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Cinnabar and the Cyclades: Body Modification and Political Structure in the Late EB I Southern Aegean

Tristan CARTER

ABSTRACT: The late EB I period represents the genesis of Colin Renfrew's 'international spirit', with certain Cycladic communities engaging in new forms of exogamous social relations, establishing long-distance trading partners and / or kinship alliances. Concurrent with, and undoubtedly related to these important political developments, was a heightened significance afforded body modification. Employing a range of accoutrements, implements and physical resources, the human form was adorned, tattooed, scarred and painted. It is argued that this phenomenon was not only a reflection of the 'body politic' (kin and corporate identity, status, gender, etc.), but also formed an element of its creation. This paper focuses upon the recent discovery that cinnabar, an extremely rare and physically 'esoteric' compound, was one of the pigments being employed at this time and considers the socio-political ramifications of its procurement and consumption.

Introduction*

From the Late Neolithic [LN] colonisation of the islands onward, the inhabitants of the Cyclades were connected with their surrounding world¹. The extent and nature of this contact has yet to be fully ascertained², though some networks no doubt offered great socio-political rewards, not least those which enabled certain participants to access Balkan metalwork and other prestige 'exotica'³.

In late Early Bronze Age I [late EB I], there appears to have been a radical change with regard to how long-distance movement and inter-cultural contact was organised and perceived within island society. In what one could term the 'genesis' of Renfrew's EB II 'international spirit'⁴, material culture of Cycladic origin and / or influence has been recovered from Attica, Euboea, Crete, Lemnos,

Samos and Western Anatolia⁵. There is reason to believe that this spread of late EB I 'Cycladica' was borne by the islanders themselves, and that the associated act of voyaging had more of a social, than economic, value⁶. One theory is that the movement of this material culture was embedded within the creation of new power structures by certain members of Early Cycladic [EC] society. This would have been achieved partly by increasing and broadening political alliances through establishing and controlling new trade networks and the exchange of spouses⁷, the emphasis being on geographical exogamy and class endogamy⁸.

Concurrent with this late EB I reorganisation and reconceptualisation of overseas contact, is the appearance of two new features in the islands' material and symbolic record. The first is the emergence of a strong maritime and celestial iconography (Fig. 1), which Broodbank has argued to be a reflection of long-distance voyaging's new social standing⁹. The second, is a heightened importance accorded body decoration and personal display.

* This paper is part of a larger study on body modification and political structure in the EB southern Aegean by the author and Georgia Nakou, though this paper and its conclusions are the sole responsibility of T. Carter. I also acknowledge the help of Miss Arberry Cottier, Miss Laura Labriola, and Mr. A.B. Carter, plus the British School at Athens for funding my attendance of the conference. Figures 1 & 2 by A.B. Carter, figure 3 by D. Faulmann.

¹ Sotirakopoulou 1996, 587-92; Zachos 1987, 124-27; 1990, 30.

² cf. Torrence 1986; Perlès 1990; 1992.

³ Zachos 1990, 30, 34, pl. 4; Nakou 1995, 6-7.

⁴ Renfrew 1972, 451-55; Carter 1998a, 61-63.

⁵ Renfrew 1972, 166, fig. 10.4-5; Zapheiropoulou 1984, 38-40; Day, Wilson & Kiriatzi 1998.

⁶ Broodbank 1989, 1993.

⁷ cf. Broodbank 1992, 543; Macintyre 1983, 375-76; Spriggs 1986, 13.

⁸ cf. Leach 1983, 7; Hommon 1986, 57; Kirch 1986; Helms 1988.

⁹ Broodbank 1989, 1993.

