

ARCHAEOLOGY AND MAPS IN PREHISTORIC ART: THE WAY FORWARD

Catherine Delano Smith, Univ. of Nottingham, U.K.

The origins of cartography lie in the prehistoric period. Archaeologists hold the key to this as to the evidence for any other activity in the prehistoric period. Thus, the common ground between researchers from various disciplines interested in the prehistoric period for the antecedents of specific themes and those responsible for the recovery of the data itself is self-evident. In the present context, this data concerns rock art and mobiliary art.

This paper focusses on the interpretation of those rock art features which appear to show maps. Attention is drawn to a number of misconceptions about the nature and function of maps in general as well as those produced by indigenous societies, and also to the need to assess prehistoric maps in the light of the social, religious and economic contexts that gave rise to the rock art. It is also stressed that it cannot be assumed that prehistoric maps were produced for the same purposes as were their historic counterparts. Then, as a means of providing a systematic approach to the identification of prehistoric maps, criteria based on the visual characteristics of maps are suggested as diagnostics. Finally, directions for future research are discussed. We start, though, by introducing briefly the traditional view on the earliest extant maps.

The 'earliest maps' and traditional interpretations

Maps hailed in the standard textbooks on the history of cartography as 'the oldest known' have been excavated from ancient Mesopotamian sites such as Nippur, Nuzi, Lagash (Brown, 1949; Bagrow, 1964; Thrower, 1972). However, a point not usually stressed in this literature is that these examples are already cartographically sophisticated. They employ conventional signs (circles to mark named settlements, for example) and, by the start of the second millenium BC, many were being drawn to scale or from measured survey (Harvey, 1980). It follows that the relevant concepts and skills must have been developed over a period of time prior to the third millennium BC - i.e. in the prehistoric period. This point had not escaped the early historians of cartography but, understandably, they tended to be less concerned with the origins of cartography than with the vast and varied corpus of maps surviving from the historic period. Nor did the intellectual climate of the first half of the century encourage such research. This was still dominated by ideas of human evolution from states of 'savagery' to those of 'civilisation' and 'culture' which ran counter to the idea that prehistoric man had the intellectual capacity for representing spatial concepts graphically (Lewis, in press). Geographers and historians of cartography therefore advanced little beyond paying lip-service to what they saw as the 'instinctive' mapping skills of primitive peoples of the historic period or to the artistic skills of prehistoric man as evidenced by cave paintings.

Three prehistoric topographical maps have featured in recent history of cartography literature (Bedolina; Seradina; Çatal Hüyük) though a much larger number of examples, of varying acceptability, are referred to in the archaeological literature (see, for example: Tobler, 1950, on the 'Landscape Jar' of Tepe Gawra; Molt, 1970 on the interpretation of cup and ring stones in northern Germany; Borgna, 1969, on the Clavier stone at Pinerola, Italy). Both the Bedolina and the Seradina 'maps' are Bronze Age petroglyphs, while the example from Catal Hüyük is an interior wall-painting from the Neolithic. The Bedolina petroglyph was early described by archaeologists as a map (Battaglia, 1934; Anati, 1958) but it entered the cartographic literature only in 1964 with Walter Blumer's explicitly titled paper "The oldest known plan of an inhabited site dating from the Bronze Age, about the middle of the 2nd millennium B.C." (Blumer, 1964; see also Harvey, 1980). The second, that from Seradina, is a smaller, simpler, figure than the one at Bedolina and is thought to show an orderly alignment of buildings with interconnecting paths and at least one (unenclosed) field (Anati, 1961; Blumer, 1967; Harvey, 1980). The third prehistoric map mentioned in the history of cartography literature is the wall painting from a shrine room at the Neolithic site of Catal Huyuk (Konya, Turkey). Once again, it was the excavator who identified it as a landscape representation, shown partly in plan and partly in profile (Mellaart, 1964). This time historians of cartography were a little quicker to take note of it (Viragh, 1965; Steward, 1980).

In not one of these cases, however, was the question of cartographic criteria raised. The identity of the representation as a map was accepted simply on the basis of visual familiarity: it looks like a map. The specific characteristics that might serve to identify a map lacking the writing (title, key, place-names) that normally helps the identification of a historic or modern map were never discussed. So, the first task of the present research programme has been to establish which are the cartographic criteria that distinguish a map, and what are a map's essential prerequisites. Only in this way can an attempt to provide a rational basis for the interpretation of allegedly cartographic figures in prehistoric rock art be made and antiquarian fantasy weeded out.

