

Palaeolithic Cave Art (Spain)

No 310 bis

Official name as proposed

by the State Party: Palaeolithic Cave Art of Northern Spain

Location: Autonomous communities of Asturias, Cantabria, and the Basque Country

Brief description:

Palaeolithic cave art in Northern Spain offers a remarkably ancient and well-preserved testimony both to art and the history of humanity. The nominated group of decorated caves, situated along the Cantabrian Corniche, is representative of the development and apogee of Palaeolithic cave art, between 35,000 and 11,000 years BP.

Category of property:

In terms of the categories of cultural properties set out in Article 1 of the 1972 World Heritage Convention, this is a serial nomination of 17 sites.

1. BASIC DATA

Included in the Tentative List: 26 June 1998

International Assistance from the World Heritage Fund for preparing the Nomination: None

Date received by the World Heritage Centre: 31 January 2007

Background: The nomination of Palaeolithic Cave Art of Northern Spain is a proposal for an extension to the decorated Cave Site of Altamira, inscribed on the World Heritage List at the 9th session of the World Heritage Committee (UNESCO, 1985), on the basis of criteria (i) and (iii).

Consultations: ICOMOS has consulted its International Scientific Committee on Cave Art.

Literature consulted (selection):

Bernaldo de Quiros F., *Los inicios del Paleolítico superior cantábrico*, 1982, Madrid.

Leroi-Gourhan A., *Los primeros artistas de Europa. Introducción al arte parietal paleolítico*, 1983, Madrid.

Chippindale C. & Taçon P.S.C. (éd.), *The archaeology of rock-art*, 1998, Cambridge (UK).

Clottes J., *L'art rupestre : une étude thématique et critères d'évaluation*, 2002, Paris.

Technical Evaluation Mission: 1st - 8 September 2007.

Additional information requested and received from the State Party: ICOMOS sent a letter to the State Party on 11 December 2007 requesting that it should:

1) Consider the nomination of three additional decorated caves.

2) Confirm the inter-regional management structure for Palaeolithic cave art.

ICOMOS received an answer from the State Party on 21 February 2008 with very substantial additional documentation.

Date of ICOMOS approval of this report: 11 March 2008

2. THE PROPERTY

Description

The Palaeolithic region of Northern Spain

Palaeolithic cave art covers a very vast period in Europe from 35,000 to 11,000 BP. It stretches from the Urals to the Iberian Peninsula, but with little homogeneity. The sites can be grouped according to regional cultures, each of which has its particularities. The most important of them, known as *Franco-Cantabrian*, covers most of the known Palaeolithic cave art.

In Northern Spain, the *Cantabrian* part of this culture represents a narrow coastal strip about 40 km wide and 400 km long, running from east to west. The temperate climate close to the Ocean was favourable for human settlement, particularly during the last Ice Age. The presence of hilly limestone terrain also offered numerous natural caves as shelters.

The valleys, which descend from the Cordillera towards the sea, are generally short. They are associated with specific geological and morphological elements, and form the three main regions of this part of Spain: Asturias to the west, Cantabria in the centre, and the Basque Country to the east.

Northern Spain has a large concentration of more than a hundred decorated Palaeolithic caves, most of which are situated between the rivers Nalon to the west and Miera to the east, straddling the present-day regions of Asturias and Cantabria. Another important group of decorated caves is situated in Biscay and Guipúzcoa in the Basque Country.

Palaeolithic cave art representations

The depictions drawn by human groups of the Upper Palaeolithic on the walls and ceilings of caves numerous can be divided into two thematic groups: figures of animals or humans, and signs. The animal inventory includes species (such as bison, horse, stag/hind, ibex, auroch, etc.) that then recur over a period of more than 20,000 years. During the Ice Age, there were also species of animals that are specific to cold zones. The representations evolve towards a sometime heightened realism and towards more schematised approaches to the animal. The signs change depending on regions and

periods. The human representations are hand profiles or highly stylised figures.

The art of the Cantabrian Corniche is singular in the use of certain themes (predominance of the hind), certain techniques (dotted lines of the Ramales school, scratched engravings of the Ancient Magdalenian) and abstract symbols (large rectangular signs with internal decoration). This culture is also unusual in the link between many habitats and cave art (El Castillo, Llonín, Tito Bustillo, Santimamiñe, Ekain and above all La Garma, whose Magdalenian habitats are remarkable for the area over which they extend and their quality of conservation).

Engraving and painting are used individually or are combined. On soft surfaces a line drawn with a finger or using charcoal may be sufficient for the drawing, or otherwise a flint burin is often used. The paint may be applied as lines, series of dots, colour-wash or spraying. Engraving takes many forms, in single or repeated lines, ranging from fine, shallow lines to effects similar to a low-relief.

The pigments used are of both mineral (iron and manganese oxides) and organic origin (charcoal, soot). They may be used together or separately, and used directly, or diluted in water, or mixed with animal fats. During the very long cycle of the Palaeolithic, many ways of preparing and applying pigments were used.

Changes in Palaeolithic cave art took place over very long cycles, beginning with the initial pictorial techniques and motifs. General trends can be described, related to the conventional representation of volumes, the attempt to show depth and the shape of the forms, by the use of lines and colours for this purpose, and through the use of engraving. Similar changes can be noted in corporeal representations, the proportions of the various parts, and the coordination and animation of the figures.

Although the meaning of cave art is debated, its elements, which are figurative and abstract, realistic and conventional, naturalistic and schematic, constitute the most ancient corpus of art in human history. We do not know what they signify, but they bear witness to a culture that flourished for some 25,000 years, in which natural figurative elements join others that are more conceptual and probably supernatural.

