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IMPRESSED CARDIAL DECORATION AND ROCK SHELTER ART IN EASTERN SPAIN

1. The Neolithization

According to present archaeological record two kinds of human groups with very different economy and material culture occupied eastern Spain at the beginning of the fifth millenium B.C.. On the one hand we have the hunter and gatherer communities of the Epipaleolithic slowly acquiring the elements of the new way of life. And on the other hand, farmers and shepherds having a culture that links them closely with the rest of west Mediterranean early farming communities.

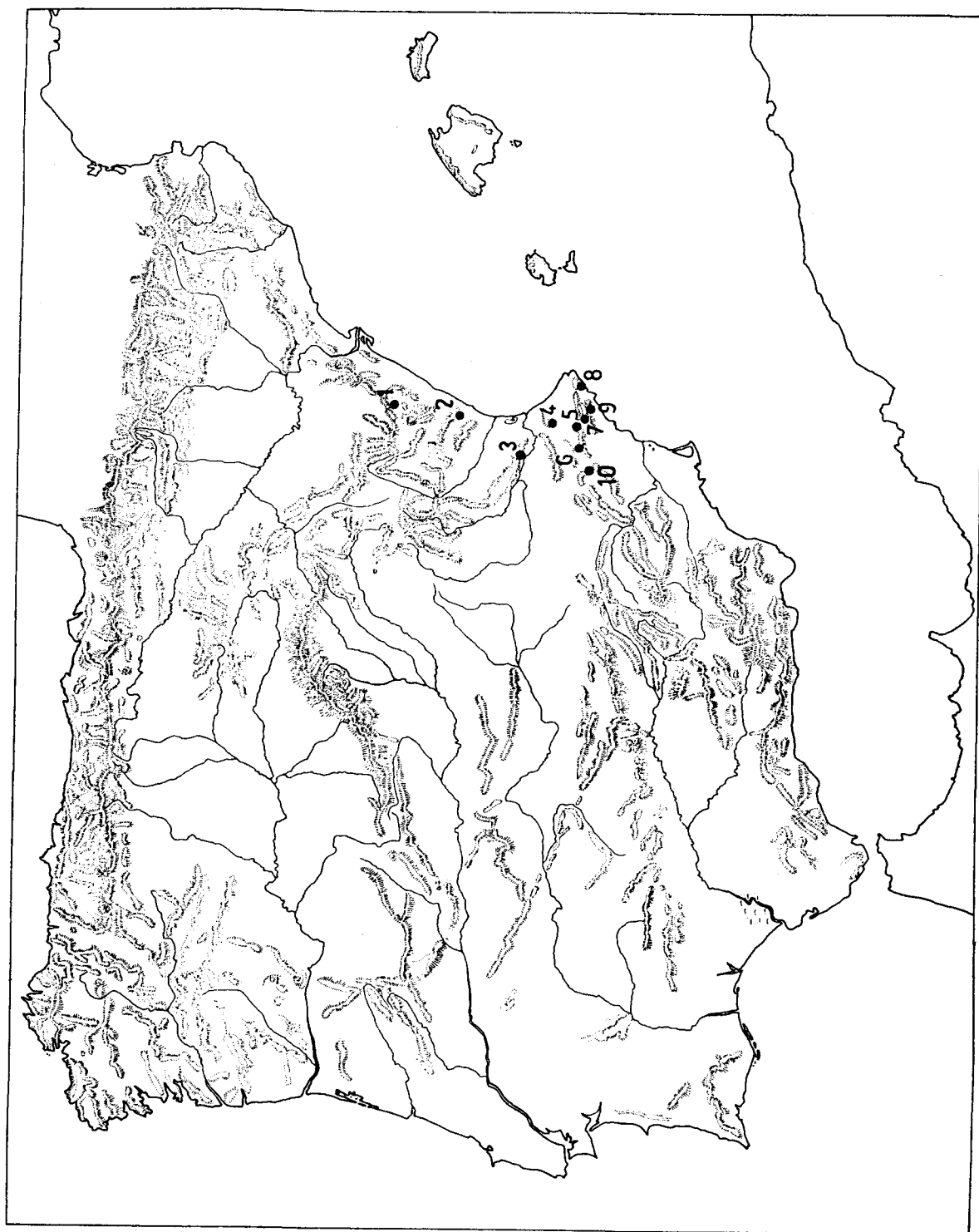
These two different but synchronous situations, two ways of life over the same territory, are one of the crucial questions for present research. As Evans (1987: 323) pointed out for the central Mediterranean, the nature of the relationship between these different kinds of human groups has been much discussed, and has been interpreted in different ways. On the one hand, it can be taken to imply that we have here the indications of a process of change taking place wholly or mainly within the indigenous population, or on the other hand that it demonstrates the arrival of a new people living chiefly or wholly on mixed subsistence farming that are going to settle among a sparse population of local hunter-gatherers. The latter would have continued their traditional way of life, but adopting the use of pottery and other traits, including elements of the subsistence base of the newcomers. These are the extreme points of view, but others offer some kind of compromise between the two, generally involving the development of the indigenous population under some measure of cultural influence or stimulus from outside the area. This view often supposes some movement of people also, even if not from very far afield, that may or may not be linked to the development of sailing.