Body modification - methods and materials

It should be made clear that this paper is not claiming that the habit of modifying and adorning the body was introduced into Cycladic society in late EB I. The LN settlement of Saliagos produced a variety of stone and shell amulets, beads and bracelets¹⁰, and copper pins were recovered from the Final Neolithic / "Chalcolithic" horizons in the Zas Cave, Naxos and Ftelia, Mykonos¹¹. In turn, stone-bead and shell necklaces are known from EB I (early) Pelos-Group burials¹², and there is evidence that some of the schematic early EB I figurines were painted, presumably reflecting real life practices¹³. However, the burial record of the late EB I Cyclades has generated a wealth of artefacts and materials for decorating and altering the body, clearly indicating the important role these customs fulfilled in island society at this time. Indeed, it is this theme that helps to define and link the richest grave assemblages of the Plastiras and Kampos groups, including Panaghia Tomb 56, Ayioi Anargyroi Tomb 5, Kapros Grave D and Louros Athalassou Tomb 26¹⁴.

The items recovered consist of jewellery (Fig. 2a-b), specifically bracelets and necklaces made from copper, silver and a particular type of greenstone¹⁵. There are also red and blue pigments, plus the pestles, palettes and bowls used to prepare them before their application to the body, either temporarily as painted decoration, or permanently as tattoos¹⁶. These colorants are either smeared on the surface of a stone vessel, recovered as small raw nodules, or kept within special ceramic containers referred to as mini-aryballoi (Fig. 2f)¹⁷.

In addition there are fine obsidian blades (Fig. 2c), that on the basis of their form, context, ethnographic and historical parallels, almost certainly represent depilatory razors, and / or knives for scarifying the body¹⁸. Finally there is a group of fine pointed metal implements (Fig. 2d-e), whose regular association with the aforementioned objects, make them eminently suitable candidates for EC tattooing needles¹⁹.

A partial insight to the nature and visual impact of late EB I body modification is provided by the paintwork recorded on contemporary marble figurines²⁰, though the details and designs are more clearly seen on the folded-arm variants of early EB II (Fig. 3)²¹. In depicting jewellery, elaborate hairstyles, body-paint and tattoos, the painters employed the same colorants that accompanied the dead.

These implements and materials thus foreshadow the more commonly referenced EB II 'toilet-kit'²², the copper scrapers, tweezers and bone pigment containers from Keros-Syros Group tombs, a development and elaboration of a late EB I phenomenon. The functional interpretations accorded the above implements are not particularly new²³, but there has been little discussion as to why such a concern for body modification should have arisen at this juncture.

Embodying political change in the late EB I Cyclades

To sociologists and anthropologists alike, the human body represents a fundamental medium through which a person may express kin and corporate identity, gender, personal experience and status²⁴. It thus comes as no surprise that the practice of body decoration in the pre-palatial Aegean has a heritage of

¹⁰ Evan & Renfrew 1968, 65, fig. 78, pl. XLVI.

¹¹ Zachos 1996, 167; Sampson 1997, 8, pl. 12

¹² Doumas 1977, 16, 86, 95, pls. XXVII,f, XXXIII,h; Papathanassopoulos 1981, 137, pl. 64.

¹³ Tsountas 1898, 195, pl. 11,16 & 18; Papathanassopoulos 1981, 185, pl. 103.

¹⁴ Tsountas 1898, 156-57; Doumas 1977, 107-08; Renfrew 1967, 6-7; Papathanassopoulos 1961-62, 132-37.

¹⁵ Tsountas 1898, 156; Renfrew 1967, 6-7, pl. 4; Papathanassopoulos 1961-62, 135, 138, pl. 67g, 71g; Doumas 1977, 108, pl. XXXV,h; Arnott 1989.

¹⁶ Doumas 1977, 17-19; Televantou 1990, 59, pl. 27-28; Getz-Gentle 1996, 65-95.

¹⁷ Ekschmitt 1986, 32 pl. 3; Papathanassopoulos 1961-62, 132-33, pl. 66g-d.

¹⁸ Carter 1994, 1997.

¹⁹ Cf. Papathanassopoulos 1961-62, 134, pl. 68g; Doumas 1977, 107, pl. XXXV,i-j, 1990, 163, pl. 166-68; Zapheirou 1970, 429.

²⁰ Tsountas 1898, 155, 194-95; Doumas 1977, 99.