The nominated cave art in Asturias:

– *La Peña de Candamo (San Roman)* is situated in the lower valley of the Nalon, above the mouth of the Ria Pravia, in a traditional rural landscape of the region, characterised by scattered dwellings and pastures for cattle rearing.

– *Tito Bustillo* is on the left bank of the same river. The decorated cave forms part of a vast series of interconnected caverns, other parts of which were temporarily occupied. It is in a traditional rural environment used for cattle-rearing. However, pressure from tourism-linked housing development is growing rapidly.

– *Covaciella* is in the gorges of a tributary of the River Cares, on a rocky slope forming part of the landscape of the pre-littoral depression of the eastern Asturias. It includes a large two-part chamber that leads to a corridor

some 40 m long. It was discovered in 1994, and the original entrance has been closed.

– *Llonín* is in the Cares valley, in a steep mountain site, between the Sierra del Cuera to the north and the Picos de Europa to the south. The environment is varied, with orchards of walnuts, chestnuts and fruit trees, and holm-oaks on the limestone hillsides.

– *El Pindal* opens out on to a small area of flat ground on the edge of a cliff, overlooking the sea.

The nominated decorated caves in Cantabria:

– *Chufín* is in the gorges of the River Lamason, a tributary of the River Nansa, just above the present water level in La Palombera reservoir. Mountainous and well suited for observing game for hunting, the site of the cave entrance dominates the narrow valleys nearby.

– *Hornos de la Peña* is in the Buelna Valley, where the landscape is varied. After consisting for a long time of scattered farms, over the last few years there has been pressure for the development of detached housing.

– *El Castillo* is on the slopes of Monte Castillo, in the middle valley of the River Pas, in an Upper Carboniferous karst morphology. Once dedicated to cattle-rearing, the region today also includes a large number of artificial forests.

– Again on the slopes of Monte Castillo, *Las Monedas* is a cave with four chambers. It overlooks a wide river valley.

– *Las Chimeneas*, also on the slopes of Monte Castillo, is a two-level cave. Its lower level is decorated, and contains Palaeolithic archaeological vestiges. It leads into a vast decorated interior chamber with several annexe galleries. A rising passage leads to the upper level, which is the current entrance, as the lower level has been closed off by rock falls.

– *Las Pasiega* is also on Monte Castillo. It consists of a complex set of chambers and passages at various levels.

– *El Pendo* is the largest of a set of natural caves in a limestone hill that includes a complex landscape of karst vestiges. Close to an urban and industrial zone, its natural landscape has today been modified by substantial transport infrastructures.

– *La Garma* is situated on the southern slope of the mountain of the same name. It is drained by a small river that flows directly into the nearby Bay of Santander. The lower part of the slope has vegetation cover of some ecological value, while eucalyptus forests have been planted on the summits.

– *Covalanas* is situated halfway up Monte Pando, at the top of a steep slope in a good observation position at the confluence of two valleys. The cave entrance is located in a landscape of great beauty. It is also close to the urban area of Ramales de la Victoria, which is rapidly expanding.

The nominated decorated caves in the Basque Country:

– The caves of *Santimamine* are situated at 150m above sea level in the middle of the landscape of Urdaibai Biosphere Reserve, where the karst heritage forms part of the geodiversity, together with what remains of the original forest vegetation of the region.

– *Ekain* is situated at the foot of small limestone hills with many karst landforms, including numerous dolines and large caves used as shelters by groups of prehistoric hunter-gatherers. The environment is essentially rural,

with many meadows. However this has been modified in recent years by the urban spread of towns such as Zestoa.

- The cave of *Altxerri* is situated in the slope of the limestone cliff of Mount Beobategaña, some 2 km from the town of Orio and 2.5 km from the shore of the Ocean. It is a large cave almost 2 km long with two main levels, and numerous wells. Its main decorated gallery is at considerable depth, a long way from the entrance.

Following the suggestion made to the State Party by ICOMOS, the initial proposal of 14 caves, in addition to those already inscribed at Altamira, has been increased by adding the following decorated caves: Altxerri (Basque Country), Las Chimeneas (Cantabria) and Covaciellas (Asturias).

History and development

The first *Homo sapiens* arrived by small groups in northern Spain around 35,000 BP. They cohabited for a time with the last of the *Neanderthals*, and then developed a significant culture known as *Upper Palaeolithic*, from 30,000 to 25,000 BP, producing bone projectiles and stone blade tools, and producing the first artistic artefacts and the first decorated walls (La Peña de Candamo).

The last Ice Age then began to make its influence felt, ending in around 18,000 BP. During this period cave art developed in the eastern part of Cantabria, producing an individual style (Altamira, La Peña del Candamo, El Castillo, Las Pasiega, El Pendo, La Garma, Chufin and El Pendo).

The artistic apogee, known as *Magdalenian*, corresponds to the end of the Ice Age, from 17,000 to 13,000 BP. This was the period of the major works in the decorated caves, with a great variety of motifs and techniques of representation. This was one of the key moments of the history of art, as seen for example in the polychrome figures of Altamira and El Castillo, the combination of engraving and painting, the use of the rock forms themselves, and realistic detail in the animal figures in most of the nominated caves.

From 13,000 to 10,000 BP, the climate became warmer (Holocene), causing a profound transformation in human lifestyles, together with a decline in cave art. Las Monedas is an example of late cave art, and there is no evidence of cave art later than 11,000 BP.

