

Cave Science

The Transactions of the British Cave Research Association



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Volume 10

Number 3

October 1983



Grotto in Kvannlihole 2, Fiplingdal

Kvannlihole, Norway

Iron Age in Matienzo

Rock temperatures in Altamira

Sandy Hole Portland

BRITISH CAVE RESEARCH ASSOCIATION

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Cover Photo: Stalactites and Stalagmites in Kvannlihol 2

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THE IRON AGE IN MATIENZO, NORTHERN SPAIN

by Peter Smith

ABSTRACT

Iron Age remains have been found in four caves in Matienzo (Santander) mainly by successive British caving expeditions. The finds include pottery, human remains, metal objects and paintings, possibly related to rituals during the use of caves for burials. They can be dated in the Early Iron Age, starting about 900 or 800 B.C.

RESUMEN

Se han encontrado restos de la Edad de Hierro en cuatro cuevas de Matienzo (Santander), principalmente por las expediciones espeleológicas. Los hallazgos incluyen cerámica, restos humanos, objetos de metal, y pinturas, posiblemente relacionados con los rituales durante la utilización de las cuevas para los enterramientos. Se pueden fechar a principios de la Edad de Hierro, que comenzaría aproximadamente 900 u 800 antes de Cristo.

INTRODUCTION

The village of Matienzo lies in the Cantabrian Mountains about 25 km. to the southeast of Santander. It is in a karst-enclosed depression which contains many caves of varying sizes and lengths. These have been studied, first by a Santander caving group, la Sección de Espeleología del Seminario Sautuola, and later by a series of British expeditions, which have been summarized in B.C.R.A. Transactions (Corrin et al, 1981). Important archaeological remains have been discovered during the caving exploration, and these have mainly been of the Bronze and Iron Ages (Fig. 1).

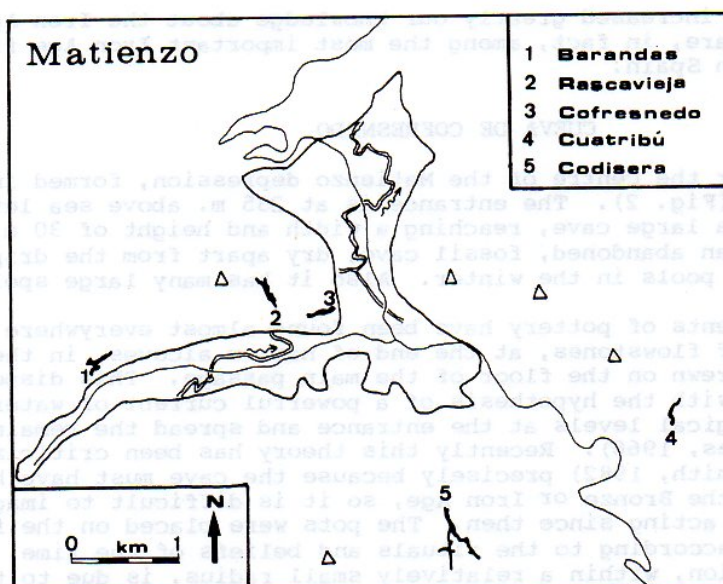


Fig. 1. Area map with cave locations.

The first finds were in the Cueva de Cofresnedo and consisted of abundant fragments of pottery (Begines, 1966) and human remains (García Caraves, 1966). The pottery was then attributed to the end of the Neolithic or the beginning of the Bronze Age, and the skeletal remains appeared to belong to two persons, a youth and an adult. They also reported finding pieces of pottery in another cave, Rascavieja, although they gave no further details.

The next find, a human skeleton, was also discovered in Rascavieja during the English expedition of 1975. It was studied by R. Rincón, who thought that it could be of a youth about 12 years old, and dated it in the Bronze Age. However, it has never been published in any detail, apart from a short note about the discovery (Mills, 1975).

In 1978 A. Pintó found some pieces of pottery in the Cueva de Codisera. Apparently these constituted three or four sherds. They were deposited in the Museum of Prehistory in Santander, but have never been published.

During the winter of 1980-81 more fragments of pottery were found in the Cueva de Cofresnedo. These sporadic finds concluded, in October 1981, with the discovery of some paintings on the cave walls, as well as human remains, by E. Muñoz and other members of the "Colectivo arqueológico" C.A.E.A.P., M. Ortiz and P. Smith (Peñil, Muñoz and Smith, 1982).

RECENT DISCOVERIES

After this latest find, others have been made, which we can summarize as follows:

1. 6th December 1981, Cueva de Codisera. A copper arrowhead. (M. Ortiz and P. Smith).
2. 10th January 1982, Cueva de Cuatribu. Schematic- abstract paintings (Smith).
3. 12th August 1982, Cueva de Cofresnedo. Various iron artifacts, pottery and human remains (David Hartnup and L. Mills).
4. 9th September 1982, Cueva de Codisera, Pottery (Smith).
5. 10th October 1982, Cueva de las Barandas. Pottery and human remains. One week later, a copper strip (Julie Bridgman and P. Smith).

These finds have increased greatly our knowledge about the Iron Age in Matienzo and Santander, and are, in fact, among the most important Iron Age finds in caves anywhere in Northern Spain.

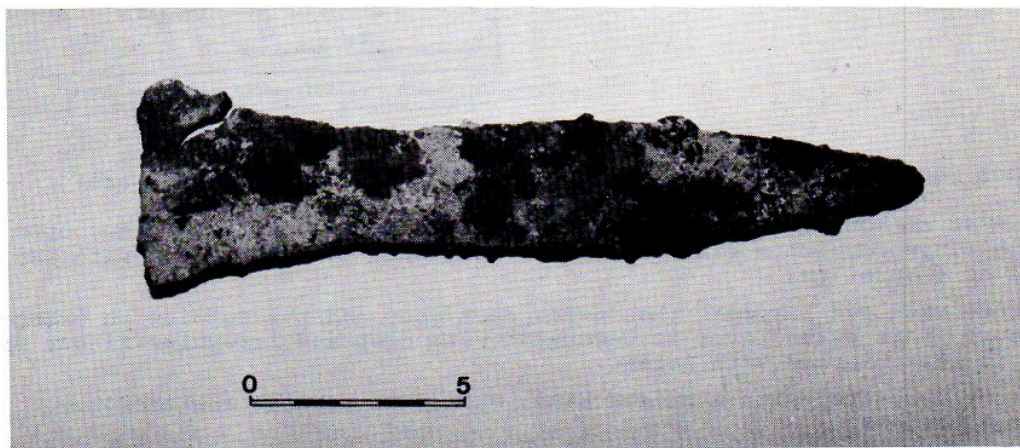
CUEVA DE COFRESNEDO

This cave is near the centre of the Matienzo depression, formed in the sides of the Monte Enaso (Fig. 2). The entrance is at 235 m. above sea level, and faces east. It is a large cave, reaching a width and height of 30 m, and is 275 m long. It is an abandoned, fossil cave, dry apart from the drips of water which fill the gour pools in the winter. Also it has many large speleothems.

