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The Art of Paleolithic Hunters in the North of Spain.

[Authors]
César González Sainz, Roberto Cacho Toca and Takeo Fukazawa.

[Editors]
Texnai Inc. Tokyo and University of Cantabria.

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Contents

Preface.

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César González Sainz

With these lines we would like to present the main result of a project that we developed in 1998 and part of 1999. It is equally the work of a group of post-graduate students in the Department of Historical Sciences at the University of Cantabria, led by Roberto Cacho Toca, who committed themselves to the project, and made it possible. Much of the first year was taken up seeking advice, defining objectives, organizing the fieldwork and writing the texts that accompany the photographs in the Database. These were taken by the magnificent team of photographers and multimedia experts belonging to Texnai Inc. of Tokyo, who deployed the latest techniques in virtual reproduction in prehistoric caves and museums throughout the Cantabrian Region.

Essentially, the Database offers people interested in Paleolithic art a full photographic record, making use of virtual reality techniques in order to overcome traditional limitations. In this way, it becomes possible to understand the rock art inside the chambers of a cave, or handle a decorated object and appreciate its tiniest details.

From the point of view of prehistoric cave art research, the Database provides a good opportunity to learn the latest information about Paleolithic works of art in the Cantabrian Region. This natural region had its own cultural characteristics in the Upper Paleolithic, and certain intra-regional differences. Furthermore the Database introduces an integrated approach, covering both rock art in caves and the surprising miniatures created in portable objects. It includes not only the large, internationally famous sites such as Altamira, Tito Bustillo or Ekain, but also less spectacular caves, like La Loja, Pondra and Arenaza, which we believe to be equally necessary in order to obtain a truer idea of the plural reality of the art.

The Database contains a large number of interrelated photographs, and information about decorated objects and cave paintings, about the depictions in certain caves, and about prehistoric art in the region. The twenty-two caves that it covers include several that are closed to the general public or with serious limitations in the number of visits (such as Peña Candamo, La Lluera, Chimeneas and Pasiega, Altamira, Pondra, Arenaza, Santimamiñe and Ekain). These measures are taken in order to conserve the paintings adequately, or because the art is located in narrow passages that are not suitable for tourist visits. However, the technology employed here allows the user to understand the interior layout of the caves, and assess the works of art in their spatial and physical context, in a more complete way than is obtained from the two-dimensional view of traditional photographs. This is of vital importance, as prehistoric art was produced on surfaces that varied greatly in quality, size and position, and the Paleolithic artists showed their mastery in the way they incorporated the irregularities in the walls and ceiling into their depictions of animals and signs. In the same way, the decorated areas are quite variable in their ease of access, their capacity and the possibilities for viewing the figures at a distance.

Preface.

The photographs of mobiliary art illustrate unique objects that, at best, are normally only seen in a glass case in a museum, usually from only one side. Here it is possible to observe the techniques used in the preparation of these artifacts and their decoration, often better than with the original in our hand, as the light does not fluctuate, and our hands do not shake. We can rotate the object to examine the other side, or enlarge the photograph and see the smallest detail, such as the remains of red coloring on the ibex head from Cueva de Tito Bustillo, the tiny hairs on the ears of the hinds on the staff from El Pendo, or how the barbs were cut in the harpoons found in many Magdalenian sites.

Finally, the Database includes a large number of scenic views of the region, from the Pyrenees in the north of Navarra to the Nalón valley in the center of Asturias. These photographs are interesting to give an idea of the landscape in which the groups of Paleolithic hunters lived. In some cases (such as the circular panoramas from the tops of Peña de Candamo, Ardines hill, Monte Castillo and Ekain hill) they are quite spectacular views and rarely known even by specialists in Paleolithic archeology. They make it possible to visualize the territory around the site and the strategic value of the locations chosen by Paleolithic hunters.

The team at the Department of Historical Sciences at the University of Cantabria, in close and friendly collaboration with the photographers and software experts of Texnai, have worked together in order to offer a complete version of our Paleolithic artistic heritage, in an up-to-date product intended for the general public at a medium to high level. However, we believe that this Database will also be of interest to researchers in prehistoric art, given the possibilities it provides for the study of manufacturing and decoration techniques in bone and antler, of the composition of cave art panels, and the discovery of new figures, among other aspects. We aim, therefore, to contribute to a wider diffusion of information about this early, spectacular, artistic development, and at the same time, to its more efficient conservation. We also hope to arouse in the user the same emotion that we have felt while working in the caves in the Cantabrian region. An emotion that is linked to the vividness and expression of many of the figures of animals, and also, despite the great cultural and chronological distance separating us, to the recognition of the pulse of humanity beating in all these paintings created by our ancestors at the end of the Ice Age.

Prof. Dr. C. González Sainz
Department of Historical Sciences, University of Cantabria.

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Chapter 1

A Multimedia Database for Paleolithic Art in the Cantabrian Region.

1.1

Development of the project, and the technical and scientific team.

The multimedia database presented here was a project carried out by a large team of photographers and software experts based at the company Texnai of Tokyo, working with a group of researchers in Paleolithic art in the Cantabrian region, linked with the Department of Historical Sciences at the University of Cantabria (UC), Santander.

The technical basis of the project, and several of its aims, were originally presented by Takeo Fukazawa at the 4th Congress of Japanese Studies in Spain, held in Santander in September 1997. At the same time, the first contacts with the prehistorians taking part were able to define the main features and objectives of the database. Fortunately, a few weeks later, the Japanese Ministry of International Trade and Industry, through IPA agency, selected the project from over a hundred applications, and guaranteed its financial backing and development. In this way, between the end of 1997 and the start of 1998 the fieldwork could be programmed, and the structure of the database was designed, integrating documentary and multimedia elements. Finally, an agreement was drawn up between Texnai and the Department of Historical Sciences, and this has governed the development of the project since March 1998.

Most of the fieldwork was carried out in March and April 1998, briefly prolonged into June. The first team of photographers and technicians, accompanied by postgraduate students from UC, visited and photographed all the caves to be included, from the west of the region, Peña de Candamo in the center of Asturias, to Cueva de Ekain, in the east, near the Pyrenees and the French border. A second team, with a similar composition but with an even heavier load of equipment, took photographs of the most important objects of Paleolithic mobiliary art in the different museums and research centers in the region. All this work only became possible after obtaining the appropriate permits from a considerable number of authorities responsible for the management, conservation and, occasionally, research in archeological heritage: the Services of Historical Heritage of the Autonomous Communities of Asturias and Cantabria, and of the Diputaciones of Vizcaya and Guipúzcoa, as well as the Archeological Museum in Oviedo, Prehistorical and Archeological Museum in Santander, Research Center and Museum at Altamira, Basque Historical Museum in Bilbao, and Aranzadi Science Society of San Sebastián.

The different articles accompanying the Database and included in this book were written at the same time, during 1998. The photographs were processed and organized in Tokyo in summer and fall of that year, and shortly afterwards the comments were added to the photos of cave art, the descriptions to the

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1.2

Acknowledgements.

As well as the members of the technical and scientific team, numerous people, institutions and organizations have assisted in the preparation of this Database. We would like to express our gratitude to all of them here.

* Ministry of International Trade and Industry, Japan.
* Iberia Airline (Tokyo Agency).
* Historical Heritage and Archives Service, Consejería de Cultura, Principality of Asturias. The director of the Service: José Ecenarro Tomé, and, especially, Jorge Camino Mayor and Estefanía Sánchez.

The work in the different caves in the Principality was assisted efficiently by many of the guides belonging to the above service: Santiago Calleja and Alicia García Fernández (caves of La Lluera and Peña Candamo), Mónica Balmori, (Tito Bustillo), María Luisa Quesada Soto (Cueva de El Buxu), Xosé Firmu García Cosío (La Loja) and Oscar Sánchez Gómez (Pindal).

* Ethnographical and Archeological Museum, Oviedo: Enrique Tessier.
* Consejería de Cultura y Deporte del Gobierno de Cantabria: Jesús Miguel Oria Díaz (Regional Director of Culture) and Miguel Angel Sánchez Gómez.

In the same way, we acknowledge the vital assistance of the prehistoric cave guides in the Autonomous Community of Cantabria: Antonio Gómez Fraile (Cueva de Chufín), José María Ceballos del.

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Moral, José Riancho Hoz, Ludovico Rodríguez Liaño, Pilar Fernández Rodríguez and Esteban Crespo Gómez (caves of Monte Castillo, Hornos de la Peña and Santián), and Joaquín Eguizabal Torre (Cuevas de Covalanas and La Haza). In Cueva de El Pendo we

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Chapter 2

The Art of Paleolithic Hunters in the North of Spain.

