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THE MAGDALENIAN SITE OF EL JUYO (CANTABRIA, SPAIN):  
ARTISTIC DOCUMENTS IN CONTEXT

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The cave of El Juyo is situated at an elevation of some 55 meters above sea level, at the bottom of a hollow on the north-western flank of a hill in the village of Igollo, some 8 km SW of the city of Santander, capital of the autonomous region of Cantabria, Spain. Discovered in the 1950s, the cave proved to contain more than 3.5 meters of stratified archeological deposits, which had been sealed off from the outer world almost hermetically following the collapse of the cave entry some 14,000 years ago.

Excavations, conducted by Prof. Paul Janssens and Echegaray between 1955 and 1957 (Janssens & Gonzalez Echegaray, 1958), showed that aside from thin layers accumulated during sporadic penetration of the cave by individuals or small groups during the Bronze Age and "Late Roman" periods, virtually all the stratigraphic sequence consisted of deposits of late Upper Paleolithic age, assignable to the industrial facies now called Cantabrian Earlier Magdalenian, with typological analogies to the Magdalenian III in France. The Magdalenian deposits were themselves found sealed beneath a solid overlying flowstone, over much of the floor of the cave vestibule. Consequently, later penetration of the cave scarcely disturbed the Magdalenian horizons.

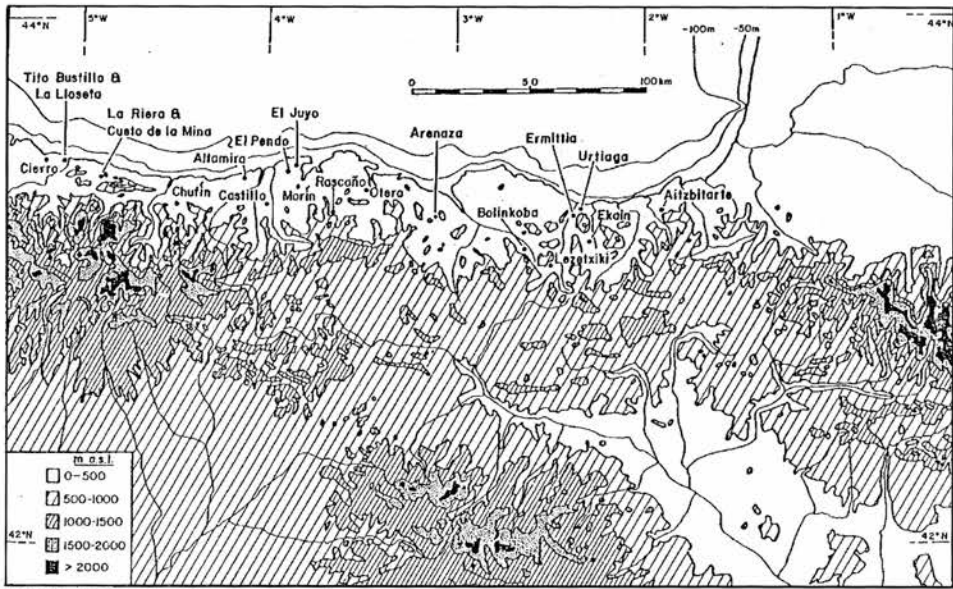
Those first excavations revealed important evidence about the nature of Earlier Magdalenian adaptations in the Cantabrian region. One Magdalenian horizon proved to be a true shell midden, attesting the intensive exploitation of the coastal limpet population (*Patella vulgata*); this and other levels suggested at least occasional harvesting of a particular mammalian resource, the herds of red deer (*Cervus elaphus*). The site seemed likely to evidence a major shift in adaptive strategies that coincided temporally with the florescence of Paleolithic art in the region.

The nature and consequences of these "wild-harvesting" adaptations warranted further exploration, and in 1978, aided by grants from the National Science Foundation and the Spanish Ministry of Culture, we undertook the first of what to this point have been six new seasons of excavation at the site (Barandiaran *et al.*, 1987). We have been joined in the direction of research by I. Barandiaran and R. Klein at various times, and supplementary financial and other support has been provided over the years by the Excmo. Ayuntamientos of Camargo and Santander, the Lichtstern Fund for Anthropological Research of the Department of Anthropology of the University of Chicago, and the Institute for Prehistoric Investigations of Chicago and Santander.

In twelve months of fieldwork, we have exposed Magdalenian deposits over somewhat more than 40 sq m. Our excavations have also served as a testing ground for new and improved methods of data recovery including the comprehensive retrieval process with its on-site physico-chemical laboratory, foam flotation procedures and macrobotanical identification laboratory, and on-site electronic data recording and analysis. In what has proved to be an unusually rich site with excellent organic preservation, these procedures have been exceptionally productive (Freeman *et al.*, 1988).

**Results to date**

El Juyo is almost unique in presenting a deep stratified deposit of materials all from a single Upper Paleolithic industrial "phase": its 3.5 m column contains perhaps twenty different Magdalenian occupation levels, and the evidence suggests that the deposits



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Fig. 16. Map of Selected Magdalenian Sites in Cantabrian Spain.

took no more than a thousand years to form. Were sedimentation rates uniform, this rate of accumulation would mean that sediment samples taken at 5 cm intervals could potentially document microenvironmental/microclimatic changes as they occurred at very short - perhaps ten year - intervals. Of course, deposition is almost never uniform, and there is evidence that some relatively thick levels at El Juyo accumulated in even shorter periods, while at other times the site must have been unoccupied.

An extensive suite of sediment and pollen samples, analysed by Drs. Stephen Porter, Manuel Hoyos and Arl. Leroi-Gourhan, documents a long earlier period of relatively temperate conditions (Occupations 13-7) followed by a sudden deterioration. This change is radiocarbon dated to 14,440 B.P.  $\pm$  180. The onset of cold stadial conditions, equated by Leroi-Gourhan with the onset of Dryas I, was apparently very rapid. The carbon-14 date for Level 4, the latest Magdalenian level in the Juyo stratigraph, is 13,920 B.P.  $\pm$  240.

The Comprehensive Retrieval Team of IPI, directed by Wm. Crowe, subjected every grain of sediment recovered from 1982 on to foam flotation. The nearly 1,000 samples processed (mostly from the five uppermost Magdalenian levels: 4,6,7,8,9) in 1982-1983 yielded charcoal (mostly *Pinus*, *Salix* and *Populus*), insect parts, microfauna, fishscales, and 853 identified seeds and plant parts (samples from later seasons are still in the course of study). Twenty-one plant families and 51 genera are so far represented. Most numerous are grasses, with nuts of *Quercus* and *Corylus*, pits of *Rubus*, sticktight (*Bidens*), horsetail (*Equisetum*) stems and *Ulex* thorns also well represented. Common genera include *Holcus*, *Enecio*, *Viola*, *Agrostis*, *Silene*, *Polygonum* and *Sambucus*. Many of the recovered genera no longer occur near the site, and some have not been part of the Cantabrian flora since the Pleistocene. Some seeds of dwarf northern varieties of plants found in Level 4 support indications of climatic deterioration from the sediments and pollen.