Clearly the model we shall follow now considers that in the neolithization process of the Iberian peninsula the external influences were fundamental. That is to say, it identifies as the first neolithic groups those that are integrated in the **cultural stream of the Mediterranean impressed ware**, characterized by cardial decoration and farming economy. Those groups themselves will be the origin of the stimulus which will later produce the slow neolithization of the 'geometric' Epipaleolithic settlements such as Cueva de la Cocina in Valencia or the rock shelter of Botiqueria dels Moros in Aragón. Certainly, in the last few years and taking as the

wain reason the higher radiocarbon dates associated with materials other than impressed ware culture, it has been hypothesized that the most important factor in the beginning of the Spanish Neolithic was the evolution of local epipaleolithic groups, while external influences were of little significance or, rather, they acted upon communities already moving towards their own process of neolithization. From this point of view we would expect to find little uniformity in the features of the early Neolithic, that is to say, we could find varied typology in the material culture and in the chronology within the general frame of the western Mediterranean. But in our opinion the problem outlined by the broad spectrum of radiocarbon dates may be discussed and solved in the most general context of comparison between settlements and areas closely related. And in this sense we must think that research up to now does not show us the previous steps towards the new way of life as we can see in the case of outstanding elements such as pottery technology or, above all, in the basic components of farming economy. As was pointed out by Hopf (1966) in her studies of charred grains of wheat and barley from Cova de l'Or, with C.14 dates of 4770 ± 380 and 4670 ± 160 B.C., links between here and the eastern Mediterranean could explain the appearance of these cereals in this area, for which we have no previous wild forms. In the same way we need to recognize the introduction of some domestic animals such as sheep and goats, as we have said earlier. And the results would be similar for many other elements concerned. These reasons justify the outstanding place that impressed ware, and in particular the cardial vessels, occupy in the material culture. This is because this decoration so peculiar and widespread in the Mediterranean world is always found in the settlements with well-established stratigraphy with the first evidence of cereal cultivation and domestic animals.

As Fortea (1973) showed in his studies of peninsular Epipaleolithic, specially in Cueva de la Cocina, or Barandiarán and Cava (1985) have pointed out in the shelters of Botiqueria dels Moros and Costalena, there are many settlements that show the existence of epipaleolithic levels, industrially and economically, whose chronology reaches and goes further than the appearance of the Neolithic communities in the Peninsula. Therefore their slow process of neolithization can be explained by those other groups that were

Fig. 1: Map showing some Valencian neolithic sites : 1. Cova Fosca (Ares del Maestrat); 2. Can Ballester (Vall d'Uixó); 3. Cueva de la Cocina (Dos Aguas); 6. Cova de la Sarsa (Bocairent); 7. Cova d'En Pardo (Planes); 8. Cova de les Cendres (Moraira); 9. Cova de Dalt (Tàrbena); 10. Casa de Lara (Villena).



fully neolithic. That only supposes the existence of some fully neolithic communities represented by the settlements of ancient cardial Neolithic alien to epipaleolithic tradition, a clear example of which is the Montserrat caves in Catalunya, Cova de l'Or in Valencia or Cueva de la Carigüela in Andalucía; and other communities which keep their own way of life as hunter-gatherer but adopted several neolithic elements such as cardial vessels or domestic animals.

Thus, we think that comparison and detailed study of archaeological records show that in the Iberian peninsula as in the rest of the west and central Mediterranean the early neolithic horizon, understood as the moment in which we are sure of a fully developed production economy, belongs to the same cultural stream of impressed ware and, therefore, to a similar chronological horizon showing a gradual decline from east to west.

2. The Early Neolithic of Valencia (Fig.1)

The Valencian Neolithic is well known from pioneer excavations in rich settlements such as the Cova de la Sarsa (Bocairent) and, later, in Cova de l'Or (Beniarrés), Cova de les Cendres (Teulada), Cova Fosca (Ares del Maestrat) and others. As a specific feature we have the new type of rock shelter art called **macro-schematic**, known only from the southern Valencian districts, with undoubtedly religious aims as we shall see later.

The great number and richness of neolithic caves, especially south of the Xúquer river, show that they were intensely inhabited at that time. But we also know some villages, such as Casa de Lara (Villena), whose number has been increased by recent archaeological surveys, as also occurs in Catalunya and in Andalucía. On the other hand, human remains have been found in several caves, such as Coveta Emparedada (Bocairent), Cova de Dalt (Tàrbena) and Forat de l'Aire Calent (Rótova). And this leads back to the early Neolithic the use of caves as burial places. In Cova de la Sarsa, a very important settlement because of its finds, at least seven people were buried, two of them together in a narrow fissure with small ornaments and a cardial vessel that suggests the possibility of a ritual gift.