2.1

The Art of Upper Paleolithic Hunters. Introduction to Cave Art in the Iberian Peninsula.

1. Introduction.

During the last stages of the Würm glaciation, the groups of hunters living in Europe developed the first artistic cycle, which still surprises us today with the great esthetic value of many of the paintings, or their careful execution with techniques that are, nonetheless, very simple. We are equally struck by the unity of style over vast geographical areas, and its continuity during such a long period of time. Between approximately 35,000 and 11,000 years before the present, the continent saw the growth of this first example of figurative graphic expression, with its two variants: cave or rock art, on fixed surfaces (cave walls, floors and roofs, or open-air rock outcrops such as those recently located in the Iberian Peninsula), and a mobiliary art on portable objects (perforated staffs, harpoons, pendants ... and also on stone or bone plaques, statuettes etc).

Between these two variants, small differences can be detected in the distribution of the motifs represented, the techniques used, and in the composition of the figures and their thematic associations. These are due to the different conditions, such as size or hardness, of the surfaces to be decorated, and to the presumably different functions of the art. Their geographical distribution is partly different too. Whereas decorated objects are found in almost all of Europe, cave art is located essentially in the southwest of the continent. This means it is limited, apart from isolated exceptions, to the whole of the Iberian Peninsula, central and southern France, and to a lesser extent, Italy.

The Europe where this first art appeared and developed was very different to present day Europe; colder and inhospitable, wild and empty. Large glaciers had formed in mountainous areas, while a great ice sheet covered the north of Europe. Thus the northern limits of the inhabitable continent were in the center of what is now Great Britain and the north of Germany. At the same time, the water locked in this great mass of ice resulted in sea level dropping as much as 120m below the present level in the coldest period, which was from about 20,000 to 18,000 BP. This caused a regression in the coastline, of varying amount depending on the location, and the consequent enlargement in the territory available to the human groups and the herds of wild animals. Where the present day underwater continental platform is wide and flat, there was a greater increase in the territory (so Great Britain was joined to the continent). On the other hand, the regression was much smaller where there is no platform, such as in the Straits of Gibraltar, between the European and African continents.

The ecosystems known in Upper Pleistocene Europe varied greatly, but they were always colder

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2.2

Everyday Art. Upper Paleolithic decorated objects in the Cantabrian Region.

In the Paleolithic, artistic creation was not restricted to the decoration of walls in the interior of caves or on rocky outcrops in the open air. In fact it must have covered many aspects and objects of everyday life. In this chapter we refer to small portable creations, decorated in minute detail, and which have survived to the present day due to having been manufactured in durable materials like stone, bone or antler.

The technical and formal quality of many Paleolithic decorated objects, true works of art, is surprising to the modern observer. However, men and women in those times must have fulfilled two important requirements for the development of so many, so well finished works of drawing or modeling. They were almost obliged to reach a high level of manual skill in the manufacture of tools in stone, bone or wood, and of clothes and shoes, or in the processing of the animals they had hunted and food preparation, or in the treatment of the other substances used. Their knowledge of the materials they worked with; their characteristics, strength, possibilities of being worked and transformed, must have been extraordinary, especially in comparison with that of our modern, urban, computerized civilization. Besides, their way of life, based on hunting and gathering wild resources, gave them large amounts of time they could spend more or less in leisure activities, especially during those long winter nights.

Portable or mobiliary art is found over a much wider geographical area than rock art is, because as we have seen this was limited basically to the South-west of Europe, as well as other isolated locations in the continent and in Australia. On the other hand, Paleolithic mobiliary art is known from the limits of Siberia, across the plains of southern Russia and then, through the valley of the Danube, to the Balkans and the Mediterranean coast. It reaches nearly every part of western Europe, from the sites in Andalucia (e.g. Cueva de El Pirulejo) to what is now the British Isles (Robin Hood's Cave). Its distribution, therefore, overlaps more closely with that of habitation sites.

In the same way, its distribution in time does not match that of rock art exactly. It is now known that a long artistic episode during the early stages of the Upper Paleolithic (between 40,000 and 24,000 BP) saw the production of abundant figurative mobiliary art in the sites of eastern and central Europe. This was in many cases of high quality. The artistic productions in the southwest of Europe, either in rock art or mobiliary art, do not seem to have been at the same level, at least during much of the Aurignacian period. During the Upper Paleolithic, in the Iberian Peninsula and other parts of SW Europe, we find a distinct mismatch in the chronological distribution of rock art and mobiliary art. The former seems to have been more spread out in time than mobiliary art, which

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2.3

The Western Cantabrian Region. Introduction to Paleolithic Cave Art in Asturias.

1. The Principality of Asturias, at the western end of the Cantabrian corridor, was occupied and trekked assiduously by groups of hunter-gatherers throughout the Upper Paleolithic. They left multiple evidence of their activity in the caves of the region, and this includes examples of rock art and mobiliary art. Asturias, therefore, concentrates a very significant part of the total cave art known today in the Cantabrian region. Forty-five caves, from a total of a hundred and three in the region, are located in the central and eastern part of this autonomous community. Its western sector, beyond the valley of the River Nalón, has a very different geological structure, with older lithologies and less karst, and so there are fewer caves with archaeological deposits or remains of Paleolithic human activity.

The center and east of Asturias has a very complete cultural sequence of the Upper Paleolithic (38,000 to 11,500 BP). The main stratigraphies have been found in a few key sites such as Abrigo de la Viña, and caves of La Paloma and Las Caldas in the Nalón Valley; or the caves of Cova Rosa, Tito Bustillo and Los Azules in the Sella Valley. Equally, in the East the most important sites that have been dug are La Riera and Cueto de la Mina, in the Llanes area, and Llonín in the Cares Valley. Many of these sites also have magnificent assemblages of paintings and engravings. Furthermore, series of mobiliary art from La Viña, Las Caldas, La Paloma, Tito Bustillo and Llonín, among others, are of exceptional quality.

The Upper Paleolithic of Asturias has characteristics fully integrated with those of the rest of the Cantabrian region, but with a few distinctive features of its own. The main one is the abundant use made of a lithic material which is common in Asturias: quartzite, whereas flint is generally rarer and of poorer quality than in other parts of the Cantabrian. This implies a greater apparent crudeness in their lithic industries, and some differences in the tool composition. Thus, it is more frequent than in other areas to find tools of varied use, manufactured out of simple materials, such as side-scrapers, endscrapers on flakes, carenated endscrapers or denticulate pieces. Less frequent are those lithic tools that required large, long, parallel-sided blades (e.g. some kinds of burin). At the same time, certain types of tools, which are very common in Asturias and western Cantabria, seem to be linked to the possibilities for knapping and retouch allowed by quartzite, for example the lithic hunting points with a concave base of the Solutrean period (21,000-16,500 BP).

The economic organization of human groups here must have been similar to other parts of the Cantabrian region, with seasonal movements among

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2.3.1

La Peña de Candamo Cave.

The cave art in Cueva de La Peña de Candamo, in the village of San Román de Candamo, is the westernmost assemblage in the whole of the long corridor forming the Cantabrian region. Its position therefore marks the end of the area of limestone hills and well-developed karst landforms. The entrance of the cave is on the right-hand bank of the Nalón river but, whereas the other cave art sites in the middle valley are just above the present-day river course, this cave is located at the top of a steep hillside, called "Peña de Candamo", 200m above sea level. In this way, the entrance overlooks a wide area, and several natural communication routes, such as the access to the middle valley of the River Nalón. The great strategic value of the location has, in consequence, often been stressed, as it could have been used to control the animal herds moving along the valley and, perhaps, human groups too.

The cave was studied in 1914 by E. Hernández Pacheco, assisted by J. Cabré and Benítez Mellado, who carried out a magnificent work of documentation and analysis of its art. No artifacts or other remains of human occupation were found in the cave, but they were in another small cave near-by. This had a single, thick layer, with abundant industry of Solutrean age (21,000-16,500 BP), probably belonging to periodic human occupation of the site.

The cave is short, and generally rather small, but despite that, it is quite spectacular. It has many large calcite formations, like columns, flowstone and gour floors, which noticeably conditioned the organization of the art, especially regarding the choice of panels and even the techniques applied in the Upper Paleolithic. In fact, this profusion of calcite limited the production of art to a few accessible, clean walls, in three or four different locations. Besides, the growth of the flowstone separated a few small high-level chambers, like the so-called "Camerín". In this space, after climbing a stalagmitic flowstone, Paleolithic people drew animal depictions visible from all points of the main central chamber in the interior of the cave.