Values of Palaeolithic Cave Art of Northern Spain

Amongst a very vast set of caves containing art in Northern Spain, the proposed selection bears a very comprehensive testimony to Upper Palaeolithic cave art between 33,000 and 11,000 BP. It complements the masterpiece of Altamira, which is emblematic of the cave art of the Cantabrian Corniche, and which is already inscribed on the World Heritage List.

These caves form part of the same cultural ensemble as Altamira. Some of them are amongst the greatest Palaeolithic sanctuaries in Europe (El Castillo, Las Pasiega, Llonín, Ekain, La Garma, Tito Bustillo, Pindal).

3. OUTSTANDING UNIVERSAL VALUE, INTEGRITY AND AUTHENTICITY

Integrity and authenticity

Integrity

Despite inevitable alterations following the modern-day discovery and frequentation of caves, the general state of conservation since the origins of the cave art, and the integrity of the nominated ensembles are very good, with one exception: La Peña de Candamo, due to graffiti on the main panel. This cave however remains very important because of its other well conserved figures, its role in the history of cave art, and the very early dates obtained on some of its black dots (32,000 BP).

The excellent conservation of the cave art is the result of the choice of deep galleries, isolated from external climatic influences, to make the pictures.

ICOMOS considers that the past shortcomings in the management of some caves (Altamira is one example) have been overcome, and that conservation is now as effectively ensured as possible.

Authenticity

There is not the slightest doubt about the authenticity of the cave art of Northern Spain, and its attribution to the Upper Palaeolithic, and no expert has challenged them.

Over recent decades, the development of new dating techniques (thermoluminescence, uranium-thorium radioactivity, and above all AMS radiocarbon dating, which has enabled the dating of tiny fragments of paintings) have clearly confirmed the ancient dates established more than a century ago by conventional methods (styles, fauna, comparisons with portable art objects discovered in the archaeological strata). The Magdalenian period has in particular been confirmed for a maximum extension from 17,000 to 11,000 BP.

No restoration has ever been carried out on Palaeolithic works of art partially damaged by water run-off or any other cause, which means that the authenticity of the art is complete.

The authenticity of the cave art of the Northern Spain is expressed in particular by:

- Coherent and easily identifiable changes in forms within a regional entity.
- Use of materials and substances directly originating from the immediate environment and Palaeolithic ways of life.
- Characteristic use of the karst caves of the region.
- Art that is fully integrated in the life of Palaeolithic human communities, and expresses the symbolic and spiritual needs of the communities.

ICOMOS considers that the conditions of integrity and authenticity have been met.

Comparative analysis

Although the presence of Palaeolithic cultures is widespread in Europe and Asia, because of the mobility and dispersion of human groups, the Franco-Cantabrian area is the world's main centre for Palaeolithic cave art. It covers an ensemble from the Périgord in France to Asturias in Spain. The Cantabrian Corniche forms the western part of this ensemble, to the west of the Pyrenees. Since the end of the 19th century, research has been focused on this central area of Palaeolithic settlement in Western Europe.

Various recent discoveries have however drawn attention to the existence of important cave art in nearby but different regions: the south-east of France (exceptional but isolated caves of Cosquer and Chauvet), Andalusia (about twenty sites), Portugal (about twenty sites), and the Ebro valley (six sites). These secondary regions seem to have split away during the last Ice Age.

- Animals depicted in Portuguese caves are different from those in the Cantabrian ensemble. There is less pictorial diversity, and most of the art is engraved. There are no symbolic signs.
- The caves of the Ebro contain less art, and are relatively disparate. The caves were primarily living spaces.
- The Andalusian zone is the most important geographically, and is linked with the Alentejo in Portugal. The number of figures per cave is generally fairly low, and the techniques are less diversified. The subjects are exclusively mammals found in temperate regions. There are also some symbolic signs.

To judge from past and recent research, the Franco-Cantabrian area remains the central zone of permanent human presence in the Palaeolithic, in south-west Europe. Close trans-Pyrenean links via the Basque corridor, particularly during the late Magdalenian, indicate a homogeneous cultural identity over a vast geographical area.

The nominated ensemble in the Cantabrian Corniche does, however, provide specific elements that characterise the property when compared with the other Palaeolithic regional areas mentioned, and in particular the French part of the Franco-Cantabrian cultural area:

- A very dense set of decorated caves, in the very characteristic geographical area of the Cantabrian Corniche.
- An ensemble that is representative of the different periods of the Palaeolithic, including caves that are outstanding because of the number of works and the diversity of the styles encountered: Altamira, of course, but also Monte Castillo, Tito Bustillo and Ekain.
- This cave art ensemble embodies unique artistic and symbolic richness, by very rich thematic distributions that combine the great mammals that were common to temperate zones and those of glacial zones, by unique animal associations, by the predominant symbolic presence of females in the case of some species, and by geometric signs that are specific to the Cantabrian region.

- The presence in the Cantabrian ensemble of specific regional styles associated with certain Palaeolithic periods, such as the *Ramales* style characteristic of an early period, and the unique traits linked to the early *Magdalenian*.
- Strong association with dwelling places.
- Well conserved cave art in deep caves that are naturally well protected.

ICOMOS commends the arguments presented in the comparative study of the State Party.

ICOMOS considers that international studies of Palaeolithic cave art have over the last century provided abundant and detailed data that are recognised by the whole of the scientific community. In this connection, Palaeolithic cave art in Northern Spain is identified by the exceptional concentration of decorated caves of great pictorial and symbolic richness.

ICOMOS considers that the comparative analysis justifies consideration of the Palaeolithic Cave Art of Northern Spain for the inscription on the World Heritage List, as an extension of the Altamira cave.

