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BURNING BULLS, BROKEN BONES

SACRIFICIAL RITUAL IN THE CONTEXT OF PALACE PERIOD MINOAN RELIGION

VOLUME II

By

ROBERT JAMES CROMARTY

Thesis submitted for the degree of Doctor of Philosophy,

at Durham University,

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CHAPTER THREE: INTERPRETATION

This section draws together and analyses the evidence for sacrificial ritual and the other cult practices presented in Chapter Two. It seems logical to begin by correlating the information into an empirical data set and then, once the evidence is firmly understood, to attempt to interpret that data as a means of reconstructing the cult practices at the various Minoan cult sites, and thereby Minoan Crete as a whole.

Significantly, the sites presented in the catalogue are of various types, those that are generally acknowledged to be the primary Minoan categories. They are also spread out across the island (see Map 1), and are from different periods within the Minoan era. This allows for the examination of the types of cult assemblages at these various sites, in addition to allowing us to examine if the cult practice is uniform across both time and geographic space. As stated in the introduction, it has generally been believed that there was a monolithic "Minoan" religion and, as such, possessed of a unified set of ritual practices. However, this hypothesis – as regards sacrificial ritual – has been based on presumption and preconception rather than fact. Hopefully, the analysis that takes place in the following sections will help to address this situation, and to elucidate whether sacrificial ritual was a major component of the Bronze Age religious practices of Crete.

The reconstruction of a ritual practice is, of course, fraught with difficulty, especially when dealing with non-literary, archaeological information. Leach necessarily complicates discussions of ritual behaviour by noting that "...any

ritual activity has visual, verbal, spatial and temporal dimensions: in addition, noise, smell, touch and taste may all be relevant" (Leach, 1976: 81). Thus, there are always going to be some aspects of the ritual setting that we will not be able to identify from archaeology and so we must look elsewhere for this information. Obviously, the extant texts from Minoan Crete are of little or no use to us in this regard and the untranslated nature of Linear A (apparently a more 'ritual' script than Linear B) is a further hindrance. As a result, I feel we are justified in examining the ritual texts of other Bronze Age cultures to explicate the ritual archaeology of Crete. I acknowledge that there are inherent problems with this process of ethnographic analogy: religion and ritual are intimately tied to the culture that creates and utilises them and to attempt a direct correlation between two religious systems is both complex and ill-advised. However, if we use the Mesopotamian, Hittite and Egyptian texts to inform us about the concerns, types and range of rituals practised in the Bronze Age Eastern Mediterranean then this may allow us to judge the Minoan evidence in the general religious context of the period. I make no judgement on the nature or identity of the divinity addressed in these processes being similar to those of Egypt or the Near East as that matter is beyond the scope of this study.

Yet the key aspect of this chapter, beyond all else, is the significance of sacrificial ritual on Minoan Crete. We must begin, therefore, by identifying if sacrifice actually occurred. This can only be done by a close examination of the data presented in Chapter Two. As such, it makes sense to take a disaggregated view and break down the pertinent archaeological factors relating to sacrifice to

allow us to identify if there is a homogenous or heterogeneous pattern. An initial summary of the key archaeological material classes is presented in Table 1.

Site	Faunal Remains	Ash	Altar	Horns of Consecration	Double Axe	Animal Figurines	Humanoid Figurines	Rhyta	Offering Tables	Pottery	Weaponry	Votive Limbs
Temple Repositories	x (1)						x		x	x		
Shrine of the Double Axes				x	x		x		x	x		
Gournia Shrine			x	x	x		x		x	x		
Karphi Shrine			x				x			x		
Salle β, Malia										x	x	
Juktas	x	x	x	x	x	x	x	x	x	x		x(6)
Kophinas		x			x	x	x	x	x	x	x	x
Atsipadhes Korakias						x	x	x		x		x(7)
Gonies	x (2)	x	x			x	x			x		x
Traostalos	x (2)	x				x	x	x		x		x
Vrysinas		x		x	x	x	x	x	x	x		x
Petsophas		x				x	x			x		x
Kato Syme	x	x				x	x		x	x		
Anemospilia	x	x	x				(5)			x	x	
Psychro	x	x	x	x	x	x	x	x	x	x	x	
Kamares Cave	x (4)	x				x				x		
Patsos	x (3)	x	x	x	x	x		x	x	x		
Skotino		x	x				x			x		
Idaean cave	x (3)	x		x	x	x	x	x	x	x	x	
Arkalochori					x					x	x	

(1) Fish vertebrae and naturally-shed deer antlers.
(2) Very few bones in an isolated deposit.
(3) Unstratified bone; not associated with the Minoan layers.
(4) Bones were not recorded in any detail beyond a mention of their presence.
(5) A pair of clay feet was found, which may have been from a larger figure.
(6) Reported in Jones 1999 – based upon a personal communication from Karetsou, currently unpublished.
(7) "Phalloi" – These may also be arms (Dickinson, 2006: *pers. comm.*).

Table 1: Summary of Catalogue Information

FAUNAL REMAINS

The most significant archaeological indicator for animal sacrifice is the presence and amount of faunal remains at the various sites, and also the particular skeletal elements which are found. But, as may be seen from Table 1, faunal remains are by no means a uniform feature of the Minoan cult sites recorded in the catalogue. Indeed, cult sites where we may speak of faunal deposits that may be characteristic of sacrificial ritual number four in total: Juktas, Kato Syme, Psychro and Anemospilia. In all other cases the reports of faunal remains are of a nature that renders them unsuitable for inclusion in further discussion[88] of sacrifice, the reasons for which are summarised in the notes attached to Table 1. Moreover, we can say that this is not simply a phenomenon caused by the selection of these sites: Jones, in his comparison between the deposits from the cave and peak sanctuaries, notes that out of the 31 sites he included only 8 exhibited any animal remains at all (1999: Table 9, 57-58). However, beyond his recording of this in tabular form and a note that more caves than peaks exhibit faunal remains (Ibid. 12), Jones makes no further mention of this pattern or its significance.

It should be immediately apparent that the sites where we have faunal remains are anomalous to the general spread of evidence. Even more interestingly, they appear to be unique in their categories: Juktas, for example, is the only peak with extensive faunal remains in this sample. While there are other peak sanctuaries, typically around 25-30 is the accepted total, Maza is the only other example at

[88] Even if all the sites where animal bone is mentioned were included, these would still make the total number of included sites less than 50% of those in the catalogue.

which any extensive faunal remains are reported (Faure, 1963 for example). Notably, in one of the most recent surveys of a peak sanctuary – the rescue excavations at Sklaverochori – animal bones were entirely absent, as they were in the cases of Petsophas, Vrysinas, Kophinas and Atsipadhes Korakias in this survey.

Nevertheless, the bone deposit at Juktas, while an apparent anomaly among the general trend of the peaks, is so extensive, so hugely reported, that it must be reflective of a persistent and repeated ritual process at that site. Similarly, the range of species represented must have some significance. For example, bird bones are also reported from Juktas, which is interesting as doves are identified as a sacrificial victim at Ugarit (del Olmo Lete, 1999: 38)[89]. However, the remains of sheep and goat make up the majority of the deposit and so we must acknowledge that, whether the victims were interchangeable or if they were not, the ovicaprids were the predominant victim at Juktas. However, the presence of bucrania cannot be ignored as this specific skeletal element occurs at the other sites with faunal remains.

Jones, as mentioned above, makes the point that animal bones are more common at cave sites than at the peaks. To some extent this is true (as shown by Jones' survey), but once again one could by no means claim that they were a universal feature of the cult cave deposits. Certainly in the selection presented here, Psychro is the only example where we may speak of a persistent, repeated ritual process employing animals or their parts. The discussion of the skeletal elements

[89] See below, pp. 244-259 for their significance, among that of other species.

in the catalogue entry for Psychro[90] refers to the predominance of cranial elements in the deposit. The skull is a primary piece of butchery waste, it is rarely employed as a food-cut (except in the extraction of the brain), and, as such, is generally treated as refuse. However, its appearance at Psychro, not associated with other bones in a depositional relationship that would suggest on-site butchery, is interesting[91]. If anything, it is suggestive that the cranial elements of the skeleton were deemed special or significant in some way by the Minoans[92].

Thus far it would appear that faunal remains that can be directly associated with a Minoan ritual practice are the exception rather than the rule. However, when we examine the two seemingly unique sites of Kato Syme and Anemospilia then we see a much stronger presence of a possible sacrificial ritual, especially at the former. Kato Syme once again exhibits a predominance of decayed skulls and horncores, especially in the deposits associated with the podium. None of the bones that have been studied from Kato Syme are calcined and, as such, we may say that if they were burned it was done so with the flesh still in place, i.e. it was cooked. But it certainly appears that the head, or parts thereof, of the animal served some special significance and was deliberately deposited. But it must also be acknowledged that skulls and limb extremities are also classified as primary butchery waste (Halstead and Isaakidou, 2004: 140). It is clearly significant that at three major cult sites, out of the four in this study where there are Minoan faunal remains, there are notable deposits of cranial skeletal elements and their

[90] See pp. 153-159.
[91] Yet, it must be remembered that the evidence from Psychro is biased towards those elements that were presented to Boyd-Dawkins for study (see p. 154-155).
[92] See below, pp. 226-243.

associated horns. These remains are indicative of a specific practice but it seems to be limited in scope to these few sites.

For instance, Anemospilia, while it shows itself to be a major cult establishment it does not contain any notable cranial elements, at least as far as the published material indicates[93]. It would appear then that the faunal remains at Anemospilia relate to a separate cult practice. But what is also clear is that faunal remains from Juktas, Psychro and Kato Syme are of a cult nature as they differ greatly from the domestic and other secular assemblages which we know of from Crete.

As stated in the introductory sections of this thesis[94] it is usual for ritual deposits to differ from their secular counterparts, hence we are able to differentiate between the two. However, to the best of my knowledge, this has not been done for Minoan Crete. To some extent, this may be ascribed to two primary factors: the first is preconception, which has dogged the study of Minoan religion, that sacrifice was a widespread and uniform practice within Minoan culture. Such an assumption not only militated against the detailed recovery of remains from ritual sites but also the comparative study of those that were recovered. The second factor is more significant: in regard to the fact that in order to compare two data sets, we must first be in possession of two data sets. However, the secular faunal deposits are almost as enigmatic as those from cult sites. Thus, when we compare the two we must acknowledge that the information for comparison is limited.

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[93] See above, pp. 120-126.
[94] See above, pp. 44-46.

The deposits from Kavousi: Vronda and Kavousi: Kastro have already been mentioned[95]: however, perhaps the most significant report of faunal remains from a Minoan domestic assemblage comes from Kommos (Reese 1995), which is very detailed.

9,441 animal bones of larger mammals were identified at Kommos. These come from both domestic mammals – sheep, goat, pig, cattle, equid, and dog – and wild mammals – deer, hare, and mustelid. There were 140 identifiable deposits of bones from domestic mammals, of which ovicaprids are found in 90.7% of them, *Sus* in 45%, and *Bos* in 17.9% (Reese, 1995: 165). Of these deposits of bones, the NISP of ovicaprids is 185 (53.2% of the total of sheep/goat, pig and cattle), with 108 *Sus* (31%) and 55 *Bos* (15.8%). Thus, of the three major forms of domestic animal, ovicaprids make up more than half of the total number of individual animals identified at Kommos. This pattern is consistent across all periods of the Minoan settlement at Kommos and is indicative that sheep and goat were the primary domesticates.

Of the 185 individual ovicaprids, 62 can be aged (Reese, 1995: 170). There are only 15 individuals (24.2%) which are 2.5-3 years or older (Ibid.). Although it is somewhat of a leap to see this as representative of the overall kill pattern, given that the ageable specimens are only one-third of the total, in the light of the lack of other evidence there is no other course. If this pattern is representative, then such a heavy death rate among younger animals must be seen as indicative that these animals were exploited primarily for their meat. Indeed, the skeletal

[95] See above, p. 53.

elements would seem to corroborate this: although the majority of elements found are phalanges (Reese, 1995: 172-176), a significant minority, around 40%, of the faunal remains are the long bones – femur, humerus, tibia, radius, ulna), which are generally viewed as the primary cuts of meat among most cultures. Thus, at Minoan Kommos the herds of domesticates seem to have been exploited for their meat, rather than secondary products such as milk or wool.

One skeletal element that is conspicuous by its absence from Minoan Kommos is the cranium. The only cranial elements identified by Reese are ovicaprid mandibles, one from MM IB (found in Room 26-7) and one from MM II (found in Room 21), the former from an older animal (3-4 years), the latter from a younger animal less than a year old (Ibid. 172). There are also reports of skull fragments of Bos, mainly LM III, but these number less than 8 in total: intact skulls, or hornplates, are entirely absent. If we compare this infrequency of cranial elements in the Kommos deposit with the substantial reports of them from Juktas, Psychro and Kato Syme, there is a clear disparity. This would appear to lend credence to theories that the votive deposition of bucrania and skulls from other species was a specific cult practice. However, that does not necessarily dictate that they are the result of a sacrificial rite. Indeed the lack of corresponding long bones, certainly at Kato Syme, is suggestive that the killing and following butchery of the animal did not take place on site. That, however, is to be treated elsewhere[96]; for now it is enough to remark that there are obvious differences between the faunal deposits from cult sites and those from secular assemblages, provided that Kommos may be seen as representative.

[96] See below, pp. 226-243.

The extent to which this representivity is the case must be addressed. It is telling that the other secular deposits to which Reese refers are isolated, for example the Unexplored Mansion at Knossos, reinforcing the sporadic nature of the study of faunal remains on Crete. There are two main issues with much of the work to date on Minoan faunal remains. The first is the fact that relatively few reports exist and most of these are relegated to brief appendices in larger volumes. As such there is a paucity of reported facts. The second problem is more specific to the faunal details; there is no general consensus on the matter of data presentation. The manner of presentation can vary from site-wide, for example Wilkens (1996) on Ayia Triada, to specific bag or block reports, such as Reese's (1995) report from Kommos. Similarly, while some reports may discuss percentages of species representation, others – such as Walker (1996) on Palaikastro – simply state "the vast majority of the bone belonged to Ovis / Capra and Bos. Sus ranked a distant third in quanitity" (Walker, 1996: 279).

This latter problem is exacerbated by the fact that some reports do not discuss particular skeletal elements in detail, treating the various skeletal elements as similar in terms of their presence; in other words, one bone is much the same as another in terms of working out species representation. However, in terms of structured deposition these facts are intrinsically crucial as they serve to differentiate different forms of deposit[97].

Walker (1996: 279-280) mentions specific skeletal elements, but seemingly only when they are perceived as being the result of a deliberate process of deposition:

[97] See pp. 55-61 on Zooarchaeology and Ritual.

"Among the destruction debris [of Building I at Palaikastro], a deposit of sherds and bones was found on the hard, pebbly surface. The 11 bones comprised a Bos horncore, skull, and mandible. There was no evidence for burning or butchery." While it may be possible, if we assume a Minoan settlement 'life-cycle' to have existed, to see this as a deliberate deposit in association with the destruction of the building, the fact that it is a 'special' deposit seems to be the justification for the detail of the description. However, this has the indirect effect of automatically biasing the report in favour of these 'special' deposits, as opposed to providing a factual account on the skeletal elements as a whole.

The table below summarises the species representation from those reports where specific figures are provided, and these in general match up with Reese's (1995) account from Kommos which was used as the basic data set.

Table 2: Faunal Remains from Minoan Sites

Site	Date	NISP *	% Ovicaprid	% Sus	% Bos
Ayia Triada	EM	195	68.18	13.33	17.94
Ayia Triada	MM	218	66.96	26.60	5.95
Ayia Triada	MM III / LM IA	203	54.14	31.03	13.30
Ayia Triada	LM	312	71.78	18.58	6.08
Smari	MM – Late Geometric	693	54.68	18.7	12.95
Debla	EM	60	100		
Myrtos	EM	134	90.3	8.2	1.5
Knossos – Minoan Unexplored Mansion	LM IA	149	69.8	22.8	7.4
Knossos – Minoan Unexplored Mansion	LM II	2760	60.4	23.9	11.9
Knossos – Minoan Unexplored Mansion	LM IIIA2	183	64	23.5	12.0

* Identifiable to Species Level

In all cases ovicaprids can be seen to dominate the faunal deposits. A similar situation may be observed at Monastiraki: Halasmenos (LM IIIC) where ovicaprids account for 72.9% of the faunal remains; although at Khamalevri (LM IIIC) they are only 41.3% of the faunal remains (Dicknson, 2007: Pers. Comm.). In addition the following information may be offered as further context for the faunal remains. Where reports go into detail, in general, they refer to the fact that "no parts of the post-cranial skeleton of the three main species [ovicaprids, sus, and bos] were present in unexpectedly high or low proportions" (Bedwin, 1984:

307). Bedwin (Ibid.) goes on to comment that, in the case of the Minoan Unexplored Mansion, the skulls were "too fragmented for comparative data". In addition, in several reports, for example that from Smari (Tsoukala, 1996: 273), the bones are predominantly unburnt (only c.1% were burnt in the case of Smari). However, at the Minoan Unexplored Mansion at Knossos much of the LM II material, particularly from the Pillar Hall (H) and Corridor L, was either completely charred or calcined (Bedwin, 1984: 307). Yet at Myrtos (Jarman 1972) there is no discussion of burning or butchery marks in relation to the faunal material. Thus while we seem to have a vague general consensus as regards skeletal element representation, there is no such agreement on the reports of burning and butchery.

However, what does begin to become clear is that sheep and goats (ovicaprids) are the dominant domesticate species on Crete. The average (mean) percentage of ovicaprid bones in the deposits in the above table is 70.02%, while cattle bones are only 7.61% of the total identifiable deposits on average. This disparity is striking. We should perhaps not be overly surprised by this as certainly the rough pasture that dominates the Cretan landscape would be more suited to ovicaprids than to large herds of cattle.

Thus in appearance the secular and ritual deposits from Crete do exhibit some marked similarities, the primary aspect being the overall dominance of ovicaprids. However, there are also other shared qualities: both exhibit some burning of the bones, albeit not in an organised or formally patterned manner, and in both types of deposit complete or articulated skeletons are not

encountered. However, the elements within the assemblages are different. As we might expect, within the secular domestic deposits the majority of bones are those associated with the major cuts of meat – the limb bones themselves or the phalanges removed during the butchery process, while those within the cult deposits from Juktas, Psychro and Kato Syme are the more visually striking skeletal elements – for instance *Bos* hornplates – which appear to have been deliberately deposited. Of course, other bones are also found within these deposits but as may be seen from the information in Chapter Two, these elements are neither as common nor as well reported as the cranial elements. Indeed, at both Psychro and Kato Syme the cranial elements are frequently not accompanied by other corresponding skeletal elements.

Anemospilia, however, as noted above would seem to reflect a different tradition. This is interesting as Anemospilia dates to a period, MM II – MM IIIA/B, in which at the three other Minoan cult sites we have no faunal remains. At Juktas the MM II – MM III A period is characterised by an utter absence of faunal remains. Similarly, at Kato Syme the majority of the faunal remains are associated with the podium, i.e. with the Late Minoan periods, despite its foundation in MM II, and at Psychro the bones seem to come from either the Neolithic habitation levels, or the period after that containing the Kamares sherds, i.e. after MM III. It would, therefore, be fair to judge the Anemospilia practice involving animals as being entirely separate from the practices at the other cult sites. In my opinion, those remains from Juktas, Psychro and Kato Syme are more likely to have derived from sacrificial practices than those from Anemospilia, but this may only be established by the accompanying evidence.

Yet it is true to say that we may only conjecture sacrifice at these four sites, as these are the only cult sites from the selection presented in Chapter Two where the primary indicator, the animal bones, is found.

ASH DEPOSITS

In previous studies the presence of ash layers at cult locations has been seen as a direct indicator of a burnt sacrifice ritual; one example of this would be in the comparatively recent study by Watrous (1996), where, in his tables listing finds from various sites, ash and bones are considered together under the heading of "Ash/Bones", suggestive that the ash layers were seen as indivisible from possible sacrifices. Notably this was seen as a correlative factor in associating this aspect of Minoan religion with the later Classical θυσία ritual. However, the presence of ash would be a secondary indicator of such a practice, it could only be seen as such if the ash deposit were associated with faunal remains. But as we have seen these remains are sporadic and seem to be linked with specific sites as opposed to a general feature or a feature of a particular type of site.

However, this requires that we explain the ash deposits which are much more widespread than the faunal remains. As Table 1 shows, ash is found at all extramural sites included in this catalogue with the exception of Atsipadhes Korakias among the peaks and Arkalochori among the caves, although as Anemospilia was destroyed by fire the ash would be more typically associated with that conflagration. Given that we have ash deposits at sites where there are no faunal remains reported from the Minoan levels we must find an alternative explanation. But even then ashes are not a ubiquitous feature: while only Atsipadhes lacks such a deposit out of the seven peaks presented here, in his survey Jones (1999: 12) reports ash at only 12 of his 20 peaks.

Clearly then we cannot associate the ash with a burnt sacrifice ritual. Indeed Yavis made a similar point some sixty years ago: "there is no convincing evidence that altars for burnt flesh sacrifices were known in pre-Hellenic religion, *nor that burnt flesh sacrifices were practised*" [my italics] (Yavis, 1949: 41-42).

The first alternative explanation that must be considered is the more practical one: fire's most obvious qualities are the production of heat and light. As such, we should perhaps not be surprised to find ashes at these extramural sites, for either within a cave or upon a summit what other light source would be utilised, especially if the rites took place at night. In a similar vein, one recently advanced theory suggests that: "The visibility of the peak sanctuaries from the sea... and the presence of thick ash layers at some of the sanctuaries, supports the idea that the sanctuaries were used as landmarks or even as beacons for travellers and especially for ships coming from the Cyclades" (Soetens et al., 2003: 485). This is largely speculative, but does serve to highlight the fact that there is still much confusion about the origins of the ash layers at sanctuaries on Crete.

However, we must remember that we are dealing with sites where there appear to have been ritualised activities. Ritual embellishes and, to some extent, subverts practical applications of objects. As a result we must examine other ritualistic uses of fire beyond its everyday usefulness.

There are many examples of the ritual use of fire as a purging, cleansing and purifying device from various cultures. At several sites, notably the peaks, the artefacts excavated – for example, the figurines from Petsophas – have shown

traces of burning. This is possibly the result of their being deliberately cast into a fire as a means of consecrating them as an offering. Such practices are not unknown: the deliberate breaking or destruction of objects to release their ritual power is well known in the Neolithic and Copper Age Balkan area – for example, the Hamangia figurines from Bulgaria[98]. The use of fire to release the inherent power within the votive offerings is a definite possibility in Minoan Crete. However, once again in must be acknowledged that the burning or charring of figurines is not a universal feature of Minoan sites. Indeed ash deposits are lacking from the all the urban cult sites in this catalogue, and the majority in total. Nevertheless while we may conclude that fire was not a pertinent feature of the domestic or urban cult, it is clear that the extramural situation is more confused.

This is especially true when we consider that the ash deposits at the three Minoan cult sites that contain large amounts of faunal remains. How then may we apply Yavis' contention that a burnt sacrifice ritual is absent? He does so by associating the ash with a separate ritual practice: in relation to the ash layer at Psychro, which extends over much of the floor of the upper chamber, Yavis asserts that this "must have come from ceremonial feasts rather than from sacrifices or sacrificial feasts" (1949: 22). .

I am less convinced by this, especially in relation to this deposit, along with those of Psychro and Kato Syme, as the predominant faunal remains (as outlined above) are cranial elements and, while these may be legitimately seen as the remains of primary butchery, I would have expected more long bones to have

[98] See Chapman 2000 *passim*.

been found if the meat had been cooked and eaten on site along with a much greater degree of burning on the bones. In these three cases, it is difficult to provide as convincing an explanation for the bone remains as a ritual with sacrificial elements – although it may still be true that the fire was not used as a means of consecrating the animal parts. Indeed, the lack of reports of calcined bone, explicit in its absence at Kato Syme and Psychro, would suggest that the bones themselves were not exposed to fire. However, what is clear is that the use of fire, most probably for ritual and practical purposes occurred at most extramural Minoan cult sites.

ALTARS

As discussed in Chapter One, the definition of an altar has led this survey to be more specific in its application of the term. As a result, their distribution among the Minoan cult sites is seen to be more sporadic than has been reported in earlier studies. Table 1 shows that there is no overall pattern to their distribution: they are found at Gournia, Karphi, Juktas, Gonies, Anemospilia, Psychro, Patsos, and Skotino.

Overall, they appear to be more common among the cave sites than at any other type of site, but they could by no means be termed distinctive of the caves – a third of the occurrences are from caves. This pattern (or lack thereof) is very different from the opinions put forth by earlier scholars:

> "It is quite certain that altars of various kinds were placed (or made) in the peak sanctuaries. These have been mentioned above: a long, step-like altar (Juktas), a rectangular stone altar (Juktas), which was no doubt similar to the altar depicted on the Zakro rhyton, fire altars, altars of the eschara type, incurved altars and natural stones used as altars" (Rutkowski, 1986: 84)

Even though Rutkowski's comment is the polar extreme of this viewpoint, it is true to say that previous scholarship has seen altars in the majority of Minoan

cult establishments[99]. With a stringent application of the term 'altar' it is obvious that fewer occurrences of such structures will be reported, but even so it is clear that altars occur at less than half of the sites in this study. Moreover, the altars at the domestic / urban shrines cannot be associated with sacrifice because of the lack of the primary faunal indicators of this practice. We must therefore account for the preponderance of altar identifications in earlier work.

I believe that this may, to some degree, be explained by an anachronistic application of the Classical religious triad of temple, cult image and altar (as outlined by Hartog 1989). The notion of a degree of similarity between the Bronze Age Aegean and the Classical Greek world has been a largely consistent aspect of Minoan studies, even if we limit its appearance to the use of terminology such as 'Olympian' and 'chthonian' – terms which have recently undergone a significant degree of re-interpretation (Hägg and Alroth (eds.), 2005 *passim*). As a result, we should perhaps not be overly surprised about the frequency and extent to which altars are discussed: "Temples, statues and altars are signs of Greekness and can serve as a criterion for Greekness" (Hartog, 1989: 172).

However, while sacrificial altars are by no means common, they do occur at two sites where there are incontrovertible Minoan faunal remains – Juktas and Psychro. Although there is no altar at Kato Syme there is a massive central podium which has been associated with the supposed sacrificial practices at that site (Bergquist 1993, for example). Similarly, the presence of an altar at Patsos,

[99] See also Marinatos 1993, where the altar is included in her beginning summary of the key Minoan religious symbols and apparatus. Also Gesell's *Town, Palace and House Cult* references various altars.

although the bone is unstratified, is suggestive of sacrificial practices at that site also. However, the association between altar structures and the faunal remains at Juktas and Psychro are perhaps the most convincing arguments for a sacrificial altar.

But we must be wary of falling into the same trap as earlier academics, that of the Hellenocentric viewpoint. We must acknowledge that there are alternative forms of cult practice that do not require the use of a fixed altar structure, despite Nilsson's claims to the contrary (Nilsson, 1950: 117). A very good historical example of this is that of the Scythians:

> "The Scythians prayed to their gods by offering them sacrifices, but this cult involved neither the making of statues (agalmata), *the use of altars* (bōmous), or the building of temples (nēous)" (Hartog, 1989: 171, based on Herdotus' *Histories* 4.59 [my italics]).

Thus according to the view of the Greeks, the Scythian practices are improper, not only because of their decision not to lay out a sacrificial space, but also because of the particulars of the ceremony itself are so strikingly different from the Greek cult. For example, the animal is choked, the throat is not cut and the blood does not flow; the *pelekus* (the axe used to break the neck) and the *makhaira* (the knife used to cut the throat) are utterly absent. Thus, according to the Greeks, the Scythian rites are abhorrent because of the absence of the blood that is the pre-eminent aspect of the Greek practice. It should also be noted that

the use of an axe and the concentration on the blood have been translated to the hypothetical Minoan practice.

Moreover, we cannot attribute the general lack of temples or altars to the Scythians' nomadic way of life as they did raise wooden temples to Ares, but even these structures were lacking in altars according to Herodotus. Thus it seems to have been a deliberate cultural decision to practise sacrifice without the conduit structure of an altar. Therefore, we must at least acknowledge the possibility of sacrificial practices without altars. But it is also entirely possible for altars to be used in bloodless sacrifices, which would account for those altars found at sites where we have no faunal remains.

The chronological variation between the sites is of limited use in this case as the two sites with animal bones and altars are used as cult locations for much of the Minoan era. Interestingly the majority of the other sites (excluding Gonies and Anemospilia) date to the Late Minoan period. This is suggestive that fixed altar structures are more common in the later Minoan phases and may have only fully developed at this time. Unfortunately, on the basis of this small survey it would be foolhardy to be more concrete on this matter. However, the sites with animal bone exhibit these faunal remains in periods before the Late Minoan period as well as during it.

Therefore, while altars may have developed in the later Minoan periods, the practices involving animals – of which sacrifice may well have been one –

certainly took place in the earlier Minoan phases, as shown by the ovicaprids bones that dominate the MM IB – MM IIB layer at Juktas.

HUMAN SACRIFICE

The practice of human sacrifice is seen as the most extreme variant of the sacrificial rite and is often associated with modern notions of cruelty and a sense of disgust in the taking of human life. However, these modern (Western) notions are largely inapplicable when dealing with ancient cultures. For example, the Aztec culture in South America often practised human sacrifice in times of great need. Similarly, the ancient Phoenicians practised human sacrifice, in the form of the oblation of the firstborn, known as the *molk* sacrifice. According to liturgical texts this involved the holocaust of a child, of the new born, with the aim of restoring the forces of nature or the power of the state (Aubet, 2001: 246). Although no archaeological trace of the *tophet* – the place of sacrifice – or the mechanics of the cult has been found in the eastern Mediterranean region, excavations at Carthage have located several *tophets* and bone analysis shows that 80% of the bones, cremated in urns, were of foetuses or newborn babies (Ibid. 252). The votive stelae found in the *tophets* of the west, of which there are thousands, usually have an inscription with a formula referring to human blood sacrifice (*mlk'dm*) or the substitution of a sheep for the child (*mlk'mr* or *molchomor*).

Thus it should be clear that the concept of human sacrifice was not as abhorrent to many cultures of the ancient world as it is today. However, we must be careful to apply the term sacrifice accurately; not every ritual killing is a sacrifice. Thus it is important to draw a distinction "between properly called human sacrifices – those offered to a superhuman recipient – and other rites which may require the

killing of human beings without belonging to the cult of superhuman beings" (Hughes, 1991: 3). However, before such distinctions are worthwhile it must be adjudges that humans were killed in rites during the Minoan period at all. As such it is crucial to have at least a basic understanding of the key sites which have been used to suggest that the practice existed on Minoan Crete.

In relation to Anemospilia, as discussed above, the skeleton which was found in a crouched position upon a structure that was tentatively identified as an altar. It is this association of a human body and an 'altar' within a cult structure that has given rise to speculation about human sacrifice. It is perhaps telling that no alternative explanation for the deposit was proposed – the simplistic association was deemed convincing enough. It is possible that the activity taking place in the room was some form of preliminary funeral preparation: the obvious example of extended rites in association with pre-burial ritual would be the Egyptian mummification process. While I am in no way suggesting that Minoan Crete practised mummification, as that is simply not true, it is possible that extended preliminary funeral rites took place away from the actual place of interment. It must be acknowledged that due to the massive damage done to the individual upon the 'altar' during the collapse of the structure a precise cause of death cannot be concluded. While it has been speculated that all four individuals within the building died concurrently, it is possible that this third individual was already dead before the collapse. Previously such a suggestion, i.e. of the possibility that the third human was already dead, had only been considered in relation to his being a sacrificial victim.

So is there any evidence that may be cited to support the burial hypothesis? The matter is complicated as the exact nature of the Anemospilia structure has never been established. However, given the association of Anemospilia with the settlement of Archanes, it may also be associated with the nearby cemetery of Phourni. This would certainly be legitimate in terms of proximity, which is the main aspect of its association with Archanes. Phourni is one of the most significant Minoan cemeteries excavated thus far, its uninterrupted use as a burial place, from Early Minoan II – Late Minoan IIIC, allows for a full examination of the burial practices and their evolution over time[100].

During the pre-Palatial and First Palace periods, bodies were placed on the ground inside the various burial structures, with the body "in a contracted position and usually on the right side" (Sakellarakis and Sakellarakis 1997: 246). Even the burials in pithoi and sarcophagi, which in the case of the latter begin as early as EM II (the lower level of Tholos Tomb E), use this contracted position. It is noticeable that the third skeleton at Anemospilia, the so-called 'sacrifice', is also in a contracted position on his right side. While this may be coincidental, there are other similarities between the burial complexes of Phourni and the Anemospilia structure: both show a wide range of utensils for the practice of libation; both have the presence of animal bone; both are associated with the settlement of Archanes. It is perhaps significant that the complex identified by Sakellarakis and Sakellarakis as a funerary preparation site at Phourni, Building 4, comes into use in the Neo-Palatial period, i.e. the period just after the destruction of Anemospilia in MM IIIA. Although the accoutrements of the two

[100] See Sakellarakis and Sakellarakis 1997 for a full discussion of Phourni.

are not identical, both seem to be for the performance of a preparatory cult function[101]. I believe that the structure at Anemospilia, while it is of a cult nature, may also have served a function attached to the cemetery at Phourni. This would account for the problems with the sacrificial theory – namely the lack of a suitable sacrificial weapon, an inappropriate altar structure, and the other issues outlined above. While I realise that this theory still requires development it should be apparent that the explanation of the Anemospilia deposit as an occurrence of human sacrifice has certain problems associated with it that cast doubt on its accuracy.