²¹ Getz-Preziosi & Weinberg 1970; Renfrew 1991, 117-23; Hendrix 1997/98.

²² Branigan 1974, 31-34.

²³ Blinkenberg 1896, 51-54; Bosanquet 1896-97, 66-67; Tsountas 1898, 195, *inter alia*.

²⁴ Blacking 1977; Layton 1989; Gell 1993; Shilling 1993; Synott 1993.

millennia, from hunter-gatherer to proto-urban societies. The use of pigments is documented in Upper Palaeolithic and Mesolithic contexts²⁵, while Neolithic sites have produced quantities of jewellery and decorated anthropomorphic figurines²⁶. However, it is the belief of Georgia Nakou and the author, that in the late EB I Cyclades an accepted mode of symbolic behaviour (body modification) was appropriated by a few members of society who used it in a new and exclusive manner.

We are not the first to attach importance to the role of adornment in late EB I society, as Renfrew argued in 1984 that “conspicuous display” was a hallmark of the Kampos Group²⁷. His interpretation focused on the notable consumption of silver and copper, claiming that in these grave assemblages one sees the origins of Cycladic metallurgy. The first appearance of metals in the “context of display”, rather than utilitarian implements, is comparable to how the technology was introduced into other areas such as the Balkans²⁸. Thus, in Renfrew’s model it is metal that forms the basis of the Kampos Group’s importance, the body serving merely as a means through which an individual consumed the new political currency.

This argument can be challenged on two fronts. Firstly, there is now good evidence for metallurgy in the Cyclades from the LN onward²⁹, with Nakou arguing that the late EB I horizon’s importance relates to the radical shift in attitudes towards metallurgy witnessed at this time, evidenced through changes in depositional behaviour³⁰. Secondly, it would be wrong to focus on metals as the sole driving force behind political change at this time, as the diversion of metalwork into the funerary arena represented only one means by which existing media were employed in new ways to help create, maintain and articulate new social orders. The heightened political consequence given to

overseas voyaging has been referred to above, to which can be added the emergence of conspicuous production in lithic technology³¹ and the reconceptualised role of display and body imagery. Moreover, one can note a change in how island society perceived the human body, with a marked break between late EB I representations of the human figure and those of the later Neolithic and early EB I. The earlier figurines’ accentuated and schematised features emphasise certain attributes at the expense of naturalism, unlike those of the Plastiras and Louros groups, which project an image of the individual through their clear demarcation of heads and faces³².

Although the aforementioned accoutrements, implements and materials associated with body modification represent the ‘spirit of the age’, it must be noted, that apart from the obsidian blades, they are present in only a few late EB I tomb groups. It is therefore suggested that the use of this symbolic language not only expressed the social being but also formed a major factor in the creation of the ‘body politic’. This is an issue that will be returned to at the end of the paper, so at this point we shall concentrate on one of this practice’s components, the pigments.

Colorants in the Early Cycladic world

The red colorants commonly seen on the marble figurines and vessels of the EC burial record have generally been assumed to be ‘ochre’³³, an iron oxide readily available in the Aegean (Fig. 4). Sources include Kea in the northern Cyclades³⁴, Lemnos³⁵ and Thasos, whose outcrops were exploited from as early as the Upper Palaeolithic³⁶.

Recent analyses of red pigments on ‘Cycladica’ have discovered that in certain instances the colorant was not ochre but cinnabar; for example on some of the EB II

²⁵ Koukouli-Crysanthaki & Weisgerber 1996; Honea 1975; Cullen 1995, 282.

²⁶ Karali 1996; Miller 1996; Talalay 1993, 70-72; Marangou 1992, 177; Papaefthymiou-Papanthimou 1997, 23-54.

²⁷ Renfrew 1984, 51-53.

²⁸ Renfrew 1984, 52.

²⁹ Zachos 1990; 1996.

³⁰ Nakou 1995, 2.

³¹ Carter 1994, 131; 1998a, 71; 1998b, 153-76.