Deep stratigraphies obtained in Cova de l'Or and in Cova de les Cendres have provided detailed chronological sequences and they are the background to the present model of cultural evolution. The early Neolithic is also defined here by a predominance of cardial decoration among a varied and well developed pottery, and dated to the first half of the fifth millennium B.C. But the rest of material culture is equally well known. Bone and antler tools are abundant and include spoons, spatulae, tubes, points, chisels, polishers, etc., and ornaments such as rings, beads and pendants. Bone tools decrease in middle and later Neolithic, and we think that they were replaced by others made of wood. Retouched flint tools include blades and bladelets employed as sickle blades, borers and geometric microliths, particularly trapezes. Blades will increase in size throughout the Neolithic, and

arrowheads of bifacial retouch will appear in the late phase. The lithic assemblage also includes numerous polished-stone implements such as axes, small 'hoes' or chisels; and ornaments such as bracelets, pendants and beads.

Very early dates obtained at Cova Fosca, 5690 ± 70 B.C., and in other peninsular settlements have been applied to an early Neolithic other than those assemblages characterised by cardial pottery. C.14 dates and the overlaying to epipaleolithic levels have been the chief reasons for making the assumption of an early continental Neolithic that would be parallel to that of the Mediterranean area. In my opinion, many of these assemblages would be better attributed to a middle Neolithic, according to the more recent works in Cova de l'Or and Cova de les Cendres, and to stratigraphy and dates of the Andalusian Cueva de la Carigüela and Cueva de los Murciélagos.

The interdisciplinary research shows clearly how farming communities increase their influence over the environment. And for that reason Man's action must be considered from now on as another morphogenetic factor that intervenes actively in the areas surrounding his settlements.

The sedimentological studies put the beginning of the climatic optimum of the Atlantic period after 4000 B.C. for the central Mediterranean area of the Peninsula. At this time the rise in sea level seems to stop, thus allowing the regularizing of the coastal perimeter. The palynological analyses indicate that the climatic changes must not have been very marked during this phase. These changes were greater in humidity than in temperature.

As a general rule in the eastern peninsula area the landscape would have been that of a mixed mediterranean forest and around the settlements there would have been large deforested areas to allow cultivation and stock breeding.

Among the vegetables known in the neolithic sites are different varieties of wheat and barley, some acorns and legumes. In the Cova de l'Or two samples of charred grains were classified that consist of *Triticum monococcum* L., *Triticum dicoccum* Schübl., *Triticum aestivum* L., *Triticum aestivum-compactum* Schiem s.l., *Hordeum vulgare* L. *polystichum* var. *nudum* and *Hordeum vulgare* L. *polystichum*. In other settlements such as Cova de les Cendres and Cova de la Sarsa several kinds of wheat and barley have been also recognized. And in the same way that the cultivation of wheat and barley was widespread in the European neolithic communities, the same uniformity is found among the main domestic animals: *Ovis aries* (sheep), *Capra hircus* (goat), *Bos taurus* (cow), *Sus domesticus* (pig) and *Canis familiaris* (dog). In ancient Neolithic of Cova de l'Or the ovicaprines are over 50%, while in Cova de la Sarsa these percentages are slightly lower. Among the wild animals we find that the rabbit is usually the most common although in terms of meat the red-deer, the wild boar, the roe-deer, the wild goat, the horse, etc., would have been more important. It is thought that the high percentage of deer, and in general of herbivores, must be related to hunting for the protection of cereal cultivation, indirect proof of the importance of agriculture.

Fig. 2: Macro-schematic Art. Paintings in the rock shelters of Pla de Petracos. After M. Hernández and C.E.C.



3. The Neolithic Art

The Neolithic of south-eastern Europe and the Near East also includes small figurines and general imagery of the first farming communities. They tell us that the new way of life meant an important change in the religious world, as we have seen in the technological or economical aspects. That is to say, that we are now in front of a different mentality, dealing with worries that were a long way from those of the hunter-gatherer groups.

We find the same picture here since recent results have opened new perspectives in the studies of rock shelter art, although the information available at the moment is limited to the southern districts of the Valencian region. Several rock shelters with painting were found in Pla de Petracos (Castell de Castells) in 1980, showing motifs without parallel in the other paintings known in the Iberian peninsula. At first, people tried to relate them to the so called Linear-geometric Art of advanced epipaleolithic groups. Finally, these new finds allowed to define the new type of Macro-schematic Art, especially studied by Hernández (Figs 2-10).

The more abundant motifs painted in red are the human figures with a round-shaped head, stretched arms with opened hands and drawn fingers, and a body shaped by a broad outline without anatomical features. But we also find anthropomorphic designs close to the X-shaped human figures of Schematic Art, wide lines like vertical meandering and others motifs.

Recent research into peninsular Neolithic has surprised us greatly in the subject we are dealing with. It is the appearance of numerous anthropomorphic images among the rich ceramic decoration, in particular among impressed cardial decoration. It has been said sometimes that the complex and baroque cardial pottery would hide the symbols of primary elements such as water, earth or fire. But we know today that these vessels hold accurate anthropomorphic themes closely related to the painting of rock shelter Macro-schematic Art.