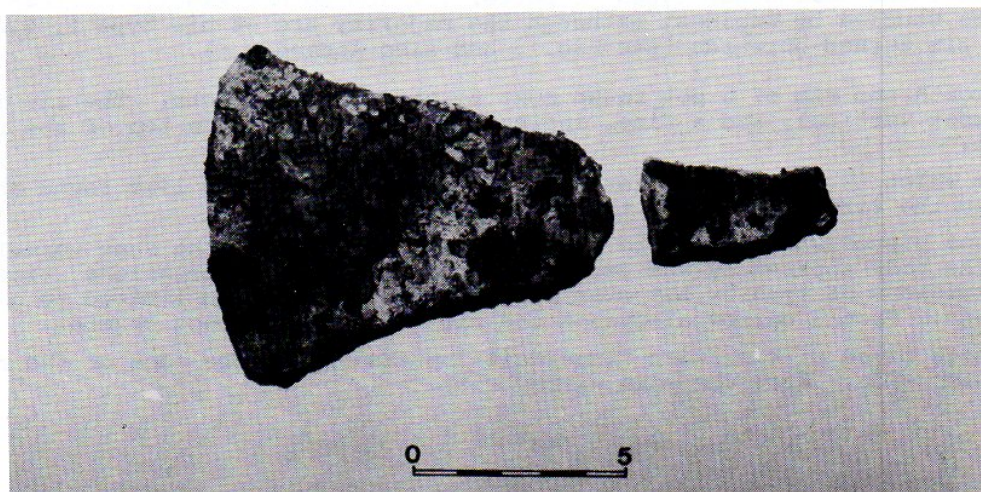
The Pottery: Fragments of pottery have been found almost everywhere in the cave; at the top of flowstones, at the end of narrow alcoves, in the gour pools, or simply strewn on the floor of the main passage. This dispersion has been explained with the hypothesis of a powerful current of water which destroyed archaeological levels at the entrance and spread the remains throughout the cave (Begines, 1966). Recently this theory has been criticized (Peñil, Muñoz and Smith, 1982) precisely because the cave must have been left fossil long before the Bronze or Iron Age, so it is difficult to imagine a current so powerful acting since then. The pots were placed on the flowstones or in the alcoves, according to the rituals and beliefs of the time, and their later dispersion, within a relatively small radius, is due to the action of the water-drips or animals or more recent human activity.



1. View of La Vega, Matienzo, with, from left to right, the caves Barandas, Rascavieja and Cofresnedo.



2. Iron dagger from Cofresnedo.



3. Iron axe-head from Cofresnedo.
scale in cm.

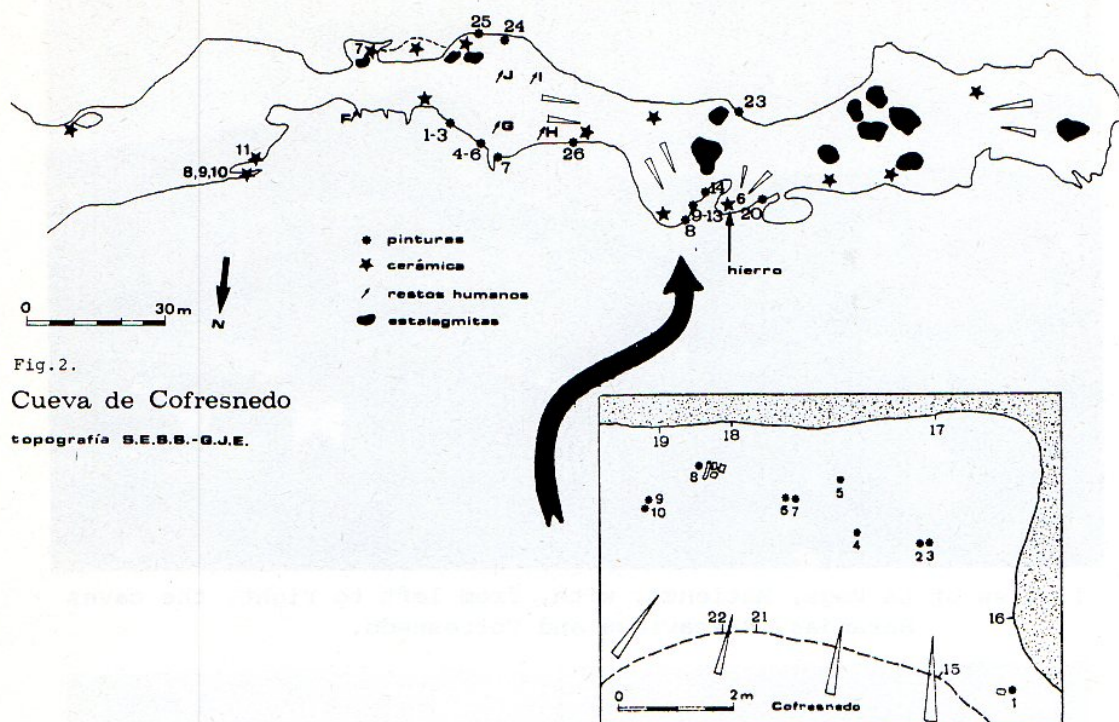


Fig. 2.

Cueva de Cofresnedo

topografía S.E.S.S.-G.J.E.

Fig. 3. Enlargement of Cofresnedo cave plan showing finds of iron objects, other artifacts and wall-paintings.

Begines recognized five main types of pottery. In summary they are:

1. The most common, a large pitcher (about 50 cm high), with a large, open mouth finished with a rim which turns outwards. Not connected with any kind of decoration.
2. Pottery with two layers; the inside dark grey and the outside an orange colour. This outer layer is decorated with deep and irregular finger marks, and is also pierced with holes.
3. Pottery decorated with a raised band, marked at regular distances by deep excisions.
4. Some edges of a straight-sided jar.
5. Another small edge, which forms an obtuse angle with the body of the pot.

We have found some other types of pottery, which do not exactly correspond with those studied by Begines, although the majority are of his type 1, i.e. with the rim turned outwards (see Fig. 3 and also Appendix 1).

6. The mouth and rim of a pot found next to the iron artifacts. The rim is high, almost vertical, and a fine, incised line goes round the top of the rim (Photo 4).

7. A rim which is notably thicker than the body, also with a line round the rim. From the first chamber on the left of the main passage.

8. Various pieces which could be the rim, base and body of the same vessel as No. 7. The body apparently was decorated with fingernail impressions, similar to the excisions of type 3, but over a wider area rather than limited to a raised band. From a narrow alcove on the right of the entrance chamber.

9. A single piece of rim, with fingernail impressions on the edge of the rim and on the outer side. From the same narrow rift.