The large mammal fauna, studied by R. Klein, includes more than 22,000 identifiable skeletal parts of which more than 8,600 can be used in estimates of minimum numbers of individuals. Red deer (*Cervus elaphus*) predominate in all levels, forming 84% of all mammals and 88% of large mammals in Level 6, where they most abound. Age profiles are catastrophic: the El Juyo hunters must have driven whole herds to the slaughter. Possibly El Juyo was chosen as a settlement location because its

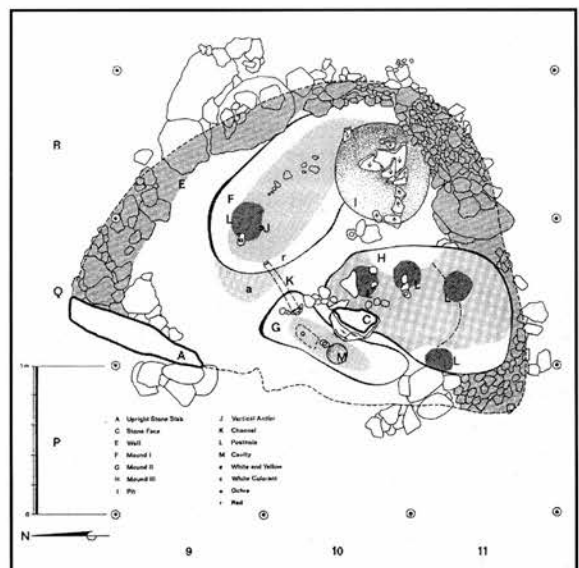
surroundings teemed with red deer. The microfauna, in course of study by Dr. Jose Rey and R. Klein, contains another cold-climate indicator, a vole, in the upper levels.

More than 55,000 lithic artifacts have been recovered to date. They include many unretouched flakes, blades and debris, and the retouched artifact series includes the keeled and nosed scrapers and backed and retouched bladelets so characteristic of this industrial phase. There is also a large bone tool series, with very abundant square sectioned sagaies and shaft segments, and relatively numerous eyed needles. There are more than a hundred whole and partial spearpoints from Level 4 alone. But despite the fact that all the Juyo levels represent a single Magdalenian industrial complex, there are marked differences in assemblage composition from level to level: for example, Level 6, packed with red deer bone, yielded very high proportions of bladelet tools compared to the "endscrapers" that predominate in other levels, while in Level 8, the shell-midden, bladelets are much rarer. As excavation progresses to include other levels, we believe that El Juyo will provide unparalleled information about the composition and functions of Magdalenian toolkits, the spatial and social division of labor, and the meaning of differences in proportional representation of artifact types in different assemblages. Two other factors make the El Juyo levels striking. In the first place, they have already provided more well-preserved Magdalenian structural remnants than any other cave site. Second, among the recovered artifacts are decorated objects of remarkable quality whose nature sets them apart from more prosaic Cantabrian Magdalenian finds.

### ***Structural Remnants and Spatial Distributions***

The lowest occupation levels extensively exposed, 9 and 8, are successive aspects of a single depositional complex related to the large shell-midden. Levels 7 and 6 are earlier and later moments respectively of a massive accumulation of literally thousands of selected red deer remains, representing some 80 individual animals. The western part of level 4, the uppermost Magdalenian horizon, is a thin seam of trampled material resting atop the sterile flowstone of Level 5; on the East, it is a much deeper level consisting principally of material deliberately deposited during the construction of a large structural complex. After the collapse of the cave entry, these levels were buried under another thick stalagmite layer: Level 3 (Barandiaran *et al.*, 1987).

Building remnants are represented in each of the major Magdalenian levels excavated to date at El Juyo (Levels 8,6 and 4) and there are minor structures such as hearths, pits and pavements in the rest (Freeman and Gonzalez Echegaray 1984).



*Fig. 17. El Juyo. Plan of large stone slab and pavement covering the Sanctuary.*

### ***Structures in Level 8***

A large, semi-subterranean dugout whose dimensions are incompletely known at present contains most or all of the shell-midden in Level 8. Several fragments of engraved deer scapulae have been recovered from this structure and its immediate surroundings in Level 8. So far, that is the only level in the site where such pieces have been found.

### ***Structures in Level 6/7***

Another large structure in Level 6 is a complex of four elements. First, there is a dugout measuring 2.5 m long by 2.25 m wide, some 25 - 30 cm deep, rounded on the N and squared off on the S (Structure 2). Thousands of small (some < 5 cm in diameter) chunks of limestone, sandstone and quartzite rubble, some burnt and some imported from outside the cave, were banked along the edges of the dugout to raise its foundation wall by over 30 cm, the maximum height to which the tumbled remnant still stood when recovered. It was within the silts filling this building, as though it had been used as a special repository or dump for this class of material after its abandonment, that we found most of the deer bone in Level 6. Abutting this on the S is another, smaller quadrangular room measuring 1.4 meters on a side. The latter was dug some 25 cm into the sediments and walled with large blocks, slabs and rubble. It contained many large fragments of colouring material including ochres and clays of grey, white and vivid purple and vermilion hues, as well as large grindstones and whole or partly worked antler racks. A large lamp made of a hollowed stalactite still contained charred organic material. Both these structures were built within an earlier large excavated depression. There are also two small basin-shaped hearths outside the structure, in Level 7. A 1.5 m wide rubble-paved walk or platform leads from the side of the "cervid room" to the original, collapsed cave entry. The most remarkable artifacts from Level 6, a set of three small bone "dice", were found stacked one atop the other on the N edge of this paved area.

### ***Structures in Level 4***

Level 4 contained more large structures than any of the levels yet described. The two latest are a pair of rectangular dugout rooms, from 15-25 cm deep, with rounded corners; the first is 1.4 m on a side and the other measures 1.2 x 1.1 m. Their size suggests some sort of storage facility rather than true dwellings. After abandonment, both were filled with miscellaneous rubble containing anomalously high proportions of stone chipping debris.

### ***The Sanctuary in Level 4***

The major and constructionally earlier complex in this level is the Sanctuary (Freeman & Gonzalez Echegaray, 1981, 1984; Freeman, Klein and Gonzalez Echegaray, 1983; Gonzalez Echegaray & Freeman, 1982). As a first step in its construction, the inhabitants excavated a large, "D"-shaped depression, about 6.5 sq m in extent, through the Level 5 stalagmite to a depth of almost two meters. In the process, they removed earlier cultural deposits, and banked them up into a sloping "ramp" along the S wall of the chamber. While the trench/mound complex described below was constructed, the wall of the whole dugout structure was sheathed with a 20-25 cm thick veneer of stone rubble in a mortar of clean clay. The wall forms a parabolic curve to both NW and SW, ending on the NW against a near-vertical (inclination 76 degrees), ca. 75 cm high, 1 m long, 20 cm thick stone slab, that abuts the curve at right angles, to enclose the NW corner of the depression. All the structural elements that compose the Sanctuary are contained within this deliberately walled, apse-like precinct.

Three trenches were dug into the floor of this walled area, and filled with various materials in a sand and ochre matrix. Each was capped by an earthen mound, from 60 - 65 cm high. Given the size and appearance of these mounds, and the elaborate nature of the complex as a whole, we at first expected that they would prove to be graves, but so far no human remains have been recovered from any of them. Their purpose is still unknown, since we have only begun to clear the fill from any of them.



But the mounds themselves are internally complex structures. Each is an intricately patterned sequence of 4 - 7 pairs of alternating layers of two different kinds.

The first kind consists of thin seams (from 2-5 cm thick) of burnt vegetal material, red ochre, spearpoints, and long, narrow skeletal parts of red deer, including fetal bones. Included bones and artifacts lie conformably with the deposits, and were apparently carefully laid in place. Often, the base of such layers is a continuous sprinkling of red ochre, and in some cases, large extensions of regular rectangular arrangements of matchstick-diameter willow withes, probably all that is left of some kind of fabric - perhaps netting or mats - can be detected against the reddened background.