The present finds of ceramic parallels are limited to Cova de l'Or and Cova de la Sarsa, offering two principal groups of anthropomorphic representations. The frontal human figures whose head is or not differentiated, with stretched arms and opened hands, a body without anatomical features, legs and feet with toes. And the more simple anthropomorphic motifs in the shape of X or Y. We must note that in the former group the unique complete figure known at the moment has sex indication by impression of *Cardium* top.

The cultural and chronological evaluation from the point of view of neolithic sequence is based on the predominance of cardial decoration among the pottery concerned here. And this means that we have an important argument to relate the Macro-schematic Art with first farming communities of this area. We can also assume that here we are dealing with the imagery of neolithic religion, with rock shelters that were sanctuaries and with ritual vases.

A very small number of ceramic parallels can be related to Levantine Art, but now only from the Cova de l'Or. Two pieces of the same vase offer us in part the impressed drawing of a goat, a deer and, possibly, a

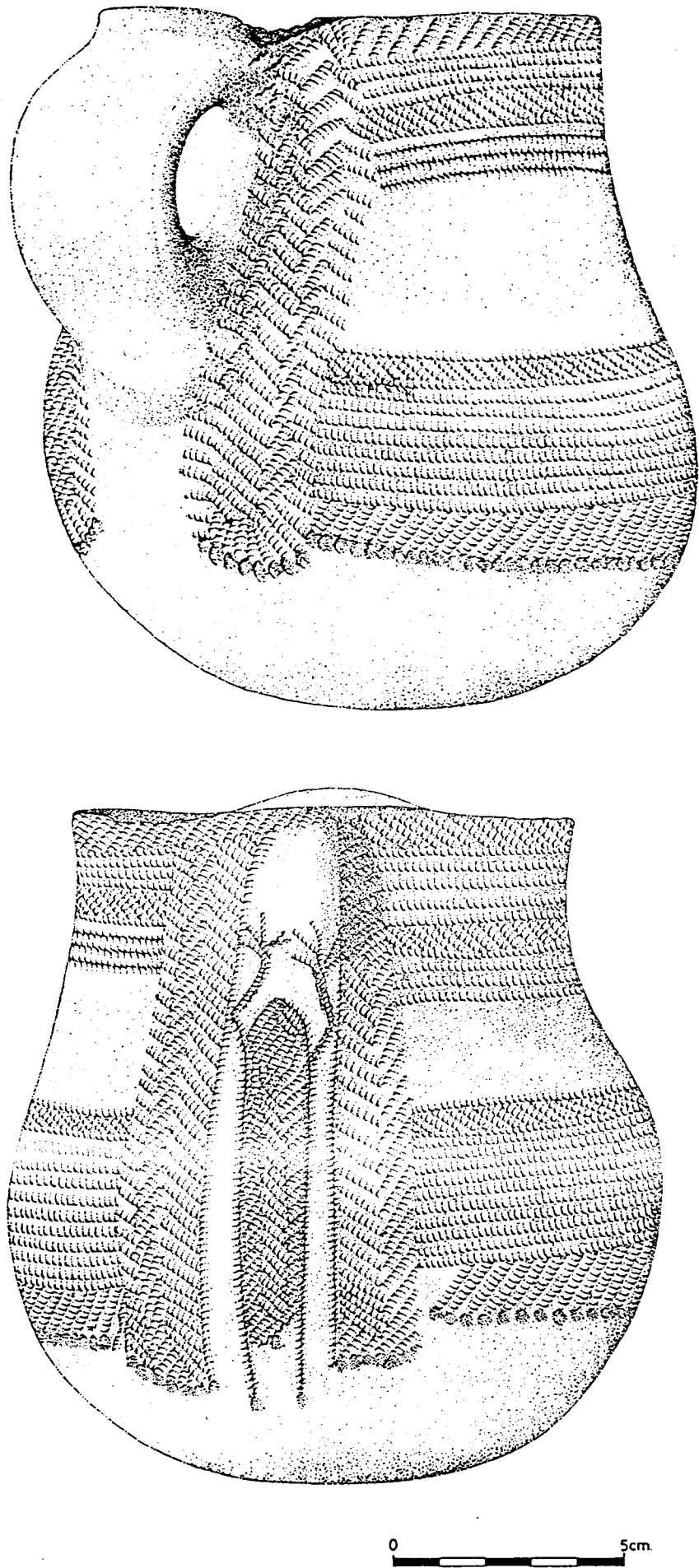
bull, in naturalistic style. Another cardial vase shows human figures that remind us of the macro-schematic ones and the levantine ones, here seeming to dance. And there is also a small figure of a bird with cardial decoration. On the contrary there are many parallels for schematic paintings both in pottery decoration and in the idols of Chalcolithic. Thus, Schematic Art has been traditionally attributed to this later period. But recent finds from middle Neolithic in Andalucía have changed this position, as is exemplified by the pottery of Cueva de Prado Negro with anthropomorphic motifs. And now the new information available from the Valencian settlements such as Cova de l'Or and Cova de la Sarsa takes back to an earlier date the beginnings of this Schematic Art. The human figures, X or Y shaped, related above with Macro-schematic Art, the stars, spirals and the other motifs usually made with cardial impressions, the piece with incised deer, etc., tell us that Schematic Art was present from the early Neolithic to the Bronze Age.