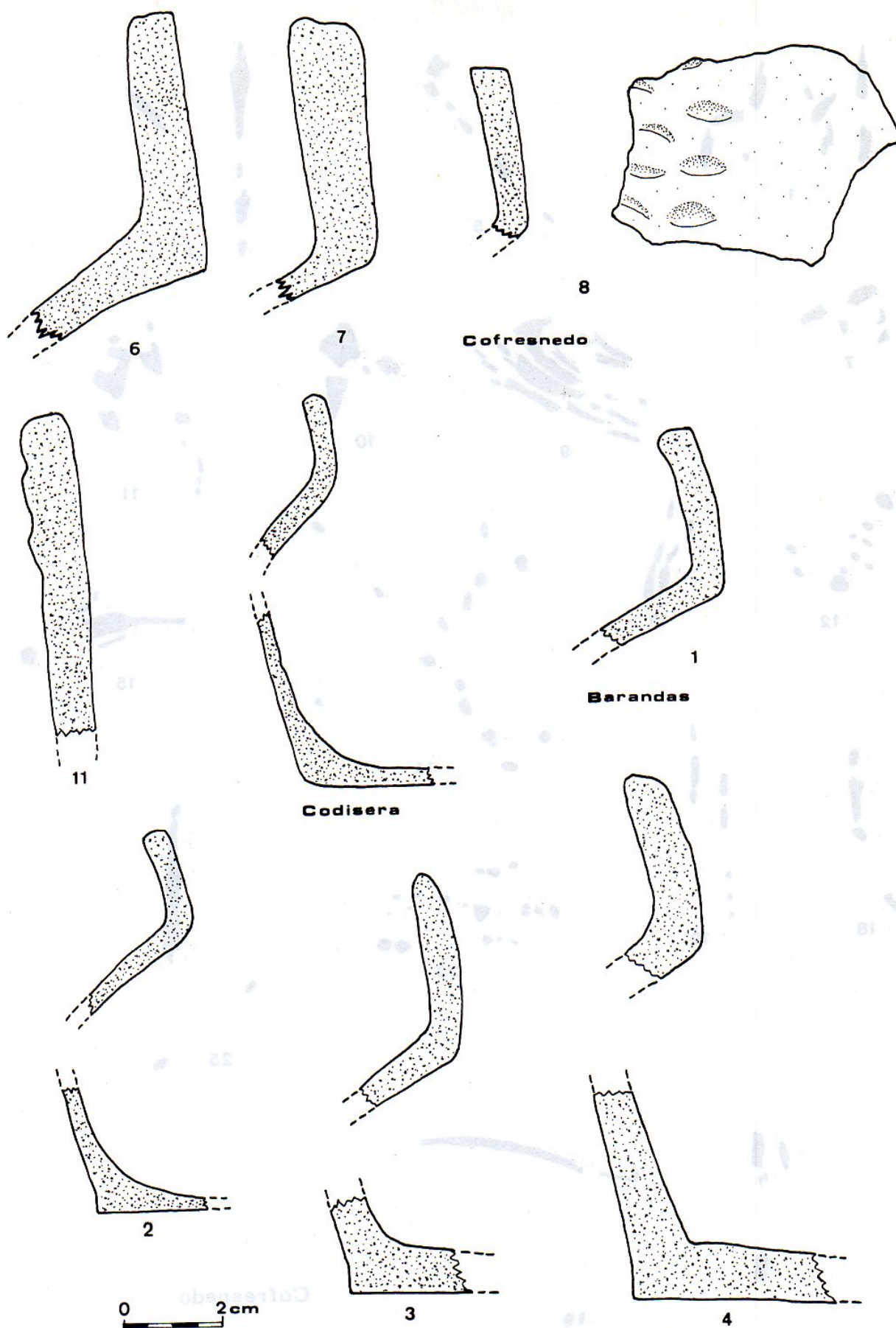


Fig.3. Pottery found in Cofresnedo, Barandas and Codisera.

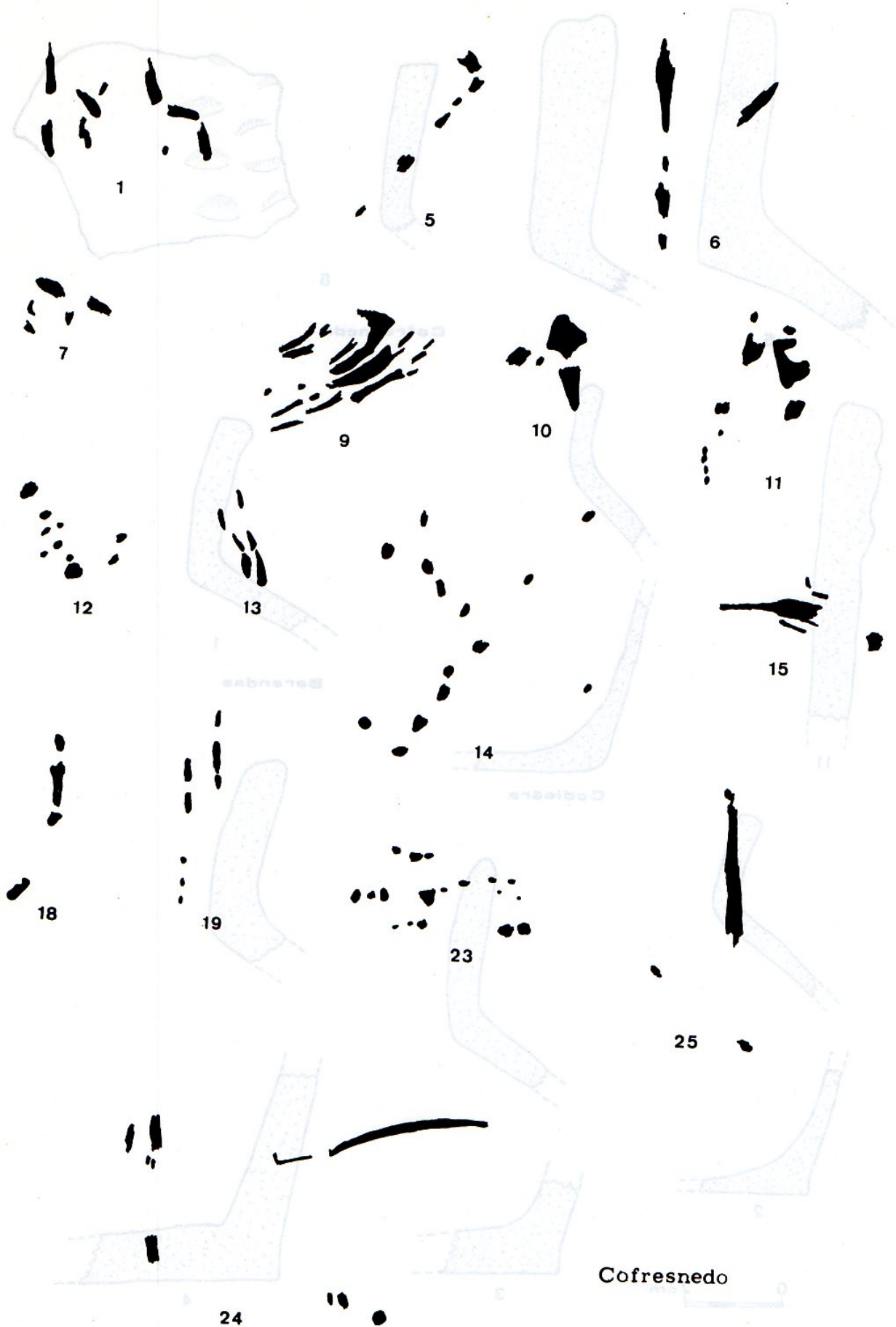


Fig.4. Some of the schematic-abstract paintings in Cofresnedo.

10. Again a single piece from the same site, it has a projection which sticks out some 13 mm.

11. A single piece from a hollow on the right of the entrance chamber. The rim of a straight-sided pot, the edge is decorated with regular fingernail impressions and the outside with irregular "smudged" finger marks.

Human remains: During the first study of the cave, five skeletal fragments were collected (García Caraves, 1966).

Piece 36-A. Part of the lower jaw, which, from its proportions, could belong to a young person.

Piece 36-B. A large right molar and part of the upper jaw.

Piece 36-C. The orbital region of the right forehead. 36-B and 36-C could belong to the same person, with a large and thick skull. The muscular insertions suggest that he was male.

Pieces 36-D and 36-E. Fragments of ribs, probably of a young person.

Thus there appear to be at least two people buried in the cave, one young and the other an adult male.

The newly-discovered remains are limited to teeth, and have been studied by Don Luis Antonio del Olmo.

F. In an alcove to the right of the main passage, a molar (position 6, lower left).

G. In the main passage, on the right-hand side. A group of teeth with part of the jaw. Possibly of a young person.

H. Also on the right of the main passage. A molar (position 6, lower left). As it is the same tooth as "F", this means there would be a minimum of two adults in the cave.

I. On the left-hand side of the main passage. A premolar (position 4, lower right).

J. Again on the left, a total of eight teeth were found in a small gour pool. Some of them, badly conserved, could not be identified. The others are; an incisor, a premolar and two molars (positions 1, 5, 6 and 7, all upper left).

Therefore it appears that a minimum of three people was buried in the cave, two adults and one youth.

All the molars examined were noticeably abraded on their upper face. This might be through a vegetarian diet, which needs more of a grinding action, rather than meat which requires a cutting action. The abrasion was especially noticeable in the case of the piece F, perhaps of a very old person, but it was also seen in the other pieces.

The Paintings: A total of 26 figures have been located since the first discoveries in October 1981. Most of them are found on the righthand wall, once within the dark zone, although a few examples can be seen on the left wall in two different areas. All the paintings can be included in "schematic-abstract" style, which is found in the Alava-Cantabrian Coast Area. These paintings, always a charcoal black, may represent stylized human figures or entirely schematic or abstract compositions.