The new approach needs to be constructively critical. An open mind is required, not only as regards potential source material (all forms of prehistoric art may contain representations of space in one form or another) but also as regards the context and purpose of such representations. It follows from this that the study of possible cartographic representations in prehistoric art cannot be divorced from the study of that art as a whole. Moreover, since both art in general and maps in particular can communicate a society's beliefs and values at the same time as fulfilling the more prosaic functions of way-finding or recording, reference to anthropological parallels is often the only means of shedding light on the behavioural aspects (including those of belief and social values) of those who produced the art in question.

Archaeological and Cartographic Misconceptions

Four main points concerning both the nature of maps in general as well as

the nature of primitive thinking are made here. The first deals with the definition of a map. Many researchers confronted with prehistoric or indigenous maps are misled by the nature of primitive and – it must be presumed – prehistoric geometry, which is topological (Piaget and Inhelder, 1956; Hallpike, 1979; Lewis, 1984 and personal communication). This means that map-makers in such contexts are concerned only with the contiguity of the features depicted and not with those aspects of Euclidean geometry, namely the properties of distance and direction, which give accuracy of shape and scale. This means that an exact correspondence between the shape and the size of fields, for instance, in the artistic representation and real fields on the ground cannot be expected from a prehistoric map, only the depiction of relative locations. Distortion of shape is irrelevant. Failure to recognise this distinction between indigenous and prehistoric mapping on the one hand and historic mapping on the other is widespread. Established definitions of topographical maps stress their mathematical accuracy and so confine the whole concept of a map to scaled plan representations of the earth's surface based on Euclidean geometry. Only very recently has a new, authoritative, definition been proposed in a move to break this semantic straightjacket. This considers maps as:

“artifact that through their images express and communicate the location and distribution of things, concepts, conditions, processes, and events in the human world” (Harley & Woodward, in press, quoted prior to publication with their permission).

Such a definition also takes account of the full range of map types. Thus are included, as properly cartographic: plan maps constructed according to topological principles; plan maps based on Euclidean geometry; and perspective or picture-maps – those spatial representations in which only some features, if any, are shown in plan, the rest being depicted in profile. It is the first and last categories that feature in prehistoric rock art.

The second point deals with the problem of the function or purpose of a map. Traditionally, emphasis has been laid on the usefulness of the map as a record of spatial distributions but this in fact applies only to maps in the literate societies of the historic period. It is misleading to assume that such needs would have existed in prehistoric times. On the contrary, modern anthropological studies reveal how knowledge relating to economic and social activities and to matters of daily routine has to be memorised from a very early age as a matter of physical survival (e.g. Gould, 1980; Blakemore, 1981). Non-literate societies, in short, do not normally need graphic records of distribution nor do they make use of maps for way-finding. Prehistoric maps, therefore, had a different purpose from historic maps and this is found in the role of symbolism.

The third point, then, stresses the importance of appreciating the degree to which, in indigenous societies, symbolism is all-pervasive. There is no clear distinction in these societies between ‘reality’ and ‘belief’ (Eliade, 1978; Giedion, 1962; Hallpike, 1979 esp. Chapter 4). This means, amongst other things, that the more permanent forms of communication (paintings, sculpture, engraved rocks) tend to be concerned with symbolic aspects of life and with matters of belief rather than with strictly practical or utilitarian messages. Thus, the prevalence of cosmological signs and even maps in

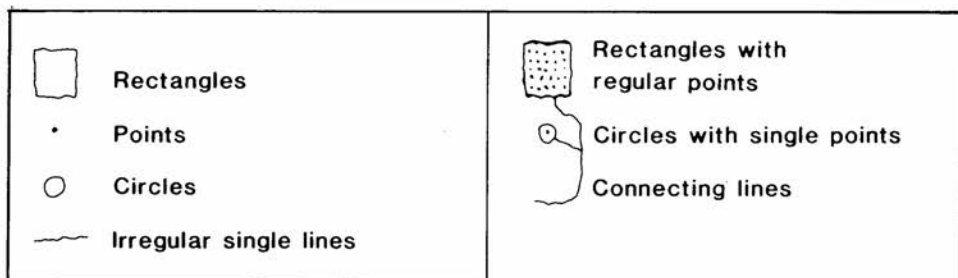


Fig. 73
Petroglyph from Bedolina, (Capo di Ponte, Valcamonica), showing (a) the total number of markings and (b) those thought to date from the second phase, including the map assemblage.