It is difficult to say how far this new perspective will extend that, at the moment, is limited to Neolithic of some south Valencian districts. But the present point of view is that with the first farming communities here the Macro-schematic Art appears also, without roots in the area, with undoubtedly religious aims and with clear connections with the Italian villages of early Neolithic with painted and impressed pottery. This chronology means that we are near the horizon of Linear-geometric Art, that belongs to epipaleolithic groups that still have not begun their process of neolithization. And that soon after, but still in the ancient Neolithic according to scarce zoomorphic pottery motifs, will appear the Levantine Art. This hypothesis has been checked by the presence of levantine paintings over the macro-schematics ones in some rock shelters such as La Sarga (Alcoi). Finally, the ceramic parallels tell us how Schematic Art was present from the early Neolithic, mixing and losing itself sometimes in the Macro-schematic Art.

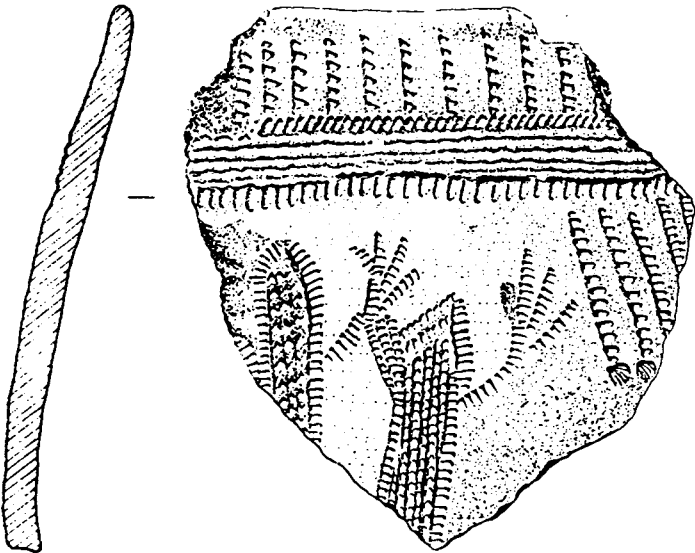
All these problems will need intense research in the next few years, but they can already exemplify the complex cultural duality envisaged for the Neolithic period, described above as early farming communities and local epipaleolithic groups going through their neolithization. We think that possibly in the near future we can see reflected in these artistic works the changing mentality and the interaction of the neolithization in its wider sense.

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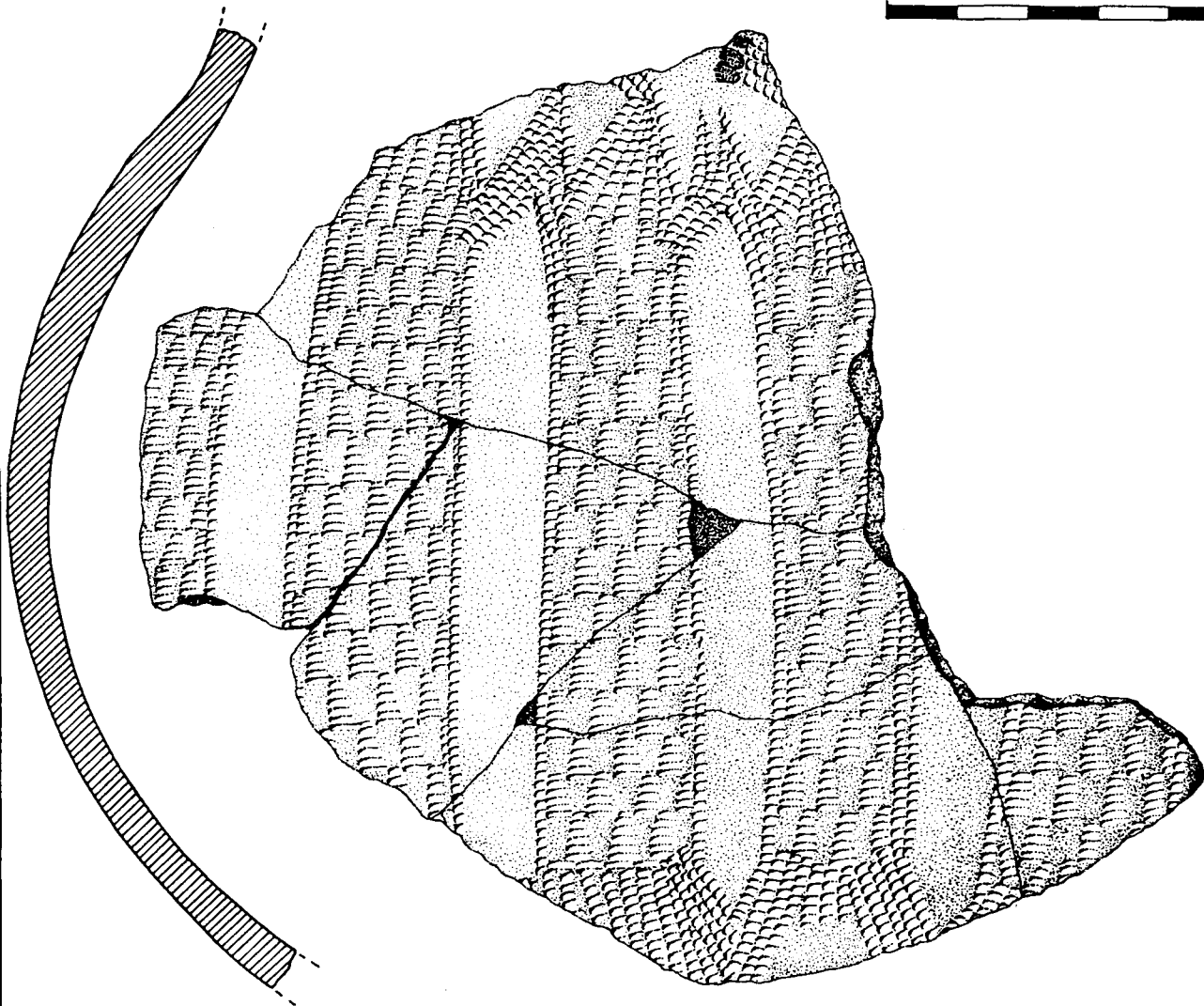
Fig. 3:
Anthropomorphic
representation in early
neolithic pottery of
cardial type. From Cova
de l'Or.