The first paintings in Cofresnedo are quite simple figures of dots and short lines, apart from No. 1, drawn with vertical and diagonal lines. The most interesting paintings are grouped on the end wall of the first chamber on the right of the main passage. No. 9 is a composition of diagonal, subparallel lines, which is similar to some paintings in the cave of Altamira (Breuil and Obermaier, 1935). No. 14 is a series of dots which suggest the form of an "L" or perhaps a "Y". It is possibly the most important figure in the cave in a dominating position (Fig. 4 and Photos 5 and 8).

Another group of paintings can be seen in the next chamber on the right, where the iron artifacts were found. These are mainly of short, vertical lines. Also an overhang, covered with a layer of calcite, is decorated with small dots (Photo 6).

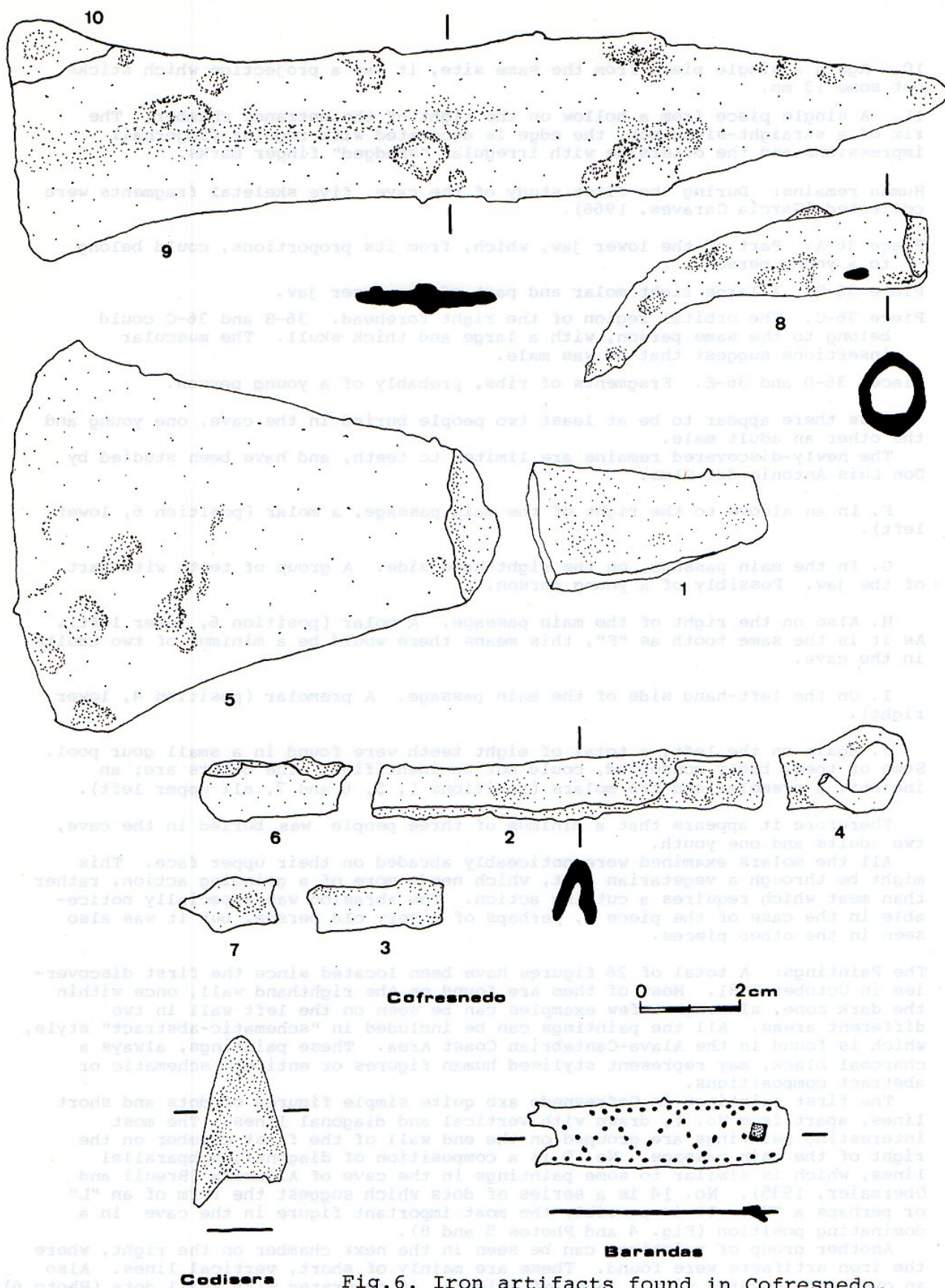
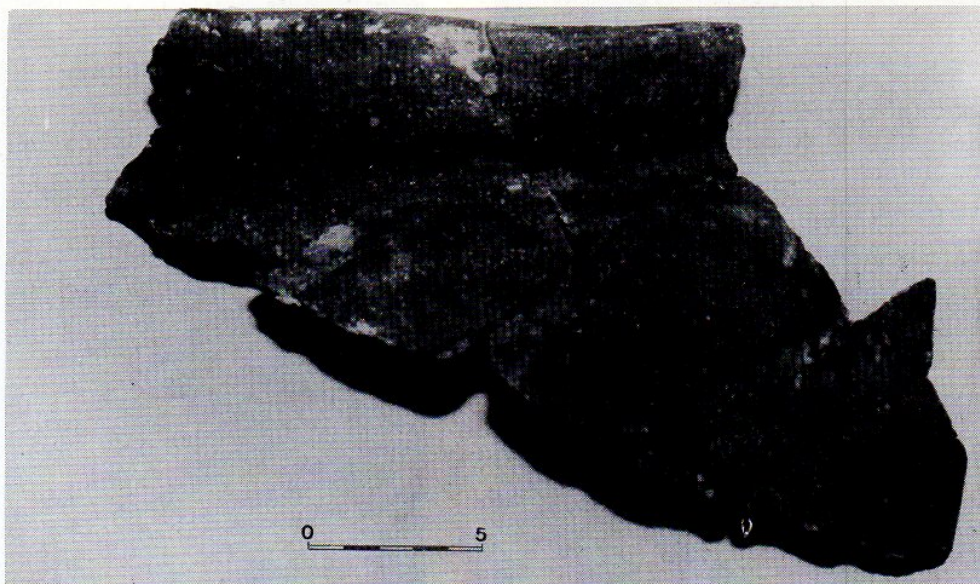
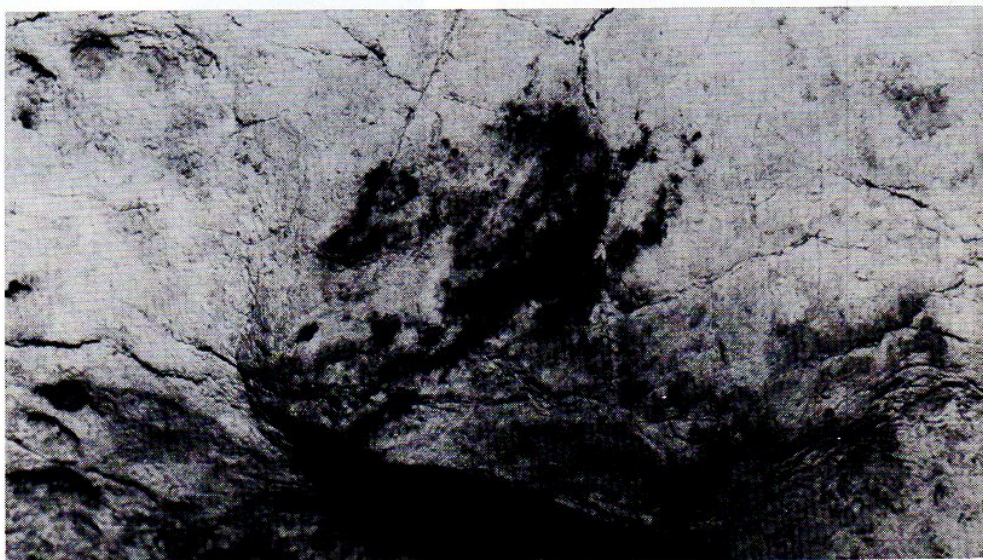


Fig.6. Iron artifacts found in Cofresnedo, and two finds in Codisera and Barandas.