prehistoric art is readily accounted for (Giedion, 1962; Delano Smith, in press) as is the use of maps as talismans, for example (Fisher, 1982). The symbolic function of prehistoric maps has to be seen as part of the symbolism of rock art as a whole. Two lines of advance are available to the researcher to illuminate this symbolic context, both based on anthropological literature of recent date. One is the study of the symbolism of space and of spatial representation in modern as well as in indigenous societies (e.g. Goodey, 1971; Hallpike, 1979, Chapter 7). The other is the study of the role of rock art in contemporary, or near-contemporary, societies (e.g. Lewis-Williams, 1981 and 1983). However, the response by archaeologists, especially in Europe, to these two vastly rich and potentially illuminating areas of cognate research has been largely disappointing, particularly where the study of rock art is concerned (see comments by Carter, 1984, for one example).

Our fourth, and final, point in this section follows the foregoing. It is a warning that the meaning of each symbolic manifestation has to be learnt for each context. Although cross-cultural equivalents do exist, signs can have quite opposite meanings in different societies or at different times. Even within individual indigenous societies, symbolic meanings have to be learnt by those eligible for such higher knowledge. This learning is normally gained in the course of preparation for the ritualistic ceremonies of initiation (*rites de passage*). Such ceremonies, anthropologists reveal, have little or nothing at all to do with matters of economy or physical survival but rather are designed to pass on, to the younger numbers of the society at appropriate stages, the various levels of the symbolic meaning of their life (e.g. Barth, 1975). This means that symbolic knowledge may be the property of only a few: to the uninitiated members of the society, neither ceremonial nor daily acts and gestures need have any special, cosmological or religious, significance. Similarly, their appreciation of the meaning of elements in their own society's art, including any maps there may be in this art, is also superficial. It may be even less well known that historic and modern maps also have similarly 'hidden' meanings and symbolic functions. Yet maps of all ages and cultures mirror, often unconsciously, the attitudes and values of the map-producing society. These hidden cartographic messages may be deciphered by means of an iconographical approach (Harley, 1981, 1983; Blakemore & Harley, 1980).

Such developments in the study and interpretation of maps from the historic period have important lessons for the archaeologist interested in the cartographic content of prehistoric rock art. They reveal how little historic and modern maps are really understood as cultural artefacts. They underline how a full and considerably enlarged appreciation of the nature and function of historic maps is needed before any interpretation of the prehistoric evidence is attempted. And, while there are those who point to rock art scenes that appear to be adequately explained as no more than narrative art (as some of it surely is), the anthropological evidence puts it beyond argument that a great deal more, if not most, of that art was produced expressly and consciously as a representative gesture or for its symbolic content, transforming cosmic thoughts into graphic images. As surrogates of space, maps in such rock art would have been fashioned to convey abstract messages about that space.



The 'Topographic Figures' of Bedolina and at Mont Bégo

Before turning to the cartographic criteria, it is worth looking more closely at the history of the discovery of those specific images from European rock art that are circulated in the archaeological literature as examples of pre-historic maps. These concern the Bedolina 'map' from Valcamonica, and the many 'topographic figures' found at the start of this century at Mont Bégo (now in Tende, France, but until 1947 in Italy).

The petroglyphic complex at Bedolina is familiar to readers of this journal. As seen on the rock today, the incision comprise not a composition but a palimpsest. According to one stylistic analysis, the various figures and signs were produced on not less than four different occasions (Lloris, 1972). The map assemblage represents the second stage and it excludes the house elevations, which were added much later. Exactly who was the first to see the Bedolina rock and to recognise it as containing a map is not clear, but in 1932, at the London meeting of the First International Congress of Pre-historic Sciences, Raffaello Battaglia described two petroglyphic compositions from Valcamonica as "very accurate" representations of fields and enclosures (Battaglia, 1934, p. 236). One of these assemblages was later named by him as Bedolina, the other as Giadighe (for the latter see Delano Smith, in press). In 1958, another archaeologist, Emmanuel Anati, introduced Bedolina as "the rock with the plan and the view toward the valley beyond" and suggested that "it seems clear that the engraving is a faithful representation of what the artist saw in the valley" (Anati, 1958, p. 360). The rock does indeed offer extensive views over the flat-bottomed, now intensively cultivated, Oglio Valley, some 40 metres below but at present there is no firm archaeological evidence for the Bronze Age landscape said to be so faithfully represented on the rock above. The Bedolina complex is unusual as regards its large size (4 x 2.30 metres); most rock art compositions in Europe are relatively small. So far, no more than half a dozen so-called 'topographical' compositions are known in Valcamonica (out of a total of 180,000 different figures) but most are very small or fragmentary in comparison with both Bedolina and Giadighe.