The art begins on an inclined roof in an earlier chamber, easily reached from a sloping floor. This is the "Gallery of the Signs", with three abstract motifs painted in red, composed of various concave lines in the shape of three-pointed stars, and next to other simple, non-figurative marks, also in red. Most of the designs are, however, concentrated in the main chamber, especially on a wall nearly eight meters long and over two meters high on its left-hand side. The use of scaffolding or some other form of ladders must have been necessary, therefore, here and in other parts of the cave, as will be explained later. This central chamber is 25m long, 20m wide and 15m high, and

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2.3.2

La Lluera I Cave.

The caves of La Lluera are located in the village of San Juan de Priorio, just a few kilometers from Oviedo. They are therefore in the middle valley of the River Nalón, only five meters above the present-day river level. La Lluera I is a short cave, made up of two short passages with separate entrances, which unite inside the cave. La Lluera II is situated fifty meters upstream, and is an even smaller cave. The art at La Lluera was discovered in 1979 by the Polifemo caving club of Oviedo, and its study began immediately under J. Fortea Pérez, who concentrated on the cave art, and J.A. Rodríguez Asensio, who took charge of the archaeological dig at the site. These professors have published important reports about the site.

The excavation of the archaeological deposit at La Lluera I, in the eastern passage, revealed evidence of human occupation at different moments during the Solutrean, developed in the region between 21,000 and 16,500 BP approximately. Materials from the much later Azilian period were also found (between 11,500 and 9000 BP in the Cantabrian), and a bone taken from this layer was dated by radiocarbon to 10,280 +/- 230 BP.

The cave of La Lluera II also contained Solutrean material in a single level of human origin. It is likely that the parietal engravings found at both sites belong to this period, and to be more precise, their style seems to indicate a time in the early Solutrean.

Regarding cave art, La Lluera I is doubtlessly the clearest example of what Professor Fortea has called the second artistic type in the Nalón valley, including other nearby caves in the same area, such as Abrigo de la Viña, and caves of Molín, Adriano, Godulfo and Murciélagos, as well as in the westernmost parts of Cantabria (e.g. Cueva de **Chufín** on the River Nansa, and less clearly related, the caves of **Hornos de la Peña** and **Venta de la Perra**), which were discovered some time ago. The technical and stylistic similarities among the figures in all these sites are accentuated by the fact that they are all “exterior” assemblages. The work of engraving was carried out in them within daylight, or at most within semi-shade a little further inside the caves.

All the cave art at La Lluera I was engraved with simple, deep and quite clear lines, achieved by repeatedly cutting the same grooves. It has also been noticed that the groove’s profile was sometimes cut back on the inner part of the animal figure, and other times on the outer side, in a very early attempt to express the volume of some of the animals represented.

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2.3.3

Cave of Tito Bustillo.

Cueva de Tito Bustillo is one of the five or six most important caves with Paleolithic art in the Cantabrian region, both because of the number of figures decorating its walls and for their stylistic and technical quality, and of course, for the esthetic quality of many of the figures.

The cave is located in the limestone hill of Ardines, a small hill overlooking the present-day estuary of the River Sella from its left bank. Nevertheless, during the Upper Paleolithic the coastline was further away, six or seven kilometers to the north at the time of maximum marine regression. At that time, Ardines hill controlled the natural route entering the inland Sella valley, as well as a wide, open coastal strip, which allowed easy communication between the different Cantabrian valleys, as it united them along a major East-West axis.

Ardines hill has well developed karst features, which helps to explain the large number of sites it contains with remains of Paleolithic occupation, and occasionally with cave art in the depths of the caves. This density of sites is comparable with Monte Castillo, La Garma, or other locations in the Cantabrian region that were frequently used in the Upper Paleolithic. In this way, Cueva de Tito Bustillo connects by a vertical chimney with Cueva de La Lloseta, which has its own Paleolithic habitat and a few paintings, and it must once have connected with the entrance of La Cuevona through a blocked passage at the eastern end of the "Long Gallery". The same hill has the caves of Viesca, Pedroses and El Cierro, and slightly further away, Cova Rosa. The right-hand bank of the estuary has Cueva de San Antonio, which also has an archaeological deposit, in this case a single Paleolithic painting of a horse.

The cave we now know as Cueva de Tito Bustillo is in fact a long passage several hundred meters long, reached today through an artificial tunnel. The two original entrances are blocked by collapses of large boulders and other material. A narrower section, which forms an obstacle part way along the "Long Gallery", and certain differences in the parietal art along the passage, have meant that two large sectors are differentiated in Tito Bustillo: the eastern and the western. Each sector had its own entrance in the Upper Paleolithic, and have an archaeological deposit.

In the Paleolithic, the eastern sector was probably accessible from the site of La Cuevona, which has a deposit of Magdalenian age. The former entrance to the western sector also has important archaeological stratigraphy, dug by Professor A. Moure Romanillo. Although the chronological interpretation of this site was not without its problems and discussion, there are sufficient arguments to believe that the levels

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2.3.4

El Buxu Cave.

This cave is situated in a limestone outcrop, in a small valley occupied by the Entrepeñas stream. This is a tributary of the River Güeña, which in turn flows into the River Sella at Cangas de Onís, a town a few kilometers away from Cueva del Buxu.

The cave was discovered by chance in December 1916 by one Cesáreo Cardín, an habitual collaborator in the archaeological digs of Hugo Obermaier and Conde de la Vega del Sella. These had asked him to visit Cueva de Las Inxanas, located in the same hill as Cueva de Buxu. C. Cardín, mistaking El Buxu for that cave, entered and found its examples of parietal art. He immediately informed Obermaier and Vega del Sella of his discovery, and they began the study of its contents, publishing their results two years later.

The cave has been modified drastically since then, mainly due to the work carried out to accommodate tourist visits. These changes not only substantially altered the aspect of the cave but also destroyed much of the its archaeological deposit.

The entrance is formed by an outer vestibule six meters wide and five meters deep, facing south-west. The original rock-shelter, however, was much larger, as is shown by the presence of numerous blocks of limestone which have collapsed from the roof, and the remains of a former floor, partially eroded away. This former rock-shelter would have faced south, situated 300 meters above present-day sea level, and 25 meters above the valley floor. Most of the archaeological deposit must have been in this outer area, and as we have mentioned it was practically destroyed by the work carried out in the cave in the 1950s.

The right-hand wall of this rock-shelter has a very low entrance (now covered over) leading to passages without any apparent archaeological interest. At the back of the rock-shelter, a hole 45 centimeters wide led into the interior of the cave. Nowadays the cave is entered through a metal gate, installed next to the original entrance. When this was discovered, it was so low that it was necessary to crawl on the floor towards the inner part of the cave. In order to make the visits easier, a trench nearly one and a half meters deep was dug in the rock-shelter and the first part of the cave passage.

The first strictly scientific archaeological dig was carried out in 1970, by E. Olávarri. As the exterior deposit had been destroyed, this excavation was limited to several small trial digs in the first chamber of the cave. Despite being in only a marginal area of the deposit, this dig and the ones by M. Menéndez between 1986 and 1989 succeeded in finding

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2.3.5

El Pindal Cave.

Cueva de El Pindal is situated by the San Emeterio Headland, near the village of Pimiango, in the eastern limits of the Principality of Asturias. The cave entrance, facing east, has a magnificent view of cliffs hanging over the Cantabrian Sea. However, the Paleolithic artists had a very different view from this same place, as the coast line was then several kilometers further north, due to the marine regression which took place in the last glaciation.

The topography of Cueva de El Pindal is quite simple. The cave is basically a single large gallery, with no side-passages, 360m long. This tube was once a natural resurgence for a stream, and a small stream still flows in the lowest part of the cave in wet weather conditions.

The cave art was discovered by H. Alcalde del Río, one of the pioneers in the region, in April 1908, and so it was the first cave with Paleolithic art to be known in Asturias. The depictions are distributed in five parts of the cave. The first is nearly 120m from the entrance, on the left-hand wall of the passage. This is a horse's head, painted as an outline in red, and facing right. It shows certain conventions typical of Solutrean art (of between 21,000 and 16,500 BP), such as the lines indicating the limits of the mane.

Further inside the cave, about 240m from the entrance, we find a large panel nearly twenty meters long. This has about fifty figures, practically all the figures known in the cave, They are animals and abstract signs executed with a small number of technical procedures. The signs are the most homogeneous, as they are all painted in red. The animals are generally painted in the same color, but they sometimes include engraved lines, of great precision and quality in some cases. Some figures were represented solely with fine incised lines. Finally, recent research has discovered the existence of animal figures painted with yellow lines, which are now very faded, and occasionally situated below the red paintings and the engravings.