4. Pottery type 6 found with iron artifacts in Cofresnedo.



5. Painting no.9 in Cofresnedo.



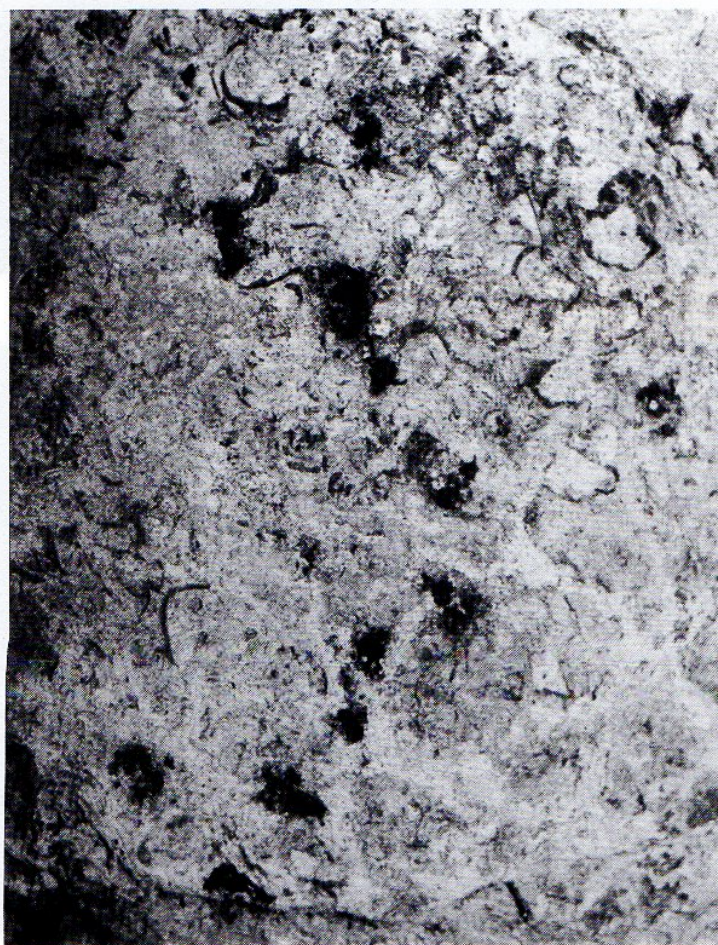
6. Painting no.21 in chamber with iron artifacts in Cofresnedo.



7. Painting no.9 in Cuatribu.



9. Painting no.12 in Cuatribu.



8. Painting no.14 in Cofresnedo.

More paintings of dots are found on the left-hand wall, approximately opposite these chambers. And another chamber, on the left nearer to the entrance, contains two more paintings (No. 24 and 25). The first of these appears to have been drawn with a finer quality paint than the others.

Although it is true to say that many of these paintings are purely abstract, others could be schematic human figures, for example No. 14 or the paintings of vertical lines. Therefore Cofresnedo can be included between the second (schematic figures) and third (abstract) periods of the classification of A. Llanos (1977). It most resembles the paintings in Altamira or in the Cueva de Cudón (C.A.E.A.P., 1982).

The Metalwork: Various pieces of iron were found in the chamber at the base of the slope which ends the main passage. Ten pieces were found altogether, although these appear to belong to four objects. They were discovered separated across the chamber, and covered by the flowstone and gours of soft calcite which forms the floor in this part of the cave (Figs. 5 and 6).

Object 1: this corresponds to the pieces No. 9 and 10, and is an iron dagger. 184 mm long, it is 47 mm wide at the end, it narrows to 27 mm and widens again to 31mm. The two pieces were found together, and it seems the fracture must have occurred recently or at the time of being removed from the calcite (Photo 2).

Despite the rust, the central ridge can still be seen; however, there is no sign of rivets or any other way of fastening it to the handle, which is missing. It is similar to the dagger found in Monte Bernorio (Palencia) and on display in the Museum of Prehistory in Santander, although this has multiple ridges down the centre of the blade. It also resembles the dagger from Doroño, Condado de Treviño (Llanos, 1968).

Object 2: this appears to be the head from a spear or javelin, although it is now bent. It is 74 mm long, with a circular cross-section, hollow, and pierced with a small hole near its base. This is the piece, No. 8, which was found next to the pottery type 6.

Object 3: these are two pieces (No. 1 and 5) which, from their size, could belong to the same tool, although they do not fit together perfectly. They were discovered about four metres apart, so the break must have happened some time ago. It could be an adze, or curved axe which (piece No. 5) is 95 mm long and 77 mm wide. If No. 1 did belong to this tool, then it would form an elongation of the axe, to which the handle would be attached. A fragment of pottery was found next to this piece too (Photo 3).

Object 4: the remaining pieces of iron are grouped together, as they are all of a similar size and were found more or less close to one another. Nevertheless it is hard to say to what kind of instrument or tool they might belong. No. 2 is a long piece, 77 mm, with a "V" cross-section, while No. 4 forms a kind of ring or hook.

Other Notes: Of the four kinds of archaeological remains in the cave (pottery, human, paintings and metal) it is easiest to find a relationship between the pottery and the metal, since the pieces of iron No. 8 and 1 were discovered practically in contact with the pottery type 6 and another fragment. Therefore it is thought that the iron and the pottery, at least this particular pot, would be of the same age and even form part of the same funeral ritual.

The walls of this chamber also have some paintings, but this time the connections are not so close. Neither are they the most significant paintings in the cave.

The human remains were all found in, or adjacent to, the main passage. But they have never been found together with the pieces of pottery and charcoal, and often they are isolated in the gour pools. However, there are remains of pottery in various parts of the passage and both walls are decorated with the black paintings.

In fact, it appears that the entire cave was used for the funeral rituals, placing the pots and other objects and painting the pictures, in different but very exact points of the cave, which would have a special meaning within the rituals. Nowadays our image of this use is rather imperfect, as the studies of the 1960s and unknown intrusions have altered greatly its original state.

The Cueva de Cofresnedo is by far the richest in Matienzo in archaeological material, as if it were the cave favoured for the rituals. This is probably due not only to its impressive size and beauty, but also to its position in the centre of the depression.

CUEVA DE CUATRIBU

The entrance is hidden in the trees, to the southeast of Ozana, the most southern part of Matienzo. It faces south, and lies at 415 m above sea level. It is a dry cave, apart from a few gour pools, and the floor is mostly of clay. About 230 m long, it never reaches large dimensions, and the passage height varies between 1 and 4 metres (Fig. 7).