Justification of the Outstanding Universal Value

The nominated property is considered by the State Party to have Outstanding Universal Value as a cultural property for the following reasons:

- Palaeolithic cave art is the most significant early cultural and artistic manifestation of the human species. It is entirely linked to the appearance of *Homo sapiens* and the emergence of a new human culture involving profound material changes, the invention of new techniques, and the development of artistic expression through painting, engraving and sculpture. It represents a crucial stage of the manifestation of the human creative genius. It bears an exceptional testimony to the history of civilisations.
- The decorated caves in the nominated property are outstanding and unique in terms of both number and quality, and their state of conservation is remarkable. The proposed series of caves completes and extends the exceptional significance of the Palaeolithic cave art of Altamira, already acknowledged by its inclusion on the World Heritage List as an outstanding example of the development of art in the Upper Palaeolithic and as a masterpiece of Magdalenian polychromy. The ensemble illustrates the richness of inspiration and the diversity of techniques of this first stage in the art of humanity.
- The cave art of El Castillo, La Garma, Tito Bustillo and Llonin seems to reflect continuity with Altamira, as monographs of the artistic symbolism of the Upper Palaeolithic. The other caves can rather be seen as specific chapters illustrating a period or a style of Palaeolithic art. The ensemble covers a period from 35,000 to 11,000 BP.

Criteria under which inscription is proposed

The property is nominated on the basis of cultural criteria (i), (iii) and (iv).

Criterion (i): represent a masterpiece of human creative genius.

This criterion is justified by the State Party on the grounds that Palaeolithic cave art is the first truly accomplished human art, over a very long period of the history of *Homo sapiens*. The nominated property provides a full and significant illustration of the various styles of this very long period of human civilisation. It bears witness to the great richness of realistic and symbolic decorative motifs, and the variety of the expressive techniques used. The property is a universal and outstanding expression of the creative genius of man during the different periods of the Upper Palaeolithic.

ICOMOS considers that the arguments put forward by the State Party are acceptable, and that they have been established and approved by the international scientific community.

ICOMOS considers that this criterion has been justified.

Criterion (iii): bear a unique or at least exceptional testimony to a cultural tradition or to a civilisation which is living or which has disappeared.

This criterion is justified by the State Party on the grounds that the nominated cave art of Northern Spain bears an outstanding and unique testimony to an ancient stage of the origins of human civilisation that vanished more than 10,000 years ago. This was the period during which the hunter-gatherers of the Upper Palaeolithic produced a consummate artistic, symbolic and spiritual expression of their human society. The material bases of this artistic and cultural expression are also of outstanding richness in the cave art ensemble nominated as an extension to the already listed site of Altamira.

ICOMOS considers that the nominated ensemble provides a full and outstanding illustration of the cultural values of the Upper Palaeolithic period.

ICOMOS considers that this criterion has been justified.

Criterion (iv): be an outstanding example of a type of building, architectural or technological ensemble or landscape which illustrates (a) significant stage(s) in human history.

This criterion is justified by the State Party on the grounds that Palaeolithic cave art bears witness to an exceptional change in the human condition, giving rise to a new culture that flourished over a long period of more than 20,000 years. It corresponds to a change in climate in the last Ice Age, which led man to move into an evolved troglodyte habitat and renew his survival and social organisation techniques, of which the cave art forms the artistic and spiritual component, conserved over a long period.

ICOMOS considers that archaeological research carried out since the listing of Altamira (1985), when this

criterion was rejected, today means that this criterion can be considered. Research has in particular enabled a better understanding of the social organisation of human groups in the Upper Palaeolithic in their troglodyte habitat, in their technical and social organisation, in connection with the artistic and symbolic representations of cave art.

ICOMOS considers that this criterion has been justified.

ICOMOS considers that the nominated property meets criteria (i), (iii) and (iv) and that the Outstanding Universal Value has been demonstrated.

4. FACTORS AFFECTING THE PROPERTY

The Palaeolithic decorated caves and shelters of Northern Spain are located in karst areas that are typical of this type of human settlement. Various factors may affect them and cause damage that is difficult to restore. The factors are of various natural and human types, but their effects may be combined.

Pressure from economic and urban development

Urban spread is generally substantial along the Cantabrian Corniche, encouraged by very clement geographical and climatic conditions, as in Palaeolithic times. Population density is 300 people per square km in the Basque Country, and more than 100 per square km in the other regions.

Land use pressure can be very strong in the immediate environment of the caves, and in some cases has altered the natural plant coverage in the approach landscape, whether by farming, dwellings, quarries and mines, infrastructures, or sometimes by the development of the site itself for tourism purposes.

Human need for water may lead to water catchments that change the underground hydrological conditions, and thus the humidity levels necessary for the conservation of the cave paintings.

Human frequentation of caves

Human frequentation of the caves may directly affect the previously mentioned natural factors, and cause deterioration of the cave art: ground wear as a result of visitors passing on foot, modification of the atmosphere and the associated biochemical equilibria.

There is also a highly diverse range of more specific phenomena linked to human presence: deterioration of the paintings because of exposure to light, vandalism, tourism facilities that are aggressive for the cave environment and the archaeological environment, etc.

Geological processes and natural risks; impact of climate change

Karst caves are natural geological formations involved in continuous morphogenesis processes: chemical and abrasive action of water, deposits of calcareous concretions, rock collapses that may cause the disappearance of the cave or the irreversible destruction of its accesses, etc.

These actions are taking place permanently in the caves, at the geological time scale, that is over several million years. They are generally only barely perceptible at human scale, but they can lead to sudden events that are sometimes catastrophic for cave art: change in water flow, rock fall, change in the atmosphere of a cave, etc.