³² cf. Papathanassopoulos 1961-62, 135-36, pl. 70; Doumas 1977, 99-100, pl. XXXV, a-d; Sotirakopoulou 1998, 126-38, pl. 13-23.

³³ Renfrew 1969, 23; Doumas 1977, 90; Blomqvist 1990, 240.

³⁴ Photos-Jones *et al* 1997.

³⁵ Higgins & Higgins 1996, 124-25.

³⁶ Koukouli-Crysanthaki & Weisgerber 1996.

folded-arm figurines from the British and Metropolitan Museums³⁷. At present few of these analyses have been published in full, so it is difficult to gauge how commonly this material was being employed, or the temporal and spatial context of its exploitation. Cinnabar has been identified, however, on an unprovenanced palette from a North American museum³⁸, that on the basis of parallels from excavated contexts should be late EB I in date³⁹, i.e. the period under discussion.

Cinnabar and the Cyclades

Cinnabar, also known as vermilion, is a dense, vivid, red natural mineral, the principal ore of the metal mercury⁴⁰. The significance of cinnabar's use in an EC context is arguably due to the material's rarity and its interesting physical properties. With regard to the first point, the archaeological literature has stated that cinnabar is unknown in the Aegean⁴¹, quoting Theophrastus, Pliny and Vitruvius who recorded that the Greeks of the classical world procured the pigment from the "Cilbian fields of Ephesus" (Fig. 4), later turning to the Almaden source in southern Spain⁴².

There is, however, one reference to an Aegean source of cinnabar which has hitherto gone unnoticed. In 1935 the ancient historian Oliver Davies, in his book *Roman Mines in Europe*, claimed to have found cinnabar occurring naturally next to one of the most important sites in the EC world, Chalandriani on Syros⁴³. In January 1997 the author relocated this alleged source with a colleague from the British School at Athens (Fig. 5)⁴⁴. With a permit from the Greek Institute of Geological and Mining Exploration (IGME) the red minerals were sampled, but on analysis they

were discovered to be a compound containing hematite, not cinnabar. Thus it now seems that Davies' claim was mistaken. Indeed, geologically, one should not expect to find cinnabar in this vicinity due to the absence of geothermal activity⁴⁵.

Yet evidence for cinnabar in the Aegean does exist, having been discovered by panning surveys undertaken by IGME. Traces of the mineral have been found on Euboea in the regions of Kapsouli, Kalliani and Katsaroni⁴⁶; it is also recorded on Naxos, Chios and at a number of locations on Samos, but in virtually all of these instances cinnabar was present only in extremely small quantities⁴⁷. Furthermore, the samples came from waterborne secondary contexts so that we remain ignorant of the mineral's sources. Cinnabar is also quite soft and susceptible to reduction during mechanical transport, meaning that it is difficult to evaluate the size of the source the panning sample derived from.

Physical properties and value

Turning to the mineral's physical properties, it is cinnabar's brilliant colour that commonly forms the centre of discussion. Pliny describes it as one of a select group of "vivid" colorants, along with azurite, malachite, indigo and Tyrian purple, all other pigments being referred to as "subdued"⁴⁸. In EC society cinnabar's vibrancy would have distinguished it from the more accessible red pigments (iron oxides and vegetal dyes), the differences in hue and modes of application embodying and conveying variant histories, experiences and social relations⁴⁹. The pigment's association with silver mining is also recorded⁵⁰, though mercuric sulphide does not necessarily correlate with the metal.

While Pliny was at a loss to explain why, in Roman society cinnabar had "sacred" associations and was deemed to be of the "highest importance", used to paint the face of

³⁷ Higgins 1972; Hendrix 1997/98, 8; Carter *et al.*, in *prep.*

³⁸ Getz-Gentle 1996, 264, pl. 40,b.

³⁹ Dumas 1977, 17, fig. 5,b.

⁴⁰ Read 1970, 310-11; Gettens, Feller & Chase 1972, 45-69.

⁴¹ cf. Hendrix 1997/98, 8.