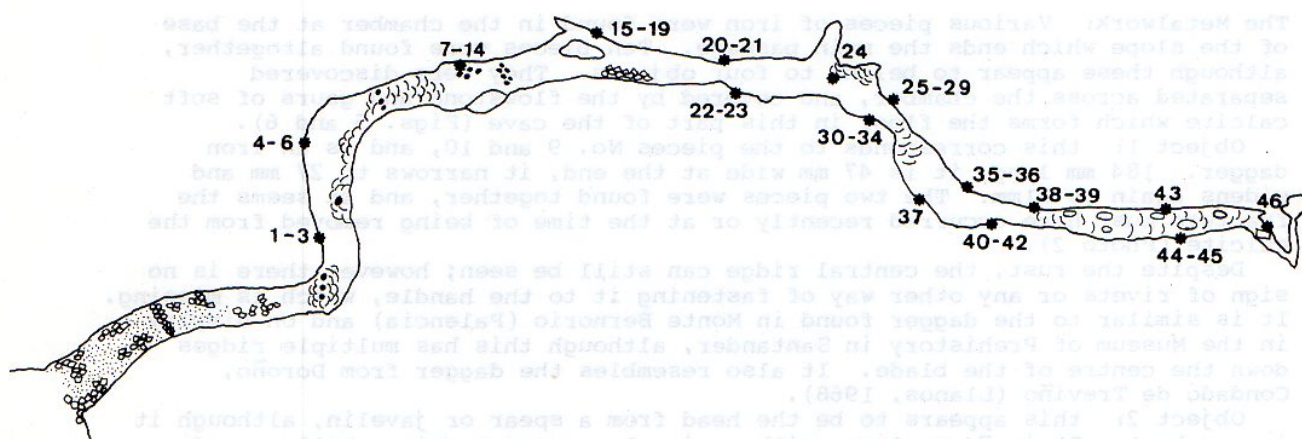


Fig. 7.
Cueva de Cuatribu
topografía 1975

The cave was included in the study of the S.E.S.S., and they discovered a vase, attributed to the medieval period, and recently dated in the twelfth century (Begines, 1966; Peñil, García and Bohigas, 1982). They also noticed the large quantities of charcoal spread throughout the cave, on the floor, stalagmites and boulders. Now it is thought that this charcoal was taken to the cave, or made there, to do the paintings, which were discovered in 1982. The cave is also remarkable for the remains of bears, perhaps three or four specimens. From their size these are more likely to be brown bears, rather than cave bears.

Recently, 7th January 1983, an iron object was found in a low opening at the entrance of the cave. This is apparently part of a narrow axe, imitating the axes of the Bronze Age. It was found by a member of the Colective C.A.E.A.P. Apart from this find, out of context with the paintings, there have been no other finds of metal, pottery (except the medieval vase), or human remains.

The Paintings: These are again black, of the schematic-abstract style (Fig. 8). There are more figures than in Cueva Cofresnedo, in total 46 have been catalogued, and they are found from the start of the dark zone to the end of the cave. However, the first ones, near the entrance, and the ones near the end consist only of dots or single lines. The most interesting groups are concentrated in four zones.

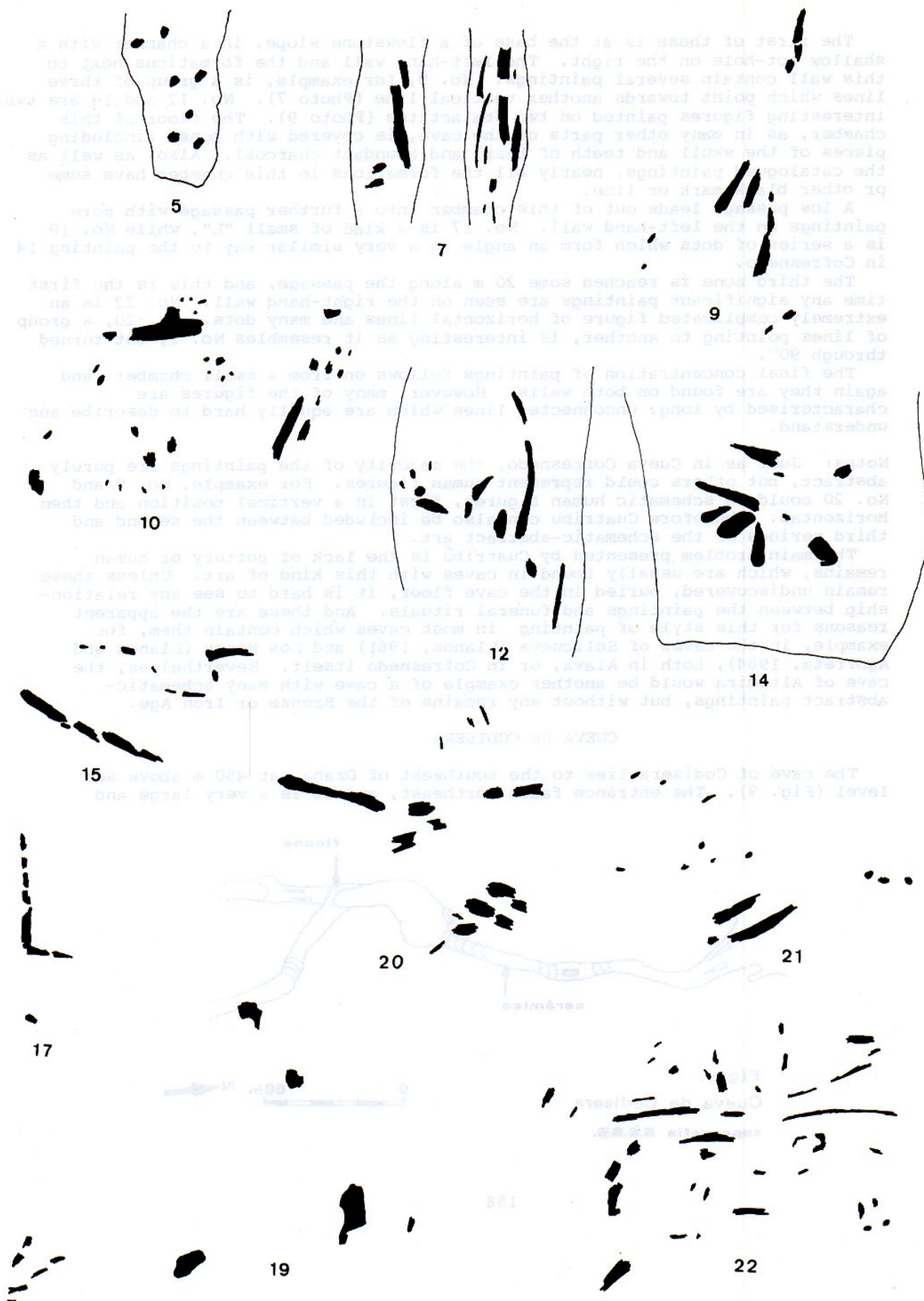


Fig. 8. Some of the schematic-abstract paintings in Cuatribú.

The first of these is at the base of a flowstone slope, in a chamber with a shallow pot-hole on the right. The left-hand wall and the formations next to this wall contain several paintings. No. 9, for example, is a group of three lines which point towards another vertical line (Photo 7). No. 12 and 14 are two interesting figures painted on two stalactites (Photo 9). The floor of this chamber, as in many other parts of the cave, is covered with bones (including pieces of the skull and teeth of bear) and abundant charcoal. Also, as well as the catalogued paintings, nearly all the formations in this chamber have some or other black mark or line.

A low passage leads out of this chamber into a further passage with more paintings on the left-hand wall. No. 17 is a kind of small "L", while No. 19 is a series of dots which form an angle in a very similar way to the painting 14 in Cofresnedo.

The third zone is reached some 20 m along the passage, and this is the first time any significant paintings are seen on the right-hand wall. No. 22 is an extremely complicated figure of horizontal lines and many dots. No. 20, a group of lines pointing to another, is interesting as it resembles No. 9, but turned through 90°.

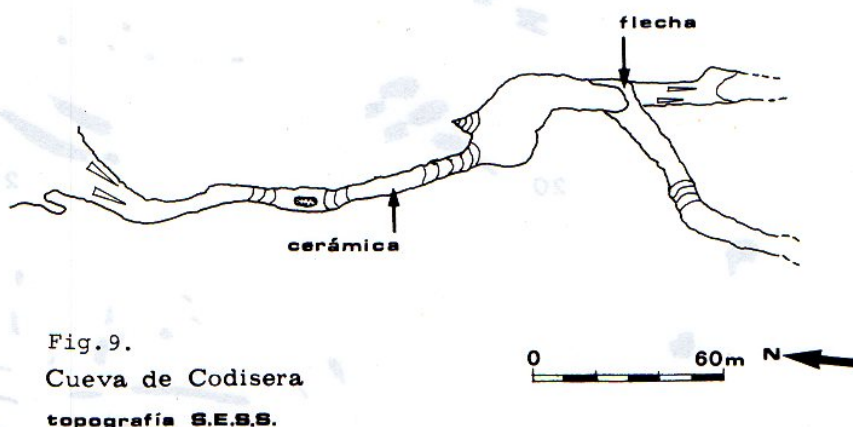
The final concentration of paintings follows on from a small chamber and again they are found on both walls. However, many of the figures are characterised by long, unconnected lines which are equally hard to describe and understand.