Landslides may affect the entrance to a cave and cause irreparable damage. They depend of course on local geological and geographical situations affecting the ground, but also on the natural environment.

Plant coverage upstream and in the cave environment plays an important role not only in ground stability, but also in the hydrology and changes in humidity in the caves. Deforestation has increased these risks and artificial coverage may modify these conditions.

Climate change could affect plant coverage, render soils fragile and alter the relative humidity in the caves.

Risks of accidental flooding of a cave are linked to its situation with regard to external precipitation, and its geological and hydrographic situation with regard to the groundwater network. The area of northern Spain situated close to the Ocean is a generally damp region, and torrential rain can occur there. A change in the pattern of rainfall linked to climate change could affect the flooding risk and make this a sensitive issue for caves in some situations.

The risk of forest fires increased markedly in the second half of the 20th century. Caves whose entrances are in forested or brush vegetation areas are particularly at risk. In addition to possible direct damage to cave art close to the entrances, there may be consequences from the destabilisation of ground upstream of the cave, and in the hydrological consequences of destruction of the plant cover.

The Cantabrian Corniche region is considered to be a zone of low earthquake risk.

Biological agents can also affect the Palaeolithic heritage: colonies of insects depositing excrement at cave entrances, insects or mammals modifying the archaeological ground, colonies of micro-organisms covering the painted walls or altering the support rock (green algae at the cave of El Castillo), etc.

Changes to the chemical composition of the air (moisture content, CO₂ concentration) may affect the conservation of cave art, and paintings in particular, by direct or indirect action (changes at the surface in the local biosphere).

Risk preparedness

General natural risks are regularly monitored and there are intervention plans for the specialised services of each autonomous region, for example for forest fires and flooding.

Prevention of risks linked to human frequentation: See 5 - Conservation measures and visitor facilities.

Prevention of risks linked to economic and urban development: See 5 - Management Plan.

ICOMOS considers that the various risks have been well understood and appropriately analysed by the bodies of the State Party in charge of the property.

ICOMOS considers that special consideration should be given to the understanding of possible correlations between factors affecting the property and thus to the concept of the chain of risks, and to trans-disciplinary studies.

ICOMOS considers that the main threats to the property arise from the correlation of natural factors combined with human pressure resulting from tourism demand and from the changing economic and social environment of the nominated properties.

5. PROTECTION, CONSERVATION AND MANAGEMENT

Boundaries of the nominated property and buffer zone

The nominated property consists of each cave and the immediate environs of its entrance. By definition, most of the property is underground.

Each property is surrounded by a buffer zone determined on the basis of the local environment of the cave, particularly in order to protect land use and landscape, but also depending on the hydrological basin linked to the cave, in order to guard against the risks of changes to the hydrogeological conditions and humidity of the cave itself.

A detailed plan of the buffer zone is provided for each cave. The relevant population densities are analysed in each case.

ICOMOS considers that the boundaries of the nominated properties and their buffer zones are adequate.

Ownership

The areas of land in which caves are opened have a variety of statuses: regional or communal public property, private property.

Pursuant to the law on the subsurface of Spain, the caves themselves are public property, under the responsibility of the autonomous regions.

The exploitation of the caves is governed by the administration on the basis of revisable exploitation and public opening concessions.

Protection

Legal Protection

The Palaeolithic art caves are governed by Law no. 16/1985 of Spanish Historic Heritage, and more particularly its Articles 40-1 and 40-2. They are defined

as public properties of cultural interest and are thus subject to national listing for protection purposes. These listing measures include some earlier provisions concerning the recognition of Spanish national heritage.

Following their discovery and study to establish their artistic and prehistoric value, all the nominated caves have been scheduled under the law, in 1924-1925 for those known earliest, and in 1997-1998 for the most recent (El Pando, La Garma).

Buffer zone:

The three autonomous regions of the Basque Country, Cantabria and Asturias provide regulatory protection for the buffer zones of the nominated caves. No modification may be made or new construction established without the authorisation of the Regional Council for Culture. The same authorisation is required for water catchments in the buffer zone.

These specific authorisations for the nominated property and its buffer zone are included in the land use plan.

Effectiveness of protection measures

ICOMOS considers that the territorial, landscape and hydraulic principles that guide the regulatory protection of the property and its buffer zone are appropriate.

ICOMOS recommends that these principles be strictly applied, particularly with regard to pressures from urban spread and economic development on some of the nominated caves.

ICOMOS considers that the legal protection in place is adequate.
--

Conservation

Inventories, recording, research

In Northern Spain, prehistoric research began in the last quarter of the 19th century. The majority of the world's best-known prehistorians have studied the cave art of this region and acknowledged its artistic, historic and cultural importance.

Initial methods focused on determining dates of production of the works and archaeological vestiges, using the conventional methods of stylistic analysis and stratigraphy. Many studies were published, constituting one of the largest corpuses of prehistoric research.

Modern physico-chemical dating methods have basically confirmed the earlier studies, while making them more precise and giving them a greater degree of certainty (See 3 - Authenticity).

Cave art research is still a very active field today, adding to the conventional art history and prehistory studies transdisciplinary studies about factors threatening the works and their protection (See 4 - Factors affecting the property).

Detailed inventories and descriptions of the nominated caves exist in the various museums and interpretation centres located near the sites, and in the major universities offering courses on prehistory and cave art.

ICOMOS considers that studies on the conservation of the decorated caves undertaken in the three regions of the Cantabrian Corniche are remarkably advanced, and can be considered as authoritative.