Aside from Anemospilia, perhaps the only other site that shows potential evidence for human sacrifice is the somewhat suggestively named "Room of the Children's Bones" at Knossos.

This is a small room of a Late Minoan IB house, c.1450 B.C., containing animal[102] and human bones. The room shows occupancy from MM II onwards, but the pertinent finds – including the bones – come from the LM I layers. In addition to the bones, there were 25 conical cups, a series of other pottery and charcoal fragments (Warren, 1981: 159).

The majority of the 218 human bones were found in a layer of soft, black, carbonised earth. However, the bones themselves were unburnt, which indicates that the black carbonised earth, in its original form at the moment of destruction, subsided over them. This earth then would appear to be the decayed form of

[101] Obviously this conclusion is drawn from the surviving aspects of the Anemospilia structure (see above pp. 120-126).
[102] A few ovicaprids bones, vertebrae with cutmarks (Warren, 1981: 159).

burnt timbers, some of which still preserved their form at the top of the black level. The human bones were scattered throughout this level in no semblance of skeletal order whatsoever. This point is easily confirmed by the fact that many of the skull fragments were able to be joined together into two fairly complete skulls, with mandibles, which belonged to children of eight and twelve years old. But at least four individuals, all children, are represented in the room. The key archaeological and osteological factor in respect to these remains is the evidence of human modification: that is to say 35.7% appear to bear cut marks on them which suggest filleting and the deliberate removal of the flesh.

It must be noted immediately that this deposit is unique. It is not a burial – the lack of care given to the remains is utterly alien to the Minoan burial practice which seems reverential in its treatment of the remains of the deceased, even with their secondary burial practices. The lack of articulation in the remains also shows that we are not here dealing with a primary burial interment in the basement, but with bones (unburnt) placed, or perhaps quite possibly carelessly thrown, into the western part of the room. The knife marks on the bones have given rise to theories of (ritualistic) cannibalism. The circumstances behind the deposit are still unclear, but if the analysis of the cut marks as being indicative of the deliberate removal of flesh is accurate then we are forced to acknowledge the possibility of sacrifice. Although it must also be noted that there is no archaeological indication of an altar structure in the basement, nor anything to suggest an oblative function for the deposit.

If we ignore the two possible archaeological occurrences of human sacrifice outlined above, then there is little other evidence to suggest the existence of the practice in the Aegean during the Bronze Age. The only textual indication comes in the form of Pylos Tablet Tn 316.

This tablet has been described as "The most important single Mycenaean document to give evidence of cult practices" (Hughes, 1991: 201). Although Mycenaean rather than Minoan, Linear B Tablet Tn 316 is the only possible indicator of human sacrifice in the Aegean Bronze Age. But even here the evidence is not explicit: Tn 316 contains a list of gold vessels and unnamed men and women dedicated in some way to a number of deities, including Zeus, Hera, Potnia, Hermes (apparently), and one *I-pe-me-de-ja*. The most frequent offering is a gold vessel and one human being per deity, although some vessels are offered without a human counterpart.

However, while it would seem that these individuals are dedicated to a deity the specifics are unclear. Hughes (1991: 202) summarises the possibilities as follows:

1. The ideograms WOMAN and MAN refer not to actual people but to figurines.
2. The humans act as cup-bearers to carry the vessels in procession.
3. The men and women were dedicated to serve in the sanctuaries in some capacity.
4. **OR** The men and women were sacrificial victims.

The introductory formula which accompanies these ideograms, *PO-RE-NA*, is unclear as to the exact nature of these people. That the gold vessels were listed first implies that they were the most valuable dedication (Ibid.). Yet this does not mean that the individuals were not sacrifices – a slave or a prisoner would be more than likely to be valued less highly than a gold vessel. Thus the textual evidence is frustrating in this respect.

THE RITUAL CONTEXT OF SACRIFICE

As the title of this study indicates, the purpose of this paper is not only the focussed study of the archaeological evidence for sacrifice in Minoan Crete, but also to place this practice in the overall cultic scheme that operated in the Bronze Age. By which I mean the relative frequency of the archaeological indicators of sacrifice when compared with those of other cult practices such as votive deposition, libation, and the offering of non-animal foodstuffs. The patterns of distribution of these various remains allow us to identify the more significant forms of worship and cult practice in Minoan Crete, hence the inclusion of the data pertinent to these practices in the catalogue section. It makes sense initially to address each of these practices separately and then express a synthetic view once the data has been examined.

LIBATION

It has long been postulated that liquid offerings played a major role in the ritual processes of Minoan Crete. As can be seen from Table 1, pottery is the only archaeological feature present at all 21 sites presented in the catalogue. However, this is not detailed enough, hence in Table 2 the type of vessel (where possible) is identified. This is necessary as, while certain vessel forms are directly designed for drinking (conical cups, kylikes) or pouring (rhyta), others are for storage (pithoi) or serving. The oblative function of libation necessitates primarily pouring and drinking vessels and, as such, if libation is the major cult practice we should expect these in either very large numbers or elaborate designs. We may also expect storage or collection vessels to hold the liquids before the ceremony, more than likely in quantities relative to the size of the site and in proportion to the numbers of pouring and drinking vessels – this is, of course, presuming that the liquids for libation were stored on-site.

A further artefact that may be indicative of the practice of libation is the offering table – a feature that occurs in several forms from many cult sites (Figs. 49-53). The design, usually a surface with one of more shallow, bowl-like depressions, would seem to be ideally suited for the reception of liquids, although cereals and pulses would also be appropriate. The *kernos*, a multi-cupped vessel on a stand (Fig. 54), may have served a similar function in the pre- and proto-Palatial era.

SITE	Cups/Bowls	Pithoi/Storage	Pouring Vessels	Cooking Vessels	Other/Unidentified
Gournia		x			
Karphi	x				x
Knossos - Shrine of the Double Axes	x				
Knossos – Temple Repositories	x	x	x		
Salle β - Malia					x
Atipadhes		x	x	x	
Gonies	x	x			x
Juktas	x	x	x	x	
Kophinas	x	x	x	x	
Petsophas	x	x	x	x	x
Traostalos	x	x	x		
Vrysinas	x	x	x		x
Anemospilia		x			
Kato Syme	x	x		x	x
Arkalochori	x	x	x		
Idaean Cave	x	x	x	x	
Kamares	x	x	x		
Patsos	x	x	x		
Psychro	x	x	x		
Skotino		x	x		

Table 3: Functional uses of pottery found at Minoan cult sites

But it must also be acknowledged that all of these vessels also had a utilitarian function. Indeed the conical cup is one of the humblest of Minoan artefacts; Gillis (1990: 1) describes this vessel as "the epitome of the 'uninteresting' low-status object". She also adds that, in her opinion, the cups are "purely pragmatic and have no symbolic function, either social or religious, at all" (Ibid. 3). While I agree that in itself the conical cup had no inherent religious symbolism, we cannot doubt its use in a ritual setting. The term *conical cup* requires some explanation, and it makes sense to follow Gillis' description as hers is the major work on the subject. The term conical cup is one applied to small, handleless cups of a coarse design: "the shape can vary considerably, regarding base shape, wall shape and even rim shape. Despite its name, the walls of these cups are as often unconical as not, being curved, semi-globular, agival, bell-shaped etc". (Ibid. 5). This much may be seen from the sections of the various shapes (Fig. 55).These cups were wheel-thrown and cut off the wheel with a string, and hence may be seen to have been mass-produced at considerable speed. In addition, it should also be noted, as Gillis does (Ibid. 3), that a number of early 20th century excavations overlooked the conical cup due to its humble character; only a limited number were recorded and retained, and even these have a limited provenience.

By contrast, the varieties of pouring vessels – in particular, rhyta – are at times incredibly ornate and have received much attention. This is especially true of the striking examples of the zoomorphic type, although certain other examples, such as the Harvester Vase from Ayia Triada and the Sanctuary Rhyton from Zakros are equally as famous for their decoration. Yet it is the zoomorphic examples,

such as the famous serpentine bull's head rhyton from the Little Palace at Knossos (Fig. 56), that have garnered the most attention in the study of possible ritual vessels. This doubtless results from the (simplistic?) association between the zoomorphic appearance and the offering of an animal's blood. While this cannot be refuted, it does not preclude their use in libations involving wine, honey, or milk. However, one must be careful as the rhyton is not an exclusively ritual vessel, nor is it the only type of vessel that served a pouring function – the stirrup vase, for example, could also have been used for such a purpose.

However, it would seem a legitimate conclusion to deduce that at those ritual sites where we have pouring and drinking vessels, and the offering tables described above, that libations played a part in the cult process. This is even more probable if storage vessels are present, suggesting that they were a regular feature requiring a constantly present supply of liquids. The offering table may not be a key cult implement in extramural sanctuaries, however, as here natural clefts or pools may have served depending on the nature of the deity worshipped. For example, they are not found at Atsipadhes although coarse drinking, pouring, and storage vessels are found. This may lead to the conclusion that these tables were associated with one specific cult or with more elaborate cult sites: Peatfield viewed Atsipadhes as a "poorer" rural peak sanctuary (Peatfield 1990 *passim*).

Of the peak sanctuaries discussed in the catalogue, five out of the seven exhibit drinking, pouring, and storage wares; namely, Juktas, Petsophas, Kophinas, Atsipadhes, and Vrysinas. Only Traostalos and Gonies are lacking in pouring shapes. This is convincing evidence for the fact that liquids played a major role

in the cult activity of the peaks. This is even more apparent when one considers that four out of the seven – Juktas, Petsophas, Traostalos, and Kophinas – all exhibit offering tables or altar structures. Such a largely consistent presence of all paraphernalia relevant to libation at the peak sanctuaries would strongly suggest that their practice was a key component of the peak cult.

A similar pattern is visible in relation to the caves. Once again all of the caves exhibit storage and drinking wares, even Arkalochori has fine cups and bowls and some fine decorated vase covers. Kamares, as we may expect, has perhaps the greatest range of pottery, included amongst which are objects which Jones (1999: 52) describes as a "fruit stand". Similarly, most have vessels that may have been used for pouring. A notable example of this is Psychro, which reports fragments of two bull's head rhyta (Hogarth, 1900: 104; Boardman, 1961: 57) and possibly another modelled on a goat's head[103]. Psychro is also noteworthy for the large number, over 30, of offering tables, some of which were inscribed with Linear A signs. However, aside from the Idaean Cave none of the other cave sites presented here contained offering tables. However, it is possible that the "fruit stands" reported at Kamares are a form of pedestalled offering table. These objects have been studied recently (Platon and Pararas 1991) and have been associated with libation rituals. We may then postulate that libations took place at, at least, Psychro, the Idaean Cave, and Kamares, as all three of the function-forms of pottery and offering tables are found at these locations. Drinking rituals (toasting ceremonies?), and possibly libations, seem to have

[103] Jones (1999: 52) claims that Psychro has no pouring vessels, but this is clearly not the case.

occurred at the other cave sites, with the exception of Arkalochori which seems to have had little or no ritual function.

The extramural sanctuaries show a different pattern of evidence, inasmuch as the quantities and locations of the evidence pertinent to libation are different. Kato Syme, for example, has over 500 (five hundred) examples of offering tables, whereas Anemospilia has none. Kato Syme also has coarse storage ware and pithoi, along with jars, cups, kylikes, and some cooking pots. However, given the preponderance of offering tables and other forms of pottery, the evidence for pouring vessels is scanty. This makes the identification of libation somewhat problematic, but given the sheer numbers of offering tables such a rite still seems likely. Anemospilia also has a significant amount of pottery, primarily the 24 vases in the east room and the large number of vessels, including pithoi, in the central chamber. This fact, and the broken vessel associated with the skeleton in the antechamber, are suggestive of the practice of libation at Anemospilia as well.

By contrast, the urban sanctuaries and deposits have very scant evidence for any ritual practice. Libation would seem possible both at Gournia and the Shrine of the Double Axes at Knossos, as both contained an offering table set into the floor. The latter also contained an LM IIIB stirrup jar, which could have been used as a pouring vessel. Likewise the "vases collecteurs" in the floor of salle β (Malia) are potentially receptacles for liquids. Karphi, as noted above, contained little or no evidence for the practice of libations.

Thus it would appear that libation was a major feature of peak, cave, and extramural cult. Although the urban deposits are more confused, there are indications of the practice being extant there as well. Given the apparently frequent occurrence of libation at Minoan cult sites we turn, inevitably, to the liquid that was offered. Ultimately, without archaeo-chemical analysis data, this is largely speculative. If we take the evidence of the Ayia Triada sarcophagus as verbatim then there is reason to suggest that blood was offered. Certainly in this scene blood may be seen to be being collected in large vases, seemingly by stabbing the victim in the neck (see Fig. 57)[104]. In the traditional reading of the sarcophagus, as seeing both of the long side panels as parts of the same ritual process, the blood is then poured into a large vessel somewhat reminiscent of the Classical krater. If this is an accurate rendering of a ritual scene (the interpretation of which was discussed earlier[105]) then it prompts an interesting question on where the division lies between libation and sacrifice. Previous study, indeed the study of ritual in general, has tended to view these rites as mutually exclusive. But if blood were a primary liquid used in offerings – a theory that has been applied to the Ayia Triada sarcophagus and the "vases collecteurs" of salle β in particular – then might we see the two rites as aspects of one process, the blood being offered to a power while the carcass served a more secular function, perhaps the feeding of the congregation. If so, this would alter the perceived focus of Minoan ritual activity. However, we still return to the fundamental issue of the lack of faunal remains from the majority of Minoan cult sites, which would seem to cast doubt not only on the practice of sacrifice but also any other rite involving animals.

[104] A similar method of killing animals to drain their blood is still prevalent in some areas today, especially in the Omo Valley in Ethiopia.
[105] See pp. 38-43.

Thus, given the very limited distribution of faunal remains but the extensive distribution of artefacts suggestive of libation, it would seem a logical conjecture that even if blood were used in some libations it certainly was not the exclusive liquid offering. Therefore we may speculate, with a high degree of certainty, that other liquid materials were also used. Certainly some of the iconographic representations of possible libation give no indication that blood was used (see Fig. 58). In the Archaic and Classical periods libation was widespread, with two verbs σπένδειν and χέειν becoming used for the act. Burkert (1985: 70) accounts for the difference as being directly related to the vessels employed in the rite; the σπένδειν being associated with a hand-held jug and controlled pouring, and χέειν with the tipping of a larger vessel onto the ground. Similarly, Burkert sees the latter as being primarily associated with the cult of ancestors or chthonic deities. However, as more recent studies (Hägg, R. and Alroth, B. (eds.), 2005, *passim*) have reiterated, the division between Olympian and chthonic may not be as evident as was once believed.

The liquids used for the Archaic and Classical libations were wine, honey, and milk – in the *Odyssey* (XI. 30-31), all three are used as well as water. Indeed, Burkert (Ibid. 71) sees the libation as a polar opposite to the θυσία ritual – one being peaceful (the libation) and one "hostile" (the burnt animal sacrifice), the former being used to frame the latter, re-establishing the peace. In relation to this theory it is interesting that the word σπονδαι ("libations") can also mean "armistice"[106]. However, while I do not agree with the polarisation of these ritual processes, one may envisage the utilisation of the same non-blood products in

[106] Of course, other scholars view these rites differently. Obbink (1993: 78) notes that "wine poured in honour of the god was regarded as a type of sacrifice".

Minoan rites. Indeed, Nilsson (1950: 343) saw the use of intoxicants such as wine as being an explanation for the ecstatic qualities of some Minoan cult scenes[107].

While this is speculative, there is a general consensus that bloodless libation was a popular ritual practice in the Minoan period, and the archaeological evidence would seem to corroborate this supposition. However, the question of its primacy is somewhat moot as it is one aspect of a very varied cult system, but we may say that the evidence for it is certainly more widespread than that for animal sacrifice, suggesting that it was more common than this latter practice.

[107] For a discussion of the ecstatic qualities of Minoan religion see below pp. 283-291.

VOTIVE DEPOSITION

One of the features of Bronze Age Cretan religion that has most dominated previous study is the prevalence of votive figurines at a number of Minoan cult sites. Although this ritual process is markedly different from animal sacrifice, it is clearly a major component of the ritual context of the period and, as such, it must be considered in this study.

The figurines may be divided into sub-categories according to material and type: while the majority are of clay, there is a significant minority of examples in bronze and other metals. The type of figurine may be either animal or humanoid, which may then be further divided by species and gender[108]. Therefore, it should be immediately apparent that there is a great range of figurine types, and so it seems sensible to discuss the animal and humanoid figurines separately.

The location of the votive within the sanctuary is also a significant feature of the practice of deposition. Alroth has noted this phenomenon in relation to the Classical practice : "Thus, the placement of the votive gift on or at the altar means something different from the placement of a similar votive on a bench at the entrance to a sanctuary" (Alroth, 1988: 195). Unfortunately, for the Minoan sanctuaries, in many cases we do not know the exact place of deposition, because either the precise find spot was not recorded or the votives were found in a large dump, as in the case of Petsophas, perhaps from periodic cleaning of the area.

[108] Jones (1999: 6-7) makes a further division according to size, but I do not feel that this is as relevant a factor.

Animal Figurines

Table 1 shows that the extramural sanctuaries are characterised by animal figurines – with the exceptions of Skotino, Arkalochori, and Anemospilia – whereas none of the urban deposits contained animal figurines. The animal figurines are particularly associated with the peak sanctuaries, as they occur at these sites in much higher numbers than in the caves.

Juktas, without doubt, exhibits a wide range of species in terms of animal figurines; namely bovines, goats, birds, pigs, dogs, beetles, and snakes, all in large numbers. Petsophas, likewise, has many species represented by figurines: bovines, agrimi, goats, sheep, swine, dogs, hares, tortoises, and a weasel-like creature, in addition to birds. However, aside from oxen, they are small in size (3-7 cm). The other peaks do not show anything like this range – most have oxen, birds, and goats and nothing else, although Traostalos does have a fish, but this may have served as a rhyton.

The caves, while they do contain animal figurines, do not exhibit anything like the quantity or the range of figurines. Even Psychro has only a few clay bovines and a single clay sheep (Jones, 1999: 7). A similar situation exists at Kamares where a handful of non-descript animal figurines are reported. Thus, while animal figurines are an aspect of the cave cult, it is clearly not as significant an aspect as it is at the peaks. Likewise, the extra-urban sanctuaries seem to have only a marginal connection with animal figurine deposition. Anemospilia has none, and at Kato Syme – while they occur – they are small in size and do not

occur in numbers comparable with the peaks. Kato Syme has primarily bovine figurines and, interestingly, these are typically associated with the kylikes found at the site.

Having established that the animal figurines are a prominent artefact at the extramural sanctuaries, notably the peaks, it is necessary to discuss the purpose of these dedications. Rouse (1902) made a similar study of the votives from Greek sanctuaries, and he saw a large number of them as being directly related to the concept of sacrifice. He classified them thus:

1) Figures or groups which represent the devotee prepared for sacrifice, or engaged with some ritual act.
2) Models of the thing sacrificed.
3) The articles used in the ritual.
4) The deity to whom the sacrifice is made. (Rouse, 1902: 283)

Rouse saw the figurines of animals as having one of two possible functions, either as a pseudo-sacrifice or as the commemoration of a sacrificial occurrence: "We may now take a general view of the animal models: not to imply that they must commemorate a sacrifice, but that they may" (Ibid. 298). It must be noted that a number of the historical Greek sanctuaries exhibit a similar assortment of figurines to the Minoan sanctuaries in this study. For example, the Argive Heraeum and Olympia both yielded hundreds of animals in bronze and clay, the latter also contained a representation of an insect in bronze, possibly a scarab (Rouse, 1902: Fig. 45), which is reminiscent of the beetle figurines from Juktas.

This traditional viewpoint of the pseudo-sacrifice has also been the primary hypothesis applied to the Minoan figurines. However, the recent study by Zeimbekis (Unpub. Ph.D.thesis) has cast serious doubt upon this interpretation. The significant feature of the material at Juktas, for example, is that while the faunal remains are predominantly ovicaprids the figurines are mostly of bovines. This is one of the major pieces of evidence in her countering of the pseudo-sacrifice hypothesis.

Another interpretation may well account for the dichotomy between the urban and extramural sanctuaries; namely that the animal figurines are associated with pastoralism and herd management (Rutkowski, 1986: 88). This would explain why the animal figurines are largely absent from the urban cult installations, as the protection of flocks and the environment that sustained them would most probably be primarily associated with the extramural sanctuaries in the areas where the flocks were kept. However, while it is very probable that at least some of the cult practices carried out by the Minoans were associated with the fertility of flocks or the production of food, this interpretation of the animal figurines does not account for the presence of figurines of birds, beetles, and wild animals at some of the sanctuaries. Indeed these votives would seem to be problematic for the interpretation of the animal figurines, and the cult of the peaks, if they were to "relieve the fears and cares of the shepherds and cattle breeders" (Rutkowski, 1986: 94).

Personally, I believe that no one explanation can account for the range of animal figurines found at Minoan sanctuaries. It is possible that they constituted a gift in

themselves to the deity – the range in size reflecting the wealth or status of the dedicator. Equally they may reflect the power of the deity worshipped at the site – flocks, birds, fish, wildlife in general – all of these may be reflected in the animal votives: there has certainly been a deal of speculation about a Minoan 'Mistress of Animals'[109]. However, whatever the motivation behind the deposition of votive animal figurines at the caves and peak sanctuaries, what should be abundantly clear is that the cult practice of their deposition is more widespread and more common than the practice of animal sacrifice may have been, even if all faunal remains at Minoan sites are remains of sacrifices.

[109] See, for example, *MMR*: 352 ff.

Humanoid Figurines

The anthropomorphic figurines (to be more precise) seem to be equally as important as the animal figurines, if not more so. However, their interpretation is ostensibly more straightforward. They must be either the depiction of an anthropomorphised deity or representations of the worshippers themselves. The latter interpretation has been the one which has attracted a level of general acceptance. For the basis of this study the fabric of the figurine is not overly significant. The majority are of clay (terracotta) but there are significant examples, such as those from Skotino, in bronze.

Again, if we compare the Minoan figurines with those from historical Greek sanctuaries, the interpretation as worshippers would seem very reasonable. However, there is one notable difference between the assemblages from the two cultures. The Greek sanctuaries contain several examples of a human[110] figure carrying an animal, or animals, which have been seen as the bringing of a victim for sacrifice or dedication to the deity. Famous examples of this type would be the *Moschophoros* ('Calf-Bearer'), and the several Kriophoroi such as the gigantic example from Thasos (Ridgway, 1977: 73-74). There are similar depictions of men and women carrying animals on plaques from the Greek sanctuaries, and from the Archaic and Classical levels at Kato Syme. However, from the Minoan sanctuaries we have no examples of humanoids carrying animals, which may suggest that the humanoid and animal figurines are not for

[110] In this case the term 'human' may be used legitimately, because identifying what they are doing in this case makes it clear that they are human, not divine (Dickison 2007 *pers. comm.*).

the same purpose. In my opinion, it at least casts further doubt on the concept of the pseudo-sacrifice interpretation of the animal figurines themselves.

These human figurines, as we may term them if the interpretation as worshippers is correct, are a major feature of the majority of Minoan cult locations. The cave sites, as a type, are where they are least common: while Psychro has them in abundance, and Ida would also see to have large numbers although reports are as yet incomplete, the majority of caves are lacking in them. Skotino has only the three famous bronze examples (Davaras, 1969 *passim*), and they are simply not present at the other caves in this survey. This is very significant as they are practically ubiquitous elsewhere. Only salle β was without them; this, however, is consistent with the fact that this room was lacking in everything aside from pottery in the form of the *vases collecteurs* and the famous swords.

However, there is a notable difference between the urban and extramural sanctuaries. The figurines found in the urban shrines are typically seen as depicting deities rather than worshippers, whereas those at the peaks are seen as personal votives; this is especially true of the LM III shrines, such as Karphi, where we have the "Goddess with Upraised Arms" figurines, which are identified as deities because of their gestures. Also the figurines from urban shrines are exclusively female, at least in this selection, but it is certainly not a great leap to state that the urban shrine figurines are exclusively female. By contrast the peaks show both male and female figurines. As the peaks exhibit the greatest range of votive anthropomorphic figurines it is fitting to discuss them in more detail.

While all of the peaks contained male and female figurines one should not think of these deposits as being identical. Indeed there is considerable variation in the styles of figurines at the peaks, especially the female figurines. The most significant example of this variation is the style of female figurines dominant at Petsophas[111]. The female figurines from Gonies exhibit similarly ornate headgear but of a different design. This variation in the style of the figures could relate to different female deities or, indeed, to distinct local dress styles – whichever is the case it is an indication that general uniformity should not be confused with an identical quality. The male figurines are seen to be more uniform than the female – typically unclothed aside from a 'loincloth' often with an object (dagger?) in the belt – and this is particularly noticeable in terms of gesture. The most common gesture of the male figurines is to have one or both fists clasped to the chest; also significant is the gesture of the arms outstretched. Both have been interpreted as gestures of adoration, and thus the figurines are seen as depicting worshippers. It is also noteworthy that while the male figurines outnumber the female, the latter are far more ornate. In my opinion, these figurines at the peaks are the ultimate form of personal dedication, a votive rendering the individual worshipper that remained at the sanctuary in the absence of the depositor, creating an enchainment between individual and cult place. This accounts for their widespread presence at Minoan cult sites, but not for their absence at most cave sites which remains perplexing. At best we may conclude that a fundamental difference in ritual practice, reflected by the presence or absence of humanoid figurines, existed between the peaks and the caves.

[111] See above, pp. 105-109.

A further difference is exemplified by the deposition of 'votive limbs'. While all of the peaks in this survey present evidence for the offering of modelled parts of the body as votives (if we count the 'phalloi' at Atsipadhes[112]) this should not be seen as an ubiquitous feature of the peak cult. Indeed Jones' survey accounts for votive body parts from only 11 of 20 peak sanctuaries (Jones, 1999: 6). However, it is significant that even with this sporadic distribution they are more prevalent than faunal remains at this type of site. Their origin has been attributed to requests for healing, in a manner akin to the Classical practice, and this is seen to be the case especially in the example of the seated female figurine, with a massively swollen leg, from Traostalos (Fig. 59). Rutkowski (1986: 86) goes so far as to identify the ailments that this individual may have suffered from, namely liver cancer or elephantiasis. The fact that many of the examples of votive limbs have holes in them, seemingly for suspension, may suggest that they were either worn by individuals or that they were hung within the area of the sanctuary itself. The practice of hanging votives on walls or in trees is attested in the Classical period[113].

The 'medicinal' quality of the votive limbs is one which I believe has been correctly identified; their presence at only some examples of the peaks is suggestive that only the deity at these sites was associated with healing. Indeed, even if the limbs are not associated with healing they are suggestive of a disparity of practice between the peaks. But crucially, for this study, they are

[112] These 'phalloi' have been recently reinterpreted as arms by some Minoan scholars (Dickinson, 2006 *pers. comm.*).
[113] For example, there are several references in the *Greek Anthology* to this custom (Alroth, 1988: 195), also votives may be deposited in water. See *The Greek Anthology* (Loeb Classical Library): VI, 106, 163; IX, 326).

indicative of another form of ritual process which is more consistently represented than animal sacrifice appears to be.

The deposition of these votive figurines and body parts is undoubtedly on of the most widespread and important Minoan ritual practices. A cursory glance at the distribution, even for a non-academic, would make it undeniable that the practice of sacrifice was by no means as common in the ritual programme as the offering of figurines. However, one should not deny the possibility that votive deposition may be linked with sacrificial practices. This association has been noted in the case of the Geometric-Classical Apollon at Dreros: "On the south wall of the cult building was found a construction which contained earth and goats' horns. It was interpreted as an altar, a *keraton*... Beside this construction there was a bench/table built of rough stones *on which* [my emphasis] were found some fragments of terracotta, at least three female heads from the seventh century, a bronze gorgoneion, pottery and some ashes and remains of bones. In front of the bench more bones and some terracotta objects were found" (Alroth, 1988: 200). It should also be noted that Dreros has been regarded as an example of "a living tradition from the Minoan period" (Ibid.)[114]. While I do not believe that this argument can be sustained, it nevertheless indicates that votive deposition and sacrifice may be practised in unison.

[114] Here Alroth is building on the work of Sp. Marinatos. See Marinatos, Sp. (1936), 'Le temple géométrique de Dreros', in *BCH* 60: 214-285.

AGGREGATED VIEW:

Distribution, Function, and Relative Significance of Sacrificial Ritual

We are now in a position to take an aggregated view of Minoan ritual. As such the following sections attempt to draw together the strands of research from this dissertation to contextualise the rites of the Bronze Age, seeing various cult aspects in relation to one another, examining their relative significance, and possibly areas where they overlap and interact. Here sacrifice is discussed alongside other cult processes that have been previously studied in relation to the Minoan evidence, in order to place sacrifice within a cultic context. This section also draws more heavily on earlier scholarship on the subject of Minoan religion and attempts to correlate existing theories on this subject with the findings from the preceding chapters.

Following discussions on the various aspects of ritual performance and context that have been previously proposed, this section also briefly attempts to account for the motivations behind the various rites in an effort to answer the fundamental question of 'Why?'.

GEOGRAPHICAL AND TEMPORAL VARIATION OF THE SACRIFICIAL REMAINS

The severely limited distribution of faunal remains, our key category of evidence, makes any attempt to identify a pattern – either geographic or temporal – somewhat haphazard and of limited use. However, this subject should be addressed, even if only for the sake of completeness.

Map 2 plots those sites which have definite Minoan faunal remains, but also includes those which may contain Minoan faunal remains but at which the stratigraphy or excavation details make this ascription uncertain. One may offer the observation that the general distribution of these site – with the obvious exception of Traostalos – are scattered around the central area of the island. When we compare the distribution of these sites with the major settlements (also marked on Map 2), especially those with palaces, there is again little correlation between the two. Knossos may be linked via geographic proximity with both Juktas and Anemospilia (although the same may be said of Archanes), while Zakros is very close to Traostalos (but Zakros is very close to at least half a dozen peak sanctuaries).

However, Psychro and Kato Syme are distant from most of the major settlements, the latter is particularly isolated. This would seem to imply, given the richness of both of these sites, that those who left votives and carried out ritual practices at these sites made a deliberate (and fairly long) journey to them in order to do so. On the current evidence we may then suggest, on the basis of no positive

evidence to the contrary, that sacrificial rituals cannot be associated with the inhabitants of a single settlement or geographic area of Crete. Rather, it would appear as though the sites that exhibit convincing evidence for sacrificial rituals were used by the members of several communities, although perhaps not concurrently.

This would certainly seem to be the case at the cave of Psychro. In his recent re-examination of the pottery from Psychro, Watrous (2004) revealed that a marked change in the origins of the pottery occurred in LM IB-LM II (143-145). Prior to this period, since the cult foundations, the pottery in all its forms (of fine ware) was dominated by styles characteristic of Malia. However, after LM IB and up to LM III A2-B, Knossian fine ware dominates and Maliote ware is absent. Watrous links this to the downturn experienced by the Maliote palace at the end of LM IB and Knossos' ascendancy in the following period. While it may be dangerous to associate fine ware styles with members of specific communities, such a marked difference in the pottery is suggestive of not only Knossos' broadening influence but also of the importance of Psychro as a cult site to the inhabitants of at least the central area of the island. But it must be remembered that Psychro also had a huge number of simple offerings, such as conical cups containing food (Ibid. 144), which may be suggestive of a number of social classes using the same cult establishments.

Kato Syme and Juktas also appear to exhibit evidence of use by a similar variety of people. One of the most common points made about Juktas is its close association with Knossos, although some have associated it with Archanes.

However, I would suggest that both associations are equally viable. I do not adhere to the belief that each major settlement was associated with its own peak sanctuary. The wealth of Juktas, as with Psychro, is suggestive of a wider significance on Minoan Crete. Kato Syme almost certainly enjoyed a similar pan-Cretan importance. This feature of all three sites where we have incontrovertible evidence of Minoan faunal remains is interesting as a pan-Cretan significance accounts for the limited geographic distribution of this evidence.

However, in terms of the temporal variation of the deposits containing the faunal remains, there is a general correlation between these sites. At Juktas, the second layer which is dominated by faunal remains may be dated to MM IIA-LM IB; the animal bones from Kato Syme are associated with the central podium which dates to ca. MM IIB / LM IA; finally, at least some of the animal remains from Psychro may be placed within the MM III layers. Although there are earlier faunal remains found at Juktas, this MM II-LM boundary is the only period where we have animal bones at all three sites. Therefore, we may confidently speak of a development in the cult programme where, if sacrifice and rituals involving animals did not begin in this phase, they certainly seem to have become more significant. As a result, it may be interesting to see if other ritual and social changes occurred at this point and possibly may be linked with this process.