The signs take different forms. The simplest are groups of dots and short vertical lines which are usually associated with natural forms of the rock, such as hollows in the case of some groups of dots, or cornices and rock ledges, like the fingermarks situated over the figure of a hind. Several closed signs were painted on the far right of the panel. These are interpreted indistinctly as shield-shaped signs or vulvae, although morphologically related more with the latter because of their triangular shape. There is also a sign in the shape of a loop, consisting of a vertical line finishing at the top in a large ring, which

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2.3.6

La Loja Cave.

Cueva de La Loja is situated in the village of El Mazo, (Council of Peñamellera Baja) in the very east of Asturias, very near to the boundary with Cantabria. The cave entrance is just a few meters from the River Deva, on its left bank, in the natural gap between the coastal fringe, and the two inland valleys of the River Cares, coming from the south of Sierra del Cuera, and the River Deva, descending from the mountains of Picos de Europa. The cave is now only ten kilometers from the coast, but it must have been further away when the prehistoric engravings were executed, due to marine regression in the last glaciation.

As in the case of many caves with prehistoric artifacts, Cueva de La Loja was already known to the villagers when, on August 23rd 1908, H. Alcalde del Río, H. Breuil and L. Mengaud discovered the Paleolithic engravings and paintings. After the discovery, the parietal art was studied in a brief season of fieldwork, and the results were published three years later in Les cavernes de la region cantabrique. This included studies made in another sixteen Cantabrian caves with Paleolithic cave art, and was the first synthesis of Paleolithic Art in the North of Spain. Since then, Cueva de La Loja has been referred to in numerous books on history of art, and in works summarizing certain aspects of Paleolithic art, such as chronology, animal iconography or signs.

In recent decades a few details and comments have been added to the study carried out in 1911. One of these was published in 1978, by J. M. Gómez Tabanera, who revised the art and proposed new interpretations of two of the figures.

Cueva de La Loja is formed in Carboniferous limestone. The entrance faces east, and leads to an almost straight main passage, 98m long. It has just one side-passage, on the right-hand side of the main gallery, 28m from the entrance, and this is a narrow rift which returns to the surface. The last part of the cave has two siphons, on the left-hand side of the passage, 76m and 90m from the entrance. The cave floor used to be formed by a layer of clay. Recently this has been covered with gravel in order to accommodate tourist visits, but the original floor can still be seen in areas near the walls, and beneath low rock overhangs in the wall.

The natural conditions for habitation in the cave are not too good, and even today the cave sometimes acts as a resurgence. So it could not have been very suitable as a shelter for long periods in the Paleolithic. The rather limited archaeological digs that have been carried out seem to prove this. First, the material on the cave floor was gathered up by H. Alcalde del Río and J. Carballo at the start of the century. In 1929,

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2.4

The Central Cantabrian Valleys. Introduction to Paleolithic Cave Art in Cantabria.

1. The territory we now call Cantabria had a large human population during the Upper Paleolithic, due to its relatively good climate and the abundance of game, fish, seafood and plants available to those groups of hunter-gatherers. If we add the intense karstification of the area, it is easy to understand the reasons for large number of well-preserved archaeological deposits, and consequently of examples of mobiliary and rock art in the caves. The situation of the Autonomous Community of Cantabria, in the center of the long Cantabrian corridor, means that it provides a summary of many of the cultural characteristics of the region during the Upper Paleolithic, and even concentrates some of the changes in landscape which are found along the length of the Cantabrian region. In fact, in Cantabria we see the transition from the more orderly relief, with older lithology, in the West, to the predominance of Cretaceous limestone and more abrupt scenery in the East.

Cantabria holds some of the greatest names of European Paleolithic sites, such as Altamira, El Castillo, La Pasiega, El Pendo and La Garma, among many other less spectacular caves. After more than a century of research, nearly fifty caves with parietal art are known, while decorated objects have been recovered from nearly all the Upper Paleolithic deposits that have been dug. These human occupation sites include the caves of Castillo, Altamira, Hornos de la Peña, El Valle, El Pendo, Morín, Otero, Rascaño, Cualventi, La Pila and El Juyo. This sample must represent, however, an insignificant proportion of the works of art produced during such a long period, as many must have been destroyed or, perhaps, not yet discovered.

2. Cantabria played an important role in the beginnings of Paleolithic cave art research, thanks to prehistorians like M. Sanz de Sautuola, H. Breuil, H. Alcalde del Río, and others. The controversy over the age of the paintings in Altamira, which took place in the years between 1880, when Sautuola's publication proposed their Paleolithic chronology, and 1902, when this was generally accepted by prehistorians, was of extraordinary importance in the field of human sciences. In essence, the discussion was over the full artistic, intellectual and spiritual capacity of Paleolithic people (and also, indirectly, of materially primitive contemporary societies). It was difficult to accept and understand then that human groups, who lived on such a "primitive" material and technical level, could produce such excellent (and so well-preserved) paintings and engravings. At the end of the 19th Century, changes were analyzed from a too strict and simple evolutionary point of view, marking the apogee in the liberal belief in the human tendency to

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2.4.1

Cave of Chufín.

Cueva de Chufín, or Moro Chufín, is located on the banks of the River Lamasón, 100m from its confluence with the River Nansa. The nearest village is Riclones, in the municipal district of Rionansa (Cantabria).

The landscape around the cave is now very different from the one that existed when it was occupied by Paleolithic populations. Apart from the climatic and vegetation changes that have taken place everywhere since the glaciation, a reservoir was built here in the 1960s, and this has altered the natural environment, both outside and inside the cave. Palombera reservoir has flooded the confluence of the two rivers, and its average level is 30m above the original course of the rivers. In this way, the water has filled lower caves, some of which might have formed part of the Chufín cave system, and is very close to the Paleolithic entrance of the cave. Inside the cave, the passage descends until it reaches a flooded section in the form of a permanent lake, which is so near to Paleolithic paintings that it could affect their conservation.

Nowadays Cueva de Chufín can be reached, either by going down a steep hill from the village of Riclones, or by crossing the reservoir in a small boat, which takes you to a point only a few meters from the entrance.

The cave has long been known to the people of Riclones, and its name comes from a folk-tale describing how the Moor Chufín, a mythical character, had hidden treasure in the cave. This story, similar to many others told in different parts of the region, led to some especially credulous or optimistic people digging in the cave in search of the treasure, but instead partially destroying the archaeological deposits in the entrance.

In 1972, Don Manuel de Cos Borbolla, in the company of his sons and the reservoir guard, Don Primo González, noticed the paintings on the cave walls. He informed Martín Almagro Basch, who at that time was the director of the National Archaeological Museum in Madrid, of the discovery. Professor Almagro took charge of the study of the cave and found more paintings as well as a highly interesting panel of engravings in the entrance. His results were published quickly, the following year, and although it is now somewhat out of date, it remains the only full study of the art in the cave to have been published.

In 1974, Professors V. Cabrera Valdés and F. Bernaldo de Quirós began to dig the archaeological deposit in the entrance. In the course of their work they located more engravings and paintings in the

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2.4.2

Cave of Altamira.

This cave, without doubt the best known cave in the Cantabrian region, is situated about two and a half kilometers to the south-west of the town of Santillana del Mar. Its entrance is very near the top of a low limestone hill, just 161m above sea level, in a dominating position over the surrounding land. From this place, as its name indicates (Altamira could be translated as “high view”), there are wide panoramas over the regional territory, especially an area of karst to the west and the north, where the coastline is, about 5km away at the present time. Equally, towards the valley of the River Saja, hardly two kilometers to the south.

The archaeological site of Altamira, so stunning for the beauty of its paintings, is not, however, an isolated case. In a radius of ten kilometers around the cave there are several sites with Paleolithic art, even if they are much less spectacular. So, we can find the caves of Las Aguas and Linar to the west of Altamira, La Clotilde by the River Saja in the south, Cueva de Cudón in the east, across the River Saja after its confluence with the Besaya, and also Cueva de Sovilla up-river in the Besaya valley. Upper Paleolithic archaeological deposits, usually habitation sites, are even more common in the area, and include the caves of La Peña Caranceja, Cualventi, Gurugú and La Pila.