*Figs 4 and 5:
Anthropomorphic
representation in early
neolithic pottery of
cardial type. From Cova
de l'Or.*

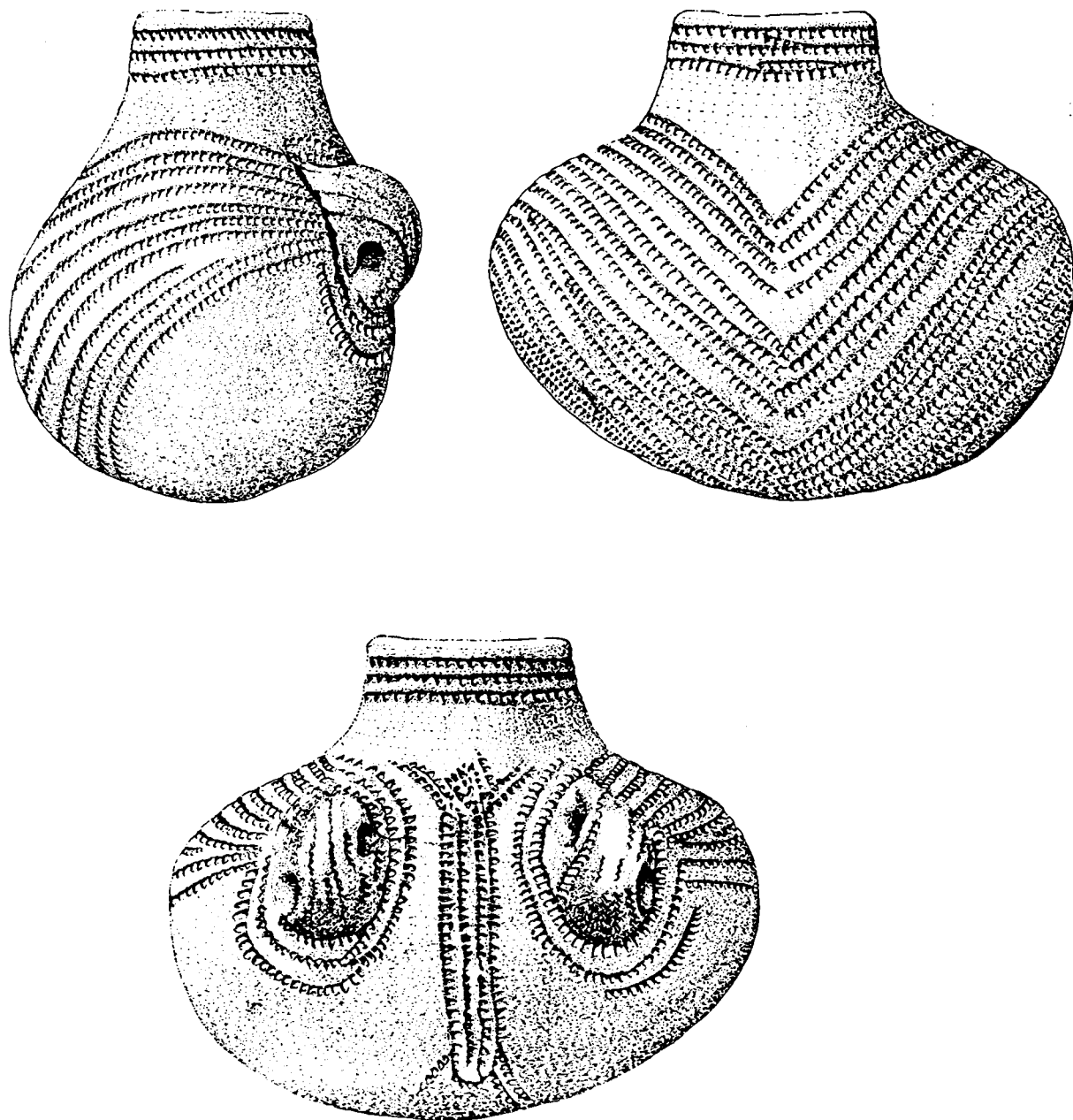


0 5cm.