The interpretation of the petroglyph at Bedolina as a map in the early 1930s, although nowhere so acknowledged, must have owed much to the work of Clarence Bicknell at Mont Bégo at the turn of the century. It was based on the visual similarity of the petroglyphs to modern large scale topographic maps. But the idea that the petroglyph itself was intended as a plan representation of certain landscape features must have come from Bicknell. Bicknell had discovered, traced and classified some 14,000 carved figures in an area of about 13 sq.kms. around that peak (for an assessment

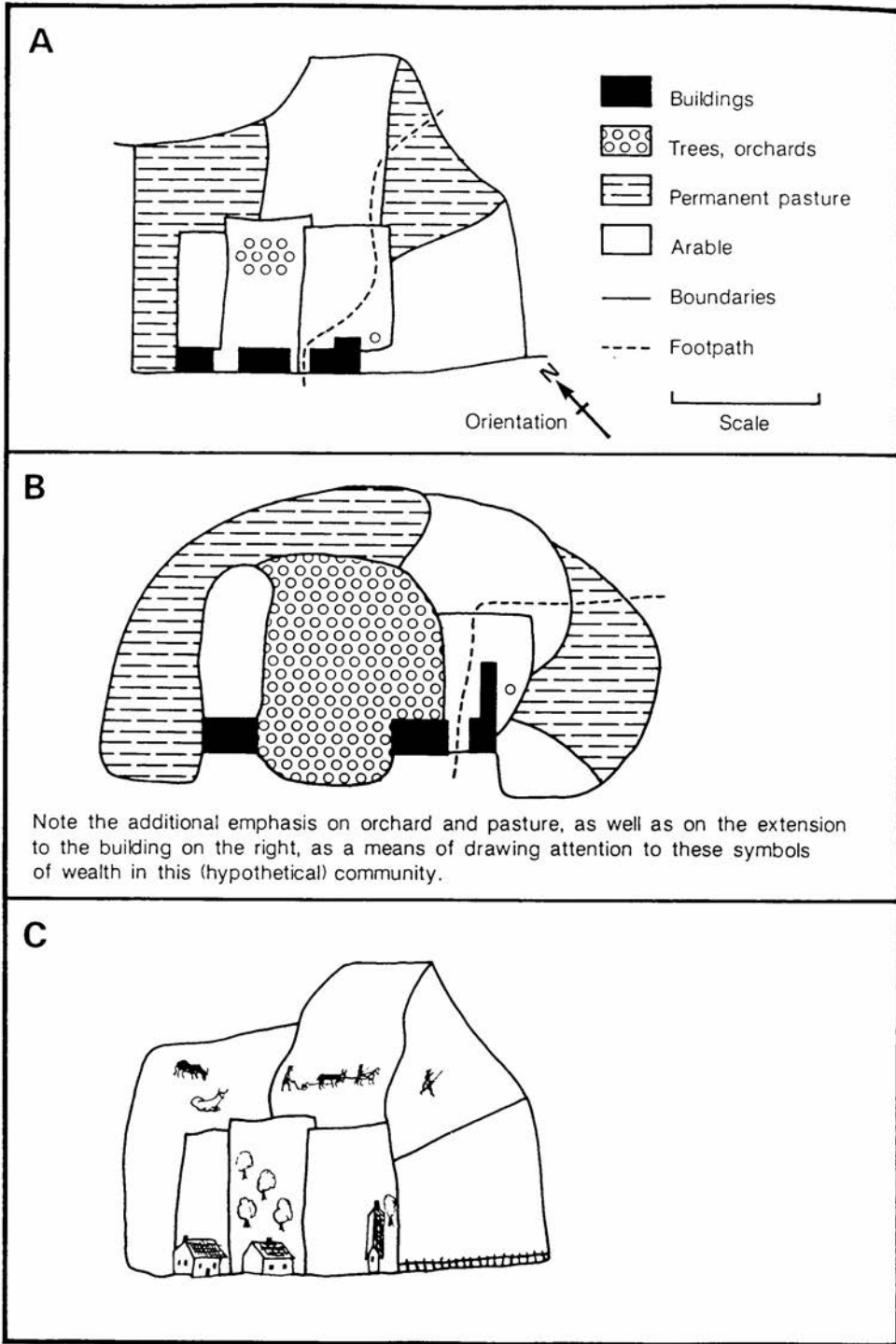


Fig. 74
Proposed interpretation of the topographical figures.

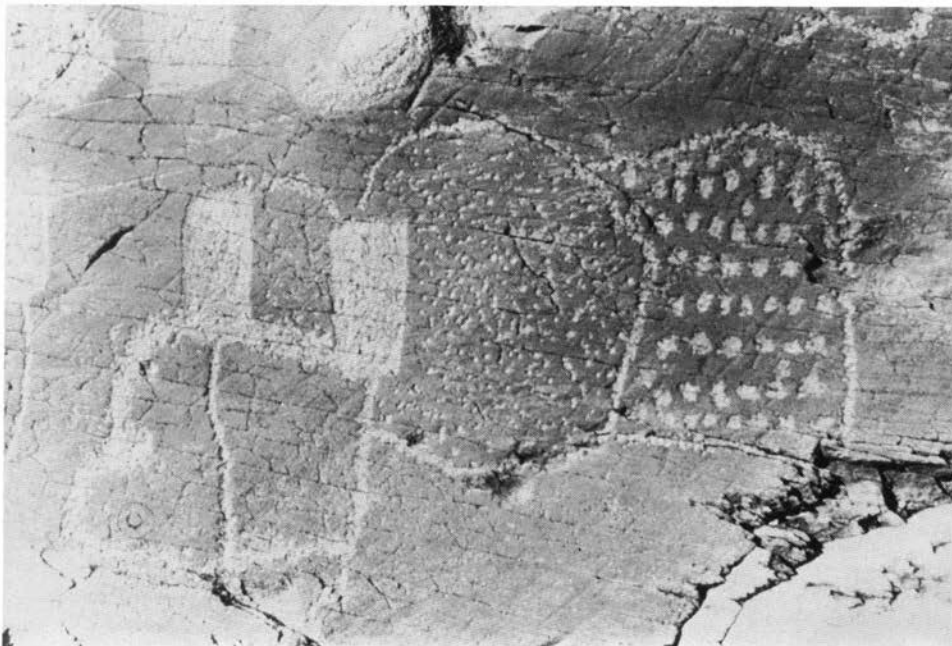


Fig. 75
 One of Clarence Bicknell's «huts and properties» or «topographical figures», from Mount Bego. (Photo reproduced by kind permission of E. Anati, Centro Camuno di Studi Preistorici).

of Bicknell's work in general, see Chippendale, 1984). Amongst figures of horned animals, ploughs, weapons and instruments, men, animal skins pegged out to dry, and various geometrical shapes, is a category of carefully composed figures described by Bicknell (1902) as "huts and properties" or as "topographical figures". Into this category, Bicknell put 194 petroglyphs from Val Fontanalba and 15 from Val Meraviglia (the two valleys are north and south of the peak respectively). Despite subsequent research and the discovery of thousands more figures by French archaeologists (the total is now thought to approach 100,000), no further examples of the 'topographical figures' seem to have been reported. Bicknell's interpretation was based on simple empiricism. On his many journeys up and down the valleys to reach the area of the petroglyphs well above the tree line, he repeatedly observed (as he himself put it) the striking likeness of the carved combinations of solid rectangles, subcircular forms, pecked surfaces and irregular interconnecting lines on the rocks to features in the landscape around him when these are viewed from above: in other words, when these are seen *in plan*. In this way, he was led to interpret the 'rectangular figure with the semicircle and other sort of closed line adjoining it' as intended to signify 'huts or sheds with a piece of ground enclosed by a wall' (Bicknell, 1913, p. 53). Bicknell also suggested that the four kinds of stippling (made by a single or by repeated blows of the 'hammer') filling some of the enclosures while others are left blank were possibly used to indicate different categories of land use. In short, ignorant of principles of cartography but through simple, accurate, observation in the field, Bicknell had stumbled across some of the essential characteristics of a topographical map. It is to these characteristics that attention is now turned.