Of course, the major change at this time is the beginning of what is generally referred to as the Neopalatial phase[115]. However, it would be incorrect to say that rituals involving animals, including possible sacrifices, did not begin until the Neopalatial phases. Yet it is true to say that there does appear to have been a major ritual reshuffle in this period. Various sites are abandoned, such as Atsipadhes, Gonies, Traostalos, Petsophas, and Anemospilia was destroyed in MM IIIA and not rebuilt; while others, such as Kato Syme and Kophinas seem to grow in importance. Similarly. After the Late Minoan period begins there is an increase in the number of urban shrines – the 'Goddess with Upraised Arms' shrines are a notable Late Minoan III development.

Indeed, the LM III G.U.A. shrines, for example Gournia and Karphi in this study, would seem to be suggestive of an entirely new ritual setting. The paraphernalia of these shrines, in particular the G.U.A. figurines and associated 'snake tubes' have certainly not appeared before this period. Their appearance would seem to indicate a dramatic shift in the rationality and cosmology at work on Crete and, as a result, changes in the expression of this through ritual. For example, the snake tubes while they may have served as ornate pedestals, may also have been linked to the burning of intoxicants or hallucinogens. Thus it would seem that with the appearance of this class of shrine we may speak, with a degree of substantiation, about an end of 'Palatial' period cult, as they mark a change in cultic outlook.

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[115] Recent study has also led to the speculation that the term 'Neopalatial' may be overly simplistic. This argument is summarised by Day and Relaki (2002: 218-219) thus: "*Treating it* [the Neopalatial period] *as a unitary division of time, in which a specific political system was dominant, is to do the complexity of the period an injustice. Our umbrella term covers a time of change at nearly every site, with the construction, destruction, intensive use and abandonment of major architectural complexes... Rather than the image of stability over time and place, we are thus faced with a picture of change*".

However, to return to the matter in question, while some, notably Peatfield (1987: 92-93), have seen this change of religious locales in the Neopalatial period as the exertion of palatial control over religion, especially in relation to the peaks which survive the period. Peatfield sees these sites as being intrinsically linked with specific palatial settlements. However, it has been noted (Dickinson, 1994a: 275) that there are gaps in Peatfield's system – Dickinson gives the example of the Gulf of Mirabello area.

It is significant, in my opinion, that even in this period of so-called 'palatial control' of religion – from which most of the urban shrines in this catalogue come – there is no evidence for possible sacrificial rituals from these palatial and urban shrines. It would be unlikely, I feel, if sacrifice had been directly related to the palaces and the palace cult for us not to find the remains of such rituals within the palaces themselves. Therefore, I cannot see that the sacrificial remains of Juktas, Psychro, and Kato Syme are associated with the expanding influences of the palaces, at least directly. However, if the palatial influence did limit the number of extramural cult sites, for whatever reasons, then this might explain why Juktas, Psychro, and Kato Syme grew in importance and have a much longer history of cult use[116].

Moreover, one cannot attribute an apparent increase in the significance of sacrifice to foreign influence. The supposed Mycenaeanisation of Crete, even though the precise process is unclear, did not occur until Late Minoan II-IIIA (Dickinson, 1996: 66) and, as such, we cannot ascribe the sacrificial evidence to

[116] Of course, there must have been a reason for the continuance of these particular sites, but an explanation for this is not within the remit of this study.

an increasing Mycenaean influence, even though the mainland culture has more abundant faunal remains in its sanctuaries. Even if we could view a focus on rituals involving animals as being the result of foreign influence, this would not be a sufficient explanation: "influence is not like influenza" (Ibid. 67). The fact that we have faunal remains at cult sites from much earlier than even the MM-LM boundary means that we are dealing with an existing Minoan practice that seems to experience something of a renaissance.

This leads to the matter that there must have been new developments on Crete that as yet have not been treated extensively by the Minoan specialists. It is true to say that the changes that mark the arrival of the Neopalatial period in MM III-LM, and develop further in subsequent LM I phases, have never been 'pinned down' as regards the precise nature of the processes at work. This is essentially due to "the complexity of Cretan Bronze Age societies, the fluidity and fragility of the structures, and the dynamic character of social and political developments" (Hamilakis, 2002b: 180). The two main hypotheses of previous scholarship have been diametrically opposed: the first, the 'Knossocentric' view, judged that the Neopalatial period is characterised by the development of Knossos as the leading centre of Crete, with an imposition of its power and culture on the rest of the island as a result. The alternative hypothesis speculates that a number of regional centres – Knossos, Malia, Phaistos, Zakros, Khania, etc. – were in direct competition with one another, each vying for control and supremacy.

These two theories have been at the forefront of Neopalatial Minoan study, but both have fundamental flaws which have been recently noted by Hamilakis. The Knossocentric viewpoint fails to account for the possibility that "the relative homogeneity of material culture [across Minoan Crete]...need not necessarily imply the imposition of a certain style by a politically and administratively dominant centre, in this case Knossos" (Hamilakis, 2002b: 183). Similarly, the argument for competing regional centres is problematic as "the assumed notion of bounded and clearly defined territories is difficult to sustain" (Ibid. 184). Hamilakis also makes an interesting point regarding the approaches taken toward the material thus far: "A key misunderstanding that runs through this debate is the implicit or explicit equation of settlement hierarchies...to administrative/political hierarchies" (Ibid. 185).

To some extent this is true, as the focus on the material culture has led to a pattern of dehumanisation of Minoan archaeology, where the institutions have almost been removed from human agency. I note below, in relation to feasting rituals[117], that the make-up of those groups who took part in these rituals is one of the most difficult aspects of the ritual to distinguish from the archaeological material alone. A similar problem is also associated with those groups who utilise the communal tomb structures. The traditional views of kinship-based or settlement-based groups fails to account for the possibility of human and social dynamism. Hamilakis (2002b) expounds a new interpretative method for approaching the evidence based on precisely these concepts, that of 'factionalism'.

[117] See below, pp. 260-268 (esp. 263).

Although he makes no attempt to define these hypothetical factions, his essay is very interesting from the standpoint of re-interpreting the evidence along a new theoretical framework. Hamilakis' theory may be seen as a legitimate development of the "competing centres" theory, especially in his discussion of the palaces and palatial structures which he suggests "may have operated as the bases of factions of different size, and social/political influence" (Ibid. 188). The notion of factions does move us in the right direction of re-establishing the importance of human agency, as well as allowing for not only intra-site variation but also inter-site connections. This theory also accounts for the relative homogeneity of the material culture, as Hamilakis notes that factions within the same broader cultural group share the same "symbolic vocabulary" (Ibid. 186), thus "a certain degree of homogeneity is required for the messages to be comprehensible" (Ibid. 183).

This hypothesis of factional competition includes the notion of "claims to supernatural links, to ancestral power, to the possession of exotic geographical and cosmological knowledge" (Ibid. 188), although this aspect of legitimating secular authority through supernatural associations may equally be applied to the 'competing polities' model. However, this shared symbolic vocabulary has direct import to the current study. The very fact that we have evidence for a diminished number of ritual sites, plus the limited distribution of ritual faunal remains at only Juktas, Psychro, and Kato Syme, would, in my opinion, seem to suggest that those sites where faunal remains do occur were utilised by several different groups. Each of these sites seems to have a significance beyond its immediate

locality, which would fit rather well with the 'factional' hypothesis of groups competing for symbolic authority.

For this reason, I have become drawn to an explanation for the faunal remains that is not primarily sacrificial in nature. By this I mean that the offering of a victim, or parts thereof, to a supernatural power was not the primary purpose of those rituals practised at Juktas, Psychro, and Kato Syme. If this were the primary intention of the ritual one would imagine the practice to be much more widespread than it actually appears to be, including smaller scale rites at the palatial and urban shrines. However, this is simply not the case. Therefore, I would suggest[118] that the focus of the rituals at these three sites is perhaps not sacrifice, but rather commensality.

[118] As will be discussed below.

MINOAN SACRIFICE

Having identified faunal remains of a sufficient quantity and firmly associated with the Minoan period at Juktas, Psychro, and Kato Syme, we must address the origin of these remains. In other words, if the remains at the sites are those from sacrifices.

In general, those who discuss the faunal remains, the archaeological 'smoking gun' for the use of animals at cult sites, have divided themselves into two basic categories: those who feel that they are derived from sacrifices and others who believe they are from ceremonial feasts. It is notoriously difficult to differentiate between these two practices on the basis of the bone evidence alone. Equally, it is perhaps a mistake to see them as separate entities at all, as it is easy for the two processes to be complementary. However, let us begin with a formal discussion of the remains in relation to sacrifice alone.

In most cultures, and in western scholarship, sacrifice is seen as the pre-eminent and most potent religious rite, certainly its primacy may be observed in the Bronze Age Near East and in Classical Greece. However, in both of these examples the evidence is far more widespread and commonly occurring than it appears to be in Minoan Crete. In terms of the textual context for the possibility of Minoan sacrifice we are rather limited. The Linear B tablets from Knossos suggest that some form of ritualised slaughter of animals did take place: in one example, C(2) 941 + 1016 + *fr.*, animals are explicitly designated as *sa-pa-ke-te-ri-ja*, literally "*animals for ritual slaughter*" (Palaima, 2004: 225). Likewise

Halstead has estimated that 1439 animals appear in texts relating to consumption (Halstead, 2002: 152-153; 158-159; 163-165), although not all of these are related to ritual contexts. However, the amount of bone found at the sites suggests that the number of animals killed, or at least had parts of them offered, at the sites was quite low. Moreover, it is difficult to reconcile periodic cleaning of the sites with the deliberate deposition of the skeletal elements, which seems to have been the practice with the cranial elements at least. Certainly in Classical Greece the selective disposal of bones from sacrifices seems to have been unusual, generally they were swept from the altars and became part of the general refuse of the sanctuary (Stocker and Davis, 2004: 183).

The particular skeletal elements commonly reported from Juktas and Kato Syme are dominated by cranial elements, likewise at Psychro there are skulls and hornplates. This is suggestive: although they may be the result of primary butchery, they may also have been either the portion of the victim allocated to the deity, or a portion set up as a commemoration of the rite. There are examples of both practices in the ancient world: the excavation of the Geometric sacrificial altar of the temple of Apollo Daphnephoros in Eretria revealed over 400 bone fragments from a 7m x 6m excavation area (Chenal-Velarde and Studer, 2003). They were almost exclusively from caprids, and only femurs, patellae, and sacral and caudal vertebrae were recovered. Here we clearly have an archaeological corroboration of the θυσία ritual where the remains found clearly correspond with the μηρία. In terms of the second alternative, that of commemoration, there is considerable evidence from the Mycenaean palace of Pylos. Here six groups of bone deposits were found around the palace (Fig. 60). The bones were burnt,

bore knife marks, and consisted of humerus, femur, and mandible elements. The bones were mainly those of cattle (5-11 head per deposit) with parts of a single deer in two of the groups. This would seem to be the deliberate retention of certain skeletal elements as a means of commemorating specific rites.

I believe that this latter explanation is better suited to the Minoan evidence, as the cranial elements do seem to have been deliberately selected for retention, thus strongly indicating that structured deposition is at play in relation to these deposits. This is evocative of the cult model from Kotchati (Fig. 61), dating to the Middle Bronze Age, which seems to represent the mounting of animal skulls and horns around a sanctuary. It is noticeable that they are modelled differently from one another, suggesting animals of different species and ages. As the majority of the faunal remains also date to the Middle and early Late Minoan periods, this is perhaps suggestive of a similarity of purpose and that the skulls of the animals were deposited within the sanctuary boundaries as a means of commemoration.

The significance of the cranial elements is also observable beyond Crete itself. A recently excavated deposit from Akrotiri on Thera is interesting additional evidence for this practice. To the southwest of Xesté 3, within a layer of pumice, a pile of animal horns – again primarily from goats – was found near a small clay larnax containing a small golden animal figurine, perhaps of a goat or an agrimi (Arch. Reports, 1999-2000: 122). This is suggestive of the symbolic significance attached to the skull and horns of the animal spreading beyond Crete, as the deposit from Akrotiri certainly seems to have a ritual or commemorative quality.

It should also be noted that a similar tendency for attaching importance to cranial elements is observable in other cultures. Archaezoological evidence is available from several sites, e.g. Karlstein/Langacker and Auerberg/Schongau in Bavaria and Piller Sattel in Austria, which reveals that the selection patterns are similar to Greek and Minoan sites in terms of species offered (mainly cattle and ovicaprids, sometimes also pigs), but differ strongly from the former in terms of the predominant skeletal elements. The findings from Alpine 'burnt offering sites' feature a sacrificial tradition in which bovine heads and autopodial elements are preferred for burning (Forstenpointner, 2003: 204). Although the process is different from the Minoan ritual, this does provide extra-cultural context that the cranial elements may be seen as legitimate ritual markers.

This, however, does not necessarily mean that the rituals being commemorated were sacrificial. While sacrifice and feasting may create similar traces on the bones themselves, such as fine incisions on the long bone epiphyses, resulting from disarticulation, and long marks on the diaphyses, probably from filleting, other archaeological and architectural features may be our best means of differentiating between the two rituals. One of the more obvious of these is the altar structure which many cultures use as a location for sacrifice.

Interestingly, in the cases of both Juktas and Psychro we have animal bones in association with structures that have commonly been seen as altars. Kato Syme, although not possessing a structure which may be classified as an architectural altar, did contain a large central podium which may have served a similar

function. Certainly the deposits containing the bucrania were linked with this structure, with an implication that the two are symbolically connected. Although the use of an altar is not a prerequisite for sacrifice[119], their presence (in some form) at all three sites with extensive faunal remains is suggestive of their employment in the rituals that produced said faunal remains.

However, and this is crucial, this does not extend to entailing that all altars are sacrificial in nature; an altar at a site without animal bones can *not* be viewed as a sacrificial altar. Furthermore, the function of the structures at Juktas and Psychro is not certain. To simply say that they may possibly be sacrificial altars is insufficient as this does not specify how they were utilised. The lack of burning or charring of these structures confirms that these are not altars for burnt sacrifices. This marks the Minoan rite as being fundamentally different from the Classical θυσία ritual, a situation that was already suggested by the fact that the skeletal elements that make up the μηρία (the *osphus* etc.) of the Classical ritual are starkly different to the cranial elements which tend to dominate the Minoan faunal deposits. Moreover, it cannot be confirmed if the killing or dismemberment of the victim took place on these altars, although the structure at Psychro would seem to be unsuitable for this purpose. It should be remembered that, in the greater majority of the iconographic representations that have been seen as sacrifices, the victim is nearly always seen upon a table-like structure, of which an archaeological example has never been found, that does not conform to any of the structures at Juktas, Psychro, or Kato Syme.

[119] See the discussion of the Scythian practices, p. 186-187.

In truth, Minoan altars in general seem to have been depositional and designed for display rather than as a place for the killing of the victim[120]. This view, that the Minoan altars have a depositional function, is nicely exemplified by the sanctuary model from the peak sanctuary on the Kephala hill near Liliano. Here a rectangular Π-shaped model was found, with a rectangular niche at its back accommodating a three-stepped altar construction inside (*Arch. Reports*, 2003-2004: 79). On the steps of this structure are a number of projections that seem to represent offerings. It should be obvious that this structure is reminiscent of that within the East Room at Anemospilia and, also, the stepped construction depicted on the Ayia Triada sarcophagus. Thus our best evidence on Minoan altars seems to reinforce their depositional function above all other concerns.

This observation on the function of the altar structures leads to a further observation on the nature of the rites that seem to have been performed at Juktas, Psychro, and Kato Syme. Our lack of many skeletal elements, especially certain long bones and ribs, may be suggestive of one of two possible aspects of these Minoan rituals. The first possibility is that the killing and dismemberment was done off-site and that only certain elements of the animal were brought to the cult place. The second possibility is that the victim was jointed on site and distributed among the assembled host for them to take away. This commensal quality of certain sacrificial rituals is well known; for example, in Classical Athens it has been argued that the deme sacrifices were a primary means of allowing the populace access to meat. A similar process of meat distribution may have occurred on Minoan Crete and such a process would account for the limited

[120] Similarly the Classical Greek victims were not killed upon the altars, merely beside them The victims' blood was then daubed across them, and the μηρία burnt upon them. Thus the Classical altars could also be described as being designed for display, at least in part.

skeletal remains found at the sites. This may also account for the types of bones that remain at the cult sites, as the skull in particular is not easily jointed and would be too cumbersome to be carried away from the extra-urban sanctuaries.

Although such a practical solution accounts rather elegantly for the disparate faunal deposits it must be remembered that this is highly conjectural and that it may be rather dubious to use secular expediency to account for ritual remains. However, I feel that this is a reasonable solution to the difficulties surrounding the Minoan faunal remains. Certainly a similar situation surrounds the θυσία ritual where the paucity of the μηρία, the gods' portion, is accounted for through the myth of the Promethean sacrifice and the later Homeric development of it (*Theog*. 540-541; *Il*. i.460-461; *Il*. ii.423-424). Of course, as myth – like religion – is a construction of human thought, then this justification is decidedly subjective. However, to speak of mythology in relation to the Minoans is without relevance as we have no idea if there was a corpus of Minoan mythological tales which may have influenced their ritual practices.

Nevertheless, Crete does feature very heavily in Greek mythology and, in many cases, the Cretans are associated with quite bloodthirsty legends. The obvious example would be that of Minos' demand of a tribute of seven youths and seven maidens to be sent to Crete from Athens, either annually or every nine years, as offerings of food for the Minotaur to pay for the death of Minos' son, Androgeos, at Athens. This association of the Cretans with rather vicious ritual practices extends well beyond the Classical period. As late as the fourth century A.D. Firmicus Maternus, in his pamphlet *On the Error of Profane Religions*,

condemns the custom practised by Cretans of tearing a live bull apart with their teeth (Detienne, 1989: 2). However, this church polemic cannot be readily relied upon as an accurate source. Nevertheless, the association of the Cretans' 'bloodthirstiness' was persistent in antiquity, with even Homer mentioning the matter. Similarly, Epimenides describes the Cretans as "κακα θηρία, γαστερες αργαι", "evil wild beasts, lazy bellies". Typically the γαστηρ represents the ardent, bestial, and wild side of man, thus the description is hardly a positive one.

Yet, this recurring feature of Greek mythology does not entail that sacrificial and bloody rituals were prevalent on ancient Crete, let alone during the Bronze Age, but the persistence of the association is interesting.

However, returning to the Minoan faunal remains themselves, as these are of continuing significance in the reconstruction of the ritual processes. Sheep and goats, which are very difficult to distinguish from one another morphologically, tend to dominate the faunal assemblages from Minoan sites and the three cult sites here are certainly no exception. However, there is no evidence to suggest the number of individual animals required for each ritual occasion, as it is necessary to remember that the faunal remains may not all result from the same ritual processes[121]. Equally, the matter of whether single or multiple animals were killed on each occasion is still undecided, although multiple offerings dominate in the practices of the contemporary cultures of the Bronze Age.

[121] See below, pp. 244-259, for a discussion of the range of possible ritual motives and a summary of the range of species offered in sacrifice in the Bronze Age Near East.

The depiction on the Ayia Triada sarcophagus, whether it is one of sacrifice or not, is perhaps the most striking image as it clearly shows the bull on the table with two goat-like animals beneath the table, which are usually interpreted as being additional victims. It is interesting to note that this arrangement of multiple victims, with multiple ovicaprids to single bovids, would not only account for the dominance of ovicaprids in the archaeological record, but also the pre-eminence of bovids in the iconographic record. While this statement is speculative, it would nevertheless account neatly for the seeming disparity between the iconography and the zooarchaeology.

Of course, the animal remains discussed from the three Minoan sites have been treated thus far in terms of their origin as being sacrificial victims. However, this is only one possibility. The fundamental question, which cannot be answered at the moment as regards the Minoan evidence, is whether the supposed invoked deity was thought to gain some sustenance or benefit from the sacrifice. This is a key concept in the sacrificial practices of most cultures, that the sacrifice sustains the deity. This is most clearly stated in relation to Israelite religion:

> "The purpose of food and drink offering is primarily alimentation of the deity. Animal sacrifice and burnt offering correspond to two basic features of Yahwism. The former strengthens and renews the communion between Yahweh and his worshippers, who at a cultic banquet devour the sacrifice from which Yahweh also receives his portion. The latter is simply a sacrifice of

homage, expressing recognition of Yahweh's dominion over his worshippers."

(Fohrer, 1973: 116)

It is interesting that, in his 1995 study of sacrificial iconography from Greece, Folkert Van Straten draws a similar distinction between rites, primarily based on the treatment of the meat. He differentiates between two types of sacrifice: sacrifices whereonly certain parts of the animal were burnt for the gods and most of the meat was consumed by human participants, and sacrifices during which the entire animal was destroyed and nothing was eaten (Hierà Kalá). However, Henrichs (2005: 50) does make the point that Van Straten does not differentiate between the rituals on any other level.

However, a similar distinction may also be made with the Minoan evidence; but not between rites, but rather between the presence and absence of rites, as on Bronze Age Crete there is an absence of evidence for so-called holocaust offerings. It should be remembered that the majority of animal bone from Juktas, Psychro, and Kato Syme is neither calcined nor burned to any great degree, which is indicative that the animal was not entirely burned away and that the bones were not burned after the flesh was removed. Yet it must also be remembered that some burning may be so thorough that only the crania, phalanges, and metapoidals survive[122]. The presence of ash deposits at these three sites attests to the use of fire, but the presence of ash deposits at sites where we categorically have no evidence of animal bones entails that we may not

[122] See above, p. 48.

exclusively tie fire in with Minoan sacrificial practices. Thus I believe that there is sufficient evidence to suggest that entirely burnt animal offerings were not a feature of Minoan religious practices. They certainly do not feature in the iconographic record, nor are they sufficiently archaeologically validated to state that they occurred. Thus in the light of no positive evidence for them it is best to say that they were not practised.

Therefore, we seem to be moving toward a narrower definition of Minoan sacrifice. It would appear, from the faunal remains, that we are dealing with a primarily commensal rite that took place at a few special sites. This is a starkly different picture to that generally proposed for Bronze Age Crete, where sacrifice is seen as being common and widespread. Similarly the commensality is not usually stressed, but surely the communal element is at the forefront as animal remains are utterly absent from the smaller scale urban shrines. This would seem to suggest that the sacrificial remains may well be the remains of commensal rituals.

However, there is a problem here – that of the difference between ceremonial feasting and sacrificial practices[123]. For the moment, let it suffice to say that the absence of certain skeletal elements, in my opinion, would seem to suggest that certain cuts of the animal were removed from the site before they were consumed. A similar interpretation was proposed for the Mycenaean site of Nemea-Tsoungiza by Halstead (2003). This site included a Mycenaean dump containing large numbers of cups, bowls, and figurines, which may represent

[123] See below, pp. 260-268.

'official' (i.e. palatial) cult activity at a small rural shrine. Here the faunal remains are dominated by "'waste' portions of cattle skeletons" (Halstead, 2003: 259), from which Halstead infers that the animals were sacrificed and the meaty parts of the carcass then distributed to participants, possibly for consumption at home (Ibid.). Therefore, while the commensality of the ritual practice comes with the distribution of the victim(s), this does not preclude the fact that the moment of dispatching the victim, the kill, may have been seen as symbolically sacrificial in nature.

The symbolic potency of the moment of death is typical of most sacrificial practices, hence why they are often glorified and embellished as a means of emphasising this quality. If we may speak of a grandiose quality to the killing of the animals whose remains are found at Juktas, Psychro, and Kato Syme, then we may move more towards sacrifice than feasting as an explanation for their origins. This is an area that has often been addressed in previous scholarship on Minoan religion, typically focussing on the subject of the double-axe.

While the double-axe does appear at Juktas, and in some quantities, their occurrence does not seem to be in direct association with the animal bones. Firstly the majority of the examples are either too small or flimsy to have served as functional sacrificial weapons. Secondly, the double-axes were found together at Juktas in a deposit that seems more reminiscent of a hoard, as at Arkalochori or indeed at Psychro. In this latter case, although we have double-axes at a site where we also have animal bones, again there is no clear connection between the two. For while the double-axes were found in Psychro's lower grotto, the faunal

remains are only found in the upper grotto. In actuality we have no convincing evidence for a definite sacrificial weapon at any of the Minoan cult sites: the sword from salle β was not associated with any faunal remains; the mass of weaponry from Arkalochori was also disassociated from any animal bones; but perhaps the best example of the disassociation between weaponry and faunal remains is at Kophinas where dozens of bronze knives, perhaps the most suitable of weapons/tools for killing and jointing a victim, are found at a site where there is an absolute absence of faunal remains.

In short, we have little to no archaeological evidence to link any form of weaponry with Minoan sacrificial practices. However, from Mycenaean Pylos there is textual evidence to suggest the use of specific tools. Pylos tablet Ta 716 lists "two ceremonial gold bridle rings and chains by which key animals would have been led to the point of sacrifice, two stunning axes to be used in the slaughtering ritual, and two sharp sacrificial knives to slit the throats of the animals" (Palaima, 2004: 236), which indicates a probable Mycenaean antecedent for the Classical *pelekus*. But Mycenaean is different to Minoan, and to assume a parity of practice between the two cultures without a sound archaeological basis in both areas is unwise.

It is noteworthy that the majority of skull horn-plates which have been recovered from the Minoan cult sites do not exhibit any impact fracturing, this is certainly true of the examples from Psychro (Fig. 62). This suggests that if the animal were struck with a stunning blow it was not delivered to the front of the front of the skull, as is the case in modern western butchery. However, in the Homeric

tradition the stunning blow was struck to the neck of the animal (*Od.* iii. 504). Unfortunately, without the specific study of the atlases and cervical vertebrae of the animals, which are not frequently reported from Minoan cult sites, such a practice is not confirmed for the Bronze Age of Crete. Nevertheless, with future study and the careful recovery of these key skeletal elements, this picture may change, but for the moment, on the evidence currently available, I would suggest that the double-axe did not play a role in the sacrificial practices of Minoan Crete in the capacity of a functional device.

Iconography is of little help in identifying the idiosyncrasies of the killing of the animal because, as was mentioned earlier, the moment of the kill is never depicted, and so it is very difficult to speak on this matter with any degree of certainty.

In addition to the double-axe, a further Minoan artefact and symbol that has become commonly associated with sacrifice is the 'horns of consecration'. The distribution of the physical renderings, in stone, plaster, or ceramic, of this symbol is decidedly sporadic. Although they occur at Juktas, Psychro, and Kato Syme, they also appear at sites such as Vrysinas, Gournia, and the Shrine of the Double Axes, where there are no faunal remains whatsoever. In total they occur at only 8 of the 20 sites in this survey and, as a result, are far from being a defining feature of a Minoan cult site, or a symbol defining a sacrificial site. This distribution is difficult to reconcile with the occurrences of 'horns of consecration' in iconography, such as on the Grandstand Fresco or on the Zakros Rhyton, where the symbol tends to dominate the structures by sheer repetition as

an adornment atop most walls. At no known Minoan cult site do 'horns of consecration' occur in such numbers; while this may be the result of destruction, the robbing of building material, and other forces that act upon the archaeological record, even the artefactual versions of the symbol from the cult sites appear in very small numbers. At the moment I can see no way of addressing this discrepancy and can offer no explanation for it. Thus for the moment I am forced to conclude that the symbolic importance of the 'horns of consecration' symbol to the Minoans themselves can not be ascertained, though it may well be that its significance has been somewhat overestimated in earlier scholarship.

As a final point on the matter of Minoan sacrifice, I would like to link this ritual process to that of libation. I would suggest that we do have enough circumstantial evidence to suggest that the use of animal blood was a significant and symbolically potent aspect of Minoan ritual. Just as feasting and sacrifice have been seen as separate ritual entities, a similar pattern has been assumed for libation and sacrifice, whereas I believe that the two practices may have been fundamentally linked. We have certainly seen that the majority of Minoan cult sites seem to have been well equipped for rituals involving liquids, but questions remain over the liquids that were employed in these ceremonies. I would suggest that at least some of these libations were of blood, particularly at the three sites we are focussed on in this section. The Ayia Triada sarcophagus quite overtly shows the deliberate collection of blood from an animal, by means of a puncture wound to the neck. Similarly Marinatos (1986) includes several seal images in which an animal is seen with a puncture wound to the neck (Fig. 63). Although

in none of the examples she provides do we see the blood being collected, this may have something to do with the syncopated style of depiction used on the seals, under the principle of *pars per toto*, although one of the seals does have a pouring vessel on the opposite side to the stricken animal (Fig. 64).

This draining of the blood may have several motivations behind it, not least the simple preparation of meat. In most cultures that still butcher their own freshly killed meat, primarily now hunter-gatherers, the carcasses are drained of their blood prior to dismemberment, some allowing it to drain away, others utilising it as an additional (and usually symbolic) foodstuff. In a similar vein the ancient Hebrews were (and indeed still are) characterised by their cultural concept of *kosher* foodstuffs, an aspect of which was the deliberate and total draining and cleansing of the carcass of blood. However, the iconography and archaeology of Bronze Age Crete are suggestive that the draining of the blood had ritual overtones and was one of the initial steps of this process rather than an end in itself. Again the Ayia Triada sarcophagus, acknowledging the issues surrounding the artefact outlined above[124], would seem to show the blood that has been collected from the animal being poured into a much larger container. Thus, in this case, I would suggest that it is this libation of blood that is the most significant aspect of this ritual process.

There are several archaeological features from various Minoan cult sites that also attest to the importance of these liquid offerings[125] and the possibility exists at Juktas, Petsophas, and Kato Syme that at least some of these pouring rituals

[124] See above, pp. 38-43.
[125] See above, pp. 197-205.

could have been of blood from animals. This is, of course, possible at other sites as well, but the absence of faunal remains from any other site makes the discussion of blood libation at those sites entirely conjectural.

Therefore, we have reached the point where we may begin to conclude about Minoan sacrifice in terms of its actual performance. Firstly, even if all the faunal remains found at Minoan cult sites derive from sacrificial rituals (a point that cannot be proved convincingly at the moment) their distribution in confirmed Minoan layers is extremely limited. Indeed, even if all the sites with animal bone in any context were included this would still make the total number less than half of the sites included in the catalogue. Thus we appear to be dealing with sporadic and isolated rituals at certain special(ist) sites, the origin and purpose of which we may only speculate about[126].

However, we may suggest that when these rites were performed they were significant, hence the preservation of 'attention focussing' skeletal elements and the prevalence of sacrificial imagery in the iconographic record. Secondly, that it appears to have been a communal and commensal ritual, as it occurs at the larger sites where greater numbers of people could have gathered. Thus, I would suggest that participation in sacrificial rites, i.e. in the assembled group, was not the domain of a privileged few, but was open to the wider population of Bronze Age Crete. Thirdly, that ovicaprids are the most common animal remains found at these few cult sites, in contrast to the iconography where bovids dominate. Finally, that the process of the ceremony is, at the moment, unknown: that

[126] See below, pp. 244-259.

sacrificial weaponry, methodology, and purpose may only be discussed in a speculative and largely uncorroborated manner.

THE PURPOSE OF RITES AND THE PURPOSE OF SITES

Having established that rituals involving animals, which may have contained a sacrificial element, were apparently current in Minoan Crete, although in far more isolated and specialised contexts than has been previously believed, we must address the motivation behind these rites: the fundamental question, "Why?". In relation to this question is the matter of the significance of the specific sites where sacrifice appears to have occurred. As noted earlier, it is very interesting that these sites, Juktas, Psychro , and Kato Syme, are of different types – a peak, a cave, and an extra-urban sanctuary. This may be suggestive of several things: differences between the powers invoked, differences between the purposes of the rites, or differences between the people involved in the rites at these various locations, are perhaps the main aspects to be considered as these are probably the most archaeologically apparent.

In general terms, sacrifice has been seen as the consecration of a victim for the impeachment of a power for the benefit of the *sacrifier* (Hubert and Mauss, 1964: 13). However, in normal practise, specific sacrifices, each performed with slight variations to the 'basic' ceremony, were performed in order to achieve specific ends. The variations which characterise these rites may include variations of personnel, victim, associated offerings, location, and time. At this point I believe it would be useful to examine the practices of the Near East, reported by both literary and archaeological sources, in order to contextualise, within the wider Bronze Age, the level of variation possible in the Minoan practices and also to provide some possible interpretative suggestions for the Minoan rites. For there

is almost certainly to have been a commonality of intention, as has been observed: "many of their basic preoccupations would have remained the same, and should have been reflected by similarities in their religious beliefs" (Dickinson, 1994a: 258).

If we examine the Near Eastern ritual assemblages, which have been more extensively studied and have the benefit of having an associated textual archive, then we may be able to better contextualise the Minoan assemblages. Although this form of ethnographic analogy has been somewhat frowned on in recent years, not least by myself in this study in relation to the assumptions about a Bronze Age antecedent of the θυσία rite, I feel it still has a place in modern archaeology. As Ucko said: "The primary use of ethnographic parallels…is simple. It is to widen the horizons of the interpreter…" (1969: 262). However, it must be used carefully; it is unwise in the extreme to simply transpose one culture's ritual tendencies and motivations onto another, but it is logical to assume a parity of purpose, if not process, between the cultures of the Near East and the Aegean during the Bronze Age.