⁴² Theophrastus *D.L.*, 58; Pliny *N.H.*, XXXVII, 114; Vitruvius *D.A.* VII, IX, 1; Caley & Richards 1956, 194-97.

⁴³ Davies 1935, 264.

⁴⁴ Miss Arborry Cottier of the Department of Archaeology and Department of Geology and Applied Geology, University of Glasgow.

⁴⁵ A. Cottier pers. Comm.

⁴⁶ Pantoula 1993, 26.

⁴⁷ Papastaurou & Pantoula 1986, 19-20; Pantoula 1994, 16-17.

⁴⁸ Pliny *N.H.*, XII, 30.

⁴⁹ cf. Sagona & Webb 1994, 133-51.

⁵⁰ Caley & Richards 1956, 198-99.

Jupiter's statue on holidays and cover the bodies of those in "triumphal procession"⁵¹. The literature provides various other descriptions of cinnabar's use, including alchemy and pharmacy⁵², with names such as "dragon's blood"⁵³, suggesting that cross-culturally the material was considered symbolically potent and highly valued⁵⁴.

Though cinnabar's high regard no doubt partly stemmed from its rarity, its worth would have also lain in the pigment's chemical properties. Today cinnabar supplies practically all commercial mercury⁵⁵. Its extraction is relatively easy, achieved in antiquity through pounding warmed cinnabar with copper pestles in conjunction with vinegar⁵⁶. In certain instances mercury naturally exudes from the mineral's surface and with prolonged exposure to light, the mineral will turn black, to metacinnabar⁵⁷, all of which serves to make cinnabar a particularly esoteric resource.

Cinnabar in context - bodies of knowledge

To summarise, while there is increased evidence for the occurrence of cinnabar in the Aegean, the mineral remains rare and not all 'findspots' may represent deposits large enough to have been located and exploited by members of Cycladic communities. Many more analyses need to be undertaken before we can appreciate when the colorant was first introduced into island society and the extent and nature of its use. It may be that its application was restricted, perhaps comparable with the specialised treatment of the blue pigments. One might expect the red smeared over large marble vessels to be ochre or hematite, their accessibility making it more appropriate for extensive body-painting. Cinnabar may have been reserved for special occasions (and

people), limited body decoration and tattooing. The latter use is perhaps counter-intuitive, given mercury's poisonous nature, but parallels are offered by traditional Japanese methods whose tattooing involves cadmium, a similarly toxic substance⁵⁸.

This paper's discussion of cinnabar, its qualities and meaning within Cycladic culture, represents only one avenue of research into the materials and implements used in late EB I body modification. It is argued that the mineral's physical properties and exclusive nature must have made it a sought-after and precious resource in island society.

Significantly, similar interpretations can be forwarded for many of the other items employed to adorn and alter the body during this period. For instance, the blue pigment, that seems to make its first appearance at this time⁵⁹, has been proved, where analysed, to be the copper compounds azurite or malachite⁶⁰, whose exploitation must have been related to the prospection and procurement of metals proper⁶¹.

As stated above, metalwork itself now also makes its first appearance in the Cycladic burial record, with the deposition of a wide range of objects⁶². In turn, the long obsidian blades and the core-pestles that occasionally accompany them, are products of a highly skilled technological mechanism, one that I estimate to have been held by only a handful of people in the Cyclades during this period⁶³.

In sum, these items constitute highly exotic raw materials requiring restricted and often quite complex technical know-how to work them. Therefore, while these accoutrements and colorants expressed a person's experience, contacts and position within society, their role in this political construct should not be seen as passive. For these implements and materials in themselves represented 'bodies of knowledge', whose procurement, ownership and manipulation

⁵¹ Pliny *N.H.*, XXXVI, 111-112.

⁵² Gettens, Feller & Chase 1972, 47

⁵³ Pliny *N.H.*, XXXIX, 117.

⁵⁴ Benedetti-Pichler 1937; Barbet 1990; Guichard & Guineau 1990.

⁵⁵ Read 1970, 311.

⁵⁶ Theophrastus *D.L.*, 60; Caley & Richards 1956, 204-05.