Cartographic Criteria for Prehistoric Topographical Maps

How is a cartographic representation to be distinguished amongst the vast variety of figures portrayed on the rocks in petroglyphs or paintings? The answer must depend on what the essential visual characteristics of a topographic map are considered to be. These have been discussed more fully elsewhere (Delano Smith, 1981, and in press), so are merely summarized here. They amount to four key diagnostics. First, a map is a composite image, comprising an often large number of individual lines (and signs) but intended from the outset as a single whole. Second, the constituent signs are cartographically appropriate; that is, though some may be wholly abstract, the majority tend to be naturalistic or mimetic representations of the landscape phenomena they represent, having at least some visual equivalence to the real object (Robinson & Petchenik, 1976, p. 61). (It was incidentally this visual equivalence that led Bicknell to interpret some of the Mont Bégó petroglyphs as plan representations of features he had seen from a similar angle in the same area). Third, the variety of such signs on a topographical map tends to be relatively limited but most, if not all, appear several times (depending on the scale and detail of the map). Fourth, the distribution of these signs over the map tends to be from a random, though not disorderly, pattern, though there can be exceptions even in modern cartography (such as in the case of a map of a new town or a Renaissance fortification). These four points encapsulate the essence of a topographical map. They can also be applied, with some modification, to celestial and cosmological maps. The issue concerning us here is how, when put to the test, the criteria fit the reality of prehistoric rock art. In addition, it should be borne in mind that, quite apart from the conceptual problems already discussed above, there are also a number of technical problems, too familiar to readers of this journal to require elaboration. One, for example, is the difficulty of establishing with any precision the chronological sequence, let alone exact date, of the various markings on the rock. Another related problem is how to recognize an intended composition from an assemblage of juxtaposed and often superimposed lines. One of the characteristics of European rock art frequently remarked on is the absence of obvious order in the markings and the degree to which the rocks are palimpsests.

To meet the first cartographic criterion, that of composition, it is suggested that where lines that are technically and stylistically identical actually connect neatly with each other, and are neither superimposed, disjointed nor isolated, it may be assumed that the lines were produced as constituents of the larger whole. Applying these strictures to the Bedolina petroglyph, the starting point must be the assemblage Lloris identified as belonging to the second phase of execution. From this, all unconnected lines and markings are eliminated. In practice, exception has to be made for the points, since a point is by definition an unconnected marking. So it can be said that where these points from regular groups (the rows within the rectangle) or are part of an arrangement repeated so frequently that it is unlikely to be the result just of accident (the point within the circle), they have to be included as part of the composition.

Second, it has to be established that the constituent signs of the composition are cartographic. That is, that they were intended as representations of

landscape features. Once again, one has to be pragmatic, since in theory any mark can be used as a sign for any object. In practice, however, there is normally some degree of correspondence between the visual appearance of the sign and the object it is intended to represent. So we can look for signs that seem to be either iconic or mimetic representations of landscape features, viewed either in profile or in plan. In the Bedolina petroglyph, the combination of neatly arranged points and rectangles is interpretable as a mimetic representation of trees within an enclosure or on a plot of land when viewed from above. Similarly, sinuous single lines may represent paths or streams; sinuous double lines (as at Giadighe) can stand for the curving course of a major river; small, solid rectangles (surprisingly absent from Bedolina but prominent in the Mont Bègo 'topographical figures') can be interpreted as plan representations of buildings. On the other hand, the meaning of wholly geometric or abstract signs must remain obscure. Some of these may represent familiar objects from an unfamiliar perspective, or unfamiliar objects. A few are so common not only in prehistoric art on a world scale but also throughout the historic period that their general meaning may be surmised (the labyrinth motif is a case in point; so also may be the use of triangles to represent mountains (see Delano Smith, in press)). By and large, however, most of these geometric or abstract markings have to be ignored.

Third, there is the criterion of the relatively limited range of sign-types, each type normally being repeated within the composition. Referring once again to the Bedolina petroglyph, it is seen how a short alphabet, as it were, of four types of markings (rectangles, points, circles, irregular single lines) was used in combination to give three more signs (rectangles with arrays of points, circles with a single point, connecting lines). The semiotic vocabulary is comprised of seven different signs, each of which occurs many times within the Bedolina composition.