0 5cm.

Fig. 6:
Anthropomorphic
representation in early
neolithic pottery of
cardial type. From Cova
de l'Or.



0 5cm.

Fig. 7:
Anthropomorphic
representation in early
neolithic pottery of
cardial type. From Cova
de l'Or. ▶

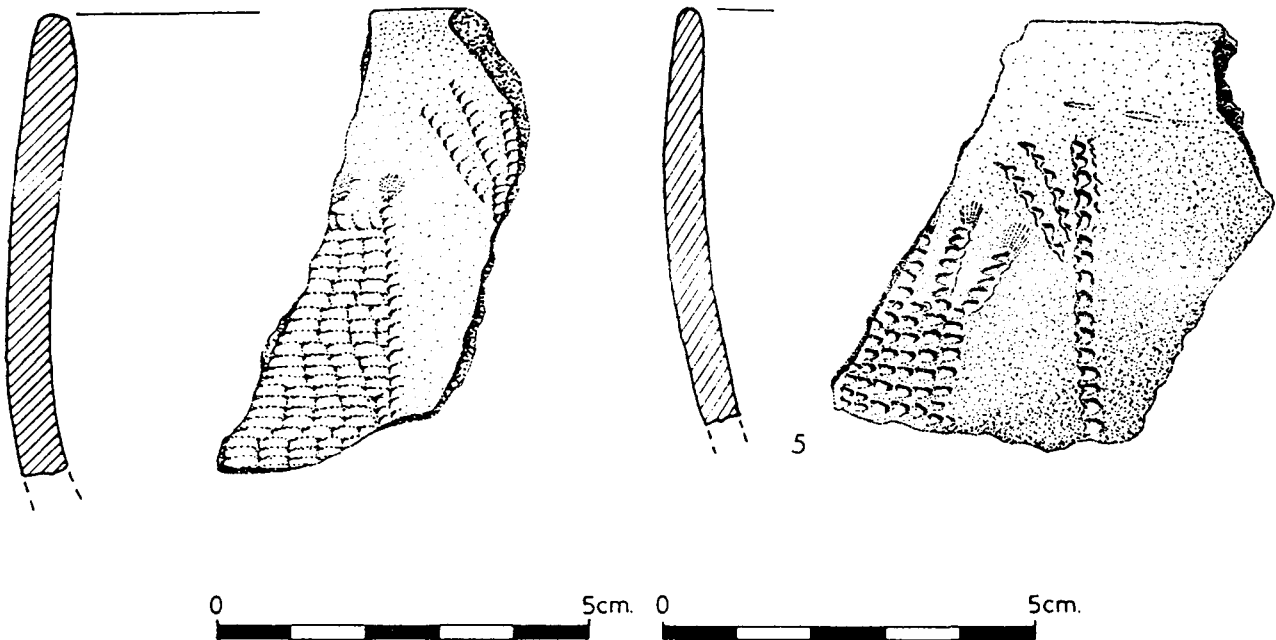


Fig. 8: ▲
Anthropomorphic
representation in early
neolithic pottery of
cardial type. From
Cova de la Sarsa.

Fig. 9:
Anthropomorphic
representation in early
neolithic pottery of
impressed type. From
Cova de l'Or.