⁵⁷ Vitruvius *D.A.* VII, IX, 2-3; Gettens, Feller & Chase 1972, 53-55.

⁵⁸ cf. Richie 1973.

⁵⁹ cf. Papathanassopoulos 1961-62, 132-33, pl. 66g-d.

⁶⁰ Renfrew 1969, 23; Thimme 1977, 543-44.

⁶¹ cf. Freidrich & Dumas 1990.

⁶² Renfrew 1984, 51; Nakou 1995, 2.

⁶³ Carter 1998a, 71, 1998b, 153-76.

would have all contributed to the creation of the social being.

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List of Illustrations:

Fig. 1: Late EB I Cycladic maritime and celestial iconography.

Fig. 2: Late EB I Cycladic material culture associated with body modification:

a - greenstone necklace, **b** - silver bracelet, **c** - obsidian blade, **d** - copper-alloy needle, **e** - copper-alloy needle with a greenstone haft, **f** - mini-aryballos / pigment container (not to scale).

Fig. 3: Painted details on an early EB II marble figurine (D. Faulmann, based on Getz-Preziosi 1994, pl. VI).

Fig. 4: Aegean pigment sources mentioned in the text.

Fig. 5: Location of Oliver Davies’ alleged cinnabar source at Chalandriani, Syros (map based on Hekman 1991).