Finally, while the pattern formed by these signs (i.e. the total composition) is clear, neat and coherent, it could not by any stretch of the imagination be described as geometric or even regular. This is also true of each sign, particularly when compared with some very geometric and symmetrical markings found in the same area. Interestingly enough, the cartographic composition on the Bedolina rock closely resembles a modern, large-scale map showing only trees, plots, streams and paths.

The result of such a step-by-step approach to the petroglyph at Bedolina does therefore tend to conform to its traditional but spontaneous identification as a map. The point at issue, however, is not just a cartographer's blessing on an archaeologist's interpretation, but also the universal applicability of a critical, reasoned and explicit approach. Nor is it to offer a suggestion of the subject or purpose of the map: it may never have been intended as a representation of any *real* space but rather an abstract representative of a landscape for symbolic purposes. The problem of the function of prehistoric maps is an entirely distinct question from that of their identification.

The Way Forward

The next advancement of the subject of prehistoric maps and the origins

of cartography depends primarily on archaeology. There are two aspects with regards to this dependence. First, only the work of archeologists can provide evidence for the total context of the prehistoric art. Second, only the work of archaeologists will uncover the material world equivalent of any topographical map from the prehistoric period-if such is ever to be found. Having said this, it should also be made clear that the archaeologists' own understanding of rock art as a whole depends on anthropology and on other cognate studies of human thinking and behaviour. These three points are to be elaborated on now by way of conclusion.

A demonstration that the Bedolina petroglyph does indeed record an actual Bronze Age layout of fields and orchards in the vicinity of what is now Capo di Ponte-as some have asserted-will depend on the archaeological recovery of evidence for field boundaries in a corresponding pattern for the appropriate prehistoric period. In addition, excavated evidence for the type of crops produced would considerably enhance this picture. Such an approach to rock art in general is being attempted in Norway (Simonsen, 1984). Even so, what one day may be found in one area cannot automatically be assumed to apply in another, especially if the two areas are spatially or temporally distant. This is not to deny the urgency of finding archaeological evidence for the total context of the prehistoric art or to minimise its potential value. What is still lacking though, even for regions with so astonishingly rich a rock art corpus as Valcamonica or Mont Bègo, are systematic and detailed empirical regional studies. We need an account of the settlement pattern of the whole region in all its particulars (range of settlement forms, distribution, types of buildings); a demonstration, from evidence, of the variety of agricultural and other economic enterprises; at least a suggestion of former social structure and religious organization; and, finally, informed speculation as to the types of beliefs that might have underlain local burial customs and rock art manifestations. We need also to see the local area in its wider regional context. This is the stage of synthesis, integration and interpretation that must follow the already advanced stage of discovery and recording if the study of rock art is to progress beyond mere description or classification. But this new stage needs to be structured, incorporating systematic, co-ordinated and directed lines of research, if effort is not to be wasted and if both maximum credibility and the development of a new line of scholarship is to be ensured.

The importance of the archaeological context can be illustrated by brief allusion to the wall-painting discovered in the course of excavation at Çatal Hüyük (Konya, Turkey) in 1963 (Mellaart, 1964). As was mentioned at the outset of this paper, this is the third of the prehistoric maps to have entered the history of cartography literature. The painting has been given a radiocarbon date of 6200±97BC. Spread over two walls, its total length is about three metres. The subject of the painting is thought to be the Neolithic settlement (shown in plan) and the neighbouring volcano of Hasan Dağ (shown in profile). The combination of plan and profile elements is, as already noted, characteristic of picture-maps, where the representation of the various landscape elements is often subordinate to the representation of the event or action portrayed. This seems to be the case with the Çatal Hüyük picture-map, where the volcano appears to be erupting. As far as

interpretation goes, as with Bicknell at Mont Bégo, so it was with Mellaart at Catal Hüyük: the idea that the wall-painting may represent the Neolithic town of Catal Hüyük came to its discoverers from its visual similarity, though this was not in this case to a real-world view (here distorted by the circumstances of an archaeological excavation) but to the archaeologists' own representation, on their site plan, of their excavated buildings (Mellaart, 1964). As a prehistoric picture-map, the painting's uniqueness derives from the fact that it has a well-documented physical context and that its religious context has been archaeologically demonstrated and is not, as is the case with so much European rock art, merely assumed.