Administrative records dating to the second and first millennium B.C. have revealed much about Sumero-Babylonian and West Semitic religious beliefs and practices, specifically sacrificial rituals (Klenck, 2002: 81). In both areas, rituals served to propitiate or commemorate the actions of a deity. The motives for sacrifice as recorded in the Ugaritic, Mesoptamian, and Israelite texts, were similar. Sacrifices were conducted to provide tribute (i.e. first fruits and tithe

offerings), to show thanks, to sustain the gods through periodic, continual, and scheduled offerings, for communion, to expiate sin, and to purify.

However, several major differences exist between the actual Mesopotamian and Western Semitic religious practices, and this must be borne in mind when comparing the near Eastern practices with those of the Aegean. Although, in Mesopotamia, the public supported the construction and maintenance of the temples, only the priests, royal family, and highest officials were allowed to worship on the grounds of the main temple of a city. Most textual evidence from Mesopotamia provides detailed descriptions of this exclusive worship while the worship of the common people is barely known (Lambert, 1993: 193). It has been speculated that public sacrificial rituals occurred on those occasions when the images of the gods were taken from shrines and temples and carried around the countryside (Postgate, 1992: 123-124)[127]. These occasions appear to have coincided with religious festivals or the consecration of new sanctuaries. By contrast, in Western Semitic religions both royalty and commoners worshipped in the main temples and were expected to offer sacrifices according to their economic means and status (Ottosson, 1988: 136). By comparison, we can say comparatively little regarding the access to the various modes of worship within Minoan Crete, especially due to the fact that we know so little about the social hierarchy in place on Bronze Age Crete. However, given the apparent lack of cult images we may speculate that public festivals involving the procession of divine images, such as took place in Mesopotamia, are unlikely to have occurred.

[127] A good modern equivalent of this form of religious practice would be the occasion of the Hindu *Jugurnata* festival.

Offerings and sacrificial animal victims were viewed in the Sumero-Babylonian religion as being of vital importance since these foodstuffs were 'fed' to the deities (Hallo, 1987: 9, 10). Offerings of meat, water, beer, wine, milk, honey, emmer flour, fish cakes, and lard cakes, were piled on trays, prepared and placed before the divine statues every morning and evening. The liquids were either served in cups or poured in sacred channels for liquid offerings within the temenos (Postgate, 1992: 119-120; Lambert, 1993: 194-195). Later, this food was consumed by the priests, temple staff, and other citizens (Lambert, 1993: 200). In Western Semitic religions, sacrifices were generally not consumed *per se* by the deity but acknowledged by the god or goddess as a request to act in the earthly realm (Klenck, 2002: 81).

In Mesopotamian religion, divination was a primary motivation for the sacrifice of animals as it was believed that omens were wrought into the physical characteristics of the victim, its behaviour, and that of the butcher-diviner, and the location and composition of the victim's remains, especially the intestines and major organs. Divination rituals are mentioned so frequently in the Mesopotamian textual evidence, much more so than in the Western Semitic tradition, that Leichty inquires, "Could a supplicant offer a victim to the gods without taking omens?" (Leichty, 1993: 241).

Finally, healing was also a major motivating factor for religious rituals in both the Mesopotamian and Western Semitic traditions. Healing rituals were either practised as part of a large ritual repertoire or in a shrine specifically dedicated to this function. Thus we can see that populations in the Levant and Mesopotamia

conducted sacrificial rituals for four principal reasons: to propitiate a deity, to commemorate the actions of a deity (both of these took the form of the feeding of the divine image), to forecast the future, and to heal the sick. Even this rather simplified series of motives is indicative that one cannot simply see a sacrifice as a gift to the deity – ultimately the sacrifice is a selfish ritual, with the *sacrifier* hoping for benefit and entreating the deity accordingly.

Therefore, as there are a variety of reasons for performing sacrificial rituals, it may also be possible that certain species are utilised for specific purposes. However, it is here that cultural concerns and preconceptions override everything else; the best example of this notion of cultural dogma is found in the Israelite taboos. From Biblical evidence, specifically that of Leviticus, it is clear that the Israelites considered various animals as unclean and, as such, unsuitable as offerings. The several examples of this belief include: crows – which could not be eaten, nor their dead bodies touched (*Lev.* 11:15); dogs (*Lev.* 11:2-3; 27); pigs – which were prohibited as sacrificial victims (*Lev.* 11: 7); and deer and gazelle which, though considered clean, could not be offered in sacrifice (*Lev.* 17). These preconceptions would account for the absence of these taxa from any ritual faunal assemblages, however without the text we would not know that they were unsuitable for cultural reasons[128].

[128] Despite the Levitican text detailing which animals are unsuitable, we still do not know *why* these particular species were unsuitable. However, it is true to say that these proscriptions were adhered to strictly.

By contrast, the Mesopotamian texts reveal no such major prohibitions[129], rather they appear to have utilised specific taxa for specific ritual purposes. For example, dogs appear to have been primarily associated with healing rituals. This association covers several cultures and periods from the Hittites (Klenck, 2002: 85), who employed puppies in apotropaic and healing rituals, to the Persian period (538-332 B.C.), where, at Ashkelon, excavations revealed the interment of over 1000 canids on the tel. It has been hypothesised that this was a deposit associated with the goddess of healing, Tanit, as several of her symbols were found on objects within the stratum of the dog burials (Stager, 1991: 37). The association of dogs with healing deities is widespread during the first millennium B.C., revealing the longevity of this association: Gula/Ninisima in Mesopotamia; Asklepios in Greece; Eshnun in Phoenicia; and Reseph and Mukul in Phoenician Cyprus (Klenck, 2002: 84).

By contrast, for the divination rituals, the normal victim in the Near East seems to have been cattle or bulls. The same is also true for the rituals of a commemorative nature. The reasoning for this association, while it may have a basis in the economic worth of these animals, is surely cultural and again speaks to the importance of such concerns in the ritual practices of a particular people and area.

Moreover, it is also important to remember that the perception of animals within a culture may not be consistent over time. One very interesting example of this is

[129] This is generally true, although food taboos do not seem to have played a major role in society, there were occasional proscriptions. For example, while pigs seem to have been an everyday foodstuff for the Sumerians, swine were not slaughtered during the month of Teshrītum, the seventh month of the year, and pork was specifically banned on the second and fifth days of that month (Simoons, 1994: 24).

the case of pigs in ancient Egypt. In terms of ritual use, the pig has a mixed history: although in the early dynasties of the Old Kingdom the pig was a frequent sacrificial victim, after the appearance of the Coffin Texts (ca. 2150-1650 B.C.) the pig becomes associated with Seth and, certainly in the New Kingdom, is somewhat belittled in religious terms (Simoons, 1994: 20). Similarly in the Hittite scheme, although the pig was suitable for magical, purificatory, and apotropaic rituals, it was not among the usual sacrificial victims.

Of course, it must be remembered that the scale of these sacrificial offerings is much greater in the Near East than is observable in Minoan Crete. For example, Pritchard (1964: 343-5) includes an Akkadian text on the daily sacrifices to the gods of the city of Uruk, part of which summarises the animal offerings as follows:

> "The daily total, throughout the year, for the four meals per day: twenty-one first class, fat, clean rams which have been fed barley for two years; two large bulls; one milk-fed bullock; eight lambs; thirty *marratu* birds; thirty...-birds; three cranes which have been fed...-grain; five ducks which have been fed...-flour; two ducks of a lower quality than those just mentioned; four wild boars; three ostrich eggs; three duck eggs".

When we bear in mind that this is the list of offerings for only one temple, in one city, and for one day, we begin to appreciate the sheer scale of the offerings that

were made in the Near Eastern regions. It should be immediately apparent that, in terms of both quantity and variety of offerings, we have nothing that comes close to approximating this mass of material, even if we were to assume the frequent mass clearing of cult sites.

However, it would be unnecessarily restrictive to rule out the existence of a similar range of ritual practice within the Minoan context. Certainly, as we have seen, there is a variety of species reported from the Minoan cult sites. The vast majority of the bone seems to come from what are typically seen as domesticated species – primarily ovicaprids. This should not surprise us, as both private and public ceremonies would have had to source their victims and not only would a domestic flock be a more reliable source of a victim, but also the gift aspect of the oblation is heightened by the surrendering of a personal or societal resource to the power invoked. However, the exact origin of these victims has in no way been ascertained, although the evidence from Mycenaean Greece is interesting on this matter.

The Linear B tablets and sealings, especially those from Thebes, are most useful, in particular the Theban Wu series of sealings. This group of 56 seals is associated with the provision of animals for feasting ceremonies: 47 of the seals refer, by ideogram, to single animals which seem to have been offered for these commensal ceremonies. Palaima (2004: 221) associates this potential practice with later traditions, such as at the Panathenaia where, according to a scholium to Aristophanes (*Nub.* 386), all Athenian colonies customarily sent a bull to be sacrificed, thus linking the communities together.

The Theban sealings explicitly record 16 sheep (13 male, two female), 14 goats (six male, seven female), 10 pigs (six male, two female), two specifically designated "fatted pigs", two cattle (one male, one female), and three indeterminate yearlings (Palaima, 2004: 222-223)[130]. This is interesting as it not only reinforces the predominance of ovicaprids over other species in ritual practices, but also shows that large numbers of animals could be employed for cult purposes in the Aegean as Palaima (Ibid. 223) states that these sealings were associated with a "single central feasting ceremony". 23 different seals were used to impress the 56 sealing nodules from Thebes (Ibid.), which Palaima believes represented the individuals or institutional entities involved in making the contributions. Although the evidence is Mycenaean, rather than Minoan, it does suggest the possible arrangements for the procurement of animals for cult use. However, it must be acknowledged that even with these sealings and texts the extent of the geographic and societal involvement in feasting and other ceremonies is still not known to any precise degree. However, at times the numbers involved could reach several hundred: for example, a tablet from Pylos (Un 318) gives an impression of a banquet for over 1000 people (Ibid. 229).

Ultimately, however, with reference to the source of the animals, the ritual origin of the faunal remains, be it feasts, sacrifices, or some other ritual process (or combination thereof), is incidental as it is fair to assume that the animals came from herds under the control of those performing (or directly involved with) the ceremonies. This is not to say that there were *ritual* herds maintained on Minoan

[130] Palaima concedes that the genders of some of the animals are indistinguishable, thus accounting for the differences between the total numbers and the gender breakdown.

Crete, as there is no evidence to corroborate this, whereas there is a great deal of evidence that discusses herds maintained for secular purposes (for example, Tablet Series D). While it may be that cult records of 'ritual herds' have either not yet been found, or remain untranslated, on the evidence currently available it seems logical to assume that the animals that were used for ritual purposes came from the normal domestic herds. However, one should not presume that any animal; would suffice to serve as a sacrificial victim. It is likely that only the finest examples would have been utilised in this way. Indeed, in the Akkadian text quoted above a focus on the quality of the offerings is apparent; a similar focus is observable in the Epic tradition, and in the animals selected for sacrifice in the Classical period, whom not only had to be of good quality but who had to show their willingness to be sacrificed by their 'nodding assent'.

To the best of my knowledge, no concerted attempt has been made to establish the purpose behind the Minoan rites. By which I mean attempts based on the specific faunal skeletal remains and the associated archaeological features; there have been various attempts to interpret the rites depicted on the Ayia Triada sarcophagus, for example. For the most part, Minoan sacrifice has been treated merely as a propitiatory gift. However, I would expect a much more varied collection of rites as is exhibited in the Near Eastern tradition. It would seem sensible to address the possibilities of several sub-categories of *sacrifice* in relation to the Minoan evidence.

The seeming abundance of divinatory overtones within Near Eastern practices is indicative of the potential importance of divination in the Bronze Age. Although

this subject has never made its way into the literature on Minoan religion, I would expect it to have been a concern on Crete as it was elsewhere in this period. The desire for foreknowledge is a consistent quality of ancient cultures, one need only think of the popularity of the Delphic Oracle in the Archaic and Classical periods. The primary problem of identifying if divination was a feature of Minoan sacrificial practices is that in nearly all cases of divinatory sacrifices it was the examination of the internal organs of the animal, rather than the skeletal elements, that revealed any omens that may be have been present. These fleshy parts of the animal have no possibility for survival in the archaeological record of Crete, even if they were retained, and so the definite identification of divination cannot come from the animal remains.

In terms of species of victims, however, we may see a correlation between the Near East and Minoan Crete. The predominant species used for the divination rituals in the Near East were bovids and ovicaprids (Klenck, 2002: 87), which are also the main victims identified at Juktas, Psychro and Kato Syme. However, to simply assume that the Minoans also practised a divination ritual on the basis that the faunal remains were from the same species is incorrect. Given that divination, at least in the Near Eastern tradition, leaves no distinctive traces on the skeleton of the victim, it is impossible to identify the practice without the use of texts. This is very much the case for Minoan Crete, as we have the faunal remains, which suggest sacrifice, but can only speculate about the purposes of the rites.

One area we may be able to speculate on with a greater degree of accuracy is that of healing rituals. It is possible that some of the sacrificial practices may have been associated with the desire for healing. The use of dogs, primarily, for healing in the Near East (as outlined above) does not seem to have occurred in Minoan Crete. Dogs certainly do not feature in the faunal assemblages of any of the sites in this study, however they do occur with frequency in the cemetery assemblage at Phourni. Thus on Crete it would seem that dogs are more associated with funerary cult that healing cult.

However, the other creature associated with healing in the ancient world, the snake, occurs far more frequently in Minoan imagery. "The snake was known in the ancient world as a symbol for healing" (Klenck, 2002: 86): this is true of several cultures, we need only think of its associations with Asklepios in Greece. The prevalence of snake imagery in Minoan Crete is well known and has been noted throughout this study[131]. It is present as decoration on both figurines and vessels, and also occurs as a plastic ornament on some vessels, such as the 'snake tubes'. It is entirely possible that these vessels, whose function has never been established, are associated with healing. They are certainly present in several cult locations, such as Karphi, and – if the interpretation of the figurines from the Temple Repositories is correct – the snake is associated with at least one female divinity.

Given the "precariousness of life in the ancient world and...the real poverty of its technological resources" (Gould, 2001: 208), one would expect a healing cult

[131] See, for example, the Temple Repositories section, pp. 75-81.

of some form to exist: as an example of this "precariousness" one need only glance at the much later *Hippocratic Writings* (Lloyd 1978 [ed.]), where *Epidemics* 1 and 3 (the 'case notes' of a doctor on the island of Thasos) record 25 fatalities out of 42 cases attended. Thus it is unsurprising that people elected to enlist divine help in healing and health matters. I believe it is sensible to see healing as a major ritual motivation in Minoan Crete, certainly the votive limbs would suggest this, even if there were not a specific healing cult. While the votives would seem to be eminently personal requests for healing, it may be that some sacrificial practices were for the general health of groups of people. This is perhaps most appropriate for some of the faunal remains from Juktas where there are both votive limbs and faunal remains.

Interestingly, the link between the healing cults of the Near East and the possible existence of similar practices on Minoan Crete is hinted at by some foreign artefacts in both spheres. For example, at Tel Haror in Israel, a deposit in Area K associated with a healing cult (Klenck, 2002: 85-86) contained a *graffito* on a ceramic sherd – a head of a bovine and "two unknown symbols" (Fig. 76) – which Klenck cites as being Minoan based on the opinion of Prof. Oren[132]. Likewise the presence of the Reseph figurines in several Aegean deposits is suggestive of healing associations as he is often seen as a healing deity in several Bronze Age cultures.

[132] On first impression the *graffito* does seem to have a 'Minoan' style about it, certainly in the depiction of the bull. Also the "unknown symbols" are reminiscent of some Linear A signs (see *PM* I: 643 no.102). Another interesting similarity between this cult area and Minoan Crete comes in the form of cult paraphernalia; decorated ceramic stands were found in the enclosed area of Area K which are very similar to those from Crete studied by Platon and Pararas (1991).

Although this may seem somewhat conjectural, I believe that it is very possible. However, what should be beginning to become apparent is that the generic term 'sacrifice' is too broad for the variety of rituals that, in all likelihood, existed. Nevertheless, it is probable that the majority of offerings were those that originated from rites that were regularly ordained during the Minoan year – in a manner similar to that outlined for the Near East, although seemingly neither as often nor as grandiose.

This proposal of regular, ordained times for ritual on Minoan Crete is not a new one. For example, Henriksson and Blomberg (1996) suggested that the worship at the peaks was centred around astronomical observations and tied to certain times of the year. While I do not agree with this particular idea, effectively of seeing the peaks as cult observatories, I would agree that both the distribution and the quantity of the faunal remains would suggest that they derive from special occasions, possibly moments of crisis or at specific times throughout the year.

This is the most obvious case on the evidence presented here – namely that Juktas, Psychro, and Kato Syme were the Minoan sacrificial sites. This serves to mark these sites apart from others on Crete, as clearly a fundamental difference in practice existed. If these were the only sites where sacrificial rituals were practised, then it would seem logical to suggest that there was something special about these sites that made them suitable as locations for sacrifice, or that made sacrifice a fitting rite for these sites.

The most obvious means of differentiating between the sites would be by the nature of the deity or deities worshipped at them. One may speculate that these sites were specifically associated with one deity (or more) that were not worshipped at other locations. In this manner the practise of sacrifice may be exclusively linked with a particular deity's cult. This would account for the massively uneven spread of possible sacrificial remains. However, it is very difficult to show (convincingly) which deities were worshipped at particular sites. Indeed, the debate about the number and nature of the powers in the Minoan pantheon has continued, and doubtless will continue, for many years. Moss' (2005) recent study speculates about multiple gods and goddesses with various spheres of activity: the 'Dove Goddess', the 'Healing Goddess', 'Gods and Goddesses of Initiation', 'Snake Goddesses', all feature in Moss' study although, it must be said, her reasoning is somewhat vague and, as a result, her conclusions somewhat suspect. Nevertheless, I would venture to suggest that the range of deities that she proposes is entirely reasonable. However, to attempt to identify specific deities at specific sites without the benefit of texts or cult images is too potentially subjective for inclusion here. But the association of sacrifice with a specific cult remains possible.

It is also interesting that, out of this survey at least, one example of a peak sanctuary, a cave sanctuary, and an extra-urban sanctuary are those that contain faunal remains. This not only serves to unite them as a sub-group, but also to demarcate them as different from other sites within their various categories. Although there has been a general view to see all examples of one type of site as

equal, this may not be the case. As has been noted[133], Peatfield saw Atsipadhes as a poor, rural peak sanctuary, and Juktas has been seen as the richest peak sanctuary and a 'national' sanctuary. This distinction may also have existed in the Minoan period as well. Certainly Juktas is the most archaeologically extravagant of the peaks, as Psychro is for the caves, and Kato Syme is particularly rich also. This would suggest that a hierarchy of sites within Crete is plausible, and that animal sacrifice may have only been practised at the most important of sites. If this were the case then it would also suggest that there was, at least in some respects, a pan-Cretan religion – although in other respects the archaeology suggests a variety of ritual local traditions.

At present it is impossible to interpret the purpose behind the faunal remains at Juktas, Psychro, and Kato Syme, at least in terms of associating them with a specific ritual requirement such as healing. However, the presence of the bones serves to impart a ritual significance and importance to the sites, as the conspicuous employment of animals in ritual activities does not occur elsewhere on Minoan Crete.

However, this section addresses only the possible magico-religious aspects that may have been associated with the Minoan rites. As was noted above, the socio-political aspects, particularly that of commensality, appear (in my opinion) to have been the more significant.

[133] See above, p. 90.

MINOAN FEASTING

The notion of feasting rituals is one that has been associated with Minoan Crete, but the treatment of the subject has been rather superficial until recent years. The discussions of feasting have generally said that it occurred at various cult sites and certain funerary complexes. However, this is not nearly enough detail to be of use to discussions about the cultic context of Minoan Crete. There is much to be considered in terms of feasting, such as: the location of the feast, the predominance of food or drink, the number of people present at the feast, the type of persons present at the feast, and the purpose of the feast, to name but a few. These areas have not been overly discussed in relation to the Minoan evidence, but the following section references the key works on the subject. This is certainly important given the apparent commensal qualities that may be associated with the practices at Juktas, Psychro, and Kato Syme. If a similar tradition of 'feasting' rituals is observable in other Minoan contexts then it may lend credence to this interpretation.

The first point that must be made is that 'feasting' is rather a loaded term, it implies rather a banquet-style occasion involving food and drink and a mass gathering. However, in several cultures the focus is laid most heavily on the drink. For example, in the Late Shang period of China (ca. 1200-1045B.C.) both wine and food were part of funerary feasts, but the emphasis was decidedly on wine, to judge from the number and variety of wine-related vessels (Nelson, 2003: 85). Thus in some circumstances feasting may be an inappropriate term; hence, for instance, while discussing the Mesara tombs Branigan preferred to use

the term "toasting ritual". However, for general discussion the term may be used, with the above caveat in place.

The next key point to make is that the location of the feast will (inevitably) drastically affect the nature of the feast. For example, we may logically assume that the indications of a feast at a burial complex are of a different class of ritual to that which may have taken place at a peak sanctuary. This variance in the location of feasts was noticed recently, for the Aegean area, by Borgna:

> "From the Early Minoan period onwards, it is possible to recognise a considerable variety of banqueting occasions and convivial ceremonies. These events include funerary celebrations, purely religious ceremonies, and ritual activities, relevant to the establishment of social relationships in Cretan communities." (Borgna, 2004: 256)

However, Borgna's comment also reveals her preconceptions about the purpose of the feasting, to establish "social relationships". In this she follows the classic text on ritual feasting, Rappaport's *Pigs for the Ancestors*, which studied the feasting rituals of one New Guinea tribe, the Maring, as being expressly for secular purposes: the creation and cementing of alliances, producing 'Big Men', and organising for warfare. In some ways this secularisation of ritual practices is a hallmark of western scholarship, but again we must acknowledge a variety of practice as being the most likely model.

There would appear to be an obvious division that may be made in relation to feasting rituals in terms of their location, that between funerary and non-funerary contexts. As such, it would seem prudent to discuss these two contexts separately as I believe they reflect very different concerns in their practices.

The evidence for graveside and burial feasting rituals is very good for Minoan Crete[134]. This is certainly true of the larger burial complexes such as the Mesara tombs and the Phourni cemetery to name but two. Typically these deposits are dominated by the conical cup (see below); however, it must be noted that these objects are not deposited in the actual graves, in general, but are instead associated with tomb niches or outside areas, perhaps marking them out as an area for the physical setting for "communal ritual activities aimed at maintaining social stability and cohesion", in the opinion of Borgna (2004: 257). Pollock (2003: 18) also notes the use of feasting rituals and commensality – the social context of sharing the consumption of food and drink – as a feature for social cohesion among many ancient nascent states.

However, in terms of funerary feasting such an interpretation makes a fundamental assumption about the identity of those persons present at the funeral ceremony: namely that they extended beyond the kinship group of the deceased person. While this is indeed possible, the majority of Minoan tombs have a communal quality, to make such a fundamental assumption with no real evidence to corroborate this view is rather circumspect. One should not assume that a communal tomb's 'inhabitants' are all related to one another, nor that they

[134] See below, pp. 269-274, for the appearance of animal bones in Minoan burial complexes.

were all from the same settlement. For example, the Merina of Madagascar build large tombs of stone, one or more to each village, which represent to them stability and a 'sense of belonging'. This tomb construction is very costly, so much so that individuals are forced to choose their own potential tomb fairly early in life, so that they may contribute to its maintenance. A Merina does this by joining a particular tomb association which looks after such funerary concerns, but first they must choose the tomb they wish to be buried in, as they have several options, e.g. parents' tomb, grandparents' tomb, or even their spouse's tomb. Thus the group who utilises a communal tomb may not be as obvious a social construction as some have believed.

Indeed, Ucko noticed many years ago that "the data revealed by the archaeological material itself tends to become swamped by unitary and all embracing explanation" (1969: 262). This note may be applied to several areas of Minoan study but in terms of ritual and religious matters it is especially suitable. Thus we may expect a more varied explanation to account for the motivation for eating and drinking ceremonies that most certainly seem to have occurred at, at least some, Minoan funerary complexes.

While ethnographic analogy with the Near East (Pollock, 2003) does indicate that there was a social function to funerary feasting, equally ethnographic analogy with other areas implies that the ritual and religious function may have been the more significant element of the practice. Anthropology often uses this comparative model as it directs attention to "the variety of cultural responses that have arisen" (Ucko, 1969: 263). However, this must be done with caution: but as

we have large deposits of vessels for food and drink in association with burial complexes in Minoan Crete it is not a leap of conjecture to presume that a ceremony involving food and drink took place. Thus as we have the probable existence of such a ritual, based solely on the Minoan evidence, then ethnography may provide clues as to why such practices occurred.

Nelson (2003) discusses feasting rituals in association with funerals in Late Shang China. In terms of these Shang feasting rituals, the secular interpretation of their function, i.e. for societal cohesion, does not appear to have been the main purpose of these rituals. The evidence for graveside feasting in early China suggests that the enlisting of the aid of the dead was of greater importance than forming alliances with the living (Nelson, 2003: 65). According to the Late Shang 'oracle bones', the propitiation of the dead, who especially appreciated offerings of wine and food, took place on a regular basis throughout the year, with a particular ancestor being feasted on a particular day of the ten-day Shang week. The purpose of the funereal feast is to create a new ancestral spirit who would aid their descendants in a number of ways. In Mesopotamia also, the provision of food and drink for the dead, and its repeated offering, was again a means of ensuring the support of the hostile dead. Certainly Mesopotamian cosmology suggests that the afterlife was a dismal affair, "where dirt is their drink, [and] their food is of clay" (*Epic of Gilgamesh*).

Thus, through analogy with other ancient and modern cultures, it seems that the motivation for funereal feasting in Minoan Crete may fall into one of two primary areas: either the secular binding-together of an extended group of people

or have overtones of ensuring the support of the ancestral spirits. Equally it may have had aspects of both: crucially, for both the Mesopotamian and Late Shang feasting traditions, we have sets of contemporary texts that indicate the concerns behind the rituals. For the Minoan, however, we must rely on supposition. I would imagine, given the communal tomb structures and secondary burial rituals (such as the moving of the bones to allow for fresh internments), that some concern for the spirits of the dead existed in Minoan Crete and would have featured in the funeral cult. For example, this is the most common interpretation for the images on the Ayia Triada sarcophagus (see Long, 1974). However, given the fact we are unsure about the make-up of the groups who utilised these communal tombs we cannot omit the possibility of a secular societal tone to the rituals as well.

Beyond funereal feasting, there is substantial evidence to suggest feasting in other Minoan contexts. However, the key point to be noted here is that, as for sacrifice, the primary indicator of the use of animals in feasting rituals would be the faunal remains. While cooking vessels suitable for meat are not a prerequisite, as the meat could have been cooked directly on the fire, without faunal remains we must conclude that any 'feasting' rituals that may have taken place must have been dominated by drink and non-animal (vegetarian?) foodstuffs. As such, as with sacrifice, only Juktas, Psychro, and Kato Syme may have had animal feasting. However, if (as was the case in both Mesopotamia and China) liquids were predominant in these feasting rituals then they may have been much more widespread.

The palaces and other major architectural complexes certainly seem to have had several foci for ritual celebration. Such locations in the palaces of Knossos and Malia are well known, but equally they occur in more recently excavated structures. Impressive concentrations of pottery suited for dining and drinking have been found in association with several structures in Chania, notably the West Court and the Great Hall (Borgna, 2004: 257). Many conical cups were brought to light in the West Court. This deposit nicely complements that of House B at Gypsadhes, where nearly 200 conical cups were found in one of the pillar crypts. These vessels were arranged in fairly neat rows and were placed upside-down, covering "a small heap of vegetable matter" (*PM* II.2: 548) (Fig.65).

However, one of the most significant deposits that is suggestive of feasting rituals is that found in the cultic complex of Daskaloyannis Street at Chania, which dates to LM IA. This extensive deposit (Fig. 66) included pits and drains filled with bones, ash, pots, and conical cups. A chemical analysis, one of the very few to have been undertaken on Minoan artefacts, on a few of the clay vases from the Daskaloyannis complex indicates one of the liquids that may have been used in feasting and libation rituals. A mixture of wine, barley beer, and honey mead has been recognised in for conical cups coming from the drain of the platform and room (Area 21) (Andreadaki-Vlasaki, 2002: 163). Andreadaki-Vlasaki notes the fact that this mixed fermented beverage recalls the Homeric *kykeon*, a mixture of wine, barley, honey, and cheese (Ibid.). In the case of these latter deposits, here we would certainly seem to have strong evidence for structured deposition, the deliberate creation of deposits in order to communicate

a message according to the extant cosmology. The importance of structured deposition is becoming increasingly apparent in Minoan archaeology, as is shown by Hatzaki's (forthcoming: 3) comment on the Temple Repositories. She states that "all the material deposited in the cists was *selected* for deposition and not swept up debris from a site clearance".

Such deposits as mentioned above are merely some of those which suggest the practise of feasting rituals. Indeed several of the cult locations in this study have evidence for such practices, as it overlaps somewhat with that for libation. Coarse cups and bowls are found at many sites and these could suggest a similar form of toasting/feasting ritual. These coarse wares have been seen as evidence for commensality: "Pottery used for ritual meals at cultic feasts, such as at MM and LM Kato Syme, consists mostly of simple, undecorated domestic ware. Kamares and other prestigious decorative styles occur rarely, which may mean that the prevailing ideology emphasised the community rather than individuality" (Borgna, 2004: 262-263). While this is interesting it is somewhat conjectural as there is no evidence to suggest the identity of those individuals who may have been present at such ritual occasions.

This is one of the most frustrating aspects of ritual reconstruction on Minoan Crete as we really have little idea about cultic personnel or those who attended the various rituals at cult locations. The votive figurines would seem to suggest personal and individual worship, but the pottery remains are suggestive of communal and commensal rites. Despite claims such as that of Borgna (2004: 265), "it is clear that...elite/non-elite interaction during the ritual performances

was minimal…", there is nothing to suggest this, although we may safely assume that some locations, such as the Shrine of the Double Axes, were subject to restricted access – not only because of their locations deep within structures, but also because of their small size. But this is the limit of what we may legitimately conclude.

However, I do believe that we may legitimately speak of a class of Minoan ritual that may be treated akin to feasting rituals. As mentioned above, the term 'feasting' is implicitly misleading as the Minoan evidence would seem to be biased heavily towards drinking. Moreover, the possible role of animals in feasting rituals shows the same limited distribution as that for sacrifice as the remains would be essentially identical. Nevertheless, non-animal foodstuffs – grain and fruits, for example – may have played a role in such ceremonies, but drinks (in whatever form) were undoubtedly the key aspects of these commensal rituals.

THE USE OF ANIMALS IN FUNERARY PRACTICES

> "----------------------------*He slung the*
>
> *bodies*
>
> *of four fine horses on the pyre, and groaned.*
>
> *Nine hunting-dogs had fed at the lord's table;*
>
> *upon the pyre he cut the throats of two,*
>
> *but as for the noble sons of Troy, all twelve*
>
> *he put to the sword, as he willed their evil hour.*
>
> *Then in the midst he thrust the pitiless might*
>
> *of fire to feed upon them all, and cried*
>
> *upon his dead companion: "Peace be with you*
>
> *even in the dark where Death commands, Patroclus.*"
>
> (*Il.* XXIII.175-184,trans. Fitzgerald)

Thus far we have been dealing primarily with ritual processes that deal with the interaction between deities and their human worshippers, or commensal rituals designed around social interaction. However, it is also possible that animals played a part in rituals that dealt with the dead, their deposition and, possibly, their worship as part of an ancestor cult. This passage from the *Iliad* illustrates that during the funeral of Patroclus, prisoners of war as well as animals were offered to the dead hero. Prior to this a large number of sheep and cattle had been killed and assembled around the funeral pyre, in a form of hecatomb (*Il.* XXIII. 169-170). Fat from the animals had also been used to "sheathe the body" (Ibid. 171), presumably to assist in its combustion. However, this is epic

literature and surely cannot be of use in the study of Minoan cult practise. In actuality, the answer is, somewhat cryptically, it may be and also it may not be.

I must stress that I do not propose that mass hecatomb offerings of this type occurred in the Minoan period. However, it was literary references such as this that led me to believe that Minoan funerary practices may have included animal offerings, or the use of animals in general. Similarly, in the Geometric – Classical periods, mainland Greek funerals are associated with funeral banquets including the eating of animals. Likewise, on Cyprus, horses (in association with chariots) have been found in the dromoi of tombs of the "Heroic Age" (Burkert, 1985: 193). Indeed a number of cultures, ancient and modern, incorporated a ritualised use of animals into their funerary practices. The archaeological evidence would certainly seem to corroborate this use of animals for the Minoan period as well.