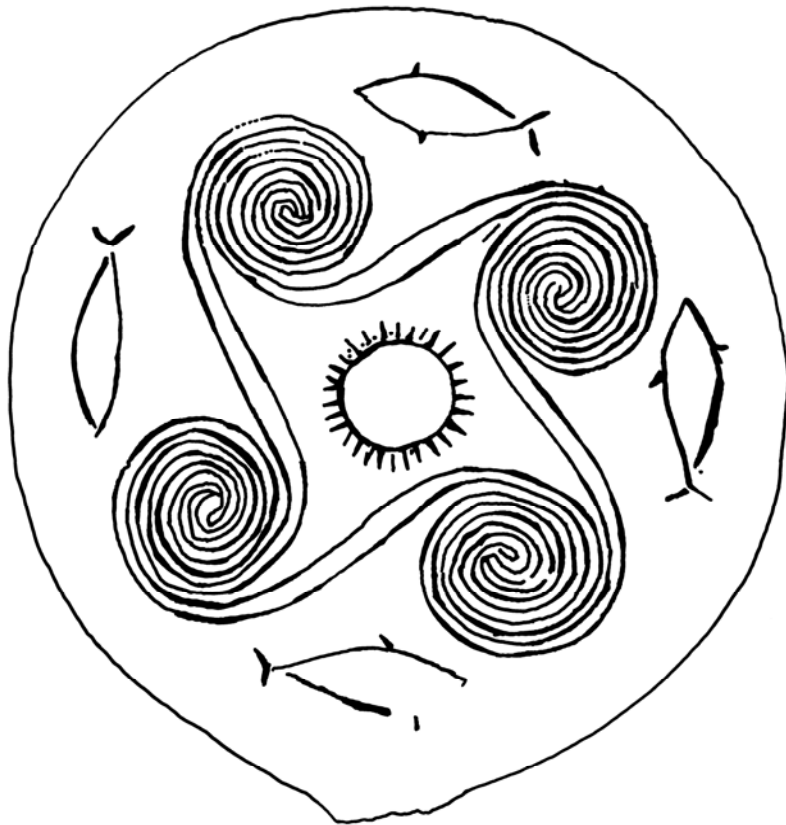


Fig. 1

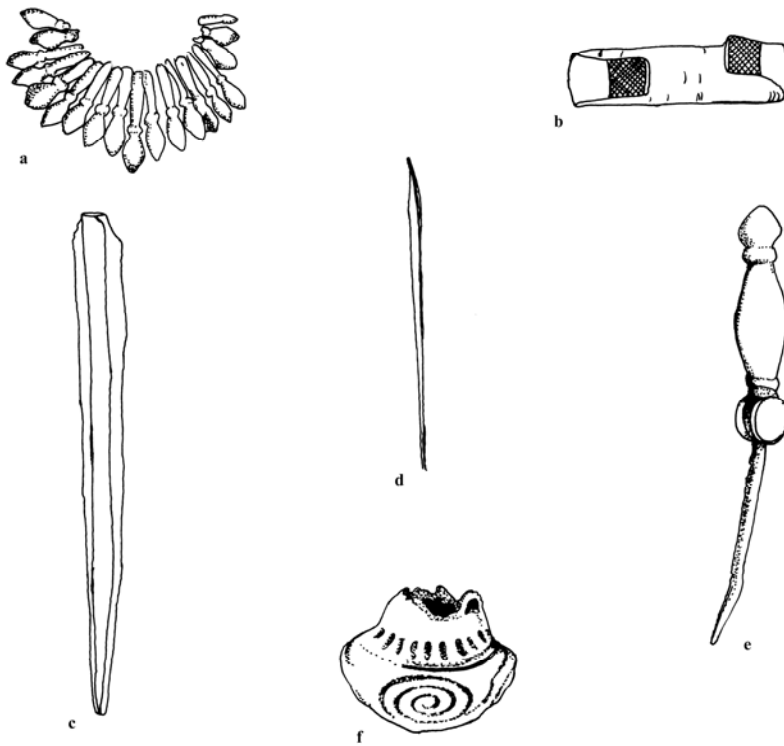


Fig. 2

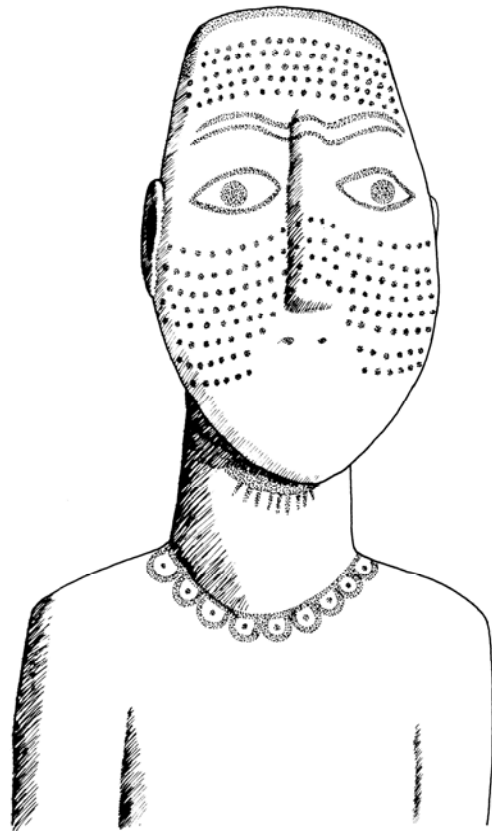


Fig. 3



Fig. 4

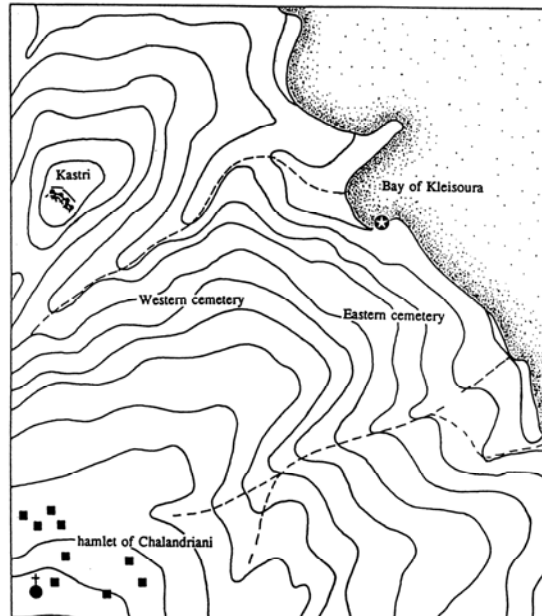


Fig. 5