A hundred and twenty years after their discovery, the polychrome bison still stand out for their esthetic qualities among all the known decorated caves in the north of Spain, and are doubtlessly one of the most astonishing creations in western prehistory. The remainder of the cave’s archaeological register is, however, rather more conventional, and relatively similar to other decorated sites and archaeological deposits in the region. The walls and roofs inside Altamira, as well as the famous polychrome animals, have numerous engravings, black paintings, and some in red, yellow and violet, of animals, anthropomorphic beings, abstract signs and non-figurative motifs. Equally, a habitation deposit of Solutrean and early Magdalenian age has been studied in the entrance of the cave, within the daylight area. Human occupations became especially frequent between approximately 18,500 and 14,000 BP, and this lapse of time may correspond to the production of all, or nearly all, the art inside the cave. As will be explained later, scientists are not unanimous on this point.

It seems that the cave was known to the local people of Santillana and Vispieres since 1868. Don Marcelino Sanz de Sautuola, a restless scholar, naturalist and archaeologist, studied it between 1875 and 1879, and he discovered and correctly interpreted the Paleolithic deposit in the entrance. Here he found

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2.4.3

Hornos de la Peña Cave.

Cueva de Hornos de la Peña is situated in the hill known as "La Peña", near the village of Tarriba, in the municipal district of San Felices de Buelna. The entrance is in the small, narrow valley of the River Tejas, 60m above the river-course, but this, only a few kilometers to the north, joins the wide, open plain of the Buelna valley.

The cave art in Hornos de la Peña was discovered in 1903 by the great explorer of the archaeology of the region Hermilio Alcalde del Río. It was, therefore, one of the first caves with parietal art to be known in Europe. Three years later, this researcher included the cave in a small book together with the studies he had made of other Paleolithic art sites: Altamira, El Castillo and Covalanas. In 1911 it formed part of a major publication on Cantabrian cave art: Les cavernes de la region Cantabrique, written by the discoverer of Hornos de la Peña in collaboration with the prehistorians H. Breuil and L. Sierra. This 1911 publication remains the main reference to the parietal art in the cave. During those early years of the century, in 1909 and 1910 to be precise, archaeological digs were carried out in the vestibule of Hornos. The scientists of the Institut de Paleontologie Humaine at Paris documented an important stratigraphic sequence, with Mousterian, Aurignacian, Solutrean, and Magdalenian industry, and also Neolithic artifacts. Among the objects recovered was a piece of mobiliary art: a fragment of a horse's frontal bone, decorated with the rear-quarters of precisely a horse, and this enabled stylistic and chronological correlations to be made with the art on the walls inside the cave.

A few brief publications that have appeared in the last two decades have added new figures to the parietal inventory of Hornos de la Peña. But they have also expressed doubts about some of the interpretations made by the first researchers, and have shown how certain engraved animal figures have been badly deteriorated by human action. This has happened at different times, but particularly during the Spanish Civil War from 1936 to 1939, when the cave was used as a shelter. No complete modern revision of the cave art has been published.

The cave has a large arched entrance facing south, seven meters wide and four meters high. This is now closed by a stone wall and an iron gate, installed in order to protect the art inside the cave. The entrance leads into a vestibule (or Chamber A), 16m long, lit by natural light, where the oldest art in the cave was produced. The left-hand wall has a beautiful figure of a horse, executed with deep incisions, although the forequarters and chest of the horse are missing. Non-figurative lines can be seen next to this equid. The

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2.4.4

El Castillo Cave.

This cave takes its name from the hill where it is situated, overlooking the town of Puente Viesgo, in the center of Cantabria. In 1903, an important archaeological deposit was located in the entrance vestibule of the cave, and numerous paintings and engravings were discovered in its interior. Hermilio Alcalde del Río, a local teacher, was the discoverer, and he also undertook the first studies in the site. Later, at different times during the century, other caves were found in the same hill, whose entrances had been blocked and hidden by collapses. These are the caves, each with an archaeological deposit and cave art, of La Pasiega, Las Chimeneas and Las Monedas; as well as La Flecha, which only had an archaeological deposit in its entrance.

In the Upper Paleolithic, the large outer rock-shelter at El Castillo, 190m above sea level and facing east-northeast, was occupied much more often than the other caves which were then open. It was thus the main habitat in the hill and in all the immediate geographical area. These other smaller caves, despite being in the same intensely karstified limestone hill, seem to be mere satellites of the great habitat and decorative complex centered on El Castillo. They were occupied more occasionally as camps, for meetings and diverse activities, some of which would have involved the production of cave art.

After the first studies in the cave, the vestibule of Castillo was excavated by the Institut de Paleontologie Humaine at Paris, directed by H. Obermaier and H. Breuil, between 1910 and 1914. The cave art was studied at the same time, with the collaboration of Alcalde del Río and several foreign archaeologists. This work played a vital role in the definition of the Paleolithic cultural sequence in the Cantabrian region, due both to the good state of conservation of the archaeological deposit and to its great thickness. Layers corresponding to nearly all the periods of the Paleolithic were dug, reaching over 20m in depth. Furthermore, the documentation of the cave art inside the cave, where there are many complex panels with superimpositions of figures in different techniques and styles, was also important for the model of the chronology of cave art elaborated by Henri Breuil. This model, based on a succession of technical procedures and stylistic changes throughout the Upper Paleolithic, was the main one used in chronological studies until 1965, when Leroi-Gourhan published his major work. Nowadays, the panels of figures in El Castillo are still proof of the distribution of many assemblages of cave art through millennia of decoration, despite the interpretations of some structuralist prehistorians, who tend to consider that all these complex panels are synchronic, or that the superimpositions are a form of composition.

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2.4.5

Las Chimeneas Cave.

Cueva de Las Chimeneas is situated in the hill Monte Castillo, in the town of Puente Viesgo in Cantabria. Together with its neighboring caves of El Castillo, La Flecha, La Pasiega and Las Monedas, it forms part of the most amazing Paleolithic site in the Iberian Peninsula, where a significant part of the cave art known in Spain is concentrated.

Las Chimeneas was discovered in the middle of the 20th Century, long after the discovery of another two important caves with Paleolithic art in the same hill: El Castillo in 1903 and La Pasiega in 1911. In 1950, construction work was under way to make it easier for tourists to visit these two caves, and this involved cutting a track round the side of the hill, from Cueva de El Castillo to La Pasiega. During this work two new caves were found, Las Monedas and La Flecha. Shortly after, in 1953, another cave was discovered, although its exploration revealed no evidence that it had ever been occupied during the Paleolithic. Then, some pits in the floor were descended to a lower passage, which gave positive and surprising results; the walls of this passage had been decorated with paintings and engravings, of animals and abstract signs, in the Upper Paleolithic. The high level passage had so many of these vertical pits that the cave was known as Cueva de Las Chimeneas (Cave of the Chimneys).

Although the archaeological deposit in Las Chimeneas has been examined twice, it is still not well known. After the cave was discovered, the few objects that were collected from the cave floor gave little chronological information. They included the jawbone of a deer, and flint tools consisting of three blades, a denticulate, and two endscrapers. In 1971 digs were carried out in the original entrance and in Chamber B, next to the panel of quadrangular signs, but they were both sterile. Despite these results, it seems likely that a Paleolithic deposit exists in the original vestibule in the Lower Passage, which is now covered by collapsed blocks and by flowstone and stalagmites, making any excavation extremely difficult.

The present layout of Cueva de Las Chimeneas is very different from how it appeared in the Paleolithic. It is now entered via the higher passage, which connects with the lower passage down a pit. This pit, which was descended during the exploration, was enlarged for tourist visits, and is now a long, winding stone staircase. In the Paleolithic, however, the Lower Passage was entered directly through an entrance, now blocked by a collapse that must have happened in the Pleistocene. The vestibule reached through this entrance is now filled by a forest of stalactites and stalagmites, so that it is now very difficult to move

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2.4.6

La Pasiega Cave.

The cave system of La Pasiega is situated on the steep hillside of Monte Castillo, half way between the decorated caves of Las Chimeneas and Las Monedas, and therefore also very near to Cueva de El Castillo. It was discovered in 1911 by the German archaeologists Hugo Obermaier and Paul Wernet, who were then taking part in the major excavations in the vestibule at El Castillo. The cave art inside La Pasiega, which turned out to be one of the most important decorated sites in the Cantabrian region, was then studied by the team of H. Breuil, H. Obermaier and H. Alcalde del Río, and magnificently published in 1913.

Rather than as a simple cave, it is better to describe La Pasiega as a cave system, not too big but very complex. It had several entrances during the Upper Paleolithic, and as many as three may have been used, which connected in a series of chambers and passages, sometimes on different levels. The building work done for tourist visits mainly in the 1950s and 60s, have complicated the topography even further by blocking up some passages with rubble, building interior walls, or by the successive opening up of new entrances at different times.