One of the key Minoan sites for this practice is the cemetery of Phourni, which is significant in its own right as it is the only known burial complex that exhibits an uninterrupted period of use from EM II - LM IIIC (Sakellarakis and Sakellarakis, 1997: 246). Although Crete's mortuary traditions were not the same at every site (Betancourt and Davaras, 2003: 135), Phourni does have considerable evidence for the use of animals in funerary practices. This is particularly true in the cases of Tholoi A and B, both dating to LM IIIA. In Tholos A the skeleton of a dismembered horse, the head severed from the neck, the legs from the belly, and the sides from the backbone (Sakellarakis and Sakellarakis, 1997: 263), was found in the entrance way. This individual, an *equus caballus* c. 6 years old, is

interesting as the entire skeleton was deposited but in an obviously jointed condition; the shoulder blades of the animal clearly retained cut marks, suggesting the removal of flesh prior to its burial. In addition, the skull of a bull was found in the entrance to the side room of Tholos A.

Tholos tomb B also shows a large quantity of faunal remains, and once again the entrance of the tomb seems to have been the focal point for the animal deposits. In this case, the entrance way showed bones of pig, sheep, goats, hares, and birds (Ibid.). Also in this tomb, which contained several burials – most in larnakes, one sarcophagus-ossuary, dated to LM IB, contained animal bones (oxen, sheep, pig, and hare) in the deposit among the human bones (Ibid. 261); the human bones in this sarcophagus, those of 19 individuals, were a distinctive red colour "as though they had been washed with wine" (Ibid. 258). However, the most distinctive finds associated with Tholos B, and the cemetery as a whole, were the skeletal remains of dogs – most had the head severed from the body.

Thus in relation to at least some of the later burial structures at Phourni there is a large quantity of evidence for the ritualised offering of animals in association with the mortuary practices, certainly more so than at the majority of cult sites analysed in Chapter Two. Interestingly, there is also an exterior 'altar', a huge slab of limestone dressed into a regular rectangular shape and placed in contact with the east wall of Burial Building 19. In the opinion of the excavators it was "certainly used for burial ceremonies" (Ibid. 261). However, it is clear that some of the faunal deposits, i.e. the full, albeit disarticulated, skeletons, differ from the normal indicators of primary butchery waste – the head and feet of animals

(Halstead and Isaakidou, 2004: 140). Moreover, even if those bones which are not from a complete skeletal deposit are associated with a feasting ritual or an offering to accompany the dead, the evidence seems confined to the later periods of the cemetery's use.

However, the evidence for the use of animals in funerary practices is not limited to cemeteries or formal tomb structures. The example of Agios Charalambos, a Middle Minoan burial cave in the plain of Lasithi in Eastern Crete, illuminates this (*Arch. Reps*. 2003-2004: 85-86). Although there was much disturbance around the cave mouth, from dynamiting that took place in 1976, there were some lenses where the original Minoan soil levels remained intact. These areas contained MM pottery, large amounts of charcoal, and many animal bones with butchery marks on many of the small elements (Ibid.). The range of species represented included sheep or goat, pig, cattle, and a small mammal that may have been hare. Some of the bone remains were burned in a manner that suggests they were cooked with the meat still on them, i.e. roasted. This is remarkably good evidence that allows us to trace the use of animals in funeral ceremonies back to at least the Middle Minoan period. However, animal bones are absent from some of the Mesara tombs, and so animal rituals are not indicated at these structures (Goodison, 1989: 32). There is evidence for burning at some of the tombs, and Xanthoudides (1924: 135) is forced to conclude that a satisfactory explanation for the fires is lacking. The cemetery at Pseira is also without large amounts of faunal material in most of the tombs (see Betancourt and Davaras, 2003), usually only one or two skeletal elements from animals are reported – typically a long bone (femur, radius, or ulna), although marine shells such as

monodonta are found (again in small numbers). Tomb 4 at Pseira, one of the earlier structures (dating to Final Neolithic/Early Minoan I – MMII A/B), is lacking in ash, charcoal, or animal bones of any kind (Ibid. 40), suggesting that the feasting upon/offering of animals was a relatively late development in the funerary practices of Crete.

Yet once again the evidence for libation and liquid offering, such as rhyta or cups, is more prevalent, at least at Phourni (Sakellarakis and Sakellarakis, 1997: 258). A similar pattern is seen in the much earlier vaulted tombs of the Mesara, where dozens, sometimes hundreds, of conical cups were found in chambers outside of Apesokari II, Ayia Triada A, Kamilari I, Lebena II, and Vorou A (Branigan, 1970: 98). Branigan associates this with a specific funerary toasting ritual (Ibid. 99-103). But at the cemetery at Pseira some of the categories of grave offerings, including undecorated conical cups, are not present in substantial numbers or are missing altogether (Betancourt and Davaras, 2003: 135). However, these simple cups are common at many Minoan burial sites. Indeed, if we compare the Minoan evidence relating to conical cups to the crudely made conical bowls and spouted jugs from Egyptian Early Dynastic graves there are remarkable similarities. Here too, in Egypt, they occur in great numbers and have also bee associated with feasting rituals, which has been supported by "occasional finds of food remnants, including fruit (dates and apples), chickpeas, fish and other animal bones in the vessels in the graves" (Pollock, 2003: 26). Feasting as a graveside ritual was also a feature of the Late Shang Dynasty in China (Nelson, 2004: 65).

The use of animals, either as offerings or for consumption in feasts, seems to be specific to certain sites. But generally, at most later (i.e. after the formation of the palaces) burial complexes there is increasing evidence for their use, perhaps becoming a more prominent feature of a Minoan mortuary practise when the relative expenditure of offering/consuming a herd animal could be more easily borne by the relatives of the deceased. However, the regional variation and inter-site differences mean that each cemetery must be judged individually.

MARITIME SACRIFICE

This section is a brief study of sacrificial rituals pertaining to the sea; more particularly, those rites that have a maritime connection, offering the fruits of the sea, offering to a deity whose τίμη would appear to be the sea, or indeed those rites carried out on or near the sea.

Certainly in the Archaic and Classical periods, sacrifices concerned with the sea are fairly well known. Obviously the offerings to Poseidon are the most famous: for example, at the Temple of Cape Sunion the first fruits of the tunny fishing season are taken as offerings for Poseidon for the festal meal (Burkert, 1985: 137). Thus, in this format of the ritual, fish are a legitimate offering although it is perhaps inappropriate to use the term "sacrifice" for this process. This term is eminently suitable, however, for the bull offerings to Poseidon (Ibid. 138). But given the lack of context supplied in relation to these rituals it is all we can do to suppose that they were of the usual θυσία type. More idiosyncratic are the horse sacrifices for Poseidon, which are of a starkly different nature. Given the massive mythological association between Poseidon and horses[135], we should not be surprised that they were offered to him. The manner, however, is most unusual given the usually stringent details of the θυσία ritual: they were drowned.

[135] The association is between Poseidon and horses is very strong indeed. He was the god of horses, *Poseidon Hippios*, and frequently took the form of a horse. In this guise he mated with the goddess Demeter, who bore him the divine horse Areion. Pegasus, the winged horse, was also the offspring of Poseidon following his coupling with the Gorgon Medusa. He also gave horses as gifts to the mortals he favoured; for example, he gave the immortal horses Xanthus and Balius (which were later taken to Troy by Achilles) to Peleus as a wedding present.

Horses were, predominantly, thrown into special areas of the sea, either alive or having just had their throats slit: the freshwater spring that rises in the sea, the "Whirlpool" at Argos, is probably the most famous locations for this rite. Such practices were also mentioned in the Epic tradition:

> "...Many a bull you've offered,
> Many a trim-hooved horse thrown in
> alive
> to Xanthus' whirlpools" (*Il.* XXI.131-2)

But it is also important to remember that horses could also be sacrificed or offered by means other than drowning. For example, they are killed and deposited in funerary cult as late as the 8th century B.C. at Salamis on Cyprus (see *BCH* 87, 1963: 282-286, 378-380). But for the most part, no matter what the form of the sacrifices, horses were usually consecrated for Poseidon.

Thus it may be observed, even from this very brief synopsis, that these 'maritime sacrifices' were significant in the Classical period. However, it has been recently argued (Robertson, 2005) that these rites can be traced back to much earlier periods. Robertson speculates that as these rituals involving horses and bulls being drowned are predominant in the Argolid, and given that the Argives of the historical period seldom went to sea, then they must originate must further back, perhaps even to Mycenaean times (Ibid. 88). However, Robertson offers no actual evidence to corroborate this hypothesis, merely presupposing that they are survivals. Yet in the discussion following the presentation of Robertson's paper

(also recorded in the conference volume), Scullion does make mention of ritual equipment, such as altars, seen on ships on Minoan and Mycenaean gems and seals.

It was this factor that prompted my enquiries into this area of study in terms of the possibility of a format for Minoan Maritime sacrifice. Previously I had considered that the sea must have at least some importance for the religious and ritual concerns of the Minoans, as an "island nation" it would have been very odd had the sea not been a powerful force in the everyday life of Bronze Age Crete. Nevertheless, I had not considered a formal maritime cult until after some time of working on this dissertation[136].

The fact that the sea was significant to the Minoans is obvious from many sources: the appearance of Marine Ware pottery, for example. This style, whose acme is LM IB, is resplendent with marine decorative elements (Fig. 67): Argonauts, triton shells, octopuses, sea weed, and other motifs are common. Similarly, in wall painting, the exploitation of the wealth of the sea is recorded – as in the Fisherman fresco from Xesté 3 on Akrotiri (Fig. 68). However, this use of marine motifs in decorative contexts would not necessarily reflect a cultic association with the sea. Yet it is significant that in a number of Minoan cult locations we may observe a connection with the sea.

[136] I must also at this point thank Mr. Grant Slater who, from a completely non-Minoan specialist background, prompted me to consider this aspect through his much interested questioning of me on the matter.

In some cases this association may be only fleeting: the fish 'rhyton' from Traostalos[137], and the boat model from the same site; the triton shell on the lentoid seal from the Idaean Cave[138]; the water-worn pebbles from several sites, including the Shrine of the Double Axes[139]. However, in several cases the connection is more apparent; it is particularly vivid in the Temple Repositories deposit. In this deposit we have both the vertebrae of several species of fish and numerous sea shells. The connection with the sea here is incontrovertible, but has never been overly emphasised. Typically, the figurines of the 'Snake Goddess' have taken priority over everything else, but it must be remembered that snakes also are often at least semi-aquatic, while there are species which are wholly aquatic.

The 6340 marine shells, reported by Hatzaki (2007, forthcoming: 4) as coming from the Temple Repositories, have been seen as examples of personal votives, or a least a votive symbolising the presence of an individual. However, I do not believe that this is the case. I believe the precise number of shells to be largely irrelevant[140], more the sheer abundance of them is the fact that makes them significant. As Hatzaki notes (Ibid.), this is one of the largest concentrations of shells found on Bronze Age Crete and certainly the largest at Knossos.

The purpose of the offering or deposition of these marine elements is not obvious in this case, primarily due to the uncertain nature of the Temple Repositories deposit as a whole. It may well be that the 'Snake Goddess' is a

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[137] See above, p.111.
[138] See above, p. 142.
[139] See above, p. 73.
[140] Hatzaki claims a correlation between the number of shells and the possible number of persons that could have been accommodated by the Central Court in the Palace (2007, *passim*).

misleading appellation as the sea is clearly better represented than the snake. Perhaps the shells are symbolic of the τίμη of the deity with whom the deposit is linked, or an offering to that power. More prosaically, if the Temple Repositories are a foundation deposit, the shells may reflect a direct association between the Palace and the sea, either as a source of wealth or food, or in the linking of the Palace with a particular deity. Yet whatever the nature of the deposit the importance of the marine connection is unquestionable.

Nor is the Temple Repositories deposit's focus on marine elements an anomaly among Minoan cult sites. The cowrie and triton shells found at Karphi are another clear indication of the importance of the sea and marine forces to Minoan cult. Even though in this instance these shells are most likely to have been used as cult implements this does not lessen their significance, rather the opposite. Sea shells are also found at Traostalos, Juktas, and Kato Syme has a conch shell. This repeated presence of shells at various cult sites creates a sound base to judge that the marine element was a persistent one among at least some of the Minoan cult sites. Similarly, the significance of the sea is also seen in the cave of Vernopheto wehere there are drawings of a 'Mistress of Animals' in association with a catch of fish (*BCH* 93 [1969]: 195-199).

However, in terms of sacrifices to the sea (or to the deities thereof) or on/by the sea, the evidence is less clear and much of what will follow is supposition. Robertson (2005) claimed that the sacrifice to the sea was a custom prior to the 'Olympian' and 'Chthonian' categories, tracing it to the Bronze Age, but provides no evidence to support such a claim. This is ultimately because there is

no evidence to present. Bulls, horses, goats – all of these may have been thrown into the sea in the Minoan period, but there is simply no evidence, neither archaeological nor iconographic, to confirm or deny this claim. Indeed, the only possible evidence for these (or any) maritime rituals comes in the Theran frescoes, in particular the West House Miniature Fresco which is known as the 'Ship Procession'.

This very famous fresco, although it is not from a Cretan source, is suggestive of some form of marine ritual. Morgan (1988) also realised the ritual overtones of this fresco frieze: "the ships in procession are taking part in a nautical festival" (Morgan, 1988: 144). This is very possible given the adornments on the ships, such as bunting, that would not seem to be aspects of the usual rigging and fastenings of the vessels. But of greater significance than the ships themselves is the procession of men in front of the town to which the ships appear to be travelling. At the rear of this group, one figure is leading an animal, usually seen as a bull (but possibly a goat [Dickinson, 2006: *personal communication*), towards the shore, seemingly as part of the welcome for the arriving vessels (Fig. 69). It is clear that the arrival of these vessels is an event of some significance, as the population of the town are all eagerly looking toward the flotilla, and we may therefore see the leading of this animal as a significant part of the welcome for these vessels. While it may be that the animal was a gift for those aboard the ships, it may also have been a potential victim to be sacrificed as thanks for safe passage. Likewise the ornate cabin structures on the sterns of the ships in the 'procession' are perhaps suggestive of some ritual practice taking place aboard the vessels. Certainly in later periods the stern of ships was the location for

offerings: for example, a small altar was placed in the stern of Greek vessels in the Classical period for thank-offerings upon safe arrival (Morgan, 1988: 143).

Säflund (1981) also saw a ritual process in the Ship Procession fresco, noting the "spectacular ceremonial attire of the principal ships" (198). Similarly, some (e.g. Casson, 1975: 3-10) have argued that the methods of steering and propelling the ships, by means of paddles, is "archaic" for the Minoan period, an observation that has also been used to add gravitas to the 'ceremonial' tones of the fresco, apparently using traditional methods of propulsion implies a conservatism that speaks of religiosity. Säflund speculates that the purpose of the sailing may be the bringing of a bridegroom for some form of sacred marriage ceremony (1981: 200). Indeed, there is a seated male figure on the lead ship but this is somewhat of a theoretical leap.

However, it is true that the West House did contain a number of ritual features that would lend credence to any ritual interpretation of the Ship Procession fresco. One such object is the well-known plaster tripod offering table adorned with images of dolphins, which recall the "dolphin escort" on the fresco (Säflund, 1981: 204-205). Säflund also speculated that the Ship Procession fresco "presumably derived from a Cretan prototype" (Ibid. 207). However, no fresco prototypes have been found on Crete (to the best of my knowledge), although there are examples of figures in boats on seals. Certainly boats do appear in other media as well, seemingly as offerings themselves: the physical example from Traostalos is complemented by the representations of boat models on the Ayia Triada sarcophagus which seem to be being presented as gifts.

Of course, the Ship Procession has been interpreted in other ways; as a rendition of an actual voyage for one, or as a voyage of conquest, although the lack of weaponry visible on the vessels would seem to preclude the latter. The ritual interpretation is primarily based on assumption, but one for which there is a good degree of circumstantial evidence. Nevertheless, I believe that it is most probably a ritualised scene; the presence of a number of 'horns of consecration' and possibly a large, concave altar structure at the town to which the vessels are travelling may lend some support to this theory. Indeed, Säflund speculates that the settlement of Akrotiri may have begun as "a coastal cult establishment which...developed into [a] protourban settlement" (1981: 206).

Thus, there would seem to be sufficient evidence to begin to speculate that the sea, or marine elements, may have played a significant role in Minoan cult, certainly to a comparable degree with the evidence for sacrificial ritual. Indeed, if the marine traces outlined above are read as evidence for a maritime cult, then it would be of far greater significance in the Minoan cosmology than the relatively limited evidence for the commensal rituals. The fact that we have both forms of evidence at Juktas may be seen to suggest a possible link between the two cult aspects, but this is by no means clear.. Although the above treatment has been cursory, as required by constraints of space, I feel that this is a viable area for further study and that the real significance of the maritime cult has been underestimated in current scholarship.

ECSTATIC RELIGION

A further aspect of Minoan religion which I feel must be at least mentioned in this study is that of ecstatic religion. This subject has been discussed before, most notably by Peter Warren (1981/1988), and is of great interest but has little archaeological evidence to support it. This is simply because it is a ritualistic/religious process that would leave very little evidence in the archaeological record; however, it is possibly reflected in the iconographic record – although some caveats exist here as they did with the use of iconography as a source of information about sacrifice. This section is important to the overall cult operations of Minoan Crete given its frequent appearance in earlier scholarship.

First, however, it is necessary to define what we mean by the term 'ecstatic religion'. In simple terms this is ritual or religious practice where normal societal rules do not apply – emotions are heightened, reactions and activities may be termed orgiastic, and, in many cases, the situation is characterised by altered states of consciousness. Indeed, we should not be surprised to find such rituals extant in Minoan Crete as most human societies have sanctioned limited and circumscribed forms of altered states of consciousness (Michalowski, 1994: 27). In addition, a great number of ecstatic religions are concerned with the direct contact with the divine; either by the participants 'travelling' to the abode of the divine, as in the case of the Tunguska shaman, or by the epiphany of the god (either inferred or acted) as in the case of the Classical cult of Dionysus. Indeed,

the satyrs and Maenads of the latter have effectively come to define ecstatic religion.

Sacrifice may not seem directly relate to ecstatic religion, yet I feel it is necessary to include a brief discussion of the subject as it is yet another example of a ritual process which appears as, if not more common, than sacrifice[141] and equally as important in the iconographic canon. As such, it further defines the ritual context of Minoan Crete in which the rituals employing animals were performed. As stated above, the primary form of evidence for ecstatic ritual is iconographic. This too is significant as we saw earlier how much of the speculation about sacrifice stemmed from the study of the iconographic evidence. If the images assumed to relate to ecstatic religion can be similarly subject to drastically different interpretations it reinforces the difficulties and dangers of using iconography as an unqualified source for ritual information. However, if it transpires that ecstatic religion, and the acted or assumed epiphany of the deity, may be adequately studied from iconography, of which there are numerous possible examples, then it would yet again appear to be a more common occurrence than sacrifice.

The supposition of the importance of epiphanic rituals to Minoan religion has become so ingrained into thinking on this subject that even in introductory works it has taken pride of place: "...but there was also a class of summoning rituals, designed to produce the epiphany of a god, in which he/she was imagined as coming to inhabit the body of a participant or some natural or constructed feature,

[141] Although certainly in the Classical period the Maenads, in the train of Dionysus, are often seen carrying or tearing apart animals, particularly goats and deer.

or simply as invisibly present" (Dickinson, 1994a: 265). I believe that this manner of thinking about Minoan religion may have begun as a direct result of the lack of formal cult images at Minoan sanctuaries. An aniconic religion, utterly different to the propensity of cult images found in the Bronze Age Near East, may have been extant on Bronze Age Crete, and such a system more than likely would have relied on the epiphanic principle.

However, the actual evidence for this form of ritual is scarce. It is generally believed that dance or performance played a major role in these rituals and, as a result, there have been efforts to identify the areas where such activities may have taken place. Certainly the epic tradition is suggestive of the significance of dancing rituals on ancient Crete, as in the case of the description on the shield of Achilles:

> "A dancing floor as well
> he fashioned, like the one in royal Knossos
> Daedalus made for Princess Ariadne.
> Here young men and the most desired young girls
> were dancing, linked, touching each other's wrists..."
>
> (*Il.* 18.590-594)

It is noteworthy that Peter Warren has identified three such possible dancing platforms from the final period of the Palace of Knossos (1988: 9) (Fig. 70). These structures are clearly not floors of houses, granaries, or towers, or indeed any architectural feature with a super-structure; as Warren states they are

structures in the own right (Ibid.). Moreover, they are clearly important structures as can be seen in the care that was taken in their construction, with carefully dressed ashlar masonry and their size – the largest platform being some 7.34m in diameter on its upper surface. Unfortunately, the description of these structures as "dancing platforms" is without corroborative evidence (such as a representation of individuals dancing upon such a structure) and, in my opinion, stems from the need to identify a location for the ritual practice that was assumed to have taken place. This obviously results in a somewhat cyclical argument. I do not say that the ascription of the term is incorrect, indeed I believe it is rather plausible, but it requires further validation.

The only other artefactual evidence for dancing rituals comes in the form of ceramic models. These humanoid figurines are modelled dancing in a ring – the famous example being that from Palaikastro (Fig. 71). Although this is only one of a few examples of such pieces (I see the sanctuary models from Kamilari as being of the same nature, i.e. the rendering of a ritual practice in ceramics). However, as these are the only artefactual examples referring to the possibility of dancing rituals, other sources of information have been used to support the hypothesis of dancing rituals and, by extension, epiphanies and ecstatic ritual. The main category of evidence is purely iconographic, primarily scenes engraved on seals, rings, and gem stones; the most famous of the se is the Vapheio ring.

This ring (Fig. 72) has been much discussed[142] and is one of several examples of rings showing dancing rituals or epiphanies, other notable examples are the rings from Mycenae (Fig. 73), Isopata (Fig. 74), and Archanes. These scenes are typically seen as "religious ritual[s] involving ecstatic dancing and apparent trance conditions or possession" (Warren, 1981: 163-164); indeed in the case of the Vapheio ring, Evans described the scene as one of "orgiastic dance" (*PM* III: 141). These interpretations are primarily based on the energetic poses that the figures are shown as holding. While the interpretation of dance is extremely plausible (although inferred) the matter of the "ecstatic" quality is much more subjective and difficult to prove. Evans linked the scenes on the Vapheio and Isopata rings to the Mycenae ring to validate the ecstatic hypothesis. On this latter ring, fruit appears to be being picked and it is this fruit (or the derivatives thereof) that "supplies the religious frenzy" (*PM* III: 142). In this Evans was clearly influenced by, and admits such, the references to the intoxicant *soma* in the Indian Vedic texts. Although this is ultimately supposition, albeit from ethnographic analogy, the possible use of intoxicants or hallucinogens on Minoan Crete remains essentially unanswerable due to our lack of understandable ritual texts. However, if they were employed it is probable that they would be utilised in ritual processes involving direct communion with the divine; for instance, the epiphany.

The *Sacred Grove and Dance Fresco* is perhaps the most striking iconographic representation of the possible importance of dance and ecstatic religion in Minoan culture (Fig. 75). This very fragmentary miniature fresco was found at

[142] For example: Evans, 1901: 179; *PM* III: 140-144, 314-317; Nilsson, 1951: 275; Warren, 1981: 163-164.

Knossos in what was believed to have been a small corner sanctuary, and is thought to have occupied the corner space where the Northern Entrance Passage entered the Central Court (*PM* III: 29). It shows the performance of what seems to be a ceremonial dance (Ibid. 67), which Evans associated the dance ceremony with ecstatic possession (Ibid. 69) and is in keeping with his interpretations of the seals and sealings which depict similar scenes. I find this interpretation fairly convincing, certainly more so than some of the later interpretations.

For example, in White's analysis of the significance of the "sacred grove" as a concept in Minoan religion he sees it rather as an object of veneration in itself than as a location for a cult practice (1964: 114). This reiteration of the concept of a form of baetylic worship, similar to that proposed by Evans in the *Tree and Pillar Cult*, is not particularly convincing and attempts to account for the seeming lack of cult images by treating trees, pillars, and similar structures as aniconic forms of the deity. A comparison with the concern for *ashera* in Semitic religions (Ibid. 117) is of little assistance in this case, as this fails to account for the images on some of the Minoan seals where there appear to have been efforts to depict anthropomorphised deities. Thus I feel that the epiphanic interpretation of the dancing imagery is the more convincing, at least in the case of the *Sacred Grove and Dance Fresco*.

As noted above, the association between dancing and epiphanies is a well-established one – the prime Classical example being the bacchic revelries of Dionysus where one of the worshippers donned a mask of the god in an enacted epiphany. In the Minoan case the hypothesis is founded upon one key point of

assumption, namely that one (or more) of the figures in the scenes is a representation of an anthropomorphised deity. This is done, in the absence of names and text, through secondary indicators such as the relative size of the figure, or the focus of the scene, as there are no specific indicators of divinity in the Minoan iconographic register[143]. As such it must be acknowledged as a flawed method of identification, yet without alternative means it is the best method available to us. With this caveat in place, I feel I must agree with the current thinking that these are epiphanic scenes. However, there precise nature remains unclear; by which I mean whether the epiphany is based purely on a sense of religious ecstasy, or if it is enacted by a worshipper as with the Classical Dionysiac example. This ambiguity is frustrating, as is the case with the context of these ritual occurrences. There is no firm evidence to directly associate epiphanic rituals with particular forms of cult, despite early claims that they may have an association with funerary cult based on the fact that the rings depicting such scenes were found in tomb contexts (*PM* III: 140, for example). Such conjecture of this type is not useful at this point, thus suffice it to say that it would seem appropriate to believe that an epiphanic ritual of some form, in combination with aspects of dance, appears to have played a role in the religious practices of Bronze Age Crete.

A further aspect of the traditional view of ecstatic religion is that of the 'altered state of consciousness'. While we cannot answer the matter of whether hallucinogens were utilised in Minoan Crete, there is a great deal of evidence to suggest the importance of wine. One model from Kamilari (Fig. 77), while

[143] The difficulty of accurately identifying the divinity of figures in Minoan art is well-known and has affected all studies of the religion of Bronze Age Crete, including this one.

usually seen as a further example of the 'ring dance', has been interpreted by Marinatos (1993: 22) as depicting the treading of grapes for wine production. If this is the case, which is possible given the small, round enclosure in which the figures are sculpted, then the fact that the structure is topped with 'horns of consecration' is very interesting, perhaps implying a ritualised process of production or that the wine is to be used in a ritual. The wider significance of wine and wine production is clearly shown in the Neopalatial period which sees the "concentration of the vast majority of wine presses" (Hamilakis, 2002b: 195). This concentration is mirrored by the increase in numbers of drinking vessels and, at the same time, the reduction in the number of shapes, until the conical cup becomes the dominant form. All of this evidence is telling of the significance of large-scale drinking practices during the Neopalatial period. This may relate to commensal drinking rituals which may have had ecstatic or epiphanic aspects.

Yet in some examples of ecstatic religion, notably Classical Greece, there is a definite link between the ecstatic and the sacrificial. While such practices were made into high drama by Euripides in the *Bacchae*, with the frenzied dismemberment of Pentheus, it is nevertheless reasonable to presume that it is an exaggeration of the actual practice of sacrifice in association with Bacchic revelry.

We should not be surprised by this as, at least in the case of Classical Greece, burnt animal sacrifice was the pre-eminent ritual practice in terms of dealing with the gods. Obbink (1993: 71), referring to Diodorus Siculus (4.3.2), states

that the female devotees of Dionysus offered their own sacrifices – which Obbink notes was "highly unusual for women in antiquity". Therefore, according to the work of Diodorus, "historical Maenads offered sacrifices as civilised substsitutes for the savage sacrifices in Maenadic myth" (Obbink, 1993: 72). Thus, a pre-eminent example of what may be seen as an ecstatic religious cult can be directly associated with sacrificial practise.

However, for the Minoan practices we do not have the luxury of informed literary source material. The iconography that we do possess which is, at best, vague in relation to sacrifice is of a similar quality with regard to ecstatic religion. But in the traditionally-used examples of 'ecstatic' iconography, such as the Isopata ring, have no details on them that might suggest sacrifice. While this is by no means conclusive evidence, it may suggest that in the Minoan sphere ecstatic ritual and sacrificial ritual were more divorced from one another than they were in Classical Greece.

This is, in itself, of great interest despite this seeming irrelevance of ecstatic religion to the concept of sacrifice in 'Minoan' cosmology. Yet it is indeed relevant as it once again reveals that the all-pervading quality attached to Minoan sacrifice may be eroded yet further. Although this evidence alone would be at best circumstantial, when it is added to the other facts presented in this study, the very limited distribution of faunal remains that may indicate sacrifice and the persistent indications of non-sacrificial, socio-religious ritual practices, it begins to become clear that sacrifice cannot be accorded the status of the pre-eminent socio-religious ritual of Minoan Crete.

'MINOAN' RELIGION?

The title of this dissertation used the phrase "in...Minoan religion", and it has been repeated throughout the text. This has the obvious implication attached to it that there was one unifying religious belief system across the whole of Crete during the Bronze Age. However, during the course of the completion of this study it has become clear to me that this is not as obvious as one has been led to believe. Certainly, if we examine the Near Eastern region during the same period then a pattern of different deities with different secular bases of worship becomes apparent. In other words, the various towns and cities were associated with their own patron deities, whose worship was paramount within that settlement. Equally, however, there is reason to suggest that there may have been a profundity of intrinsically local deities and lesser powers extant on Minoan Crete. This is certainly true of Archaic/Classical Greece: for example, in his *Theogony*, Hesiod refuses to name the mass numbers of local and river deities as there are far too many. Therefore, in this section I intend to address this matter of 'Minoan' religion and its credibility, for as Dickinson (1994a: 259) has stated "one might expect a...tendency for communities to recognise local gods".

The first point to be made is that the same types of sanctuary site occur across Crete, with peak sanctuaries and cave sanctuaries being the most readily identifiable. Yet one should not read this as being the same as an even distribution. The peak sanctuaries, for example, cluster in the east of the island, with several other examples in the north and south of the centre of Crete. They are, however, unknown in the west of the island. While this may reflect a flawed

sampling and survey strategy, it is nevertheless suggestive that the peaks may have spread from an initial foundation in the eastern areas. However, even this has the implication of an almost evangelising process rather than the spontaneous generation of these sites by local populations. Indeed, it has long been claimed that the peaks shared a common cult, united not only by the practices performed at them, but also by virtue of their supposed inter-visibility. Recent G.I.S. (Geographical Information Systems) work on the peak sanctuaries as a group of sites (e.g. Soetens et al. 2003) has produced some interesting results on this supposed site intervisibility, suggesting that a hierarchy of intervisibility may have existed. For example, they state that all of the 'satellite peak sanctuaries' of Central Crete are visible from Juktas, "but not so much amongst each other" (485). However, I have several issues with this theory, not in substance but in presentation. By virtue of the wording there is an implication, or rather possible inference, that Juktas was the initial peak sanctuary foundation and that the other examples of the peak sanctuary are off-shoots from this initial foundation. I disagree with this, as there is sufficient individuality between the sites to suggest that they are not all of a unified purpose[144]. Furthermore, the presentation of Juktas as the pre-eminent 'peak sanctuary' is simply a continuation of the Knossocentric viewpoint, as the authors make an overt comparison between the roles of Knossos and Juktas in terms of their wider influence in Crete. Recent work (for example, several essays in Driessen, J., Schoep, I. and Laffineur, R. (eds.), 2002, *Monuments of Minos: Rethinking the Minoan Palaces*) has done much to increase the pressure to abandon this Knossocentric attitude.

[144] See below.

Given this trend in Minoan archaeology, perhaps it is time to re-address such statements as that of Peatfield (1992: 59) as he attempts to summarise the current thinking on the peaks: "Collectively they form a single class of shrine, representative of a peak sanctuary cult which was one of the features of a religious ideology which unified Minoan Crete", and later in the same article he refers to them as "transcending regional differences" (Ibid. 61).

Peatfield sees this system of unification as occurring during the Neopalatial period, when "the peak sanctuary cult was deliberately centralised at the few peak sanctuaries associated with the palaces and palatial towns' (Ibid). This is how he accounts for the "rural" quality of Atsipadhes, as it was one of the peaks being 'phased out'. However, I must disagree with his hypothesis despite his greater experience than my own. He admits that the order is synthetic and stresses the similarities, but I believe that there is sufficient inter-site variation within the peaks to cast doubt on this unifying theory.

As Table 1 shows, the only categories of artefact present at all the peak sanctuaries in this survey are pottery (although the vessel forms and quality does vary considerably), animal figurines, and humanoid figurines – we may also include votive limbs if we include the 'phalloi' from Atsipadhes. In all other categories there is a wide variation in the types of artefact and their quantities. Kophinas has weaponry in the form of bronze knives and a lead double-axe, but none of the other peaks exhibited weapons, aside from the double-axes, and even these were found at only Juktas and Vrysinas. Similarly only Juktas and Gonies have altar structures; only Juktas and Gonies have 'horns of consecration';

Juktas, Kophinas, and Vrysinas have offering tables; even ash is not a universal feature given its total absence at Atsipadhes. If the peaks were a coherent symbolic group of sites that ideologically unified Minoan Crete then surely we should expect a greater degree of unity between these sites, effectively a cult kit. However, this is simply not the case. This may reflect one of two main variances: firstly, that the peaks were designed for the worship of different deities or, secondly, that different peaks reflect different cults for the same deity. Of these two alternatives, the former is the more likely, in my opinion, rather than the local variations in the worship of a single deity. However, whichever of these is true, it has become clear to me that the variation between the peaks casts some doubt on the universality of the cult in Crete.