Present state of conservation

Palaeolithic art in the decorated caves is essentially fragile. It has remained closed away for thousands of years in underground karst formations, while being subjected to very slow but continuous geophysical and biochemical evolutions of these environments. The very fact that it has come down to us, and is perfectly observable in many caves, demonstrates its relative stability with regard to the scale of human history.

The discovery of this cave art is very recent when compared with its great age. The intrusion of modern man in an environment inherited from the Palaeolithic suddenly threatened this state of conservation, particularly as the first people to discover them were unaware or only partly aware of the effect of their interventions on the cave art environment (composition of air, temperature, biological contamination and pollution, etc.).

Pressure from external human activities is not without consequences, such as those that cause change in the relative humidity of the caves, which directly influences the state of conservation of the Palaeolithic paintings.

This "open" situation of the caves has made conserving this heritage and passing it on to future generations a delicate task. This can only be achieved today by ongoing transdisciplinary scientific monitoring, which must be directly and immediately linked to management measures.

Active Conservation measures

The underground microclimate is permanently monitored using instruments placed in the caves.

The results are passed on to the High Council of Scientific Investigations of the Ministry of Culture. Two autonomous regions are currently participating in this plan, and the third (Asturias) is considering resuming the climatological studies that were interrupted a few years ago (Tito Bustillo, El Pindal and Candamo). Visits are regulated on the basis of the information gathered, as certain threshold values must not be exceeded.

All the caves without exception are protected by grilles or gates. Access is therefore effectively controlled. In caves open to the public, each time a tour passes near the decorated walls (El Castillo, Las Monedas, Covalanas, Hornos de la Peña), the walls are protected by transparent plastic nets held taut at a certain distance from the walls and attached to supports located outside the decorated surfaces. In other cases (Tito Bustillo, Pindal, El Pendo, Candamo), barriers are used for the same purpose.

The lighting, in some of the caves open to visits, includes fixed electric background lights to help visitors find their way (Santimamine, El Castillo, Las Monedas, El Pendo, Pindal, Tito Bustillo, Candamo). The tour itself is made using hand-held electric lamps. These lighting modes, which are currently being upgraded by the installation of LED lamps (Las Monedas, El Castillo and Covalanas), do not raise any conservation problems.

ICOMOS considers that, as far as the conservation of the Palaeolithic heritage is concerned, there are always risks of damage. Primarily the risks are of damage of human origin. The risks have been analysed in detail by the bodies of the State Party, and measures to cope with and prevent the risks have been taken, both on the regulatory front and in terms of practical arrangements. The protection and conservation situation seems to be well under control.

ICOMOS considers that adequate protection measures have been taken, both in terms of regulations, and in scientific and practical terms.

Management

Management structures and processes, including traditional management processes

The supervisory authority is the Spanish Ministry of Culture. It acts on behalf of the State in the management of the cave of Altamira, which is an exceptional situation in Spain, in partnership with the Autonomous Region of Cantabria and the municipality of Santillana del Mar.

In practice, the authorities in charge of the conservation of the other decorated caves are the specialist heritage management divisions of each of the autonomous regional governments:

- The Heritage Centre of the Basque Country, and the Technical Heritage Divisions of the Deputations of Biscay and Guipúzcoa
- The Cantabrian Council of Culture, Tourism and Sport
- The Asturias Cultural Heritage Department

These regional departments have on their staff technical personnel in charge of the monitoring devices, and archaeologists.

There is however a need for general coordination, along the lines of the existing commission between the Spanish State and the Cantabria Region in the case of Altamira.

The additional documentation received from the State Party shows that it was instituted under the name of *Commission for Coordination of the Palaeolithic Cave Art Properties of the Cantabrian Corniche*. It held its constitutive meeting on 11 October 2007. It brings together the representatives of the three autonomous regions and the Historic Heritage Division of the Spanish Ministry of Culture. It is currently setting up its *Technical Committee*.

The main role of the *Coordination Commission* and its *Technical Committee* is to facilitate communication

firstly between the different regional bodies, and secondly between the administrative level and the technical level of cave management/conservation. The aim is to facilitate exchanges, promote cooperation and harmonise management and conservation plans.

Policy framework: management plans and arrangements, including visitor management and presentation

In the regional framework, each cave has its own management plan and personnel for the management and presentation of the Palaeolithic heritage, depending on the annexe facilities (facsimile of the cave art, museum, documentation centre, etc.). In reality, the local plans of a given region are very similar, and local plans are also very similar from one region to another. The variants arise because of the particularities of each cave, its state of conservation, its fragility, its visitor frequentation (or lack of frequentation), and its annexe facilities.

The management plan for the caves consists primarily of permanent scientific monitoring of the state of conservation, under the control of the specialist services of the various autonomous regions. We noted earlier that this scientific monitoring has a direct impact on visit authorisations and thus on the management of flows of tourists on the site and nearby (See - Conservation).

Some of the nominated caves can be visited in groups led by one or two guides. Those considered to be the most fragile are closed to the public (Las Pasiiega, La Garma, Santimamine, Ekain). In the caves open for visits, the number of persons per group and per day is limited. The maximum number of visitors per day is different depending on local conditions: from two hundred or three hundred (Tito Bustillo, El Castillo, Las Monedas, Pindal) to a few dozen (El Pendo, Covalanas, Peña de Candamo, Hornos de la Peña). The number may even be reduced to a few units (Chufin). These maximum levels have been lowered in past years, on the basis of the atmospheric deterioration recorded and its possible consequences in conservation terms. Today, about 100,000 visitors are admitted in total to all the nominated caves, including Altamira.