Four large general areas of the cave have been distinguished: Galleries A, B and C, and the Zone D which includes the intermediate sectors between the western area (Gallery C) and the eastern parts (Galleries B and A). This means that, from an iconographic point of view, during the Upper Paleolithic two or perhaps three different groups of art may have functioned independently. These could have been the eastern part (Galleries B, A and the eastern sectors of Zone D), the western (Gallery C), and a central group (the western sectors of Zone D) which could have been independent from the others, or have functioned as the last part of Gallery C. Solutrean industry and the usual remains of Paleolithic human occupation were found in the original entrances of Galleries C and B. A layer probably corresponding to the early Magdalenian was also found in the second of these entrances, during the digs carried out by J. Carballo, and by J. González Echegaray in 1951 and 1952 when the cave was being prepared for tourist visits. These two entrances to Galleries B and C were certainly the main ones, and perhaps the only ones, in the Upper Paleolithic.

The following summary of the available evidence, according to its position in the cave, includes the results of the project documenting the cave which has recently been developed by the Universities of Cantabria and Alcalá de Henares.

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2.4.7

Las Monedas Cave.

Cueva de Las Monedas is located on the southwest-facing hillside of Monte Castillo, at 187m above sea level. Consequently, it is very near the other caves in the same hill: El Castillo, Las Chimeneas, La Flecha and La Pasiega.

Some time after the important research carried out in the caves of El Castillo and La Pasiega at the start of the century, new discoveries were made in the 1950s, at the same time as a track was cut round the side of the hill to La Pasiega. Cueva de Las Monedas was discovered in April 1952, when the land was being cleared for the plantation of eucalyptus trees. At first, the cave was called "Cueva de Los Osos" (Cave of the Bears) because of all the skeletal remains of this animal that were found on the cave floor. But as a result of the discovery of twenty-three coins, from the reign of Isabel and Ferdinand, the name was changed to "Cueva de Las Monedas" (Cave of the Coins), and it is still referred to in that way in scientific publications. This was not going to be the last discovery of cave art in Monte Castillo, as one year later, Cueva de Las Chimeneas was found, with another important group of Paleolithic paintings and engravings.

In the months following the discovery of Las Monedas, several prehistorians working in the region, namely J. Carballo, J. González Echegaray, and E. Ripoll, published the news of the find separately. Nevertheless, the only complete study of the parietal art in the cave was not published until 1972, by Ripoll. He had been in charge of the documentation of the art in 1952, when copies were made of the paintings and small digs were carried out in different parts of the cave. At the same time, the cave was prepared for tourist visits.

The first dig was in the passage situated to the north-east of the vestibule. Two levels were encountered with abundant remains of bear, and also of deer. Two trenches were dug in the vestibule, where again two levels were found. The first level contained bones, a few fragments of very coarse pottery, a bronze awl, and half of a second awl. The lower level only had very small bone fragments.

The most interesting finds were made during the work preparing the cave for tourism. Another bronze awl was found, a bronze ax, and three basalt axes. However, this work was performed without any kind of archaeological plan or support, and almost certainly destroyed an important Bronze Age deposit. In other parts of the cave a few quartzite flakes were found, but none of the different kinds of digs ever found a level with Upper Paleolithic industry.

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2.4.8

Cave of Santián.

Cueva de Santián is located near the village of Velo, in the municipal district of Piélagos. Its geographical location shows certain characteristics which are repeated in other sites corresponding to the late Würm. The lower course of the River Pas flows quite close to the cave, about 1km away, and the estuary and present coast are just 5km away. The distance separating Cueva de Santián from the Bay of Santander is also relatively short, about 8km. However, during the Würm glaciation, sea level was about 100m lower than today, and the cave would have been 13km from the coastline then. Although the position of Santián, on the ridge between the valleys of the Pas and the Miera, was very good from the strategic point of view, the direction of the entrance, which faces north-east, and its narrowness and humidity, could not have encouraged its prolonged use as a habitat, especially in a region that is so rich in open, available caves.

The first news we have of Cueva de Santián dates from 1888, when the minutes of a meeting of the Comisión de Monumentos on May 14th reports the information given by Don Manuel Santillán about the discovery of a cave at a place called Peñas Negras in Piélagos. He does not, however, make any reference to the existence of paintings in the cave. The recent death of Don Marcelino Sanz de Sautuola, the discoverer of the paintings in Altamira, also reported at the same meeting, meant that the Comisión could not attend to Don Manuel Santillán's request that a study should be made of the cave. Nevertheless, this did not stop the discoverer preparing the cave to make it easier for visitors to see it, and gating the entrance with a wooden door.

In October 1905, the cave was "rediscovered" by Hermilio Alcalde del Río, who replaced the old, deteriorated, wooden door with a metal one, and also who mentioned for the first time that the cave contained Paleolithic art. His discovery was followed by the work documenting the depictions, which he published together with H. Breuil and L. Sierra six years later in Les Cavernes de la region Cantabrique.

No systematic study was ever made of the archaeological stratigraphy that might have existed in Cueva de Santián. The deposit was altered greatly by the different building work done in the cave for tourist visits at the end of the 19th Century and again in 1953. The known archaeological material from the cave is limited to a number of perforated sea shells, collected in the "Chamber of the Horse" by H. Alcalde del Río, and another small collection of material, which has hardly been studied, as well as a human skull, obtained when the entrance was widened in the middle of the century.

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2.4.9

El Pendo Cave.

Situated in the village of Escobedo de Camargo, near the present-day Bay of Santander, Cueva del Pendo is one of the classic Upper Paleolithic sites in the Cantabrian region. Its impressive archaeological deposit was dug by Marcelino Sanz de Sautuola at the end of the 19th Century, and archaeological digs have succeeded since then until the present time. Some of the more important digs were carried out by Jesús Carballo in the 1920s and 30s, when a magnificent collection of decorated bone and antler artifacts were recovered. These were of Magdalenian age, above all of the late Magdalenian, between 14,000 and 11,500 BP. Other important digs were carried out in the 1950s, and published some time later by J. González Echegaray.

These and other excavations have uncovered a large deposit in the entrance area of the cave's huge main chamber, containing remains of human occupation in the Middle Paleolithic and of almost all the periods of the Upper Paleolithic and Epipaleolithic. The evidence of prehistoric activity is distributed through a long stratigraphic sequence with more than twenty layers, only comparable in the Cantabrian region with the deposit in Cueva del Castillo. However, the most interesting areas in the deposit are partly covered by large limestone blocks that have collapsed from the roof at the entrance of the cave. As a result, the archaeological strata is only accessible at the base of the large boulder slope which descends from the present entrance to the center of the huge chamber, and logically, this is where most of the digs have been focused.

In recent years, R. Montes Barquín and collaborators have re-worked the stratigraphic sections cut by the first excavators in order to take samples for environmental and chronological analysis from the lower levels of the sequence. It was precisely during this work in Summer 1997, when unexpectedly they found an important frieze of paintings, doubtlessly Paleolithic in style. The paintings had previously gone unnoticed because the red pigment was very faint, and partly covered by dust and fungus. Despite their poor conservation, the paintings give a new dimension to the small group of figures which had been known in the cave since the early years of the century, and which consisted of only a couple of engravings, situated in a narrow passage at the end of the cave. These two engravings are also badly deteriorated now, and are hardly recognizable; they represent one or perhaps two rather indeterminate birds (possibly either a great auk or an anseriform). Whatever the case, they are very unusual animals in the cave art of the Cantabrian region.

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2.4.10

La Haza Cave.

Cueva de La Haza is located at the foot of the hill Monte Pando, 160m above sea level, on the right-hand bank of the River Calera, very near the Cantabrian town of Ramales de la Victoria. This hill has numerous caves, especially Covalanas, with an important group of Paleolithic paintings, and El Mirón, where an archaeological dig is examining levels that go from at least the Mousterian to the Bronze Age, in a cave which must have been the main habitation site in the area during the Upper Paleolithic.

The caves of Monte Pando are in a strategic geographical position. Apart from being a place with plentiful hunting and fishing, this area controls a natural gap for communication between the coastal strip and the high summer pastures, and beyond those, the Meseta. This route must have often been traveled, at least as far as the glaciers allowed, and not only by the Paleolithic human populations, but also by herds of ungulates. Cueva de La Haza is positioned precisely next to an old road which, in historical times, was the traditional way of communication between the Cantabrian coast and the Meseta in the south. During the Upper Paleolithic, it could have been used in the same way, at least in more temperate phases, uniting the Paleolithic sites in the Asón valley with a number of caves in the province of Burgos, like La Palomera in the Ojo Güareña cave system, Penches and even Atapuerca, all of which have Paleolithic cave art.