Notes: Just as in Cueva Cofresnedo, the majority of the paintings are purely abstract, but others could represent human figures. For example, No. 9 and No. 20 could be schematic human figures, first in a vertical position and then horizontal. Therefore Cuatribu can also be included between the second and third periods of the schematic-abstract art.

The main problem presented by Cuatribu is the lack of pottery or human remains, which are usually found in caves with this kind of art. Unless these remain undiscovered, buried in the cave floor, it is hard to see any relationship between the paintings and funeral rituals. And these are the apparent reasons for this style of painting in most caves which contain them, for example, in the caves of Solacueva (Llanos, 1961) and Los Moros (Llanos and Agorreta, 1964), both in Alava, or in Cofresnedo itself. Nevertheless, the cave of Altamira would be another example of a cave with many schematic-abstract paintings, but without any remains of the Bronze or Iron Age.

CUEVA DE CODISERA

The cave of Codisera lies to the southwest of Ozana, at 450 m above sea level (Fig. 9). The entrance faces northeast, and it is a very large and



sporting cave, almost two kilometres long. From the entrance the first passage slopes down to a pitch, which can be traversed on the left, and the passage continues through a small chamber to another larger one where a lake forms in wet weather. From here the passage slopes down again to another pitch, while a secondary passage climbs up on the left and crosses over the first.

It was completely explored by the S.E.S.S. in the 1960s, but the first archaeological discovery was made by Alfonso Pintó in 1978; he found some pottery in the chamber which follows after the first pitch.

The Pottery: This find has not been published at all, but we have been able to collect some more pieces from the same site, and this allows us to reach some conclusions about the kind of material in the cave.

The fragments all appear to belong to the same article, which is quite small with thin walls. (See appendix 1 and Fig. 3).

It is of the type with the rim turned outwards and without any decoration, therefore it is similar to the type 1 in Cofresnedo, the most abundant in the cave, and it very closely resembles the pot No. 2 in the cueva de las Barandas.

The floor of the chamber where these fragments were found is covered with many bones, of which we have been able to recognise those of cow and goat.

The Metalwork: At the start of the passage which climbs up on the left, precisely where it crosses over the first passage, a copper arrow-head was discovered. It is 35 mm long, from the tip to the end of the fin, 19 mm wide, and is very thin. It is flat, without any type of central ridge or other kind of decoration. One of the fins is missing, and also the central spike which fastens to the shaft.

Other examples of copper or bronze arrow-heads were found in the caves El Castillo and La Flecha (Puente Viesgo). Although these are rather narrower (16 and 14 mm) and longer than the one from Codisera, they are similar in being thin and flat (Aragoneses, 1953). This author dated them in the early Bronze Age, although a later dating might be preferable as the arrow-head type "Palmella", without fins, is now thought to be from the early Bronze (Apellániz, 1974).

The only other known arrow-head found in Santander has recently been published (Rincón, 1983). It was discovered in the Cueva de la Lastrilla (Castro Urdiales).

Notes: It must be remembered that the arrow-head in Codisera was found at a distance of 100 m from the pottery. Therefore there ought not to be any relationship between the two finds. Also, while the arrow-head could be dated in the late Bronze Age, the pottery appears to be of the Iron Age type.

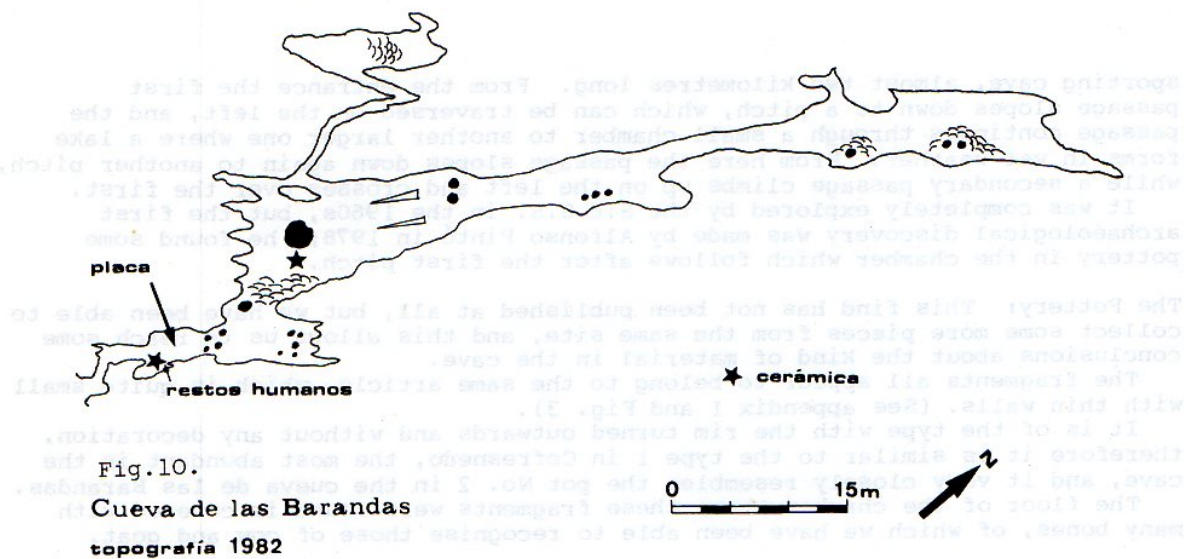
CUEVA DE LAS BARANDAS

This cave is in the part of Matienzo called La Vega, and its small entrance lies just above a path which climbs up the northern slopes of the valley (Fig. 10). The entrance faces south, at 208 m above sea level. A slope drops down into a chamber, with another slope on the left into the main chamber, which is decorated with a tall and wide stalagmite. The main passage then continues for another 70 m, while a narrow side-passage ends in a small chamber.

We were told of the cave in summer 1982, and in our second visit we discovered the prehistoric remains.

The Pottery: Fragments of pottery have been found in two completely different parts of the cave; in the main chamber next to the big stalagmite, and in the first chamber and slope on the right. This slope has been further subdivided to help differentiate between the various fragments; two rifts against the left wall, and the left and right halves of the slope itself.

We have collected, as on other occasions, only fragments of the rims and bases, and with these we have been able to pick out four different pots, although all four are of the same type: i.e. with the rim turned outwards and without decoration. Thus they are similar to the most common types in Cofresnedo and Codisera. (Fig. 3).



1. The rim of a quite large pot, found in the main chamber.
2. Pieces of a small pot, very similar to the one in Codisera. Mainly from the second rift on the left of the slope.
3. The rim and base of pot very similar to No. 1, except for the reddish colour of the inside layer of the piece. From the two rifts.
4. The base and rim of a grey coloured pot with a porous texture, and a somewhat uneven surface texture, as if it had been finished off with a spatula. From the right of the slope.

Human remains: Certain skeletal remains have been found in the first chamber and the two rifts near the entrance, and they have been studied by Dr Jose Miguel del Olmo.

- A. Part of the left femur. The lower part is broken and missing, but the piece collected is 29 cm long.
- B. The sacrum, possibly of a young male.
- C. A possible dorsal vertebra.

The Metalwork: A small piece of copper was found in the centre of the first chamber, therefore it was in a close relationship with the pottery and the human remains. It is in the form of plaque or strip, 52 mm long by 13 mm wide, decorated with a zig-zag pattern made up of dots punched in the metal. More dots surround the border of the strip. In one end there is a small iron rivet, while the other end appears to have broken where the other rivet would have been. (Fig. 6).