Of course, this also prompts another thought, one that would undercut the entire concept of the Minoan peak sanctuary. The term peak sanctuary and the 'key indicators' thereof are the construct of modern archaeologists and there is absolutely no evidence to suggest that the inhabitants of Bronze Age Crete conceived these various sites as belonging to a specific class of cult site. To some extent this must be levelled at archaeology's continuing obsession with 'types', a desire to create groupings according to perceived morphological similarities, but based on the assumption that "types do exist in culture and may be discovered by competent methodologies" (Ford, 1954: 42). Ford also makes the point that ""cultural types" are abstracted on different levels of apparent complexity by the observer" (Ibid. 47), thus every archaeologist may see a different pattern and that generalisation occurs, to some extent, to allow for usable groupings to be defined. Thus we must acknowledge this fact in any

discussion of the cult sites of Bronze Age Crete: that we are dealing with sub-classes of a cultural system, and a cultural system itself, that have been reconstructed by generations of archaeologists and, as a result, these may be flawed[145].

A similar situation to that of the peak sanctuaries exists with the cave sanctuaries. Tyree (1974) was the first to explicitly state both the limited number of cave sanctuaries and their individuality. Peatfield, likewise, concludes that the caves do not represent a single cult (in contrast to his view of the peak sanctuaries) (1992: 61). The brief survey of cave sites in this study does nothing to alter this supposition, rather the opposite in fact. The variation between the caves is very great indeed: Arkalochori is so unique that it barely seems to be a cult site at all; Skotino is sparse with finds when compared with Psychro and the Idaean Cave, as is Kamares. The one common feature across all of the caves is that the votive limbs, which seem to be a feature of the sites generally termed peak sanctuaries, are utterly absent, thus clearly marking a different cult process as being played out at these sites. The remaining categories of artefact exhibit no coherent pattern across the caves to allow any of them to serve as a defining characteristic for the group of sites listed here. The cave sites, therefore, once again seem to indicate a variety of cult practice which I would suggest would indicate the worship of a disparate collection of supernatural powers.

[145] I acknowledge the usefulness of types for archaeological categorisation, but these types must be soundly constructed. The level of variation observable between the cult sites within these perceived categories leads me to speculate that their application has been more hasty than may be proper. However, for purposes of discussion these groupings must continue to be used until a more detailed system of classification has been implemented.

The extra-urban sanctuaries of Kato Syme and Anemospilia are also unique, as they are so different (even from each other) that the fact they are discussed together in this study is simply a matter of convenience. Anemospilia is most interesting, aside from the matter of a possible human sacrifice, due to the lack of figurines in the surviving portion of the structure. Of the other sites in this survey, only Arkalochori and Salle β have a similar dearth of figurines. The former, in my opinion, cannot be termed a cult site, while the latter was largely devoid of any artefacts at all, suggesting they had been removed. Therefore, out of the established cult sites with several categories of artefact, only Anemospilia is lacking in evidence for the votive deposition of figurines. Thus it would appear that a pre-eminent ritual process did not take place at Anemospilia, which serves to mark it out as being fundamentally different from the majority of Minoan cult sites. It is also curious that the two major Minoan cult 'symbols', at least as they are identified in the scholarship of Bronze Age Crete, the double-axe and the 'horns of consecration' are not present at Anemospilia. This is interesting as Anemospilia is clearly a structure of some significance, and so this must lead us to question the assumed ubiquitous-ness of these symbols in Minoan cult.

Kato Syme is another site that is characterised by its quality of not fitting comfortably into any of the designated classes of 'Minoan' cult site. Its focus, during the Minoan period, on a large central podium makes it without parallel on Bronze Age Crete, again setting Syme apart from the other sites, and forcing us to see it as a major unique sanctuary. This is interesting given the massive history of use for the site following the end of the Minoan period. This would

seem to speak volumes for the significance of the cult at Kato Syme. However, I must stress here that I do not believe that the Greco-Roman cult of Hermes and Aphrodite was the same as that practised during the Minoan period, for as Renfrew has observed "continuity of practise does not mean lack of change in that practice, and certainly cannot be taken to imply constancy of meaning" (Renfrew, 1985: 3). Thus I simply note that whatever the object of the Bronze Age cult at Kato Syme was, it left a large enough impression of its significance on the Cretan population to ensure that the cult use of the site continued on largely uninterrupted.

The urban shrines again seem to be different enough from one another to suggest that they were not unified in the object of their worship or in their significance. Again there is no overall pattern in the artefact assemblages. It is, however, noteworthy that some categories of artefact are absent from those discussed here, namely sacrificially-derived faunal remains, animal figurines, rhyta, and votive limbs. This, in my opinion, is suggestive of several points: firstly, that sacrifice was not practised in these urban and palace shrines; secondly, that the animal figurines would seem to represent a cult process that was not catered for by the urban shrines, relating to either the powers venerated or the people utilising the different cult locales; thirdly, the absence of large rhyta suggests that the libation rituals were not on the same scale as those that appear to have been practised at the peaks, caves, and extra-urban sanctuaries. This is perhaps suggestive that the libation rituals were another category of commensal rite.

Therefore, we begin to become aware of the major variations between the cult sites of Bronze Age Crete, even within the artificial archaeological categories. However, one should not deliberately overemphasise these differences as this is no better than overemphasising the similarities. To extrapolate from Ford (1954) again, the level of difference visible may be limitless depending on the observer. It must be acknowledged that there are some unifying ritual processes that seem to occur at the majority of sites, primarily libation and votive deposition. This would suggest that similar methodologies for addressing or worshipping the divine were pan-Cretan and, therefore, may be termed 'Minoan' in character[146]. While these ritual processes may unite the island during the Bronze Age, that is different to the existence of a coherent system, although this may still exist, but it seems more complex than has been previously believed.

However, we are far from understanding any possible system at work. The double-axe and the 'horns of consecration' seem to be especially confusing, primarily in regard to their function. As stated in the initial chapter, these symbols have been predominantly interpreted as relating to Minoan religion and to sacrifice in particular. The distribution of these artefacts – the physical examples of the symbols rather than their appearances as decoration on vessels, for example – shows that they are by no means common. They occur at less than 50% of the sites in this catalogue. However, when they do occur, they are

[146] There is not the space here to address the suitability of the term 'Minoan' to describe the population of Bronze Age Crete. I trust that it will suffice to mention that I am aware of the possibility that the populations of the major settlements may have defined their identity as members of the specific settlements they inhabited rather than as the inhabitants of the island of Crete as a whole. Indeed, this notion of 'settlement identity' would seem to fit well with some of the evidence from Bronze Age Crete, such as the distinct regional pottery styles.

usually both present: only Kophinas and Arkalochori are without a corresponding 'horns of consecration' for the double-axes found there.

This is interesting as it reinforces the opinion that the two symbols were complementary. This is seen frequently on pottery where the double-axe is one of several objects placed between the uprights of the 'horns'. Although this association has been noted before it has always been treated in relation to the sacrificial weapon striking the head of the victim. Yet this combination of artefacts does not occur at Kato Syme, a site where we have abundant faunal remains. Moreover, as noted earlier, the moment of the kill, i.e. the moment of the supposed use of the axe, is never depicted. As a result of this lack of iconographic corroboration of the use of the axe, plus the limited archaeological associations between this combination of artefacts and faunal remains – they are more common at sites without faunal remains, I believe that the explicit link that has been made between these symbols and sacrifice cannot be seen to be as concrete as has been previously stated. However, it is clear that they had a symbolic significance to the cult practices of the Minoan period. Perhaps, given that a number of the examples are votive and non-functional in character, we may see them as a cult gift of a special category of individual, possibly that of a representative of the cult.

The concept of a Minoan priesthood is one that has been much discussed in earlier work and is significant in relation to sacrifice as in most cultures, a notable exception being Classical Greece, sacrifice was carried out by a special class of religious advocates or priests. While I find the term 'priesthood' to be

rather loaded, I do believe that there must have been a special class of officials who were responsible for certain ritual and religious duties. However, it must be noted that these individuals may have only performed these functions at specific occasions, certainly in the case of use of animals at cult sites these seem to have been rather infrequent, and have performed other duties as well. The evidence for this class of persons is primarily iconographic.

They are often identified as the figures on seals (in particular) who wear long robes and carry special apparatus. Several such figures are seen on various examples such as that in Figure 14. Zeimbekis (Unpub. MA dissertation), in her M.A. thesis *The Priesthood in Crete: a Minoan Perspective*, makes a number of claims for the existence of a Minoan priesthood. She divides their role into the formal standardised cult, primarily dealing with sacrifices and libations, and more 'shamanistic' practices which she believes occurred in the cave sanctuaries. She claims that there appears to be two separate classes of priests to fulfil these separate roles, but also that "archaeological evidence attests the paramount importance of sacrifice" (1991: 58).

However, I do not believe this to be true. This study has shown the limited distribution of the faunal remains in comparison to other cult paraphernalia. Thus if the evidence for sacrifice is not as widespread, then this severely limits the role of Zeimbekis' priesthood. For it must be remembered that the entire corpus of 'evidence' for these priests comes from the interpretation of the iconography of seals and frescoes. The only possible 'priest' found *in situ* comes from Anemospilia, where the skeleton of the older (38 years) man with the iron-silver

ring (a high-status object) is generally seen as that of the priest of the shrine. Yet this and the interpretation of other discoveries, such as the special entrance road to the north of Juktas where a supposed priest's residence – dating to MM IIB-MM IIIB - has been found, have all resulted from the supposition that there was a discernable Minoan priesthood. While I cannot state that there was not a formal Minoan priesthood, indeed I feel that it would be very likely if there were officials responsible for the maintenance of, and other duties within, the various sanctuaries, I believe that is it somewhat irresponsible to believe they were responsible for certain rituals when there is no evidence to suggest as such. Moreover, as the practices of the Classical period of Greece reveal, sacrificial rituals are entirely possible without a distinct class of priesthood to carry out such rites. However, this remains an area of supposition and, as a result, contention.

Thus in order to answer if we may legitimately speak of a "Minoan religion', we have to define what we mean by the term. If by using the term we wish to suggest that the same deities were worshipped across Bronze Age Crete and that a commonality of worship occurred at all the cult sites then the term would be a fallacy as this simply cannot be said to be the case when the archaeology is examined. The differences between the sites entail that we are unable to speak of a single site that defines Minoan religion. Similarly, the distribution of the sites seems to observe no discernable pattern, beyond the clustering of most of the peak sanctuaries in the east of the island. This would suggest that there is no centralised dictation for the development of cult sites, more that they developed along a more organic path, perhaps as per the requirements of the local

communities. However, this lack of a homogenised system does not mean that the practices and concerns were entirely disparate across the island. Indeed, the practices of libation and votive deposition appear to have been widespread, and may be described as pan-Cretan if not Minoan. However, the faunal remains serve to mark out Juktas, Psychro, and Kato Syme as different from the other cult sites. I believe that this creates an interesting implication, namely that the sacrificial practices were carried out at those sites which had significance beyond the local population of the area around them.

But this is far from 'Minoan', certainly as the term has been used in the past. The recent works of Hamilakis (2002b) and other scholars, particularly in the *Monuments of Minos* volume, have deliberately shied away from the terms that have been endemic in the study of Bronze Age Crete for over a century: 'Palace' has become 'court compound' (Driessen, 2002), for example; Hamilakis (2002b: 180, n.3) even states that the term 'Minoan' has "outlived its usefulness". To some extent this is a valid comment, but there is now a danger that the archaeological stress will be laid on intra-Cretan variation as a direct rejoinder to a century of 'Minoan' unity. The truth, as always, will more than likely lie somewhere between these two polar extremes. Certainly in terms of ritual practice, Crete shared the same vocabulary across the island during the Bronze Age, similar methods and practices, observable through their archaeological traces, may be seen across Crete. However, to call them Minoan implies a cultural unity that may be more hoped for (in previous study) than is actually present.

CONCLUSIONS

This study, in my opinion, has presented a view of Minoan faunal remains, and of possible sacrifices, which is very different to that presented in the past. As noted earlier, the major difference is that of the limited distribution of the faunal remains and, therefore, of any possible ritual practices which created these remains.

In terms of the distribution of these 'sacrificial' remains when compared to those artefacts which indicate other ritual processes such as libation and votive deposition it is clear that the latter practices are much more common, appearing across all classes of ritual site. The animal remains, limited as they are to Juktas, Kato Syme, and Psychro, must be seen as the remains of rites specific to these particular sites as opposed to a general pattern of practice across Minoan Crete.

However, that is not to say that these sites and their rituals were not of wider significance, rather the opposite might seem to be the case. It is fair to say that many aspects of the ritual and religious practices of Bronze Age Crete share a quality of commensal experience; it is even conceivable that the personal votives were deposited during a communal gathering. This quality may be observable in regard to libation, ecstatic religion, funerary rituals, and the ceremonies involving animals at Juktas, Psychro, and Kato Syme.

This commensal interpretation seems to best fit the evidence of the limited skeletal elements from those cult sites which had the capability to hold a large

congregation of people. However, this prompts the question of the validity of the term *sacrifice* for these particular ritual practices. My personal opinion, on the evidence currently available, is that the term is too loaded to be applied to the rituals involving animals at Juktas, Psychro, and Kato Syme. These rituals, while they may have had sacrificial elements, and may be viewed as such in terms of the definition stated earlier[147], are not 'sacrifices' in the generally used sense of the term. I would suggest that a term such as 'commensal meat ritual', while being more cumbersome, is more appropriate for these practices, as we have no formal evidence to suggest that a supernatural power was believed to receive any benefit or sustenance from these offerings. Moreover, even if these rituals did include a sacrificial element it has become abundantly clear that it could not be in a form similar to the Classical θυσία ritual. There is no convincing evidence for a Minoan antecedent for this ritual, as a comparison between the two zooarchaeological data sets reveals; even with the recent evidence for Mycenaean burnt sacrifice[148] (for example, Stocker and Davis, 2004) it is difficult to see an Aegean Bronze Age precursor for the θυσία rite. Therefore, to use this ritual as a model for the Minoan practices would now, in my opinion, seem to be without merit.

However, a further aspect of this study was to place these 'commensal meat rituals' in the context of other Bronze Age religious practices, primarily by

[147] See p. 17

[148] In the instances at the Pylos palace the preserved bones were of mandibles, humeri, and femurs; very different to the sacral and caudal vertebrae and femurs that made up the remnants of the typical θυσία. Moreover, the means of preservation of the bone is also different: "The burned material thus seems to have been deposited with some care" (Stocker and Davis, 2004: 182), whereas with the θυσία ritual the remains of the sacrifices were cleaned into the general refuse of the sanctuaries, a fact observable from the studies of Chenal-Velarde and Studer, and that of Forstenpointner.

comparing the distribution of the evidence for them across the various cult sites. It is clear by means of this simple comparison that these rituals were neither as common nor as widespread as either libation or votive deposition. Although frequency of practice is not the same as significance, such a disparity is striking, suggesting that the 'commensal meat ritual' was only performed upon certain special occasions. In contrast, libation and votive deposition are common to the majority of cult sites on Crete. However, this observation may be somewhat circumspect given an archaeological tendency to see these various groups of finds as indicators of distinct and separate ritual practices. The possibility remains that our various archaeological categories of ritual were not perceived as such by the Minoans. The simultaneous practise of a variety of ritual processes, while it has been referred to in previous studies, remains an area of relatively little formal scholarship in Minoan studies.

Just as other fields of Minoan study are currently undergoing a major re-evaluation, I would suggest that our understanding of the religious practices of Bronze Age Crete are in need of a new concentrated focus. I believe that this study has pointed out some of the major problems with previous studies of Minoan religion and, while many of the solutions require much more study, I hope that it has gone some way toward indicating possible routes of investigation.

APPENDIX ONE:

FIGURES REFERRED TO IN THE TEXT

LIST OF FIGURES REFERRED TO IN THE TEXT

Figure Number **Description and Source**

1. Stone pedestalled offering table from Zakros (Platon and Pararas, 1991: fig. 7)
2. 'Minoan incurved altar' (Marinatos, 1993)
3. Tripod offering tables from the 'House of the Sacrificed Oxen' (*PM* II, fig. 175)

4a. Simple Melian kernos (*MMR* fig. 45)

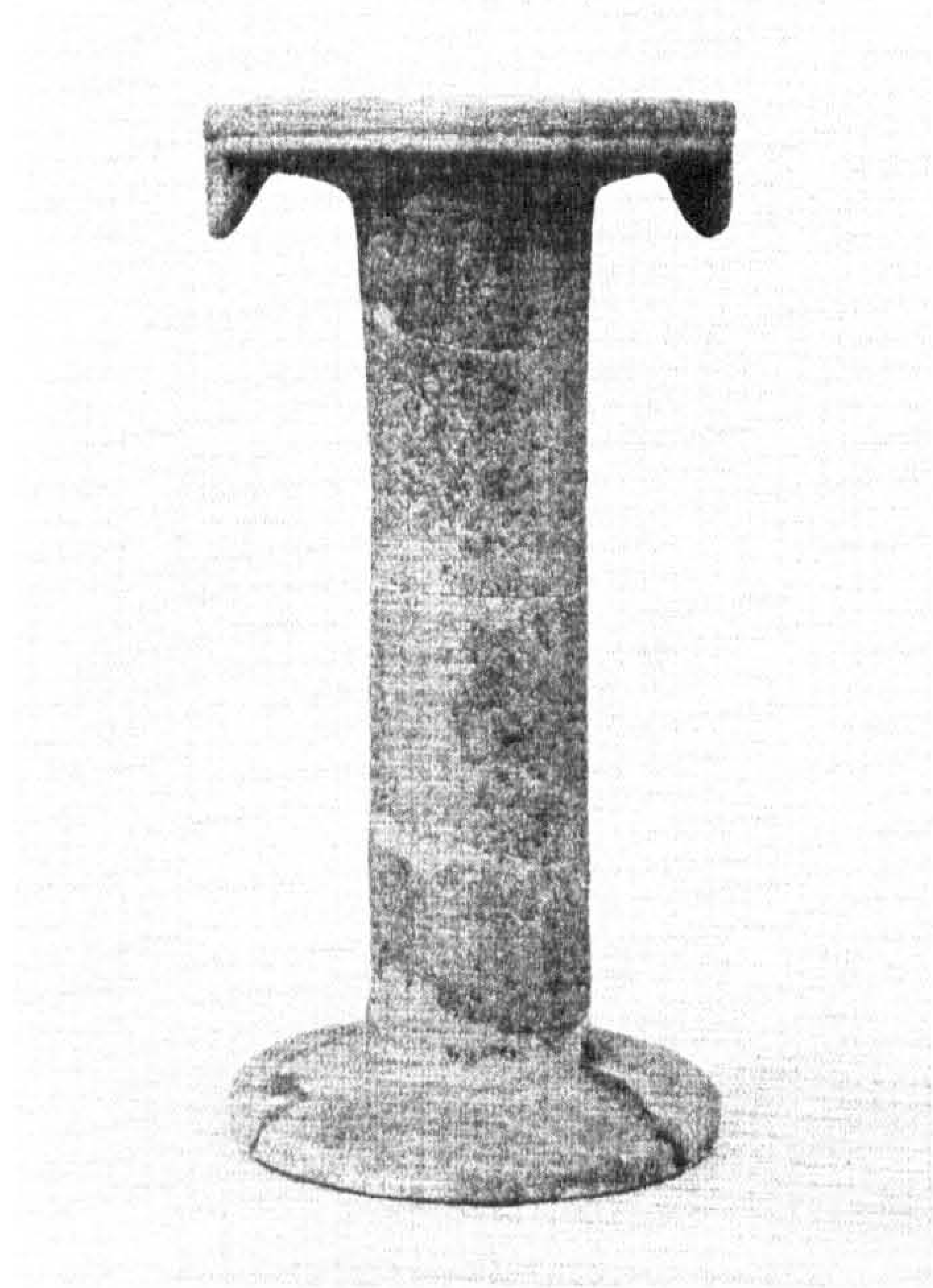
4b. Prototype of kernos with two cups from Pyrgos (*MMR* fig. 46)

4c. Prototype of kernos with three cups from Pyrgos (*MMR* fig. 47)

5. Libation table with Linear A signs, from Psychro (Boardman, 1961: fig. 28)
6. Bull lying on a 'sacrificial table' (Marinatos, 1986: fig. 2)
7. 'Sacrificial bull', male officiant and 'sacrificial symbols', sealing from Malia (Marinatos, 1986: fig. 11)
8. Ayia Triada sarcophagus. Back. (Long, 1974: Plate 30, fig. 86)
9. 'Sacrificial' procession from the Ship Frieze, room 5, West House, Akrotiri (Marinatos, 1986: fig. 24)
10. Bird epiphany (Marinatos, 1988: fig. 3)
11. Shrine topped with 'horns of consecration' from which blood is dripping. Fresco from Xeste 3, Akrotiri (Marinatos, 1986: fig. 17)
12. Ayia Triada sarcophagus. Front. The pouring scene, with mounted double-axes (Long, 1974: Plate 15, fig. 37)
13. Fragment of a Caeretan hydra (Detienne and Vernant, 1989: fig. 19)
14. 'Priest' carrying a fenestrated axe, Vapheio (*Aegaeum* 11: Plate 6g)
15. Part of a mould from Palaikastro, showing a possible divinity with double-axes (*MMR* fig. 112)
16. 'Grandstand fresco' from Knossos (*MMR* fig. 80)
17. Zakro rhyton (Marinatos, 1993: 120)
18. Isin-Larsa pot with incised decoration of boat carrying divine symbols (Postgate, 1992: fig. 6.10)
19. Steatite three-sided prism seal inscribed with a boat (Goodison, 1989: fig. 60a)
20. The essentials of the mammalian skeleton, as illustrated by the skeleton of a red deer (O'Connor, 2000: fig. 2.2)
21. Classical altar daubed with blood (Detienne and Vernant, 1989: fig. 6)
22. Cut marks on the long axis of the bone (Reitz and Wing, 1999: 128)
23. Gournia site plan (Moss, 2005: fig. 1.4)
24. Karphi altar (Pendlebury, Pendlebury, and Money-Coutts, 1937)
25. Plan and section of the Shrine of the Double Axes (*PM* II; fig. 190)
26. The Temple Repositories and vases obtained from them (Panagiotaki, 1999: Plate 24)
27. Snake Goddess figurine from Temple Repositories (Dickinson, 1994a: Plate 5.18)
28. Temple Repositories objects with bones reconstructed as a snake (Panagiotaki, 1999: Plate 17)
29. Objects from the Temple Repositories, with snake covered over with offering table (PM I: fig. 377)
30. Plan of salle β (*BCH* 107)
31. Sealing from Knossos showing two bulls on a platform (Marinatos, 1986: fig. 5)
32. Gypsadhes rhyton fragment (*Aegaeum* 11: Plate 21c)
33. Ridge of Mt. Juktas from near site of Tylissos, showing the 'human' profile (*PM* I fig. 112)
34. The 'Chasm' and other features at Juktas (Karetsou, 1981)

35. Traostalos summit plateau (Chryssoulaki, 2001: Plate 15d)
36. Plan of Kato Syme (Prent, 2005: fig. 17)
37. Plan of Arkalochori (Hazzidakis, 1913)
38. Idaean cave (Rutkowski and Nowicki, 1996: fig. 8)
39. Rock crystal seal from the Idaean cave (Rurkowski, 1986: fig. 126)
40. Plan of the Kamares cave (Rutkowski and Nowicki, 1996: fig. 9)
41. Patsos cave, figurine of a sphinx (Rutkowski, 1986: fig. 66)
42. Patsos cave, bronze worshipper figurine (Rutkowski, 1986: fig. 63)
43. Patsos cave, bronze 'Reshep' figurine (Boardman, 1961: Plate 25)
44. Patsos cave, 'horns of consecration' (Rutkowski, 1986: fig. 61)
45. Isometric view of the Psychro cave (Rutkowski and Nowicki, 1996: fig. 6b)
46. Psychro cave. Bronze Plaque (Rutkowski, 1986: fig. 59)
47. Plan of the Skotino cave (Rutkowski, 1986: fig. 35)
48. Skotino cave. Bronze figurines (*BCH* 93: Plate 11)
49. Offering tables (Panagiotaki, 1999: Pl. 21 c-e)
50. Offering tables from the West Temple Repository (*PM* I fig. 355)
51. Libation table from the sanctuary at Phaistos (*MMR* fig. 36)
52. Table of offering from Malia (*MMR* fig. 39)
53. Table of libation from Psychro [Restored] (*MMR* fig. 42)
54. Kernos from Koumasa (*MMR* fig. 44)
55. Various shapes of conical cup in section (Gillis, 1990: fig. 2)
56. Serpentine bull's head rhyton from the Little Palace at Knossos (Higgins, 1981: fig. 202)
57. Ayia Triada sarcophagus. Blood draining scene (Long, 1974: Plate 31)
58. Ritual scene of pouring from a ewer into a jar (*PM* IV fig. 376a)
59. Female figurine from Traostalos (Rutkowski, 1986: fig 109)
60. Plan showing bone deposits fro the palace at Pylos (Stocker and Davis, 2004: fig. 1)
61. Clay model of a shrine from Kotchati (Rutkowski, 1986: fig. 166)
62. Horn cores and skull plate from Psychro (Boyd-Dawkins, 1902)
63. Calf in a contorted position with an arrow in the neck (Marinatos, 1986: fig. 56)
64. Two-sided seal from Crete (Marinatos, 1986: fig. 18)
65. Pillar crypt in House B at Gypsadhes showing offertory cups ranged in rows inside pillar (PM II fig. 348)
66. Daskaloyannis street, Khania (Andreadaki-Vlasaki, 2002: Plate 54b)
67. Marine ware pottery (Betancourt, 1985: Plate 20)
68. Fisherman fresco, Xeste 3, Akrotiri (Säflund, 1981: fig. 21)
69. The arrival town, Ship Procession Fresco, Akrotiri (Morgan, 1988: Plate 105)
70. Dancing platforms from Knossos (Warren, 1989: fig. 3)
71. Group from Palaikastro [Reconstructed] (*MMR* fig. 30)
72. Gold signet-ring from Vapheio Tomb with religious scene (*PM* III fig. 91)
73. Religious scene and ecstatic dance on gold signet from Mycenae (*PM* III fig. 93)
74. Gold signet-ring, from the smaller built tomb, Isopata (*PM* III fig. 38)
75. Knossos, Sacred Grove and Dance Fresco (Driessen, 2002: Plate 1a)
76. Ceramic sherd inscribed with two symbols and the head of a gazelle, from the 'enclosed area' in Area K, Tel Haror, Israel (Klenck, 2002: fig. 2.9)
77. Model from Kamilari possibly depicting the treading of grapes (Marinatos, 1993: fig. 23)

Figure 1:



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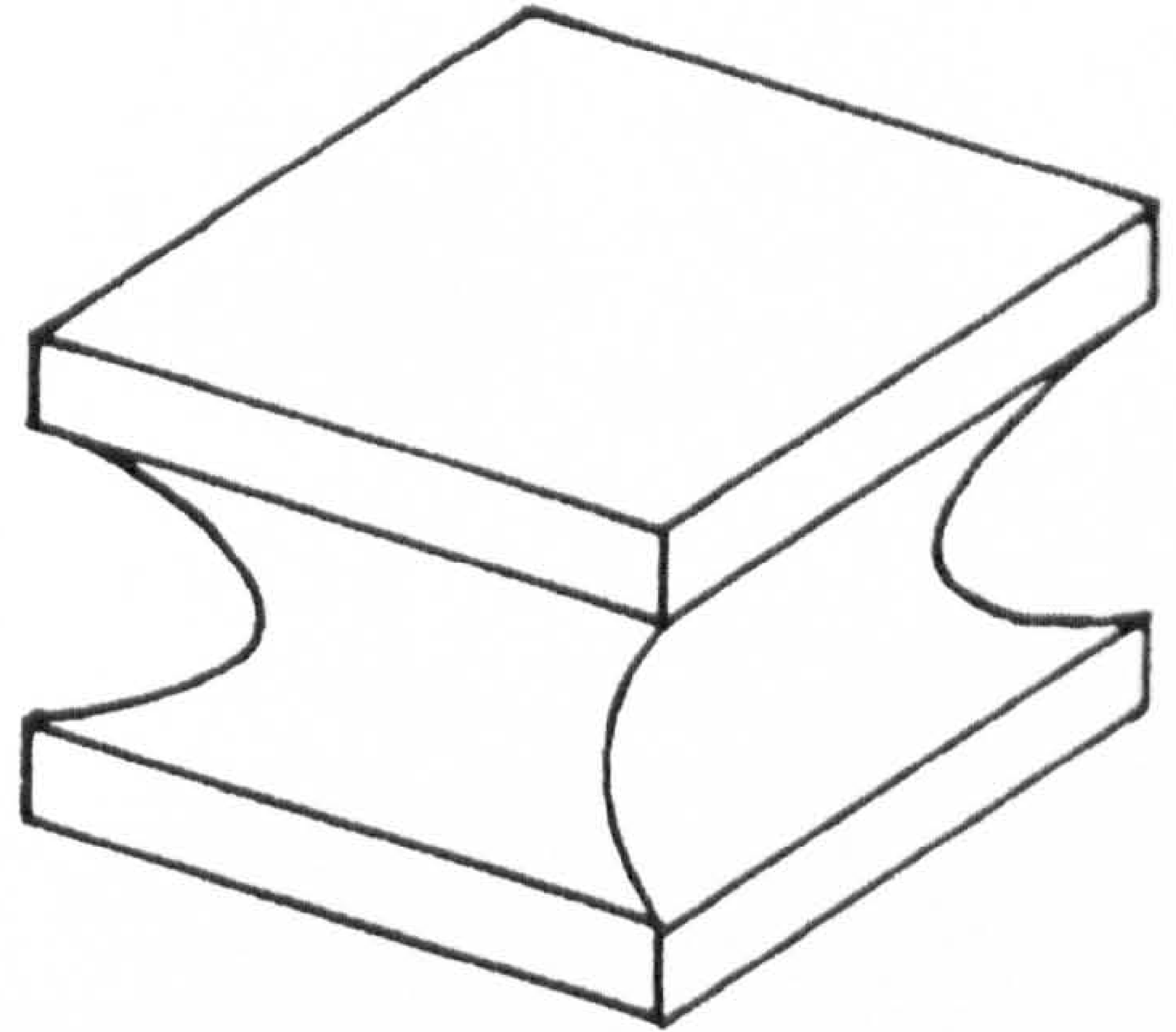

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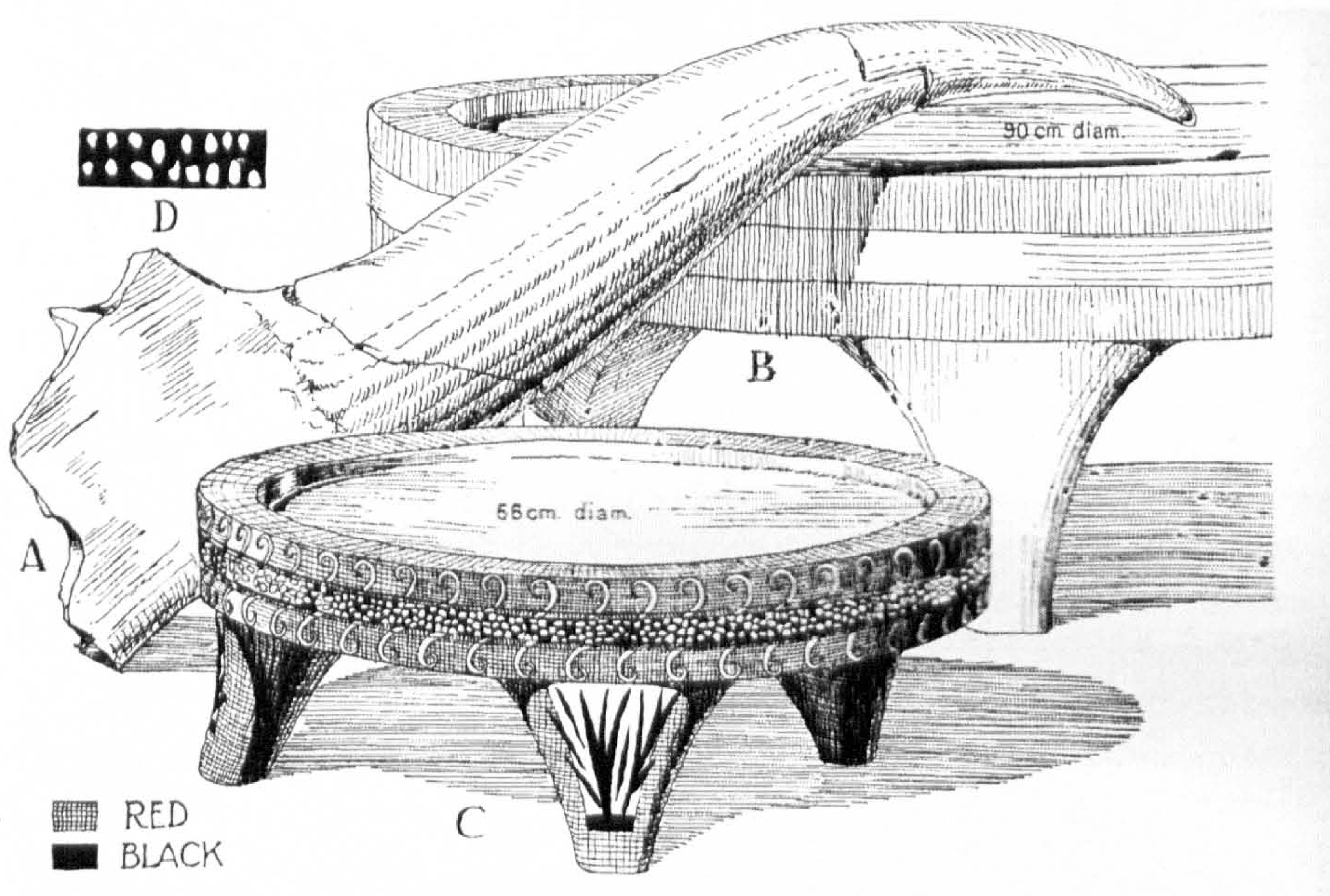