Cueva de La Haza was discovered by Hermilio Alcalde del Río and Lorenzo Sierra on September 13th 1903, two days after the same explorers had found Cueva de Covalanas. Despite the fact that they both took part in the discovery, they did not collaborate in the first fieldwork documenting its art. Thus, on January 4th 1904, Lorenzo Sierra visited the cave, apparently alone, in order to make the first copies of the paintings. In turn, H. Alcalde del Río published a small book in 1906, with some of the caves then known to have art, including Covalanas. However, he surprisingly only mentioned the existence of La Haza, without even giving its name, and did not include further details of the cave in his book because of “the lack of a previous study of the same”.

It was not until 1911 when both discoverers, together with abbé H. Breuil, published the study of the cave art in La Haza, in their book Les cavernes de la region Cantabrique. Since this time, the cave has formed part of the catalogue of caves with art in the Cantabrian region. Eighty years later, in 1991, a team of researchers from the University of Cantabria published a new study of the cave and its neighbor Covalanas, adding new information and bringing its study up to date.

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2.4.11

Cave of Covalanas.

Covalanas is situated on the N.E. side of the hill known as Monte Haza or Pando, at 320 above sea level, overlooking the steep-sided inland valley of a tributary of the River Asón. It is, without doubt, the most interesting of the caves with Paleolithic cave art in Ramales de la Victoria; a group which also includes the caves of La Cullalvera, La Haza and El Mirón. These four caves can be added to other caves in the near vicinity, with which they sometimes show a close artistic and chronological relationship, namely Morro, Pondra, Arco B-C, Arco A, Sotarriza and Venta de la Perra. This second cluster of sites is found in the gorge of the River Carranza, another tributary of the Asón, and all except the last one, which lies within the province of Vizcaya, belong to the same municipal district of Ramales, in Cantabria.

This great accumulation of sites shows how important the inland valleys of the region were in the lives of the Upper Paleolithic hunters, complementary to their activities and resources in the rich coastal strip. It must have been important for those human populations to control the natural gaps from the small valley around Ramales to the valleys further inland and the high summer pastures. In fact, the density of cave art sites and depictions in the Ramales area is one of the highest in the Cantabrian region, together with the caves of Puente Viesgo, Llanes, or the middle course of the Nalón, and the Cares valley.

The art in Cueva de Covalanas was discovered in 1903 by H. Alcalde del Río and L. Sierra, who, together with Marcelino Sanz de Sautuola, were the two main local pioneers in the exploration and discovery of cave art. Some years later, in 1911, the site was published by the two finders and H. Breuil, as one of a select group of caves located and studied in the early years of the century. Later, in the second half of the century, interesting new information has been supplied by A. Leroi-Gourhan, regarding the chronology of the art, and J. M. Apellániz, in technical and stylistic aspects, and more recently a full revision of the site has been published by a team from the University of Cantabria.

The entrance area of the cave was dug out in the middle of the century, in a rather unfortunate incident. The aim was simply to lower the floor level and make it easier for tourists to reach the paintings at the end of the cave, and as a result, no special care was taken in the work, nor were any results ever published. Apparently faunal and industrial remains were found, and although these were limited and gave little information about their chronology, they are all we know of the small archaeological deposit which must have existed at the entrance.

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2.4.12

Cave of Pondra.

This cave is located on the northern side of the gorge formed by the River Carranza, a tributary of the Asón, very near the boundary between the Autonomous Community of Cantabria and the Basque Country. The same gorge has other caves with Paleolithic cave art: from east to west they are, Venta de la Perra, Arco A. Arco B-C and El Morro del Horidillo, as well as Cueva de Sotarriza on the opposite side of the gorge. Furthermore, several caves are known, like Cuevas del Polvorín and Chiquita, which only have human occupation deposits, with lithic and bone assemblages and faunal remains, corresponding to the Middle and Upper Paleolithic. All these sites are found in a stretch of the gorge little more than one kilometer long, coinciding with its narrowest part, between the hills of Pico del Carlista to the north and Peña de Rebuño in the south.

This cluster of habitation and cave art sites, despite each one being relatively small, is probably a result of the existence of numerous caves suitable for use by groups of Paleolithic hunters, and the good living conditions they have, especially the ones whose entrances face south. Furthermore, the accumulation of sites is due to the advantages of their position for bands of Paleolithic hunters in order to control the movements of herds of ungulates, as they went from the lower valley of the Asón to the high summer pastures, on the wide slopes of the Carranza Valley. The hunting of caprids must have been possible all year round on the steep sides of the gorge.

Cueva de Pondra, and the caves of Arco and Morro, were discovered recently by members of C.A.E.A.P., an archaeological society based in Cantabria. They are still being studied by specialists from the University of Cantabria.

Pondra has a large vestibule with two entrances, facing west and south. Between the two, a wide space has excellent conditions for a habitat, and in recent times it was used as a shelter for the flocks of sheep and goats from nearby farms.

The cave art begins at the back of the vestibule, in the zone of semi-darkness. The left-hand wall of the main passage has a large panel almost nine meters long, with abundant red lines and marks, which are now very faded and partly covered by calcite. Nevertheless, as many as seven different groupings of remains of pigment have been distinguished on this wall, and these can be considered as a “minimum number of depictions”, all that is left of a composition now almost completely disappeared. The only figures that can be recognized are a few red dotted lines, sometimes in an almost circular shape.

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2.5

The End of the Cantabrian Corridor. Paleolithic Art assemblages in the Basque Country.

1. The coast of the Basque Country, at the eastern end of the Cantabrian region, had certain special characteristics during the Upper Paleolithic (c. 38,000 - 11,000 BP), which need to be described, but it must be understood that they are still within the overall geographical, ecological and cultural unity shown throughout this natural corridor in the north of the Iberian Peninsula: the Cantabrian region, between the high mountains and the sea. One peculiarity is that the geological structure and the lithology of the Basque Country is somewhat different. In contrast with the western part of the Cantabrian region, in the Basque Country the predominant rocks are Mesozoic, with younger and softer limestone types. After the last major uplift of landmasses in the Tertiary period, the result was a very high-energy relief, divided and disarticulated. The landscape is even more broken on the coast, where the coastal plains are much narrower than in the center and west of the Cantabrian, and this is particularly true in Guipúzcoa, the province in the east of the Basque Country.

These differences in relief are linked with variations in the relative frequency of some of the ungulate species which were fundamental for Paleolithic subsistence. Consequently, caprids, both chamois and ibex, were hunted and consumed more often in the Basque Country sites. Especially in Guipúzcoa we find Upper Paleolithic habitats with high frequencies of caprid hunting very near to the present day coast line, such as Cueva de Ermittia and certain layers in Cueva de Ekain. They are of course also found in inland areas, in the caves of Erralla or Aitzbitarte, or Silibranka and Bolinkoba in the province of Vizcaya. In contrast, in the western part of the Cantabrian region high frequencies of ibex and chamois are only found in sites in the steep, rocky valleys of the interior, whereas red deer, horse and bovines are more important in sites in the coastal strip, with a more open, undulating landscape. This difference in the fauna documented in habitation sites is reflected to a certain extent, depending on the existence of other factors, in the themes depicted in mobiliary and cave art.

In the same way, lithological differences along the Cantabrian corridor are also the cause for variations in the prehistoric lithic assemblages. Flint is most common in the east, where it is associated with Cretaceous limestone, in comparison with the quartzite linked to the Paleozoic rocks in the west. This allowed a greater choice in the quality of the raw material, and higher frequencies of blade tools in the lithic assemblages of all the Upper Paleolithic periods in the Basque Country. Indirectly, this explains the higher frequencies of those tools especially associated with blades, such as burins, truncated pieces or straight backed points.

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2.5.1

Venta de la Perra Cave.

Cueva de Venta de la Perra is situated in the gorge of the River Carranza, opposite the village of the same name, and right on the boundary between the provinces of Cantabria and Vizcaya. The wide Carranza valley joins the main valley of the River Asón through a narrow gap, containing in the distance of a kilometer, numerous Paleolithic sites located in the steep limestone slopes of both sides of the valley. The northern slope, where Venta de la Perra is located, has the greater number of sites, as the cave entrances face south and are more suitable for habitation. This is the explanation for the high proportion of sites with archaeological deposits or cave art, especially the caves of Arco A, Arco B-C and Pondra.