Alternating with these "offering layers" are layers of another kind of fill, the "circle layers or, simply, "fill layers". These are almost always 10 cm-thick horizons of mixed earth, scooped from other, earlier, occupation levels in the site (probably the levels removed in excavating the dugout structure). They contain all sorts of debris, including triturated, poorly preserved bone fragments and stone tools, in chaotic disarray. But in the course of excavation, we found to our astonishment that these fill layers are more than haphazard heaps of mixed dirt. They are systematically structured accumulations, made of individual lots of earth whose colour and contents were by and large indifferent to the builders, but whose shape, size and placement were meticulously and laboriously controlled. The earth for these layers was packed into rigid-walled cylindrical containers, ordinarily 10 cm wide, and then carefully everted atop the offering layers so that the dirt they contained came out maintaining its cylindrical, columnar shape. The process is analogous to that involved when a bucketful of wet sand is emptied on the beach.

The size of these containers was carefully standardized. In the mound fills, the close packed cylindrical columns are perfectly circular, as closely as one can judge by eye, and exactly 10 cm in diameter as closely as one can measure them. Areas between the mounds, or between them and the dugout walls, were also filled in the same fashion, but in that case the containers used sometimes measured 20 cm across, packing was less careful, and the aim seems simply to have been the filling of the leftover space.

In producing a layer of mound fill, the builders first everted one column of earth atop an offering layer, then (in the two largest mounds) proceeded to pack six other identical columns around it. The result is a hexagonal arrangement of seven cylinders of earth, as closely packed as possible. The builders were undoubtedly aware of this pattern, since in some fill levels their last act before depositing the next offering layer was to plaster individual hexagonal groups over with a thin circular layer of clean colored clay, or clay and limpet shells. Where the space to be filled was overly large or irregular, the space between one hexagonal group of seven cylinders and its neighbours was sometimes filled with clean clay or sand. In the smallest mound, cylindrical fill lots were not arranged in hexagons, but in staggered rows, the gaps remaining being filled with packed earth.

The detection of these cylindrical columns during excavation was extremely difficult, because they are composed of mottled earth, but adjacent columns usually contrasted somewhat in texture, and bone splinters and tools at the edges of each cylinder were often found in a vertical position, since in packing they had come to rest against the inside of the containers. Fortunately, adjacent cylinders contrasted markedly in color in quite a few cases, and when this happened, the cylinders when seen in plan or section were strikingly visible. We estimate that there were at least some 1,150-1,200 of the 10 cm columnar lots in and between the three mounds.

At least in part, the fills of the mounds were deposited simultaneously. In one case a single fill layer passes from one mound to the adjacent mound without a break. Furthermore, in one mound, unfused half-metapodials of what seems to be the same fetal cervid were found in three separate offering levels, suggesting that the mound was constructed in a very short time interval, perhaps all at once in a single season.

Once the last fill layer was emplaced, each of the mounds received an individual casing of stones in clay mortar. Just before the mortar was applied, the top of the largest mound (Mound I) was ringed with whole bone spearpoints, making it the richest source of spearpoints in the Sanctuary. Next, the remaining hollows between the mounds were

filled, and then pits were dug at the ends of each mound and the angle between Mound I and mounds II and III. The pits contained burned bone, masses of shellfish remains, ochre in powder and chunks, and eyed bone needles, sometimes thrust vertically into the fill.

In two areas (beside Mound I and at the W edge of Mound III), the uppermost layer of sediment adjoining the mounds contained isolated concentrations of fossil shells, massive chunks of ochre and (in each case) a single whistle made of a worked and hollowed nodule of iron oxide.

Toward the center of the curved eastern wall, beside Mound I and partly invading it, occupants of Level 4 dug a 65-70 cm wide, shallow pit, and deposited in it ochre, shells, spearpoints, bones, needles and the cut-out contour (*contour découpé*) of the head of a hind. Before we realized that the sanctuary deposits are so deep, we mistakenly called this a "foundation" pit.

A wall made of clay and large stones ran between Mounds II and III, and set in this wall facing the old cave entry, so that it would have been visible to anyone entering the cave, we found the large stone face or "mask" of a hybrid being described in detail below. From its nature and its dominant position atop the sanctuary complex, we have suggested that it represents a supernatural being with central significance to the beliefs and activities focussed on the sanctuary.

It is very probable that the sanctuary and the face that dominates it were intentionally astronomically aligned. At the time it was constructed, some 14,000 years ago, the last beams of the setting sun at the summer solstice would have penetrated the old cave mouth to fall directly on the face and the entry to the sanctuary. An intentional astronomical alignment of this kind is to say the least unexpected in such an early context, but the fact remains that the alignment was present, and the phenomenon of illumination at summer solstice sunset - naturally slightly misaligned due to the difference in the sun's ecliptic 14,000 years later - was still observable when we reopened the original cave entry in 1982.

As a final phase of construction prior to abandonment of the cave, Mound I was topped by a huge flat limestone slab weighing about half a ton. This was supported on a series of smaller inclined slabs of stone resting against the edges of the Mound I casing. The large slab, measuring 2m x 1.2m x 15 cm, is not made of the same limestone composing the walls and ceiling of the vestibule, and must have been carried some distance from its source, at considerable effort to the builders. The rest of the area comprising the sanctuary was entirely covered by a pavement of stone rubble that in fact extends somewhat beyond the walled precinct. Two shallow hearths incrusting in this pavement were aligned with the top of the stone face. After this last phase of building activity, the Magdalenian inhabitants of El Juyo left the cave never to return.

At the conclusion of the 1983 field season, we believed that the Sanctuary had been essentially completely excavated. A series of circular stains in what were believed to be deposits underlying the Sanctuary were tentatively interpreted as post molds. In 1988, however, we learned to our surprise that those stains were simply further circular fill patterns of the sort to be described below, and we have carried the excavation some 50 cm further without yet discovering the bottom of the trench underlying Mound III. Until excavation is complete, we will not have the evidence necessary to analyze the purpose of the Sanctuary complex.

### ***The Artistic Document***

El Juyo is a remarkable Magdalenian site in many ways. Preservation is excellent. In most levels, bone is recovered in fine condition. Structural remnants are preserved and maintain their integrity to a surprising degree, due to protection by the flowstones of levels 3 and 5. It is also among the richest Magdalenian occurrences in Spain, and its contents include in abundance items that are ordinarily rare. We have recovered some fifty five eyed needles from the Magdalenian levels to date. El Juyo has already produced enough decorated objects to be ranked among the most important Cantabrian Magdalenian localities yielding Paleolithic art. Aside from objects of personal adornment (perforated animal teeth and shells) and the decorated spearpoints that are commonplace in the levels

(more than 250 whole and fragmentary spearpoints have been recovered in our excavations), each major occupation excavated has produced other works of art of considerable interest (Freeman and Gonzalez Echegaray 1983). However, here space only permits us to examine the most important artistic documents from each level.

### **I. Level 8**

The principal art objects from this level are a small piece of engraved longbone and three engraved fragments of cervid scapula.

#### **A. Longbone fragment 11M/880296**

Discovered in 1988, this is a small (4.6 x 2.8 cm) chunk of diaphysis with engraving on the outer surface. The incomplete profiles of two horses' heads facing to the right are rendered with multiple, parallel fine-line engraving. The backs of the heads are missing in both cases. The lowermost figure, in the foreground, is completely drawn, but the part of the second head that would be hidden in the background by the first was never engraved. Fine-line shading marks the lower edge of the nasals along the muzzle of both animals. The nostril of the lower head is a large inclined oval, and smaller ovals form the eyes. The bone has been burned just at the front edge of the eye on the foreground profile. Despite differences in subject matter, the technique and style of rendition on this piece are so similar to that of Scapula 9N/85 below that it is very possible that they might have been drawn by the same artist.