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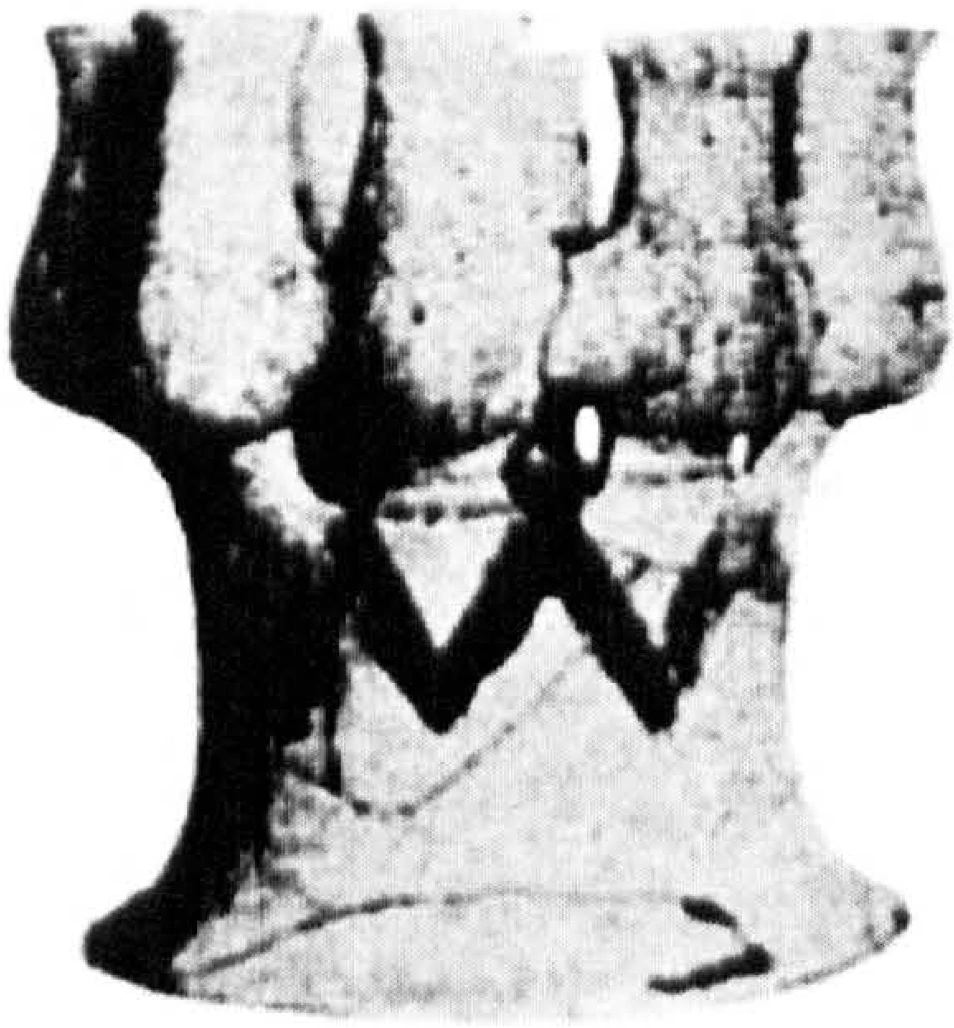

Figure 4b:

Figure 4c:

Figure 5:

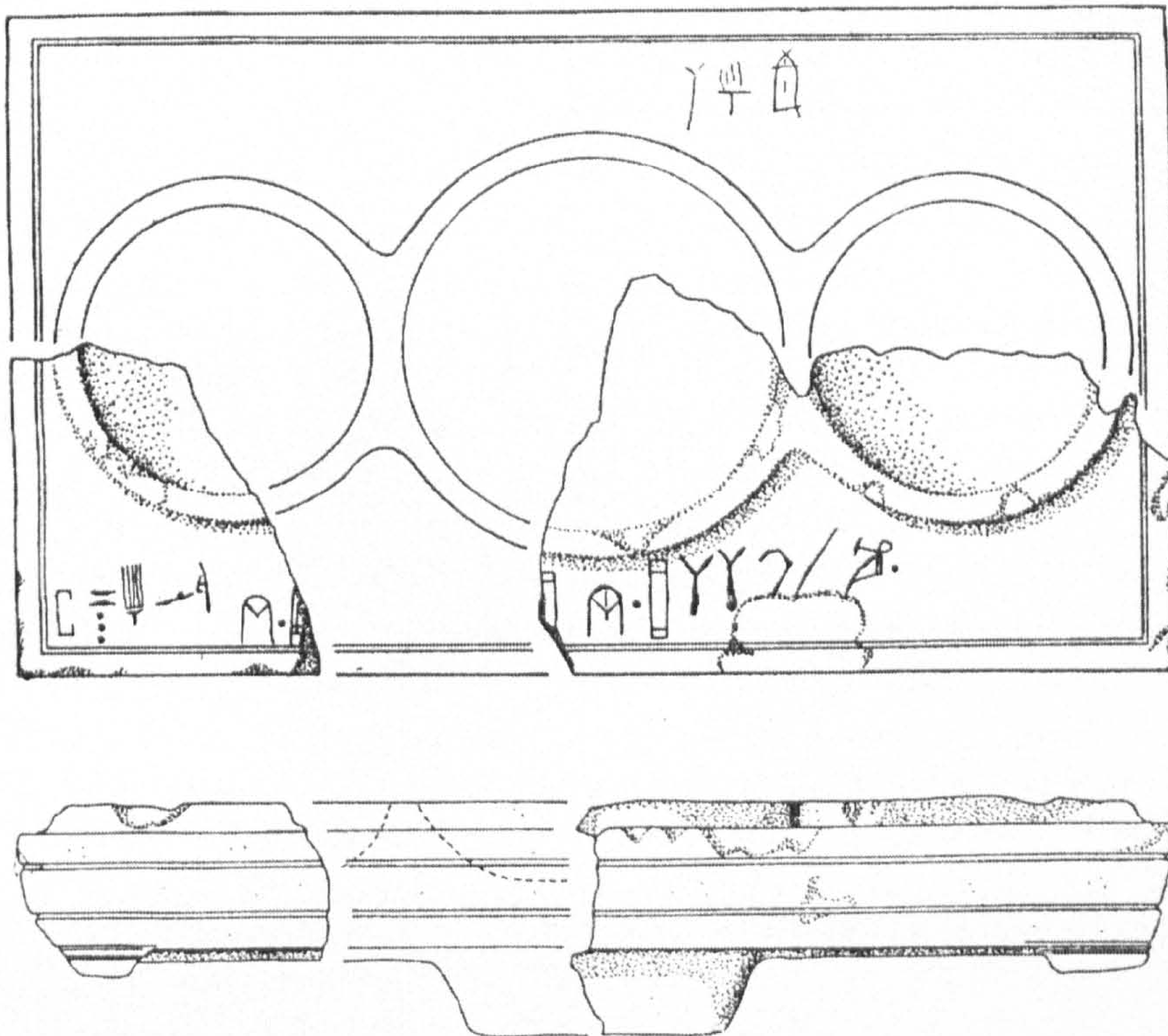

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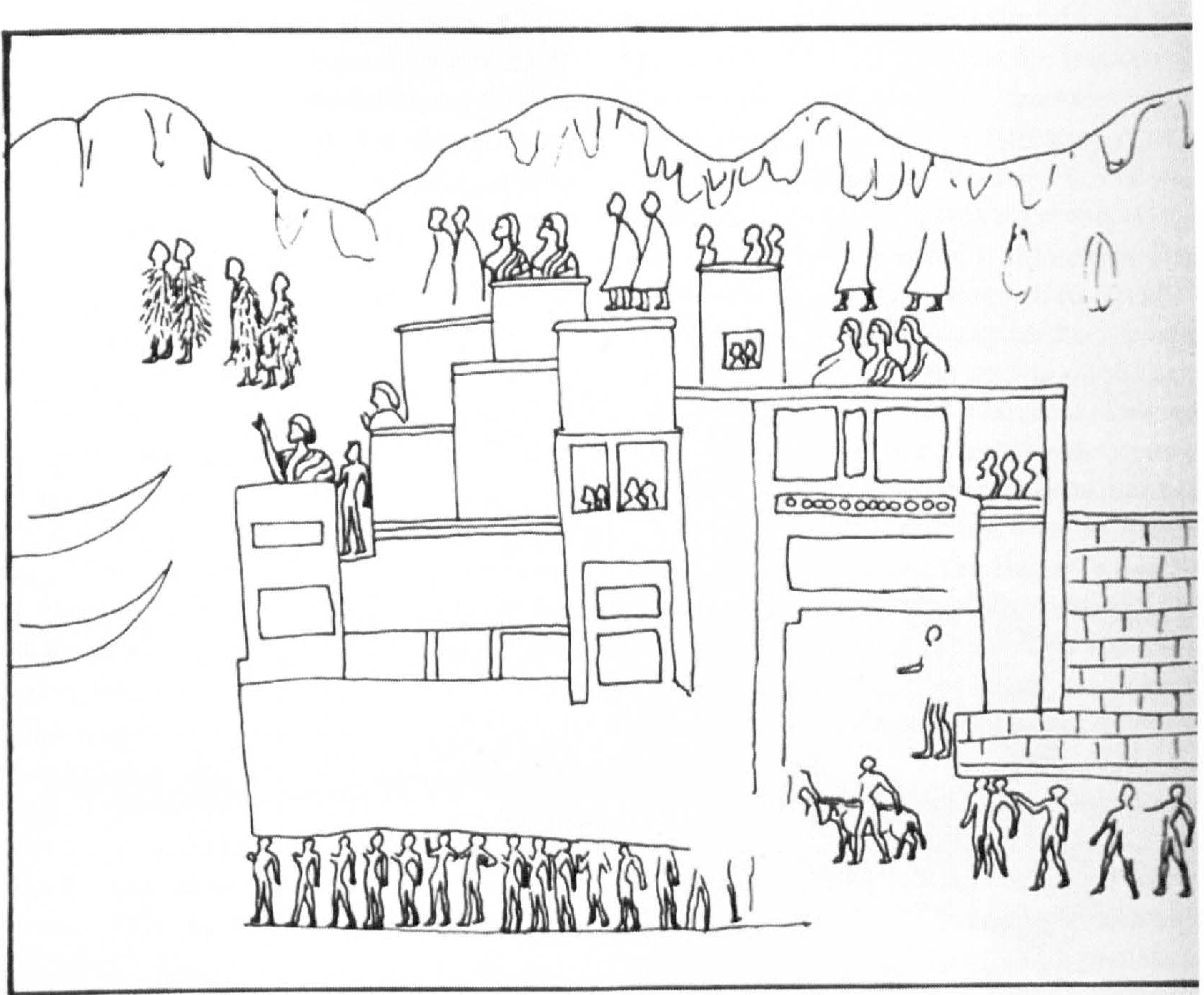
Figure 7:

Figure 8:

Figure 9:



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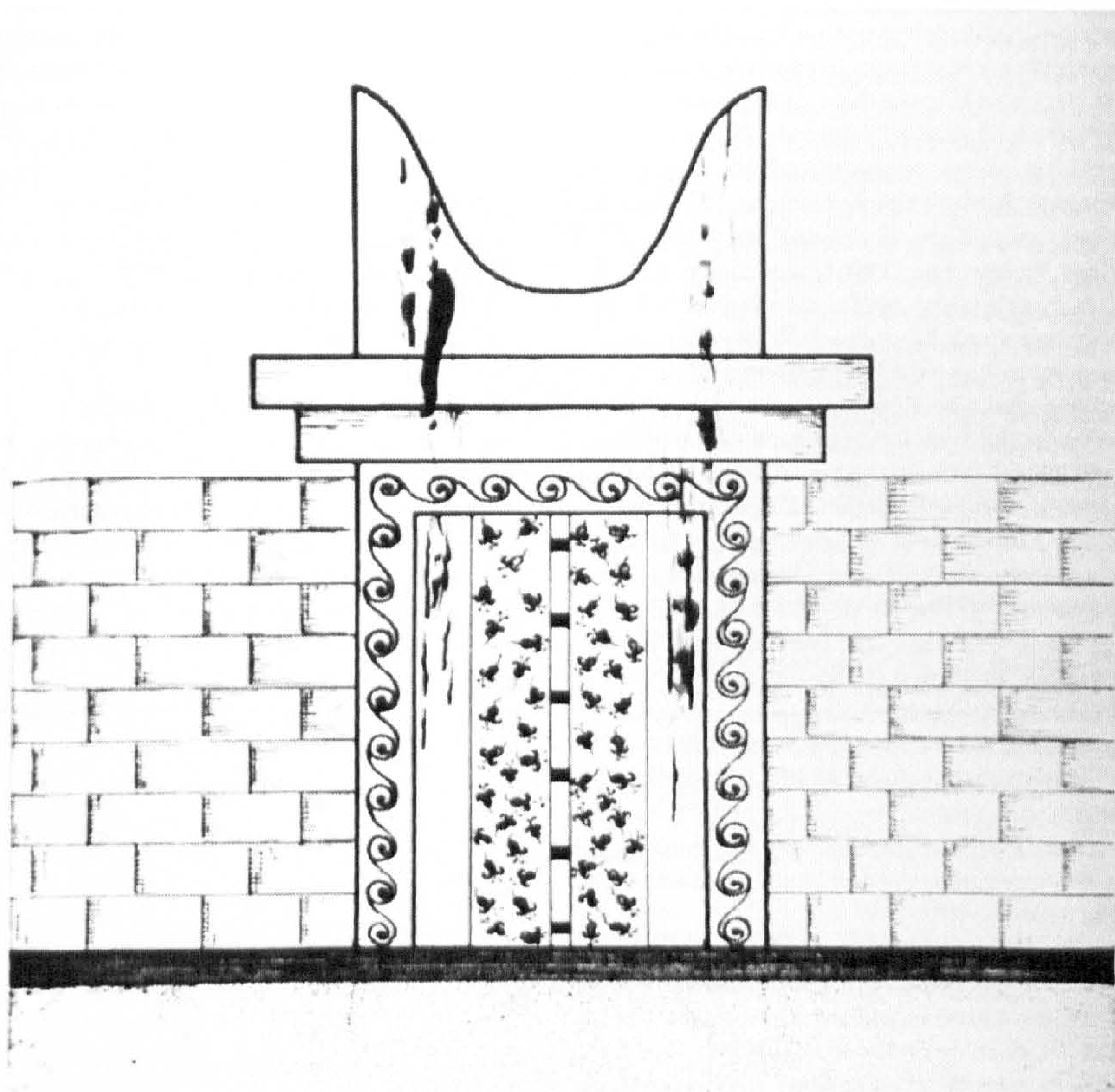

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Figure 13:

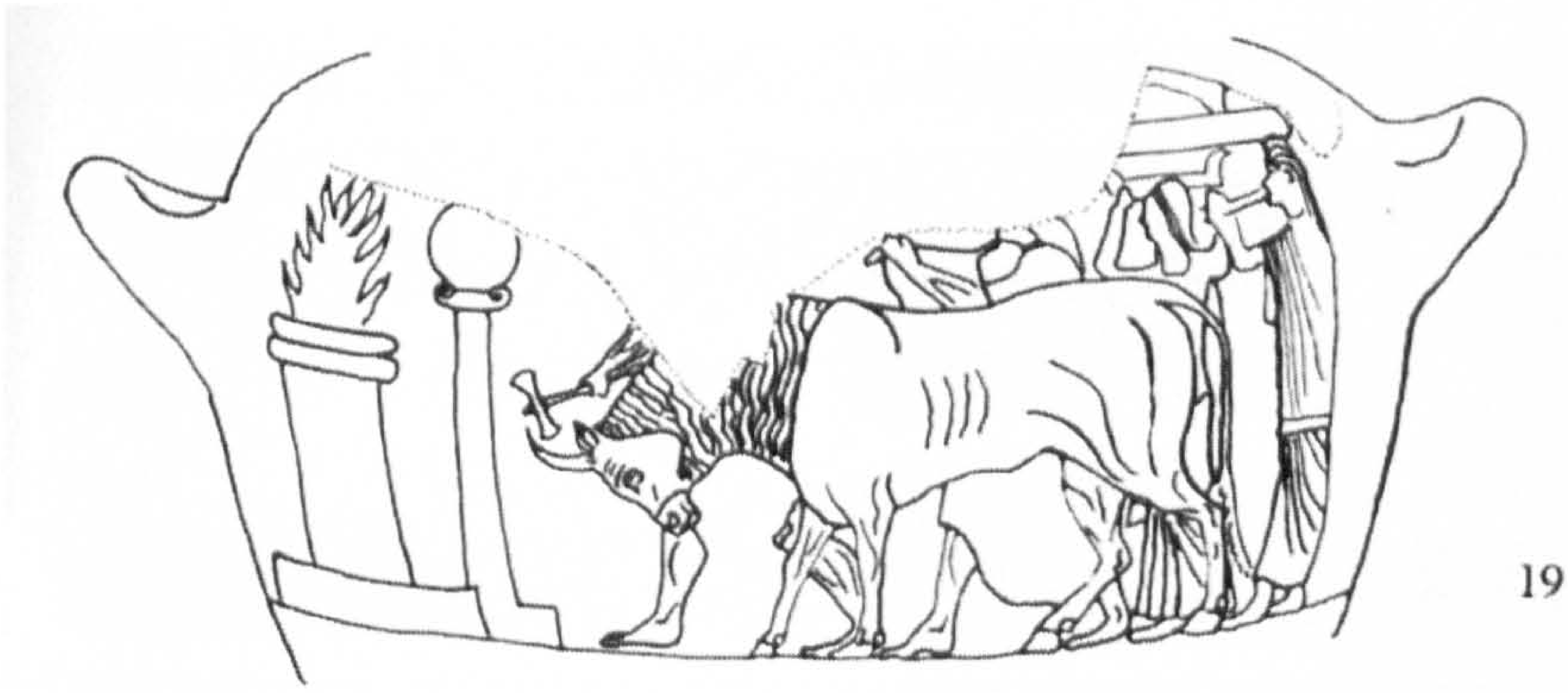
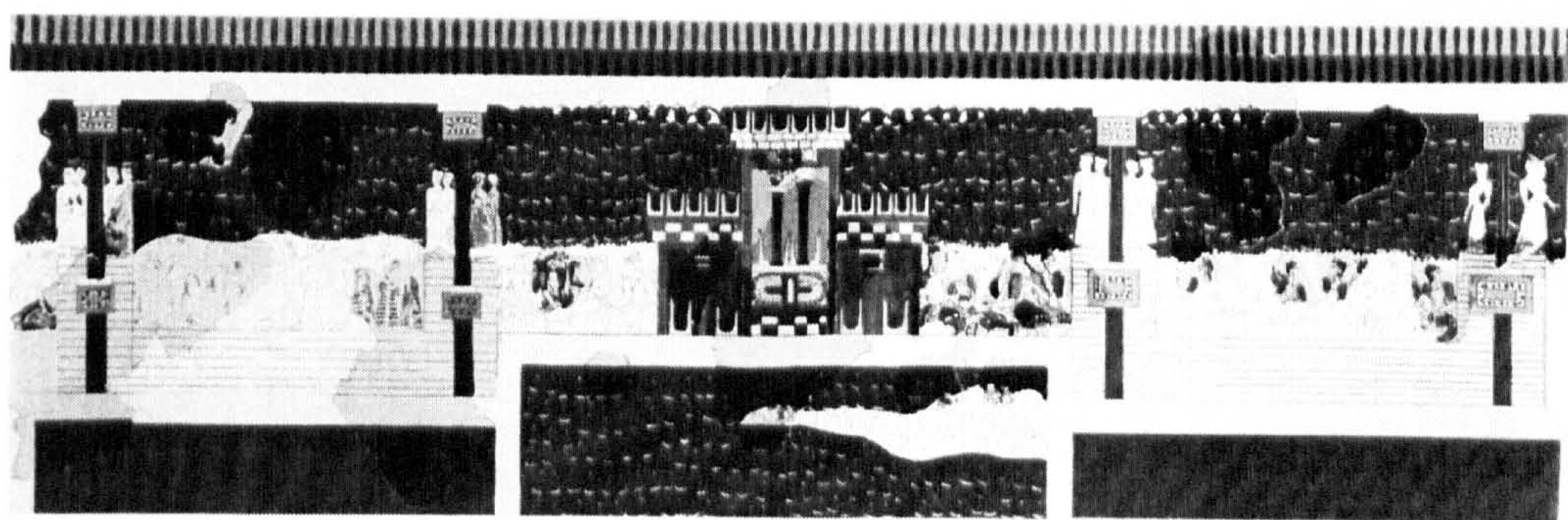


Figure 14:

Figure 15:

Figure 16:



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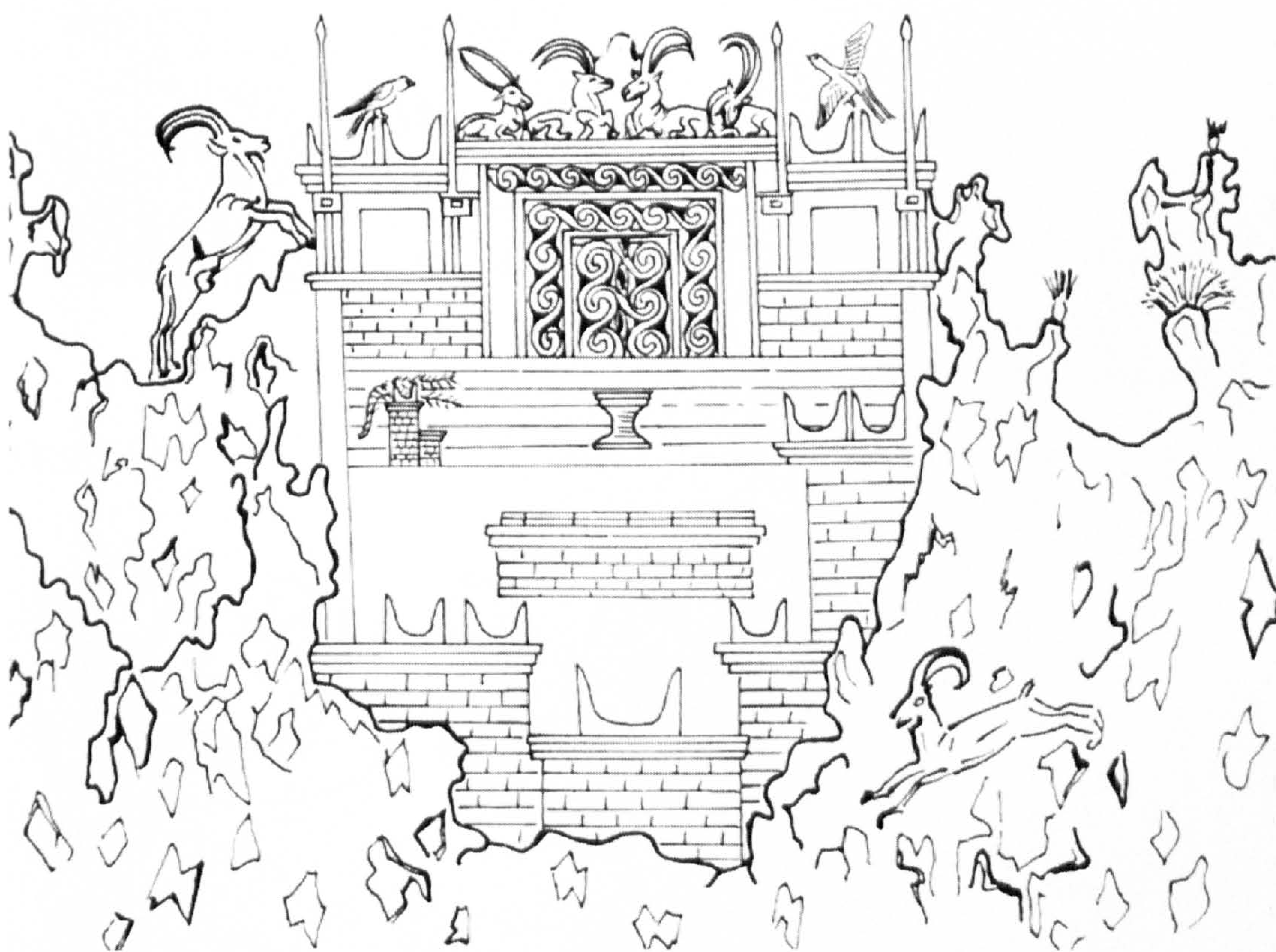

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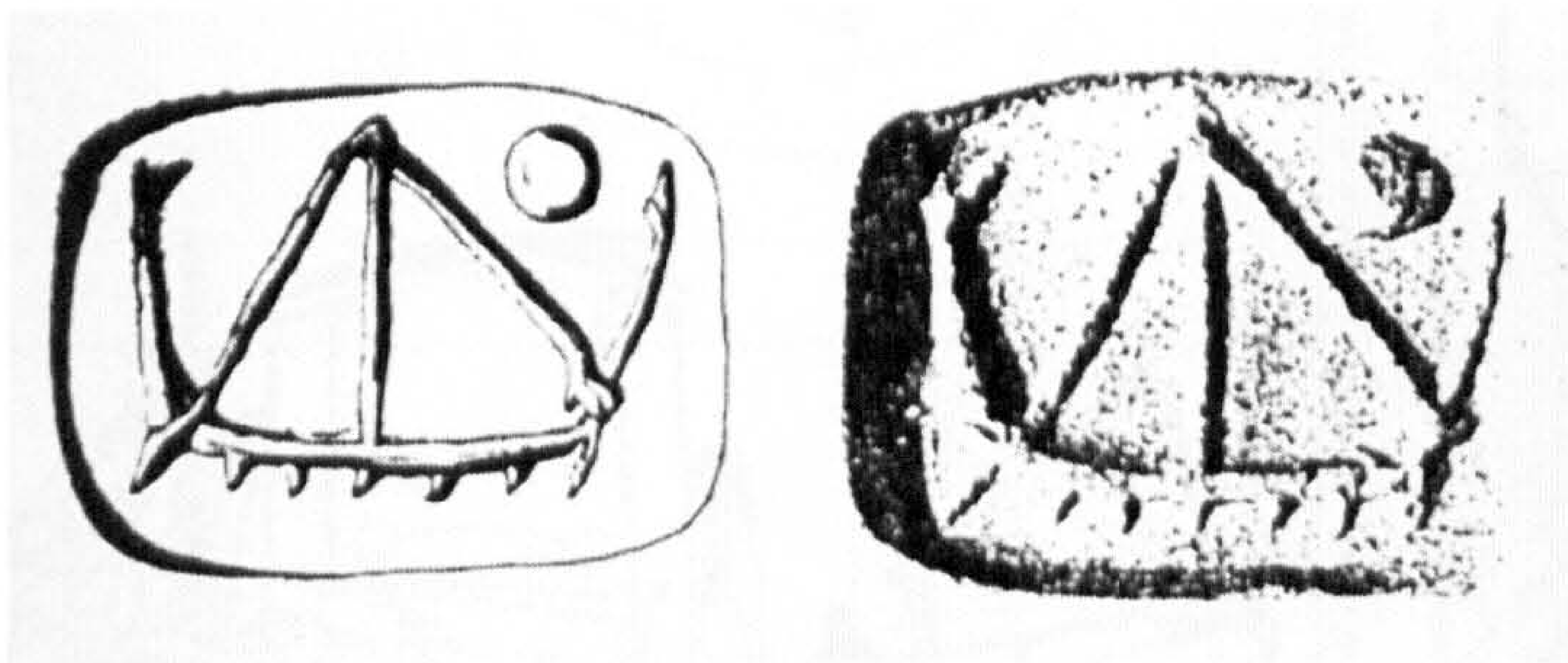

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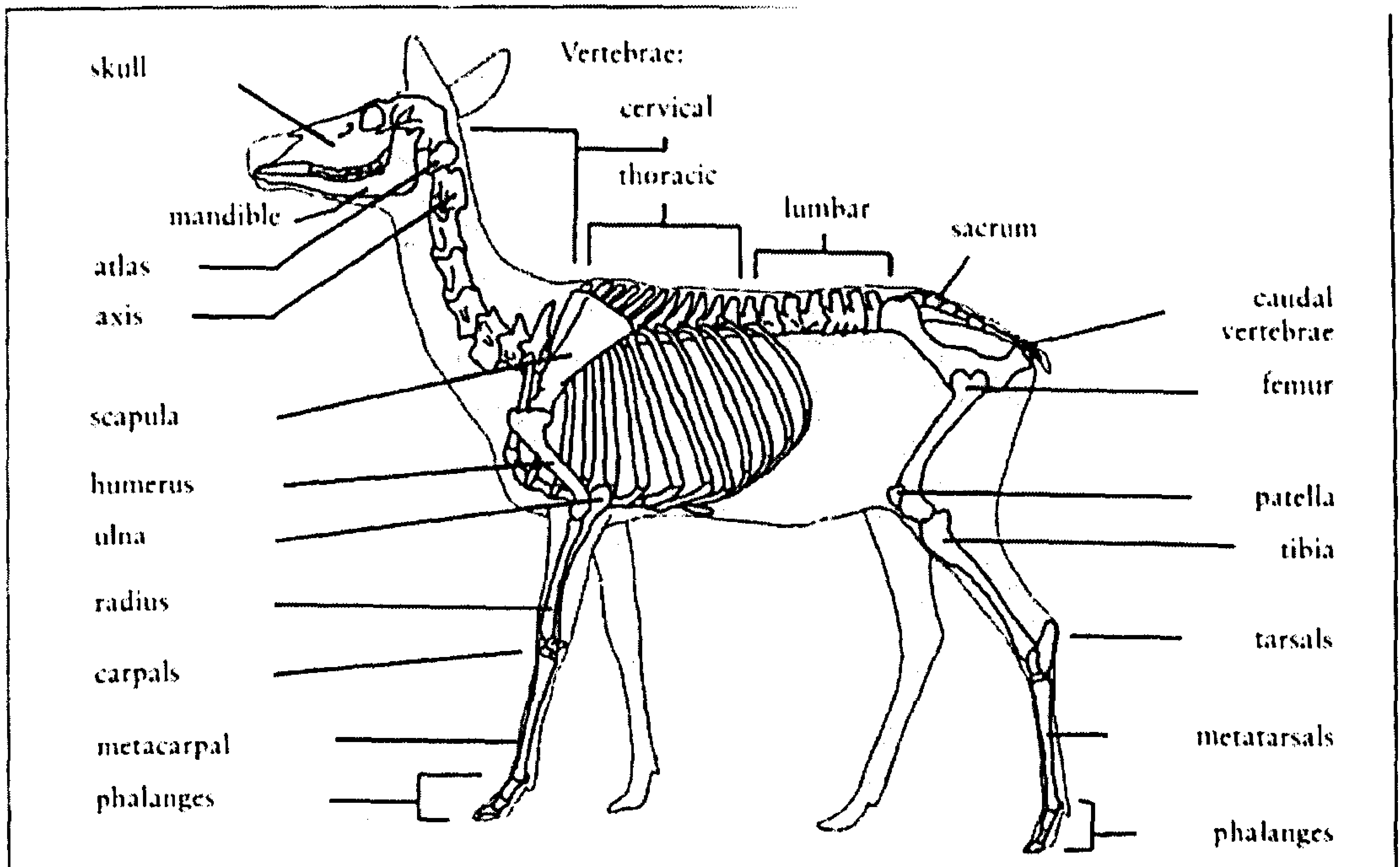
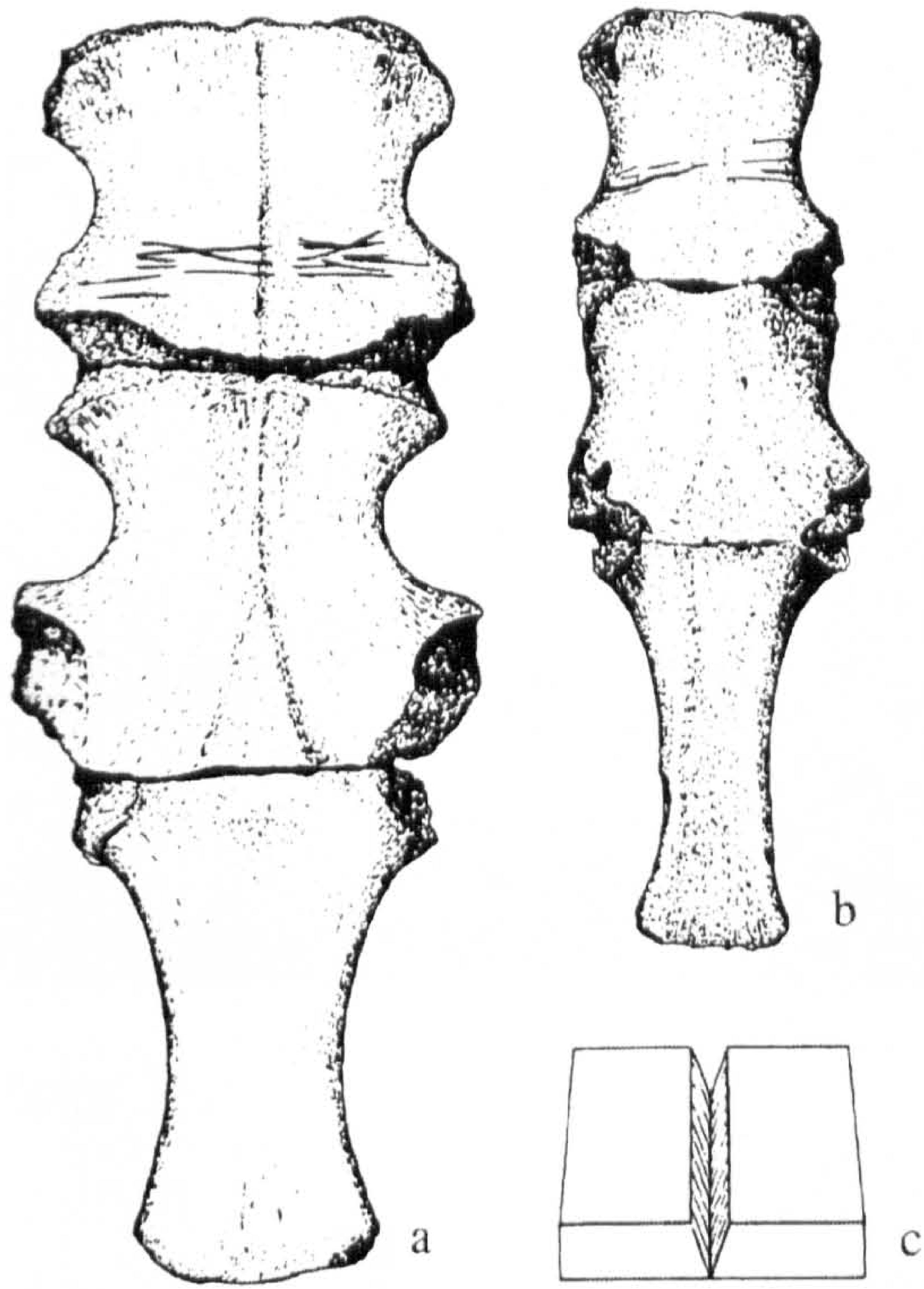