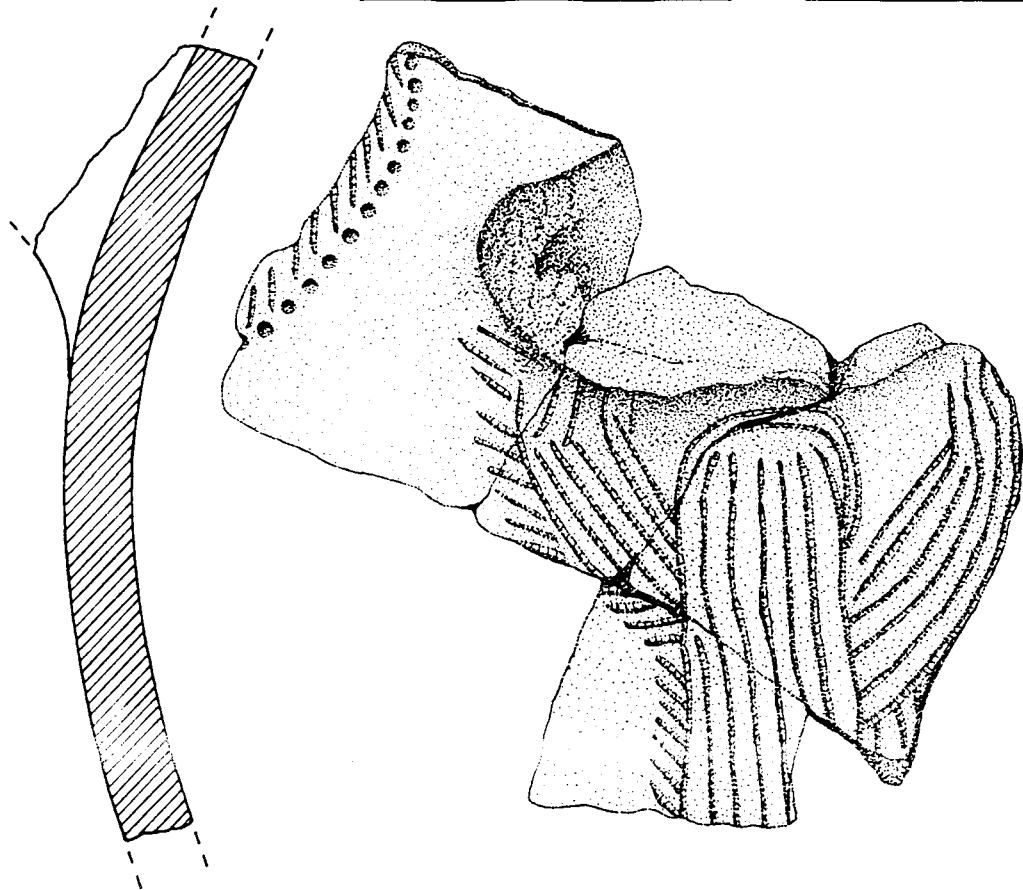
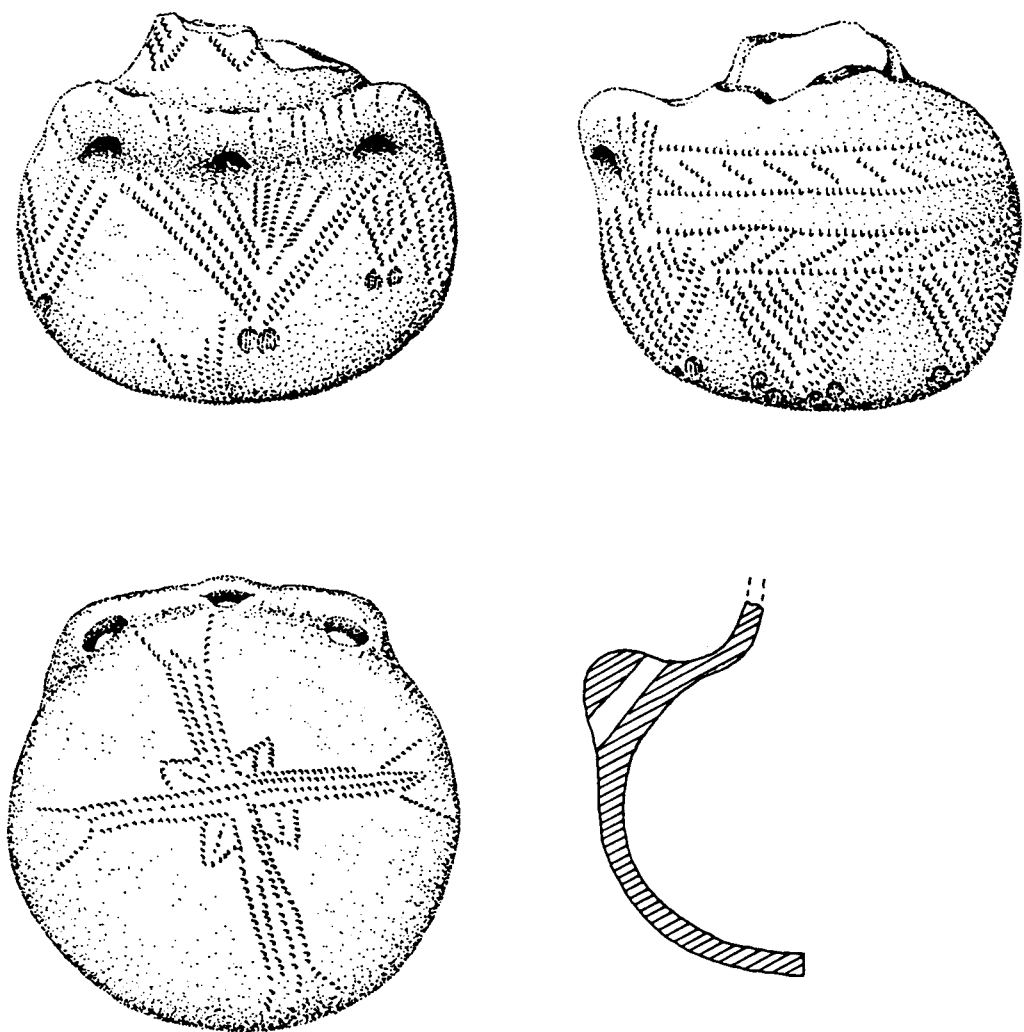


Fig.10: Anthropomorphic representation in early neolithic pottery of impressed type. From Cova de la Sarsa.



0 5cm.

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