#### **B. Scapula 110/2187**

The first of the scapula fragments is a small piece with engraving on both faces. The piece is 6.2 cm long x 2.2 cm wide x 0.46 cm thick. The engraving mostly consists of very fine, v- bottomed hairline slicing, produced by a sharp and regular cutting edge, arranged sometimes in sets of parallel lines. There are some more substantial lines (no more than 1/2 mm wide), made by a working edge with more than one irregular projection, that produced a more or less flat-bottomed shallow groove with parallel scoring. The obverse side shows what seems to be the head and forequarters of a horse facing left. The mane appears to be represented by pair of parallel lines running from the head to the shoulders. The same figure might with less probability be interpreted as the head of a hind looking right, with interior shading of fine parallel lines. In either interpretation, the wider grooves would outline the profile of the figure. The reverse face shows several groups of subparallel lines with no obvious representational organization. The interpretation of the incomplete figures on the obverse face is complicated by the fact that the bone is only a small bit of what was once a larger piece, broken in the remote past.

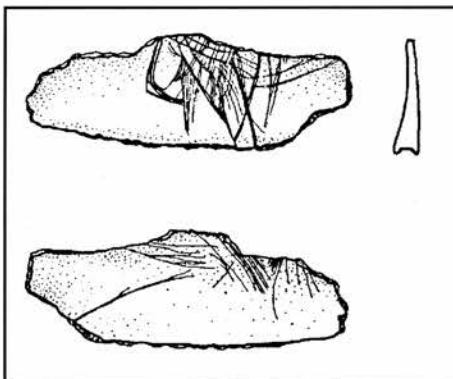


Fig. 18. El Juyo. Detail of Scapula fragment 110/2187. Size: 6.2x2.2x0.46 cm..

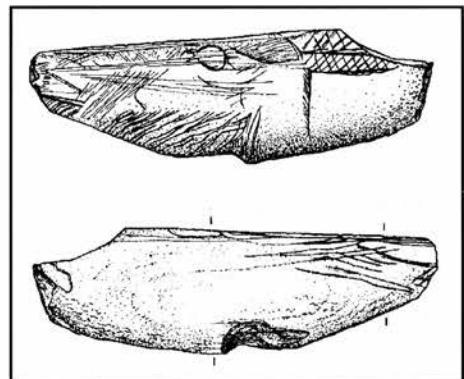


Fig. 19. El Juyo. Engraved scapula 110/2488. Size: 6.4x4.6x0.49 cm.

### *C. Scapula 110/2488*

The second scapula from Level 8, found approximately 50 cm. from the first, is a larger fragment of a deer shoulder blade, whose maximum length is 6.4 cm. The widest point perpendicular to the long dimension measures 4.6 cm and the fragment has a maximum thickness of 0.49 cm. It too is decorated on both surfaces.

Longer lines on this piece are usually combinations of shorter, single fine lines. The outlines of all figures were reinforced by retracing their course with other similar lines in parallel series. The obverse face presents a mass of overlain crossed lines among which one can detect the head of a hind, facing to the right, with pricked-up ears and an oblique oval eye; the ears and a band along the top of the head are shaded with short, fine incisions in parallel. When inverted, this figure may also be interpreted as a hind's head of a type more familiar in the art of the local earlier Magdalenian. In this case, the head, facing left, has no eye, but is shaded along the lower jaw, while the "ears" of the former figure become the front of the neck. Perhaps both readings were actually intended. Interpretation is once again hindered by the fact that the piece was broken in prehistoric times. The same surface shows other lines that may perhaps represent the legs and body of another partial animal figure and the possible head of a third. The reverse side of the piece presents several sets of overlain parallel lines in similar technique, but they do not suggest any clear depiction.

### *D. Scapula 9N/85*

The third and largest of these pieces, a cervid left scapula, was recovered during the 1987 field season, in the course of a restricted excavation aimed mainly at preparing the site for renewed full-scale investigation after a hiatus of three years. It was found just over two meters NW of the first, deliberately broken into pieces that were further shattered by pressure of the overlying sediments into more than 25 fragments (of which several were still in contact). Its longest dimension (approximately parallel to the missing spine) is 14.4 cm, the greatest width perpendicular to the long axis is 7.8 cm, and its maximum thickness (at the slightly broken inferior angle of the scapula) is 1.5 cm. The shoulder blade was broken by percussion in antiquity, to remove the spine and the upper portion of the blade. The coracoid/ glenoid area was separated from the body of the scapula by notching with repeated blows from a hammerstone, probably before the bone was engraved. Part of the neck bearing the scars of repeated flaking was found beside the larger portion of the shoulder blade. There are groups of small depressions, that at first we mistook for toothmarks, but that after cleaning and reassembly proved to be charred indentations on both surfaces of the bone, near the caudal edge. This charring, evidently deliberate, is especially well-marked on the bone's ventral surface, where it eventually resulted in splitting the bone. Apparently the trimming and charring were performed at or very near the spot where the bones were recovered.

The major fragment of the scapula bears extensive engraving over both its dorsal and ventral surfaces. The principal technique employed is fine, very shallow, parallel to subparallel engraving, and on the dorsal side that is the only kind of engraving represented. On the ventral surface, on the other hand, there is a concentration of deeper, single line incisions at the thick part of the scapula near its caudal edge.

The engraving on the dorsal surface is at least partly representational. The depictions are figures of hinds' heads, and at least two are shown. We believe that further careful examination will clarify some details that are now confusing, and the following description of the engraving should be taken as simply preliminary. The clearest figure is the head and neck of a doe facing up and to the right. The muzzle is square. Multiple fine lines have been used to shade the lower face and the neck. Its ears are laid back and its chin is raised. Its neck is long and the back of the neck converges with a series of parallel lines that may be intended as the animal's dorsal line. A semicircle of eight small burned indentations surrounds the head, cutting it off from the neck of this figure. The raised edge of the caudal border is extensively roughened and browned by heat, and there are two other small charred and checked depressions behind its neck.

The second figure is also quite clear; it is a much larger hind's head facing left. This



time the muzzle is rounded, and the nostril indicated by a punctate depression. The muzzle and upper lip are well differentiated from the chin and mandible. The eye is a slanting oval and the left ear is shown laid back as a pointed teardrop-shaped projection. The right ear may also be represented, standing more erect. The back of the mandible curves upward toward the left ear. The whole of this head is filled with fine parallel shading. There is a single, deep, charred depression above this head, just in front of the eye.

Under the second doe's head is a series of parallel lines that may show the muzzle and forepart of a third head. In this case, enough of the figure is missing to keep us from a certain identification at this time. There are also other sets of parallel lines above these two heads and behind the first, but they do not form any recognizable figure.

The reverse side of the scapula is covered with apparently non-representational engraving. There are two separate sets of sharp parallel linear incisions near the vertebral margin. Several other patches of parallel hatching or anular cross-hatching, between 6 and 8 cm from the vertebral margin, is noteworthy. Originally, it seems to have been crosshatched, but heat has caused checking that coincides with the incisions in one direction, obscuring them. Repeated applications of a hot brand to this crosshatched area eventually caused a large chip to pop out and the scapula to break at precisely the spot designated by the crosshatching. The brand had been applied seven or eight times to other points along the convex ridge paralleling the caudal border, charring the bone without cracking it. When the brand was finally applied to the hatched area, the shoulderblade split apart. There is little doubt from the location of the scorched areas on both surfaces that the charring of the shoulderblade was an intentional act and that the placement of the charred areas follows a deliberate pattern. Although it may