Finally, we return to the problem of the meaning and function of prehistoric maps, whether these are topographical (as discussed here), cosmological or celestial, and to the role of anthropological evidence in studies of prehistoric rock art in Europe. While random or eclectic forays in search of the most convenient parallel, pillaged from the anthropological literature, are to be actively discouraged, it is clear that systematic reference to modern studies of the primitive mind and of the social behaviour of indigenous cultures is indispensable. Only through these can there be an attempt to understand the place of such artistic representations in early societies and, more specifically, to see the maps amongst them as means of communication at the highest and less familiar levels of cartographic meaning. Already a number of highly pertinent points have emerged. It is now well established, for example, that rock art reflects the artists' beliefs and that the decorated sites are more often, though not inevitably, sacred or holy places. It is also clear that prehistoric art is composed primarily, if not entirely, of images where the symbolic meaning was the only one that mattered. It is clear, too, that these artists were not concerned, as was once thought, with the provision of food through the creation of 'sympathetic magic', but that these artistic representations were executed to convey messages encoded into visual forms. This latter characteristic is one that art in general share with maps in particular. However, as with modern and historic maps, the difficulty is that each 'code' needs to be broken before the message can be reached. Hence the need for future research to focus on discovering the range of possible symbolic meanings of prehistoric map images. This means considering them as being intended to convey abstract spatial attributes or ideals associated with the landscape feature depicted, rather than attempting to find in them accurate distributions or locations for each feature represented on the map. Further than that it may prove impossible to go. Even so, there is no doubt that graphic manifestations of man's mapping impulse are found in the art of the prehistoric period. The chapter on the origins of that impulse and its associated cartographic skills has been largely missing from traditional history of cartography textbooks. Already substantially rewritten, its completion lies in the hands of archaeologists, especially those concerned with the interpretation as well as discovery of rock art.

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Summary: The argument is put forward, in the context of the history of cartography, that the time has come for a more interpretative approach to the study of rock art. The origins of cartography

without doubt lie in the prehistoric period and indeed it has long been held that certain composition in rock art, both in Europe and further afield, are spatial representations: maps of terrestrial, celestial or cosmological subjects. The problem hitherto has been the lack of a sufficiently critical interpretation of these examples. In this paper, some of the methodological problems are aired, a model for recognising topographical maps is suggested, and the various ways forward are discussed. Reference is made to the so-called 'topographical figures' in Valcamonica (the Bedolina map) and at Mont Bégo, as well as to the wall-painting at Çatal Hüyük.

Résumé: Dans le contexte de l'histoire de la cartographie, on développe l'idée que le moment est venu de tenter une approche plus interprétative de l'étude de l'art rupestre. Les origines de la cartographie doivent remonter sans aucun doute à l'époque préhistorique, et de fait, il a été soutenu depuis longtemps que certaines compositions d'art rupestre, aussi bien en Europe que dans des régions plus lointaines, sont des représentations spatiales-cartes de la terre, du ciel, ou cartes cosmographiques. Le problème jusqu'ici a été l'absence d'une interprétation suffisamment critique de ces exemples. Dans cette étude, on expose quelques-uns des problèmes méthodologiques, on propose un modèle pour reconnaître les cartes topographiques et on discute les différentes méthodes prospectives. On fait référence à ce que l'on appelle les 'figures topographiques' du Valcamonica (notamment la carte de Bedolina) et du Mont Bégo, aussi bien qu'à la peinture murale de Çatal Hüyük.

Riassunto: Nel contesto della storia della cartografia è giunto il momento di cominciare a dare alcune interpretazioni a certe raffigurazioni d'arte rupestre. Senza dubbio le origini della cartografia risalgono alla preistoria ed in verità già da tempo alcune composizioni d'arte rupestre in Europa ed altrove sono state interpretate come rappresentazioni di spazi, mappe terrestri, celesti o cosmologiche. Sino ad ora il problema è stato costituito dalla mancanza di una interpretazione abbastanza critica di questi esempi. In questo articolo vengono esposti alcuni problemi metodologici, viene suggerito il modello per il riconoscimento di piante topografiche e ne vengono discussi inoltre i veri modi. Ci si riferisce alle così dette 'figure topografiche' della Valcamonica (mappa di Bedolina), del Monte Bégo e all'affresco di Çatal Hüyük.

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