The interpretation centres and museums intended to present Palaeolithic art and civilisation to the public have recently been very considerably extended. The centres and museums are operated in conjunction with the local territorial authorities and the autonomous regions.

- The key development today is the Museum and Documentation Centre of Altamira, for the Cantabrian Region. Opened in 2001, it is visited by 270,000 people a year.

The other main visitor centres and interpretation centres are:

- In the Basque Country, *Ekain Berri* is a major project nearing completion (facsimile of the cave art and museum of the cave of Ekain, which is not open for visits); the documentation centre of the cave of *Santimamine* is under construction.
- In the Cantabria region, there is a documentation centre for the *Monte Castillo* caves.

- In Asturias region, the museum of *Teverga* is an extensive project of good scientific level, which was opened in March 2007; there is also the interpretation centre of the Valdés-Bazan Palace at *San Roman de Candamo* and the Education Centre of *Tito Bustillo*.

From a conservation viewpoint, ICOMOS considers that the permanent monitoring of the atmosphere in the caves is a very positive feature, and the fact that it is directly linked to the number of people allowed to visit on a daily basis.

ICOMOS commends the effort made to present Palaeolithic cave art to visitors, and to guide interpretation, while linking this with a scheduled reduction of the number of visits made. These are large scale programmes carried out using large amounts of resources, and providing exemplary guarantees of scientific and pedagogical value.

Involvement of the local communities

The local communities are involved in the presentation of the sites, and in the organisation and management of the museums, documentation centres and interpretation centres that present the heritage to visitors. The projects are generally partnerships with the autonomous provincial governments. (See - Management measures).

ICOMOS commends the active management arrangements put in place for each cave, and considers them to be similar from one region to another.

Resources, including staffing levels, expertise and training

Within the framework of the management concession, each nominated cave has permanent staff on the site, and the activities of the staff are guaranteed by the regional and local authorities.

Under this arrangement, each cave has both permanent and temporary guides (usually prehistory or art history students) and technical and administrative management staff. A wide range of training programmes is offered to cave personnel to increase their scientific knowledge and management skills.

Furthermore, staff from the relevant departments of the three autonomous regions may be called on as required in the interest of conservation and monitoring: technicians specialising in conservation and conservation monitoring equipment, Palaeolithic and prehistoric archaeology specialists, art historians, and geologists.

The universities of the three autonomous regions are actively involved (through research contracts and training programmes) in the scientific study of the caves and their conservation. Many courses are organised: prehistory, prehistoric archaeology, cave art history, cultural heritage conservation and management, training programmes linked to the specific scientific needs of conservation (geology, hydrology, physics and chemistry).

ICOMOS considers that the management measures adopted for each cave by the three autonomous regions, and in the general framework of the Inter-region Coordination Commission and its Technical Committee, are adequate.

6. MONITORING

Factors that could affect the caves and their environment are systematically monitored.

The geological factors studied are primarily concerned with the physical state of the decorated caves:

Composition of the rocks in the caves, the risks of alterations and concretions depending on the evolution of the other parameters (air, water, humidity, CO₂, etc.).

The hydrology and hydrogeology of the caves. The geological monitoring of the surface ground and rocks in the buffer zone, soil stability.

The cave atmosphere is monitored both in terms of composition and circulations. External climate, its changes and its impact inside the caves, is also analysed.

The plant factors are related to the plant coverage of the ground and their impact on hydrology and the internal humidity of the caves (buffer zone).

Biological contamination is studied by regular statistical monitoring of the microbiological species in the cave atmosphere, on the walls and in the ground.

The monitoring covers the material arrangements for visits and for cave lighting.

Monitoring is used to exercise strict control on the number of visitors in the caves open to the public. The most fragile are not opened to the public for visits.

Substantial data bases are permanently available to the scientific personnel in charge of cave monitoring.

ICOMOS notes that great advances have been made in the scientific monitoring of the caves of Northern Spain over the last ten years or so. Data for the most sensitive caves are updated in real time, and caves opened to the public are carefully monitored in order to detect any atmospheric or biochemical alterations. Air composition and humidity for example are monitored by automatic systems. The processes of physical and/or biological deterioration are now scientifically quite well understood. It is therefore possible to consider carrying out effective interventions.

ICOMOS considers that the scientific and technical monitoring of the property is adequate.

7. CONCLUSIONS

ICOMOS acknowledges the Outstanding Universal Value of the ensemble of seventeen Palaeolithic decorated caves on the Cantabrian Corniche, proposed by Spain as an extension to the decorated cave of Altamira that is already inscribed on the World Heritage List (UNESCO 1985).

Recommendations with respect to inscription

ICOMOS recommends that the extension of the decorated cave of Altamira to include the Palaeolithic cave art of Northern Spain should be approved on the basis of *criteria i, iii and iv*.

Recommended Statement of Outstanding Universal Value

The ensemble of seventeen decorated caves on the Cantabrian Corniche has Outstanding Universal Value for the following reasons:

- As an extension to the cave of Altamira, this ensemble illustrates the appearance and flourishing of the first fully accomplished human art over the long historical period of the Upper Palaeolithic (35,000 – 11,000 BP). It is entirely linked to the appearance of *Homo sapiens* and the emergence of a new human culture involving profound material changes, the invention of new techniques, and the development of artistic expression through painting, engraving and sculpture.
- By their number and quality, the caves of the Cantabrian Corniche offer a veritable monograph of Upper Palaeolithic cave art, which is exceptionally rich and diversified. The ensemble is moreover remarkably well conserved. It bears an outstanding testimony to the history of civilisations.