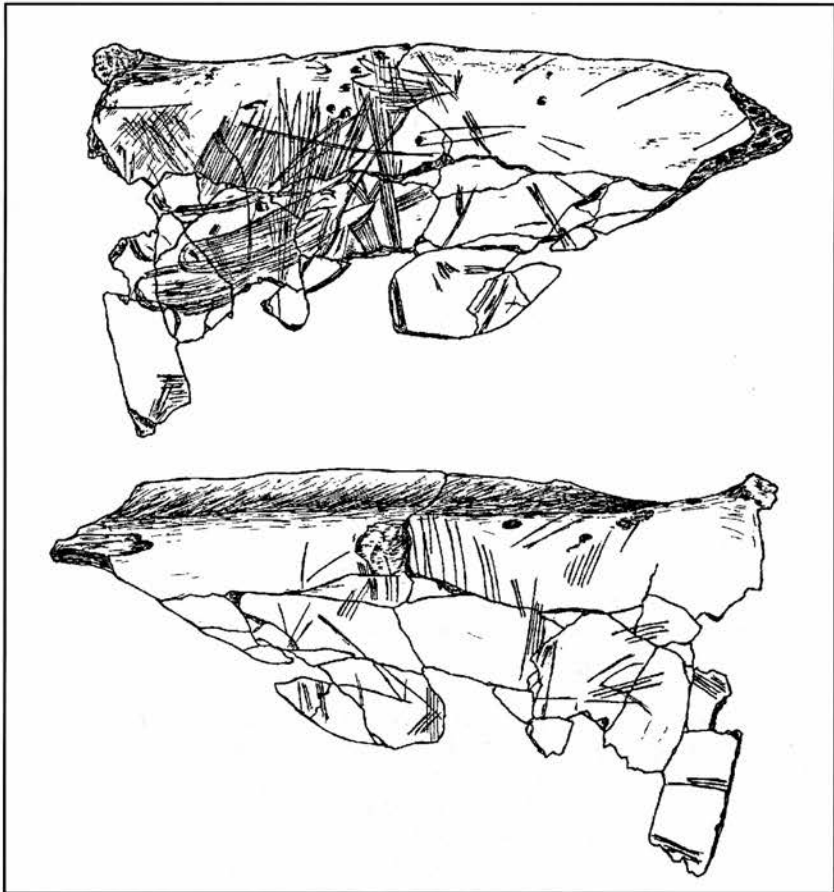


Fig. 20. El Juyo. Engraved and burnt scapula 9N/85. Max. size: 14.4x7.8x1.5 cm..

seem peculiar that a carefully decorated bone object would be intentionally damaged by burning, there are exact parallels to this behaviour in ethnography.

Divination by shoulder-blades, or scapulimancy, is a practise that is well attested among both Old World and New World peoples, and one that survives to the present in some areas. Omar Khayyam Moore (1969) has provided a possible adaptive interpretation that may help explain the popularity and persistence of this technique. It is well documented among the ancient Chinese, who used the crack patterns produced by burning animal shoulderblades to foretell the future. Other bones and tortoise plastrons were used in China in the same way (see Plath 1862). Among the Chukchi of NE Siberia, reindeer scapulae were cast into the fire for divination, and the pattern of cracks produced by scorching was interpreted as an answer from the spirit world. Turkic and Mongolic peoples used sheep bones as well as reindeer for divination, and the use of shoulderblades of other animals such as rabbits or seals is not unknown. A most exhaustive study of scapulimancy is included in Frank Speck's study of the Naskapi Indians of Labrador (in the American subarctic). In his book *Naskapi* (1935) he devotes several pages and illustrations to scapulimancy. The Naskapi believe that something of the spirit of the hunters' prey remains in its bones. Before setting out to find game, they question caribou shoulder blades, asking where game will be found. Placed on the hot coals of a fire, the shoulder-blades develop scorched spots and cracks in response. Those marks are interpreted as maps to the part of the hunting grounds where the hunters will find prey. Andree (1906) noted that scapulimancy was still used for divination in parts of rural Europe and the British Isles in this century. The practise produces results so similar to the deliberately charred and broken scapula from El Juyo that we may venture to suggest that it resulted from the same sort of divinatory rite.

We would, of course, prefer to have confirmatory data before making a more positive assertion. Such data should be easy to come by, if the El Juyo case is not an isolated example. Decorated shoulder-blades are not uncommon in the later Upper Paleolithic of Cantabria. These peculiar art objects were found in some numbers in one (Late Solutrean? / Earlier Magdalenian?) deposit at Altamira, and in the Earlier Magdalenian at the Cave of Castillo. We believe that intentional charring analogous to that on the Juyo piece can be seen in photographs of some of the Castillo specimens described by the late Dr. M. Almagro Basch (1976, Plates IIIa, VIb, VIIa, XIIa). If on reexamination some of those pieces do prove to have been intentionally scorched in the same way as the El Juyo specimen, our suggestion that decorated shoulder blades were used in Earlier Magdalenian scapulimancy will be substantially strengthened, even though we would still not know how the scorching was interpreted.

Identification of scapulimancy in the Paleolithic would incidently resolve a minor ethnographic debate of long standing. Since scapulimancy has its widest distribution in northern and central Asia, and is particularly widespread among herdsmen, Andree believed that it was devised by Asiatic herding peoples, from whom it passed to their hunting neighbors (see also Cooper 1928). Speck, on the other hand, thought scapulimancy to be an integral part of the ritual and belief system of hunting peoples. The Paleolithic evidence would prove Speck's hypothesis beyond argument.

## **II. Level 6**

By a curious coincidence, finds in the higher occupation, Level 6, also suggest possible divinatory practises by the El Juyo Magdalenians. Although they have little intrinsic aesthetic value, these artifacts do reflect the expressive domain of culture in another way. They may be classified as ludic objects: items of a kind which has only rarely been identified before in Paleolithic contexts. The items in question are three carefully shaped, nearly identical short sections cut from a single red deer metapodial, and found neatly stacked one atop the other at the N edge of the paved "walkway" leading from the large structure in Level 6 to the old cave entrance.

### ***Bone "Dice" (M7/451 a,b,c)***

The pieces are about 4.0-4.2 cm long, 1.0-1.2 cm wide and 0.6-0.7 cm thick. Each is

convex on one surface and concave on the other, and each shows some chipping or battering at the ends, but the three can still be refit exactly. By analogy with similar artifacts from aboriginal America, these are interpreted as dice or divining pieces.

Gambling and divination with almost identical bone, wood, or split cane dice, in groups of three, is described for many tribes in Stewart Culin's classic (1907) monograph on American Indian games. In use the three dice are cast smartly against a hard surface so as to rebound before falling to the ground. This prevents a skilled player from influencing the outcome. (The slight battering on the ends of the Juyo pieces might have been produced this way). Then the numbers of concave and convex surfaces facing upward are counted. With otherwise undifferentiated pieces such as those from El Juyo, there are only four possible outcomes, from three convex-up to three concave-up. The resulting count serves either as a score (when simply gambling) or as one of several alternative answers to a question (for such dice are often used for divination).

### III. Level 4 Sanctuary

There were many decorated sagaies and small objects in bone in this level, and particularly in the structures of the Sanctuary complex. Those aside, two pieces from the Sanctuary are of primary importance, as much because their context of discovery is so significant as for their intrinsic artistic value.

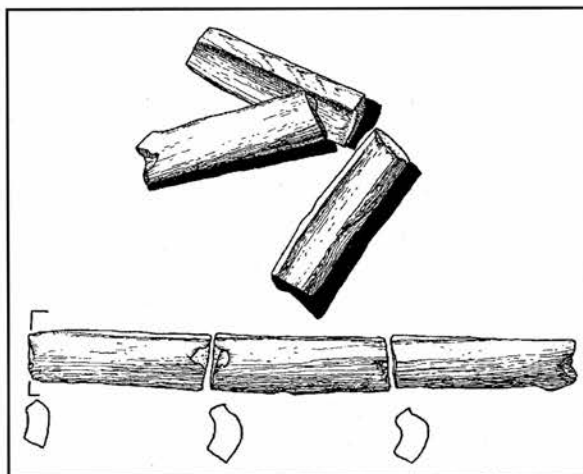


Fig. 21. El Juyo. Bone "dice" from Level 6. Max. size: 4.2x1.2x0.7 cm.