It is not known what this strip would have been for, perhaps it formed part of some personal jewellery, or decorated a belt, or even a shield or sword. Nevertheless, similar strips were found in the excavation of the Iron Age hillfort of Celada Marlanges (García Guinea and Rincón, 1970). These were in bronze, and there was also one in iron. Although they did not have the same decoration of dots, they did have holes at either end, just as this new strip has the iron rivet. Finally the C.A.E.A.P. have recently found a similar plaque or strip with iron rivets in the Cueva Coventosa, in Ason, Santander (Personal communication).

Notes: Apart from these finds, we have seen in the cave a circular oxidized object which is apparently an aluminium coin. Also there was an empty bullet shell in the entrance, so these objects show a more recent use of the cave. However, it seems clear that the archaeological material belongs to the prehistoric period, and are typical of a burial cave. As the pottery is

similar to most of that found in Cofresnedo, it is probable that it, too, is from the Iron Age. This theory is reinforced by the copper strip, with the iron rivet.

Also we have seen some pieces of carbonized bones in the entrance chamber. These, now half-covered with a layer of calcite, appear to be of animals, but they could indicate that cremation was practised at the time of using the cave.

CONCLUSIONS

Taking first the pottery, a noticeable uniformity is seen between the most abundant type in Cueva Cofresnedo, and all the pots in Codisera and las Barandas. This type, with the rim turned outwards and without decorations, appears to be typical of the Iron Age, very different from the Bronze Age pots, e.g. from the Cueva de A.E.R. (Ramales) conserved in the Museum of Prehistory, Santander. On the other hand it is very similar, in a more primitive form, to some of the pottery discovered in the excavations of Celada Marlantes.

The Cueva de las Barandas and also Cofresnedo, demonstrate that burials were carried out in the caves in this period. Though these were almost certainly inhumations, there are some slight signs of cremations. Thus the pottery and metal objects are seen to be grave goods.

The relationship between the archaeological material and the black paintings is not always very clear. The presence of paintings in the same chamber in Cofresnedo as the pottery type 6 and the iron objects supports the theory of a connection, as does the similarity between some paintings, especially No. 14 in Cofresnedo, and the decoration of dots on the copper strip. However, the connection between the burial caves and the paintings is not seen in the case of the Cueva de Cuatribu. Nevertheless, some of the caves in Alava with schematic-abstract paintings (second and third periods) have been dated in the Iron Age (Llanos, 1977).

The iron objects (Cofresnedo) and copper strip (Barandas) confirm this date. It appears to be a genuine Iron Age, in all its implications, which contrasts strongly with the finds in the Basque Country, where a Bronze Age culture apparently survived during a period chronologically in the Iron Age (Apellániz 1974). Thus these finds from Matienzo could be dated in the period going from 900 or 800 B.C. to the Roman conquest, with preference for the beginning of this period, whereas Celada Marlantes was dated at the end.

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APPENDIX 1: THE POTTERY

The table gives the approximate sizes for the different pots, and the percentages can give an idea of the accuracy to be attached to each one.

The rim heights were measured on the inner side of the rim, from the angle with the body of the pot to the top, and all the measurements are in millimetres.

For the location of each find see the text and the relevant cave surveys.

APPENDIX 1: THE POTTERY

CAVE	COFRESNEDO						CODISERA	BARANDAS			
POTTERY TYPE	6	7	8	9	10	11		1	2	3	4
COLOUR	BROWN-BLACK	DARK BROWN	BROWN	BROWN-BLACK	BROWN	BROWN-BLACK	BLACK-BROWN	BROWN-BLACK	BLACK	BLACK-REDDISH INTERIOR	GREY-BROWN
DIAMETER MOUTH	270	300	250	250	-	210	120	240	120	210	230
HEIGHT RIM	55	43	33	34	-	-	17-19	35	22	35	33
% RIM FOUND	20	12	25	10 single piece	-	10 single piece	17	17	50	33	8
THICKNESS SIDES	5-6	5	5-7	8	7	8-9	5-6	5-7	3-4	5-7	7-8
DIAMETER BASE	-	-	230	-	-	-	90	-	90	120	165
THICKNESS BASE	-	-	8	-	-	-	4-5	-	3	9	10
% BASE FOUND	-	-	5	-	-	-	20	-	25	10	45
NOTES	Line around top of rim. Found next to iron objects	Difference between thickness of rim (15 mm) and sides. Line around top of rim	Sides decorated with fingernail impressions	Fingernail impressions on top of rim and round outside	Single small piece with projection 13 mm long	Straight-sided. Fingernail impressions on rim, finger marks outside	Irregular thickness of sides and rim				Flat-topped rim. Possible use of spatula

APPENDIX 2: THE PAINTINGS

Cueva de Cofresnedo

- | | |
|--|--|
| 1. Short vertical and diagonal lines, dots. | 14. Series of dots making an 'L' or 'Y'. |
| 2. Short diagonal line. | 15. Horizontal line. |
| 3. Dots. | 16. Group of dots. |
| 4. Group of dots. | 17. Vertical line and dots. |
| 5. Dots forming diagonal line. | 18. Vertical line. |
| 6. Vertical line and dots. | 19. Vertical lines. |
| 7. Dots. | 20. Group of dots. |
| 8. Long diagonal line. | 21. Group of dots. |
| 9. Diagonal, parallel and curved lines and dots. | 22. Dots. |
| 10. Dot and larger marks. | 23. Group of dots. |
| 11. Large marks and dots. | 24. Horizontal curved line and dots. |
| 12. Group of dots. | 25. Vertical line and dots. |
| 13. Short vertical lines. | 26. Diagonal lines. |

Cueva de Cuatribú

- | | |
|---|---|
| 1. Dots. | 24. Dots on stalagmite. |
| 2. Dots forming a line. | 25. Horizontal line. |
| 3. Dots. | 26. Dots, horizontal and vertical lines. |
| 4. Dots and short vertical line. | 27. Dots and horizontal line. |
| 5. Dots on stalactite. | 28. Pair of parallel horizontal lines and dots. |
| 6. Pair of dots on stal column. | 29. Dots. |
| 7. Vertical lines on column. | 30. Diagonal lines, large spot and dots. |
| 8. Lines and dots on column. | 31. Vertical line. |
| 9. Three lines pointing towards other vertical line. | 32. Horizontal line. |
| 10. Horizontal and diagonal lines, many dots. | 33. Dots. |
| 11. Few dots on stalagmite. | 34. Vertical line. |
| 12. Vertical lines and dots on stalactite. | 35. Dots and vertical line on stalagmite. |
| 13. Vertical lines and marks on column (badly conserved). | 36. Dots. |
| 14. Small figure of wedge-shaped marks on stalactite. | 37. Dots. |
| 15. Diagonal line and dots. | 38. Vertical line. |
| 16. Vertical lines on calcite. | 39. Dots. |
| 17. 'L' shaped figure. | 40. Dots. |
| 18. Vertical line and dots on stalactite. | 41. Dots. |
| 19. Dots making an angled figure. | 42. Diagonal line and dot. |
| 20. Diagonal and other short lines. | 43. Small lines and dots. |
| 21. Pair of parallel diagonal lines and dots. | 44. Dots. |
| 22. Horizontal line and many dots. | 45. Dots. |
| 23. Dots. | 46. Vertical and diagonal lines and dot. |

POSTSCRIPT Since the above article was completed we have found several objects adding to our knowledge of the period in Matienzo. These are, firstly in Cofresnedo, a flint scraper in the entrance chamber and a blue glass bead and copper ring near painting no.20. Also Juan Corrin has found a complete lower jaw and a copper or bronze nail. Found in the same alcove as molar F, this is the first time in Cofresnedo that human remains have been found with other objects. In Barandas, David Hartnup has discovered another copper strip almost identical to the one reported above and other iron objects. Barandas thus confirms even more closely the results from Cofresnedo.

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