréhension des gravures rupestres protohistoriques du mont Bego. Tradition(s) et constructions symboliques. Mémoire de DEA. París.
- Serres Th. 2001. Les associations de gravures protohistoriques. Etude et interprétation. IPH. París.

Direttore Responsabile: Prof. Patrizio Bianchi

Aut. Trib. Ferrara n. 36/21.5.53

Comitato di Redazione della Sezione Museologia Scientifica e Naturalistica: D. Bassi, S. Capitani, C. Peretto, G. Zini.

Gli Annali dell'Università di Ferrara, Sezione Museologia Scientifica e Naturalistica (<http://eprints.unife.it/annali/museologia/>), vengono inviati in cambio di riviste scientifiche italiane e straniere; tali riviste sono cedute alla Biblioteca del Sistema Museale ed Archivistico d'Ateneo (S.M.A.) dell'Università di Ferrara.

Ogni comunicazione relativa alla stampa deve essere inviata a:

Redazione degli Annali, Sezione Museologia Scientifica e Naturalistica, c/o Biblioteca del Sistema Museale ed Archivistico d'Ateneo, C.so Ercole I d'Este 32, I-44100 Ferrara, Italia.

Stampato presso
Cartografica Artigiana snc
Ferrara
Novembre 2008