#### *Contour découpé (10R/3010)*

The first, and most masterful of these is a piece recovered from what we have previously (and mistakenly) called the "foundation pit" in the Sanctuary. It is the cut-out profile (*contour découpé*) of the head of a doe realized on a large cervid rib fragment. The figure measures 9.74 cm from the tip of its nose to the extreme projection at the other end of the rib. At its widest point, just behind the jaw, it is 3.00 cm wide and its greatest thickness is 0.50 cm. Apparently, the general outlines of the piece were first engraved on the rib fragment and then the piece was flaked and ground to remove excess bone, matching its shape to the outline. The indentation where the line of the mandible curves to meet the neck was produced by removing flakes from the edge and reverse side of the bone by direct percussion.

Both surfaces are extensively polished, and marks produced by grinding the bone against a fine abrasive surface are particularly visible along the obverse face in the form of fine, shallow striations running sometimes along the bone, sometimes across it. Contours of the top of the head and the lower part of the muzzle have been ground to a knifelike edge, beveled more abruptly on the obverse than on the reverse surface.

The contour of the head is not completely cut free from the surrounding bone. The area behind the neck has been left intact to support the ears, which are laid back

following the same line as the top of the head, apparently because they could only stand free as delicate and fragile projections.

The hind is represented looking to the left. The tip of its nose has been somewhat chipped, but the hollow resulting ends at an engraved line marking the edge of a nostril. Short multiple fine lines radiate away from the nose, and a double diagonal line gives a three-dimensional quality to the forepart of the upper lip. That lip is made up of a sequence of fine, slightly slanting strokes. The lower lip is a single, deeper engraved line. Short parallel strokes shade the chin, and a mass of multiple, oblique parallel lines each consisting of several shorter incisions models the area behind the lips. The jaw is shaded by multiple, sinuous and branching strokes. Parallel long composite lines, some wider than others, mark the structure of the muzzle. Hair over the forehead is indicated by another series of slanting lines set off from the face by a curve. The egg-shaped eye has what appear to be two short curved lachrymals - perhaps an artist's error. The ears are filled with diagonal crosshatching. An old break carried away the back of the upper ear, but stopped at the engraved top of the lower. Densely packed oblique incisions give a rounded quality to the back of the head. Several overlain sets of long parallel lines on the reverse side of the bone seem to repeat the major outlines of the head on the other side.

This *contour découpé* conforms in theme and style to other pieces from the Cantabrian Lower Magdalenian artistic tradition, but in technique of execution it stands well apart. As far as we know, there are as yet no other cut-out contours from contexts earlier than the Middle Magdalenian. Nor is the El Juyo piece typical of the cut-out profiles known from the Magdalenian IV. Most of those are horses' heads, and most, including the recently reported profile from La Vina (Fortea 1981), have more rounded, blunter, sculptural profiles, while the El Juyo piece has been polished to a sharp edge. So, while it is true that the El Juyo head belongs thematically and stylistically to the Lower Magdalenian artistic milieu, in agreement with the artifact series from the Level 4 Sanctuary, with respect to technique of execution, the figure is best regarded as occupying a transitional position, sharing elements of both Earlier and Middle Magdalenian artistic traditions.

The delicate beauty of the head, its boldness of line and graceful style, place it, we believe, among the masterpieces of Spanish Paleolithic art.

### ***The Mask***

The most unusual find from the El Juyo Sanctuary is the large, partly anthropomorphic "mask" that dominated the complex from its vantage point atop Mound II.

The "mask" is a large stone, measuring 35 cm tall by 32 cm wide, with a thickness of 22 cm. It was found actually built into a clay and slab wall separating Mound II from Mound III. That explains why the artists left the reverse side of the block rough as they found it: only the front of the "mask", facing the cave entrance, was ever supposed to be seen. The block is substantially thicker at the base than at the top, providing the weight and surface necessary to balance it upright.

The stone selected presents a number of natural irregularities, including one vertical and one deeper horizontal fissure, and a fossil that suggests an eye. These made the block look something like a face even in its unworked state; the Magdalenian artist(s) enhanced and exaggerated that resemblance by minimal but skillful alterations of the front of the stone.

The top of the block has been squared off by percussion, to produce a more or less flat upper surface and two sloping sides, that together suggest a cranial vault. Some 4 cm from the upper edge there is a deeply engraved line, running the width of the forehead. A series of shorter, shallower grooves runs roughly parallel to this, some above it and some below. Perhaps these were intended to represent hair (as for the beard to be described later). Given the peculiar nature of the figure, each side must be described independently, despite the fact that the two are "fused" at the midline into a single face. First we describe the major features on the face's own right side, then its proper left.

The first important feature on the right side is the eye, formed by a sharp blow that



removed a shallow flake from the surface. The flake scar is an ovoid with its widest end tilted downward toward the center of the stone. The nose is indicated by a single line that departs from the central fissure to curve upward to the right side. Below this is a somewhat irregular, curved lanceolate form, point directed upward and to the face's right, that suggests a moustache. The mouth is indicated by a curved natural crack, prolonged to the extreme right of the stone, whose interior shows some engraving to enhance the lips and probably to suggest teeth. The effect is a suggestion of a benevolent smile. The lower edge of the stone is irregularly scalloped, and the surface between the chin and the mouth bears multiple irregular horizontal or inclined engraved lines, some quite deep, that give the impression of a beard.

On the proper left side, the eye is formed by a deep, more or less triangular hollow, resulting from the presence there of a fossil in the rock. Above the eye, engraving and abrasion produce several grooves that curve up and to the left of the face. The lower border of the fossil has been abraded to produce a sort of tear duct. From the upper edge of the fossil, a depression curves to the stone's right to join the fissure down its midline. This fissure, too, has been intentionally abraded to suggest the top of a long muzzle, ending in a triangular engraved nose with a central horizontal nostril. While these marks

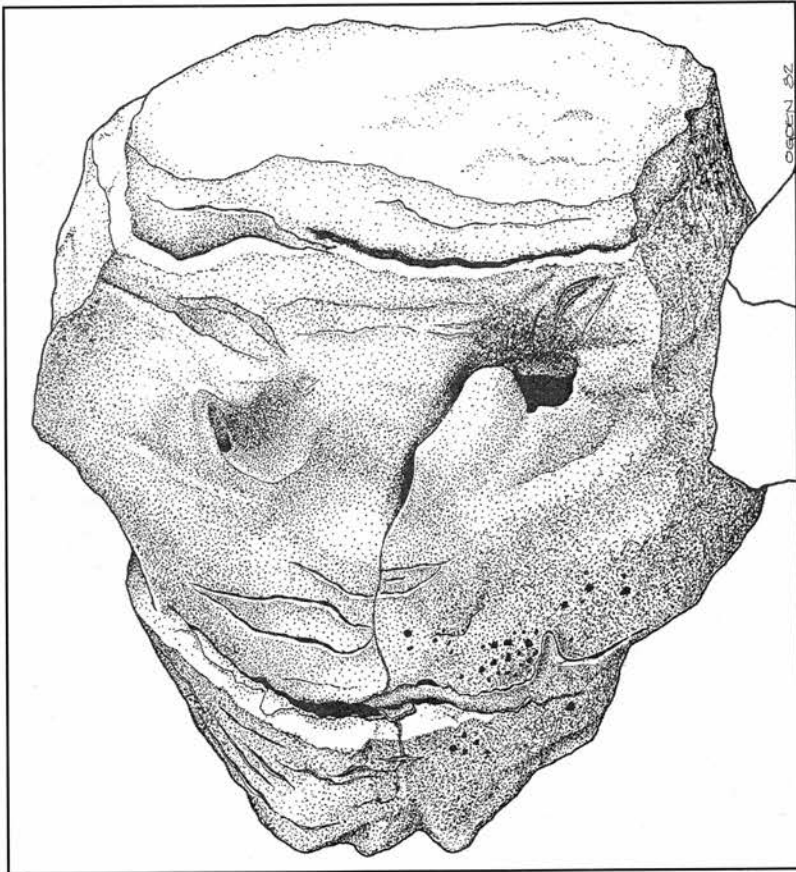


Fig. 22. El Juyo. "Mask" from Level 4 Sanctuary. Size: 35x32x22 cm.

appear at the same height as the simple curve of the human nose on the opposite side of the crack, the more complicated figure on this side suggests the naked rhinarium of an animal. The natural crack that formed the mouth only extends a few cm onto this side of the face, and when it disappears it is continued to the face's left by a carefully engraved double line. The upper line of the pair has a sharp upwards inflection just left of its midpoint, as though to suggest a sort of fang. The upper lip on this side of the figure bears

multiple irregular dots of black paint, and more such dots are found on the chin as well. Between the rhinarium and the upper lip, and over the triangular chin, which is set off from the other side by a marked notch where the midline fissure reaches the bottom edge of the block, there are other shallow engraved lines, difficult to interpret because of the roughness of the natural surface of the stone.