Criterion (i): The Palaeolithic cave art of the Cantabrian Corniche fully and significantly illustrates the first truly accomplished human art, over a very long period of the history of *Homo sapiens*. It bears testimony to the creative genius of man during the different periods of the Upper Palaeolithic.

Criterion (iii): The nominated ensemble bears outstanding and unique testimony to an ancient stage, which vanished more than 10,000 years ago, of the origins of human civilisation. This was the period when the hunter-gatherers of the Upper Palaeolithic achieved an accomplished artistic, symbolic and spiritual expression of their human society.

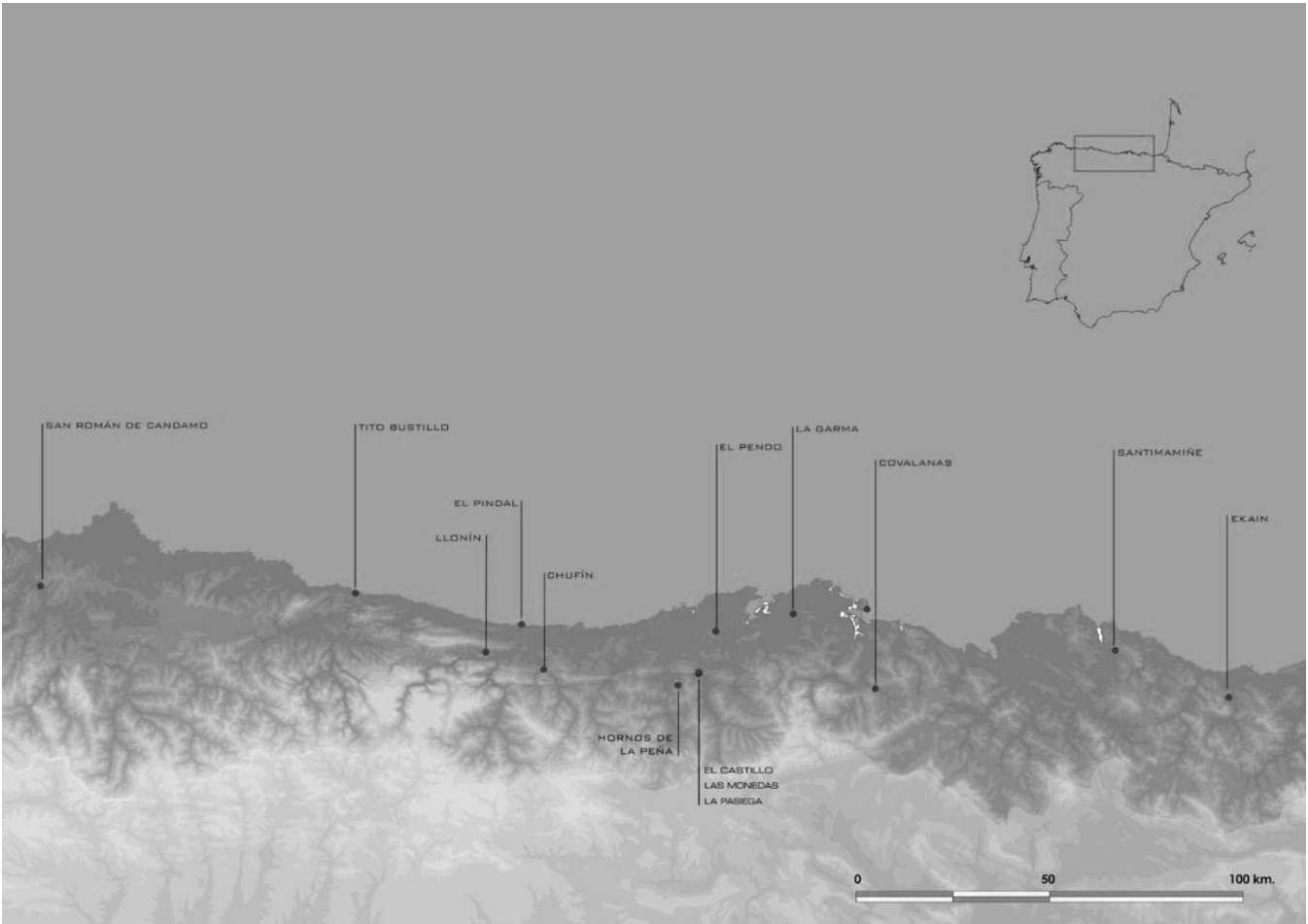
Criterion (iv): The Palaeolithic decorated caves bear witness to an exceptional evolution of the human condition. The climate change of the last Ice Age gave birth to a new culture that flourished for more than 20,000 years, leading man to settle in an evolved troglodyte habitat and renew his techniques of survival and social organisation, of which the cave art forms the artistic and spiritual component, conserved over a long period.

The decorated caves of the Cantabrian Corniche bear authentic testimony to the Upper Palaeolithic, and are perfectly well dated and authenticated by the scientific community as a whole. In the context of a very long period of underground conservation, their integrity is remarkable.

However, in the context of the contemporary discovery and opening of the caves, complex risks have arisen related to the alteration of the physical, geological and biological conditions of conservation. Extremely rigorous management is required to ensure that the risks are effectively dealt with. The State Party has given all the necessary guarantees concerning transdisciplinary scientific management of high quality, combined with rational management of visits and site interpretation.

ICOMOS recommends that the State Party should give consideration to the following:

- Actively continue the setting up of the Autonomous Coordination Commission for the management of Palaeolithic cave art in Northern Spain, and its Technical Committee.



Map showing the location of the nominated caves



La Peña cave



Chufin cave



Entrance to El Pendo cave



El Castillo cave