The engravings in Venta de la Perra were discovered in 1904 by Lorenzo Sierra, making this the first cave with Paleolithic art to be found in the Basque Country. In his first visit, as well as finding a few flint artifacts, he also discovered the engraving of a bear. He returned in 1906, accompanied by the prehistorians Henri Breuil and Hermilio Alcalde del Río, and they saw more figures then. The three of them published their first study of the cave in their book Les cavernes de la region Cantabrique in 1911. Afterwards, other visitors have seen further examples of figures that had previously gone unnoticed. In this way, another bison was located on the left-hand wall in 1950, and in 1981 J. M. Apellániz added a group of lines to the catalogue of art in the cave. At the same time, several studies have been made of the cave art in Venta de la Perra, especially by A. Beltrán, and recently, by X. Gorrochategui and R. Ruiz Idarraga.

The entrance of the cave can easily be seen from the village of Venta de la Perra. It is within an impressive rock-shelter, which leads to the first passage, where the engravings are found. The cave does not end here; rather it divides into two passages, one of which is nearly 200 meters long. However, the Paleolithic artists chose the first part of the cave for their depictions, which are therefore in the daylight zone, and above the habitation space.

The archaeological deposit helped to situate the cave art in early phases of the Upper Paleolithic. The only dig was performed in 1931 by Telesforo Aranzadi and José Miguel de Barandiaran. At the base of the deposit they found levels with artifacts of Mousterian aspect, and of the early Upper Paleolithic, which were covered by a post-Paleolithic layer containing pottery. In the Paleolithic, the cave was used mainly for the processing of ibex hunted on the steep slopes around the cave, and the remains of large bovines are much rarer, despite these being the principal theme depicted on the walls of the cave.

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2.5.2

Cave of Arenaza.

Cueva de Arenaza is situated on the side of the hill Pico de la Arena, 400m away from the village of San Pedro de Galdames, in Vizcaya. The geographical position of the cave, and the natural conditions of its surroundings, would have been highly suitable for settlements during long periods of time in the Upper Paleolithic. Its low altitude above sea level, about 150m, and its south-facing entrance, must have helped to ameliorate the harsh climatic conditions of the glaciations. At the same time, a steady supply of food by hunting and gathering was practically guaranteed during the Paleolithic. The cave is located near two areas where hunting gregarious animals must have been especially easy: the cliffs of the hills Monte Ganerán and Pico de la Cruz, in an area where the valley is narrower, near the present-day village of Garay. The River Galdames occupies the valley floor, about 80m below the cave, and this was doubtlessly fished by the prehistoric populations.

Cueva de Arenaza was known and often visited by the villagers of Galdames, as is shown by the names written on the walls, with dates between 1935 and 1965. It was also used to store the explosives for the mines that are in the vicinity of the cave, and it was therefore also known as Cueva del Polvorín (Cave of the Explosives Store). Nevertheless, the cave paintings were not found until 1973, when they were discovered by several members of the Gorrochategui family.

Arenaza is part of a cave system which is developed under Pico de la Arena, and which is connected with other caves. Its entrance is formed by a large arch divided in two by a column. It now looks very different from how it did in the Paleolithic, among other reasons, because a stone slope was built in its western half to slide down the wagons coming from the mines, and which were unloaded at the foot of the hill.

By crossing the arch of the entrance, we reach a large vestibule about 20m long and 10m wide, which becomes narrower towards the back. Archaeological digs have been carried out here since 1972, first under J. M. Apellániz and J. Altuna, and more recently by J. M. Fernández Lombrera. During this time, a large area of about thirty square meters has been dug against the eastern wall, and layers have been discovered that go from the late-final Magdalenian to the Roman period. The size and divisions of the sequence have made Arenaza one of the most important deposits in the region to study different processes of cultural and economic change, whether it is the study of the end of the Upper Paleolithic and the start of the Azilian period, or the transition from the Mesolithic societies which are well represented in the deposit to the first Neolithic in the region: a period with little known stratigraphy in the Cantabrian. In

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2.5.3

Cave of Santimamiñe.

Cueva de Santimamiñe is located in the hill of Ereñusarre, very near the village of Kortezubi, four kilometers from the town of Guernica, in Vizcaya. The cave's name comes from a nearby chapel of Santimamiñe, which in the Basque language means San Mamés, or St Amandus, to whom the chapel is dedicated. Equally, the name of the hill comes from the Basque word ereñotz, which means bay-tree, and which refers to the abundance of this plant.

The cave is situated in an area of great natural beauty, in the heart of Urdaibai, an area of 220 square kilometers which was declared a "Reserve of the Biosphere" by UNESCO in 1984. It is crossed by the estuary of Guernica, and also encloses the coastline around the mouth of the River Oka. Numerous species of birds use this space as a resting-place during their migrations from north Europe to Africa. Although the environmental conditions, and the position of the coastline, must have been very different in the Upper Paleolithic, the hunter-gatherers who camped at Santimamiñe would have had easy access to areas of estuary and shore that were rich in animal species, and where they would have had all the facilities they needed for their hunting, fishing or gathering activities. The excavations carried out in the archaeological deposit have thus revealed abundant remains of their presence.

The cave was already well-known by the local inhabitants when in January 1916 a group of young men, among whom was José F. Bengoechea, saw the first of the paintings. Their discovery reached the attention of the great musician and composer Jesús Guridi, who visited the cave a few months later. As he saw the importance of the find, he informed the authorities of the Province of Vizcaya. In the following months more important visitors came to see the site, including the French prehistorian Henri Breuil. He was followed by F. de la Quadra Salcedo and A. Alcalá-Galiano, members of the Comisión de Monumentos de Vizcaya, who produced the first copies of the prehistoric paintings.

The excavations of the deposit, and the full documentation of the cave art, began in 1918, by a team led by Telesforo de Aranzadi, José Miguel de Barandiaran and Enrique Eguren, true pioneers of scientific prehistoric research in the Basque Country. The site was dug in a number of seasons between 1918 and 1926, and in a second phase, between 1960 and 1962. These digs uncovered stratigraphy with levels going from the Aurignacian to the Roman period, one of the most important deposits in the whole of the Cantabrian region. The same archaeologists also carried out the basic study of the cave art in Santimamiñe, although a few new figures

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2.5.4

Cave of Ekain.

Cueva de Ekain contains one of the most interesting groups of cave art on the Cantabrian coast, not so much for the number of figures it has, but above all for the exceptional artistic quality of many of its paintings, and the good state of conservation of the art and its surroundings inside the cave. It is located on the eastern slopes of Ekain hill, very close to the village of Cestona, belonging to the municipality of Deba, in Guipúzcoa. The Goltzibar and Belioso brooks surround the hill, and they unite a few meters away from the cave, and form the Sastarrain rivulet, which flows into the River Urola at Cestona.

The cave is not very far from the present coast line, just seven kilometers away in a straight line. However, at the time when the cave was decorated, the accumulation of ice in the immense glaciers that existed then, resulted in a lowering of sea level. In the Cantabrian region, this meant that the coastline receded over seven kilometers to the north during the coldest periods. In any case, the cave's archaeological deposit has relatively little evidence of shell fishing. Cueva de Ekain is not an isolated site; in its surrounding area other significant Upper Paleolithic deposits are known, with particularly important occupations of the Magdalenian period (16,500 to 11,500 BP approximately). They are in the caves of Ermittia, Erralla, Urtiaga and Altxerri, and the last of these also has an important group of parietal engravings and paintings. They were used occasionally by the human populations who lived in this eastern part of the region, and whose subsistence was based on hunting red deer and ibex, and sometimes other species of ungulates, the fishing of salmon and trout in the rivers, and gathering vegetables, or shell-fish and other animals on the shore.

Cueva de Ekain was known to the people in the village of Sastarrain, when A. Albizuru and R. Rezabal discovered the cave art in June 1969. It was a small cave only thirteen meters long and barely two meters wide. To the right of the entrance, some boulders blocked a small opening, and when they pulled these boulders out, they were able to enter a new, larger passage, and find the splendid panel full of paintings of horses. They immediately informed José Miguel de Barandiaran of their discovery, and this well-known Basque archaeologist and ethnologist visited the cave the following day.

The Paleolithic cave paintings were soon studied and published by J. M. de Barandiaran, together with J. Altuna. Later, in 1978, a second, larger and more complete study was carried out by J. Altuna and J. M. Apellániz. Besides, a magnificent study was made of

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2.6

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