A careful examination of these details shows that despite its superficial appearance as a crudely worked anthropomorphic figure, this is actually a much more complex representation of the face of a strange dualistic being with two well-differentiated natures. The vertical crack divides the face into two halves. The right half is a relatively benign moustached and bearded male countenance with a big smile. Its left, on the other hand, is clearly not human. Its pronounced lachrymal, its long deliberately smoothed muzzle, its naked rhinarium, the black punctations suggesting the roots of whiskers or vibrissae, the triangular chin, and the fang-like inflection of its upper lip, are instead the features of a wild beast, almost certainly a large felid: both lions and leopards lived near El Juyo when the site was occupied.

True, no visibly upward-projecting fang is really present in living big cats. However, in their discussion of the engraved lions on plaques from La Marche, Pales and Tassin de Saint-Péreuse (1969) show that such a tooth is depicted on most of the depictions from that site. While the La Marche artists may not have produced anatomically precise renditions, their lions are evocative and convincing - perhaps even more so than they would be were that imaginary fang omitted. It may also be that the hollow that really does exist behind the cat's fleshy upper lip, and can produce a shadow that looks like a fang, was shown by the Juyo artist as such.

It is remarkable that a piece whose workmanship is technically so sketchy can nevertheless so economically represent the complex fusion of two distinct natures, one human, the other animal, the first in frontal view, the other in partial profile, in one masterful, integrated and harmonious whole. But of course we should remember that the artists who conceived and executed this face were almost certainly raised in the same tradition that produced the consummate artists who produced the strikingly evocative polychrome bison on the Great Ceiling of Altamira.

### ***The Mask in the Context of Paleolithic Art***

The El Juyo mask occupies a place apart in the world of Paleolithic art. An analysis of some of the ways in which it is like or unlike other art works from the Magdalenian world may help cast its peculiarities in greater relief.

In the first place, the mask from El Juyo is a free-standing stone block. But that does not imply that it belongs in any way to the sphere of what we call "mobile" art. It is so large and heavy that it could only have been moved with difficulty, and, once emplaced in its supporting wall, it became a fixed and permanent structure in its cave surroundings. Other such large, free-standing Paleolithic art works are known, including the famous and monumental "Venus" from Laussel, sculpted on a block more than 50 cm long, and several other reliefs from the same site (Lalanne, 1912; Delporte 1982). Although they are free-standing, such bulky pieces generally have less in common with portable art objects than they do with the realm of parietal art.

The Paleolithic art works that are most like the masks from El Juyo are the grotesque heads or faces executed on projections of the rock wall in the final gallery of Altamira (Breuil & Obermaier, 1935; Freeman et al., 1987) or in Castillo (Alcalde del Rio, Breuil & Sierra 1911, pp. 166, 169-70; Ripoll, 1972). Since their first discovery, such faces have been called "masks"; we continue to use that term in specific reference to these finds, without any implications about their functions. Masks belong properly to the category of parietal or wall art, since most of them are a permanent part of the walls of the cave.

The rock projections that are the surfaces to be transformed into masks have natural shapes and salients that vaguely suggest monstrous visages, faces that at one and the same time evoke the idea of human beings and wild beasts, constantly shifting and changing from one to the other. Those from Altamira are appreciably larger (60 to 70

cm high) than the mask from El Juyo, but the general concept is the same. In all cases, the support already naturally bears a general resemblance to a face, so that all that is necessary to complete it is to enhance that general resemblance by means of a few strokes of color, a few incisions, or some minimal breakage or abrasion of the stone. They are not truly sculptures, since their surface is not deliberately modeled over its whole surface. Human intervention in their execution is limited to the absolute minimum necessary, and restricted to that surface which faces the viewer. There is more extensive intentional retouch in the case of the El Juyo piece than is ordinarily the case for the masks from Castillo and Altamira, but when we compare it with the finely detailed drawings and paintings that were realized by Magdalenian artists (for example, the beautifully executed *contour découpé* from the "foundation" pit), the class of masks as a genre appears peculiar and rudely executed.

The human visage that is the Juyo mask's right side is caricatured, but so are practically all the human faces known from Paleolithic art. Even the faces from Dolni Vestonice, La Marche and Brassempouy, called "portraits" by some authors, are not truly realistic depictions, and other human figures are generally even more distorted. We don't know why artists capable of producing such surprisingly realistic representations of animals chose to represent the human form in so grotesque a fashion. Perhaps they were afraid that too realistic a picture might magically come to life, or that the portrait might steal the "soul" of the person depicted. Whatever the reason, the human face is always more or less distorted, and keeping in mind that in the case of the mask from El Juyo the extent of artistic intervention in adding details to the suggestive natural shape of the rock was really very small, the human side of the mask is in fact surprisingly realistic in comparison with other Paleolithic human depictions.

Some well-known authorities, like E. Ripoll, S. Geidion and A. Leroi-Gourhan, have called attention to the fact that, in many anthropomorphic depictions, details of facial features or body posture have been forced into shapes or attitudes characteristic of other animal species (Geidoin, 1981; Leroi-Gourhan, 1965, pp. 96-98, 1984, pp. 188-9, Ripoll, 1958). One class of figures so treated, the so-called "ornithocephalic" figures, has human bodies but heads drawn out into bird-like beaks. Another group, the so-called "sorcerers" or "shamans" at sites such as Trois-Frères or Teyjat, or the bison with human legs and feet carved on the Castillo stalagmite, has human bodies or extremities with heads of bison, deer, or other mammals, and sometimes seems to be clothed in skins. It has been asserted that such depictions represent ritual practitioners, costumed in masks and animal skins during a ceremonial performance, or that they are hunters disguised in animal skins so as to creep closer to their prey. Whatever the true explanation(s), such figures have the appearance of hybrids of human beings and animals.

The masks from Castillo and Altamira, described earlier, have such hybrid shapes. That from El Juyo is also part human and part animal, but differs from the other hybrids in that its human and animal features are laterally separated. The conceptual difference between its two natures is more clearly symbolized in this case than it is in the others. What is more, the problem of integration of two different natures in a single figure that maintains the differentiation as it fuses them into one harmonious whole has been solved absolutely masterfully. From a short distance away, one has the impression that one is looking at the homogeneous face of an anthropomorphic being. Only when the face is carefully scrutinized close-up under appropriate illumination does its double nature become evident. Understanding of the dualism of the mask from El Juyo may have been esoteric lore, restricted to a small group of initiates. If that is so, it suggests further inquiry into the possible role of the El Juyo sanctuary in the initiation process. We have presented some preliminary and speculative observations along these lines in another place (Freeman & Gonzalez Echegaray, 1981).

Dualism such as that expressed by the face from El Juyo is a common element in the symbolism of many modern peoples. The symbolic polarization of opposite natures by differentiating them laterally is also a commonplace in modern symbol systems, nor is it surprising to find the more "natural", instinctive, wild, threatening, bestial half of the face relegated to its left side, while the more cultural, controlled, benign, human side is

its right. Many modern societies would agree that such a placement is most appropriate (Needham, 1973)

The mask is obviously not a literal representation of any living being from the natural world. We believe that it is not stretching the evidence at all to suggest that it shows, instead, a supernatural being. One might, for example, suggest that the face may depict a “master” or “protector” of the game, a kind of spirit being frequently found in the mythological repertoire of foraging peoples. Perhaps it may, but the symbolism employed seems more complex and subtle than one would expect in that interpretation. The mask suggests a less constrained, probably more polyvalent being. The late Mircea Eliade (pers. comm.) observed to one of us that the face was a remarkable depiction of the reconciliation of opposed principles, a feature that he had often noted in the structure of the oldest and most widespread symbols of the “paradoxical state of the totality, the perfection and, consequently, the sacredness of God” (see Eliade, 1971, pp. 146; 1979).

The designation “Sanctuary” has been applied to the complex in Level 4 throughout this paper. We should stress that the complex at El Juyo seems truly to be a sanctuary in the strictest sense: it is a space intentionally set apart from the areas used for the routine activities of daily life, and dedicated to the performance of culturally patterned rituals designed to establish interaction with a culturally postulated supernatural (see Spiro, 1966, p. 96). In this case, the special nature of the precinct is indicated by the elaborate details of its construction, the fact that the behavior attested by that construction and the abandonment of quantities of apparently unused implements cannot be explained in terms of ordinary economic efficacy, and the presence of the face itself. The existence and specific details of the astronomical alignment are other factors supporting the interpretation, but with so much other evidence, the case would be strong enough already. While we were earlier convinced that the structures in the Sanctuary complex were not mortuary-related, we now believe that it is premature to make any final judgement about the purpose of the Sanctuary structures at this time. There can be no doubt that whatever its purpose, at El Juyo the ritual was communal: the weight of the slab capping the sanctuary is so great as to have required the collaboration of several individuals in its placement. We suggest that the mask is in fact a symbolic representation of the supernatural forces to which the ritual was directed.

Elsewhere, one of us has attempted an analysis and classification of Paleolithic sanctuaries, including that at El Juyo (Gonzalez Echegaray, 1986). That designation is often applied very loosely to galleries and caves with parietal art. The fact that the El Juyo complex can be called a sanctuary in the strictest sense supports the more abstract, general case as well. Very probably, at least some of the galleries and caves that have been traditionally called sanctuaries were in fact just that. It remains to be determined which of them come closest to fitting the narrow definition, a large but by no means impossible task. Structural parallels with the El Juyo case may prove enlightening. We can mention at least one fundamental parallel between the Juyo sanctuary and the Final Gallery or Cola de Caballo at Altamira: the central importance of masks suggesting hybrid beings. There are certainly others.

### ***Concluding Observations***

We have described a series of decorated objects from El Juyo some of which have considerable intrinsic aesthetic interest and appeal. But, they are even more important for reasons beyond their inherent aesthetic value. The context of recovery of each described object is known exactly. Interrelationships between each of them and all the other materials found in the same areas of the same occupation levels can therefore be determined. Viewed in total context, they become media for the transmission of information about systems of prehistoric beliefs and behaviour that is much richer and more thickly textured than any information they can possibly provide when viewed in isolation.

Professional anthropologists have generally presumed that such principles of symbolic structure as dualism and lateral polarity can only be discovered through



linguistic discourse. Without living informants or written documents to attest their presence, it is thought, they must remain inaccessible to study. Were that true, prehistorians, who have access to no oral or written testimony from the groups we study, would never be able to decipher in the least degree the dimensions of such symbolism in human behaviour, for there would be no empirical evidence.

It is undeniable that living informants or written records can describe symbol systems with a thoroughness and wealth of detail that are unattainable through other channels. Nevertheless, art historians, psychologists and other non-anthropological professionals who devote time to the study of graphic symbolism have long maintained that one may gather a great deal of information about symbolism and its meaning from the study of works of art and other non-verbal manifestations of human belief and behavior.

The engraved scapulae from Level 8 and the dice from Level 6 provide us with glimpses of human nature involved in dealing with the unknowable, in coping with the vicissitudes of a fickle world. They strike a responsive chord in us, that makes our Magdalenian precursors seem more familiar. The Sanctuary complex at El Juyo and the mask lend themselves particularly well to deeper interpretation, and because they and their surroundings were so well preserved, so that it is possible to examine in great detail the intricate network of interrelationships between them and other environmental, industrial, structural and artistic factors, their study provides a richness of symbolic information that is at present unique for Paleolithic remains.

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#### Riassunto

Lo studio costituisce una fonte ricchissima di informazioni simboliche. Nel Livello 4, un recinto simile ad un'abside che si è rivelato essere un Santuario, conteneva oltre 1200 piccole colonne circolari sistemate in esagoni sulla superficie di molti strati di offerta. Verso il centro del muro orientale curvo, una fossa scavata nel suolo conteneva ocra, conchiglie, punte di zagaglie, ossa, aghi e il profilo ritagliato della testa di una daina, uno dei capolavori dell'arte paleolitica spagnola. Di fronte alla vecchia entrata della grotta era situata una grossa "maschera" di pietra che si ritiene rappresenti un essere soprannaturale polivalente. E' probabile che il santuario e la maschera fossero allineati con gli ultimi raggi del sole durante il solstizio d'estate. I principali oggetti artistici ritrovati sono un piccolo frammento di osso lungo che reca l'incisione di due cavalli e tre scapole incise con cavallo e un alce. Il frammento di scapola più grande risulta intenzionalmente danneggiato dal fuoco e suggerisce l'idea di un rito divinatorio.

#### Summary:

*The study provides a unique richness of symbolic information. In level 4 an apse-like precinct, later discovered to be a sanctuary, was found with offering layers on top of which at least 1.200 circular columns of filling had been arranged in hexagones. Towards the center of the curved eastern wall a shallow pit contained ochre, shells, spearpoints, bones, needles and the cut-out contour of the head of a hind, one of the masterpieces of Spanish Palaeolithic art. Facing the old cave entry was set a large stone "mask" hypothetically of a supernatural, polyvalent being. It is probable that the sanctuary and this mask were aligned to the last beams of the setting sun of the summer solstice. The principal art objects are a small piece of longbone engraved with two horses and three scapulae engraved with horse and deer. The largest fragment has been intentionally damaged by burning probably in divination rituals.*

#### Résumé:

L'étude constitue une source extrêmement rich d'informations symboliques. Dans le niveau 4, un espace clos ressemblant à une abside s'est révélé être un sanctuaire. Il contenait au moins 1200 colonnes circulaires disposées en hexagones à la surface de nombreuses couches d'offrandes. Vers le milieu du mur oriental incurvé une fosse peu profonde contenait de l'ocre, des coquillages, des pointes de lance, des os, des aiguilles et la silhouette taillée d'une tête de daine, un des chefs-d'oeuvres de l'art paléolithique espagnol. En face l'entrée de l'ancienne grotte était placé un grand "masque" de pierre que l'on considère comme la représentation d'un être surnaturel, polyvalent. Il est probable que le sanctuaire et le masque furent alignés avec les derniers rayons du soleil couchant au solstice d'été. Les principaux objets d'art sont un petit fragment d'os long, gravé de deux chevaux, et trois omoplates gravées de chevaux et d'un cerf. Le fragment le plus grand a été endommagé intentionnellement par le feu et fait penser à un rite divinatoire.