Figure 21:

Figure 22:



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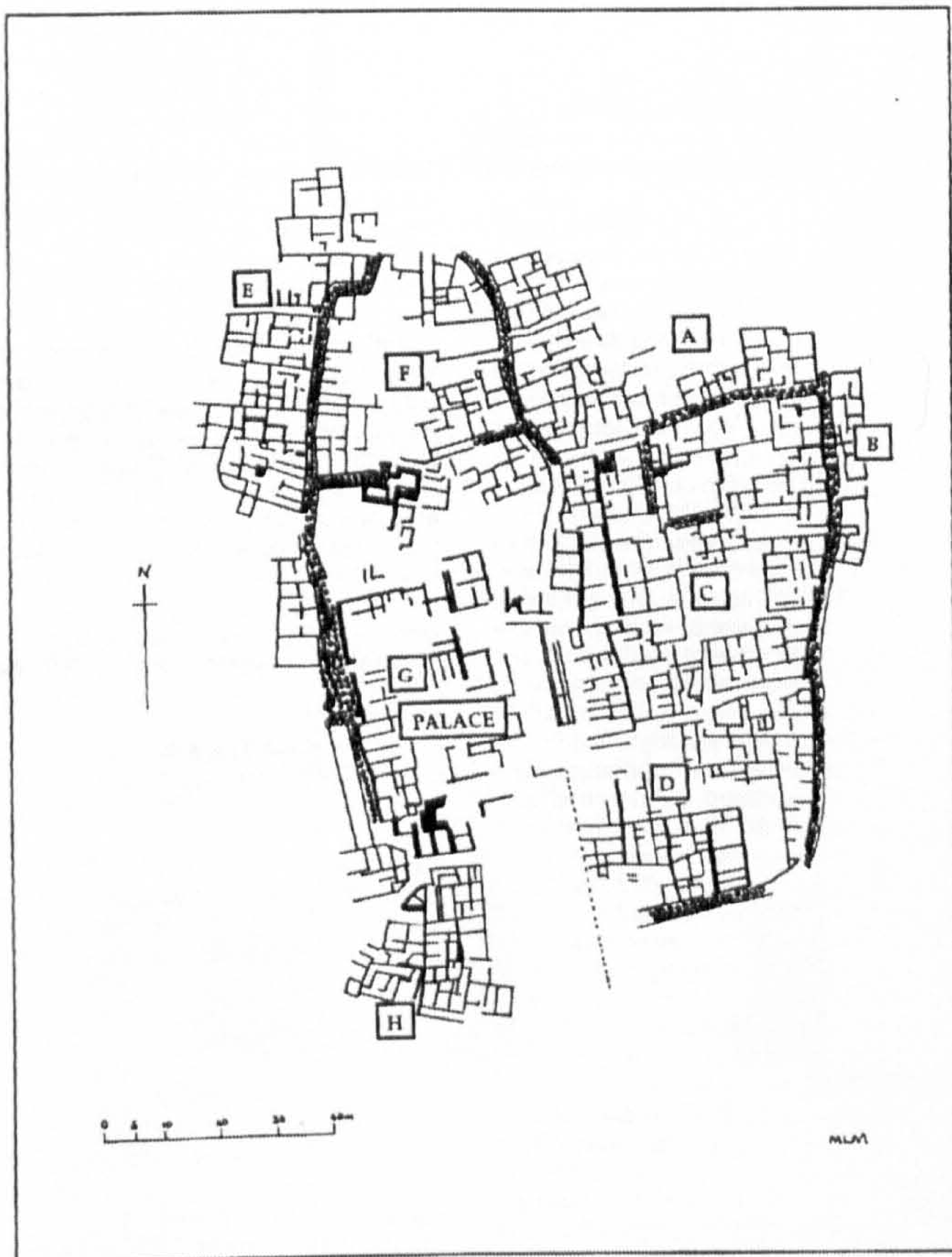

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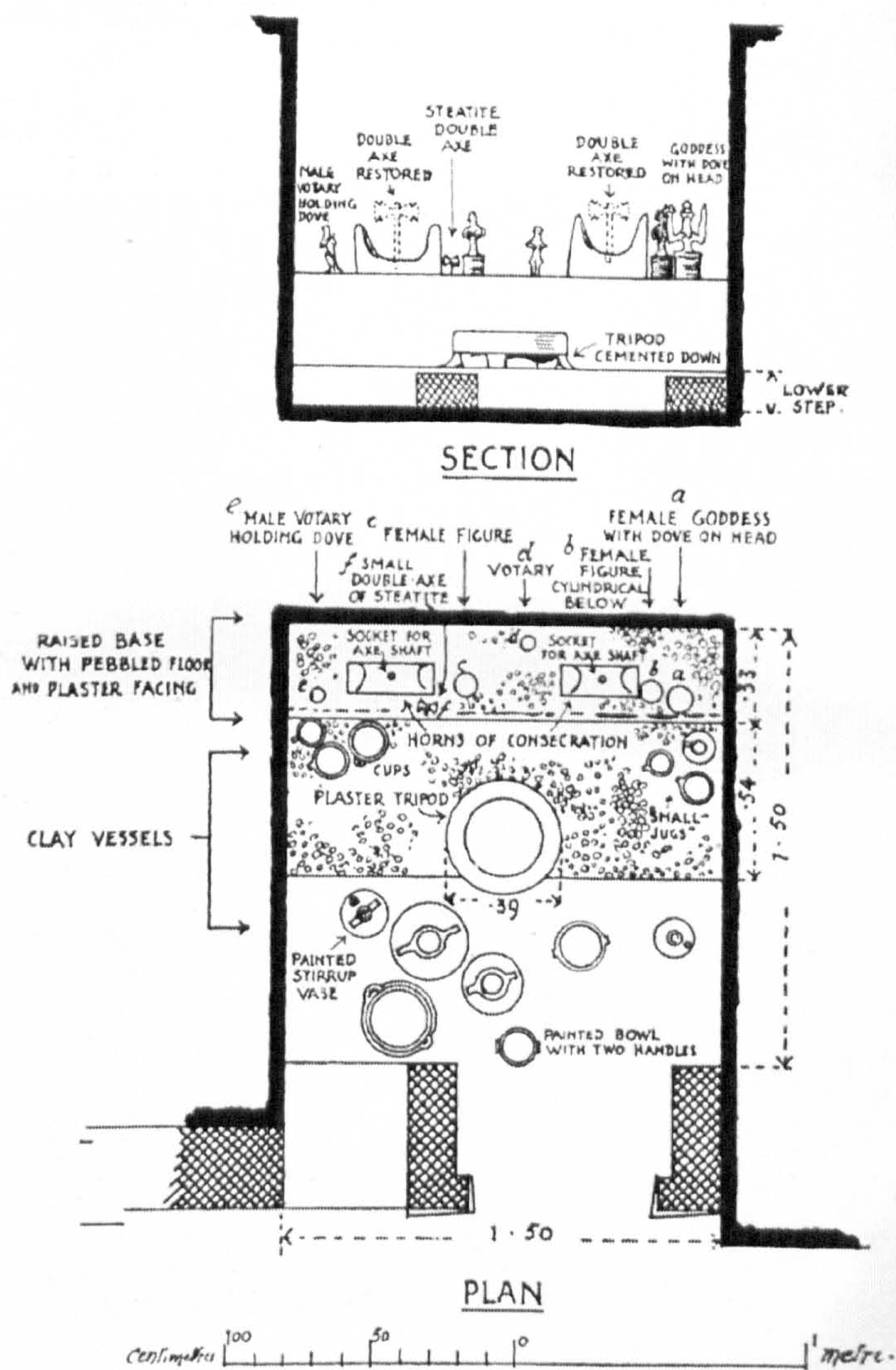

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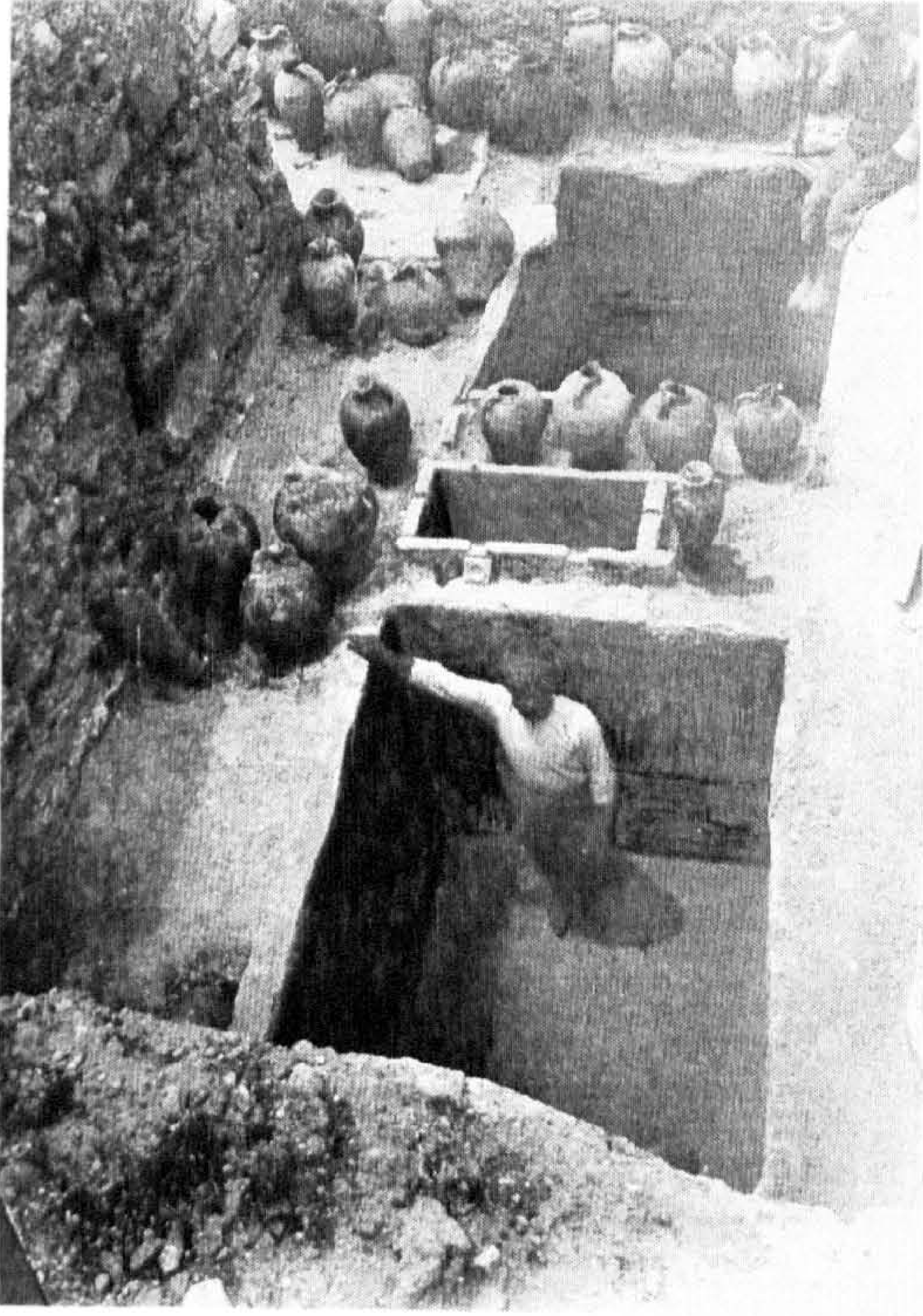

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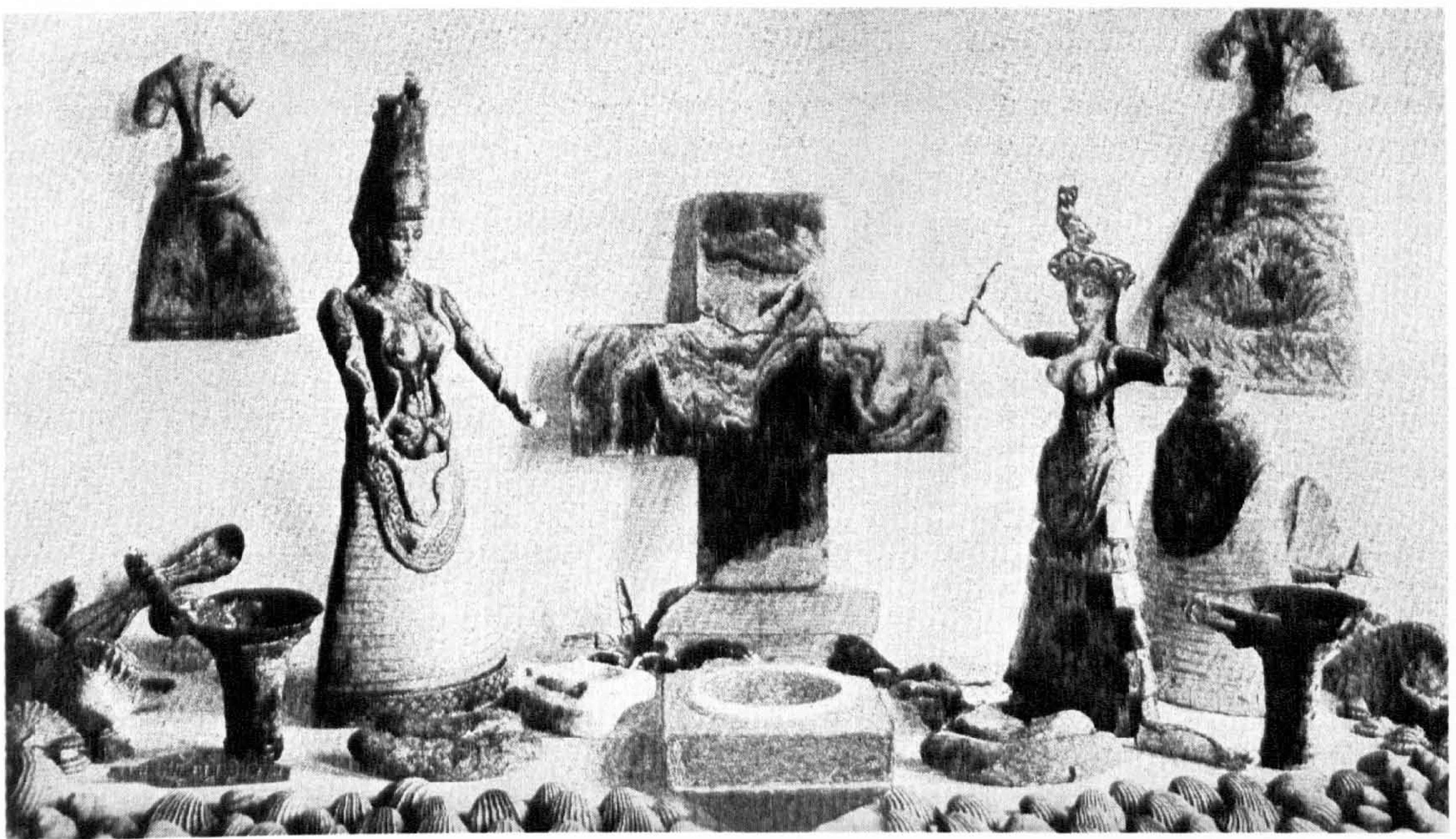

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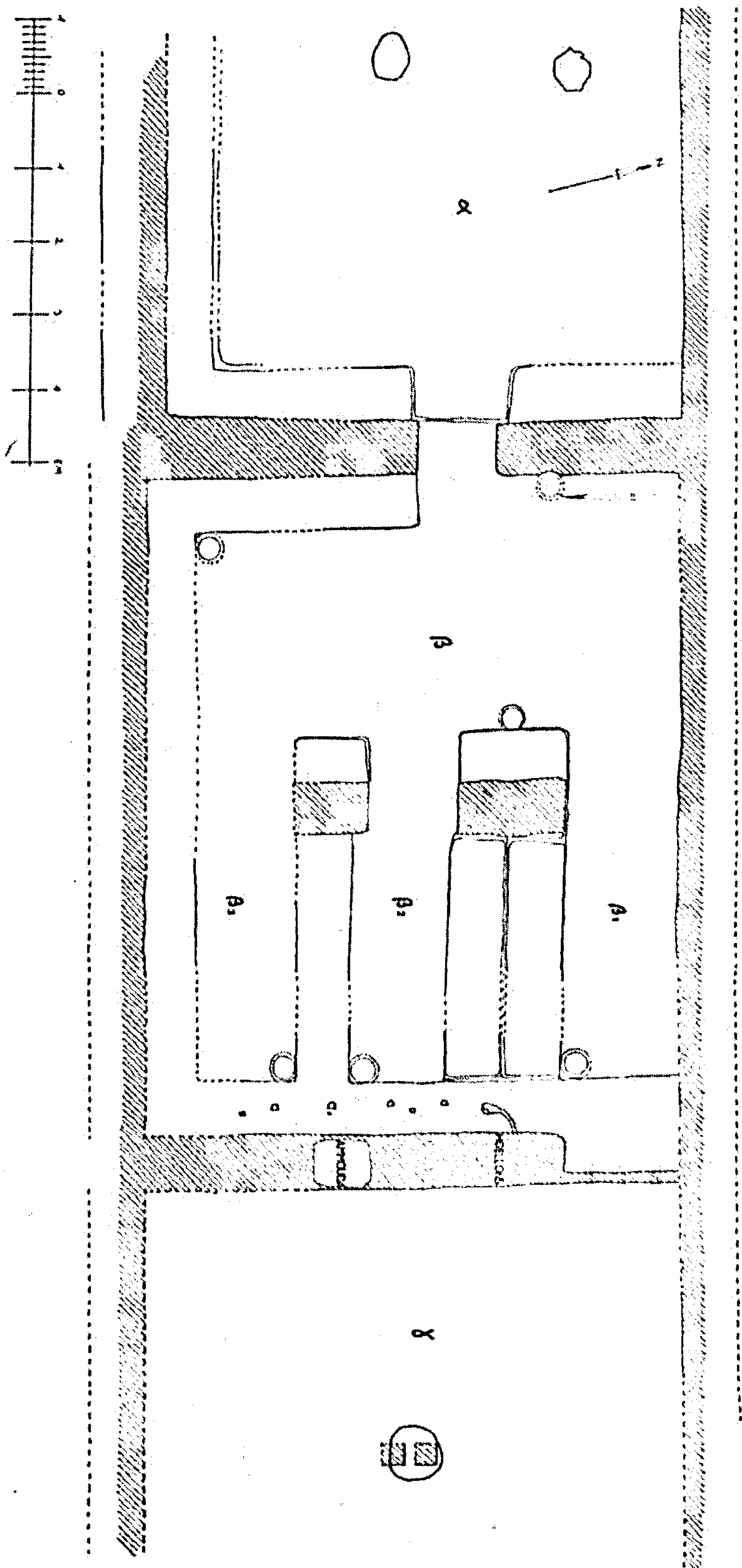

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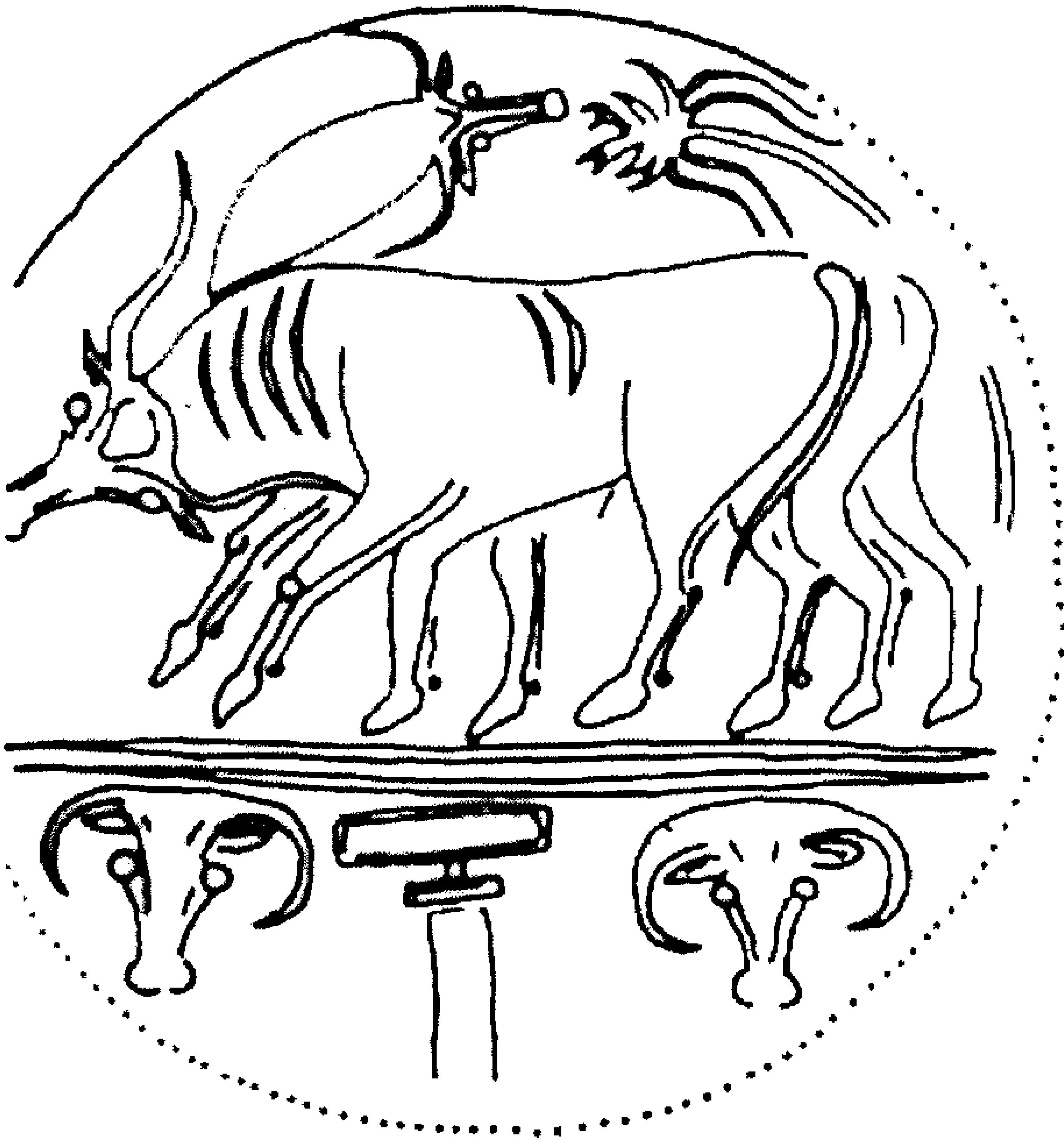

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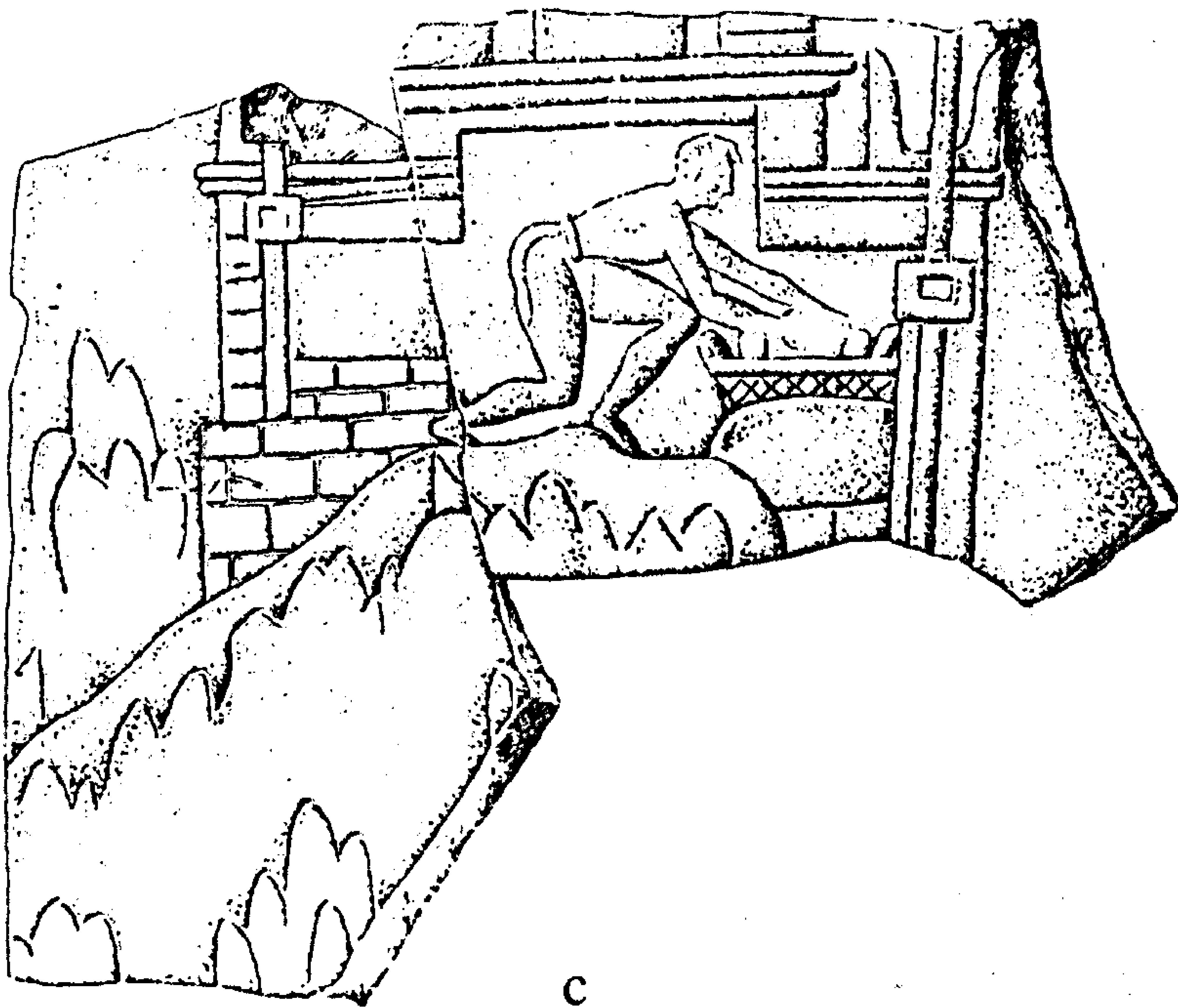

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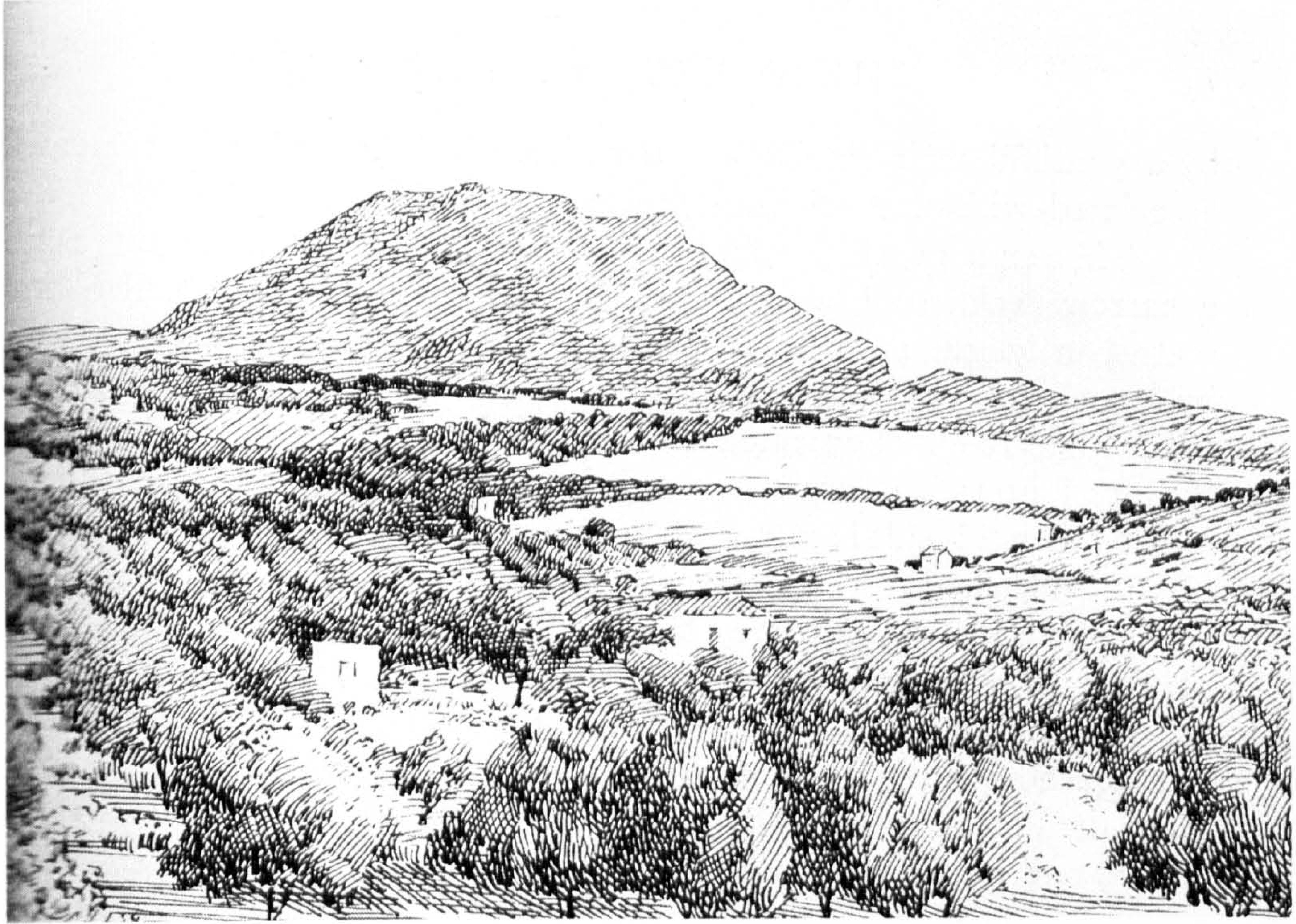

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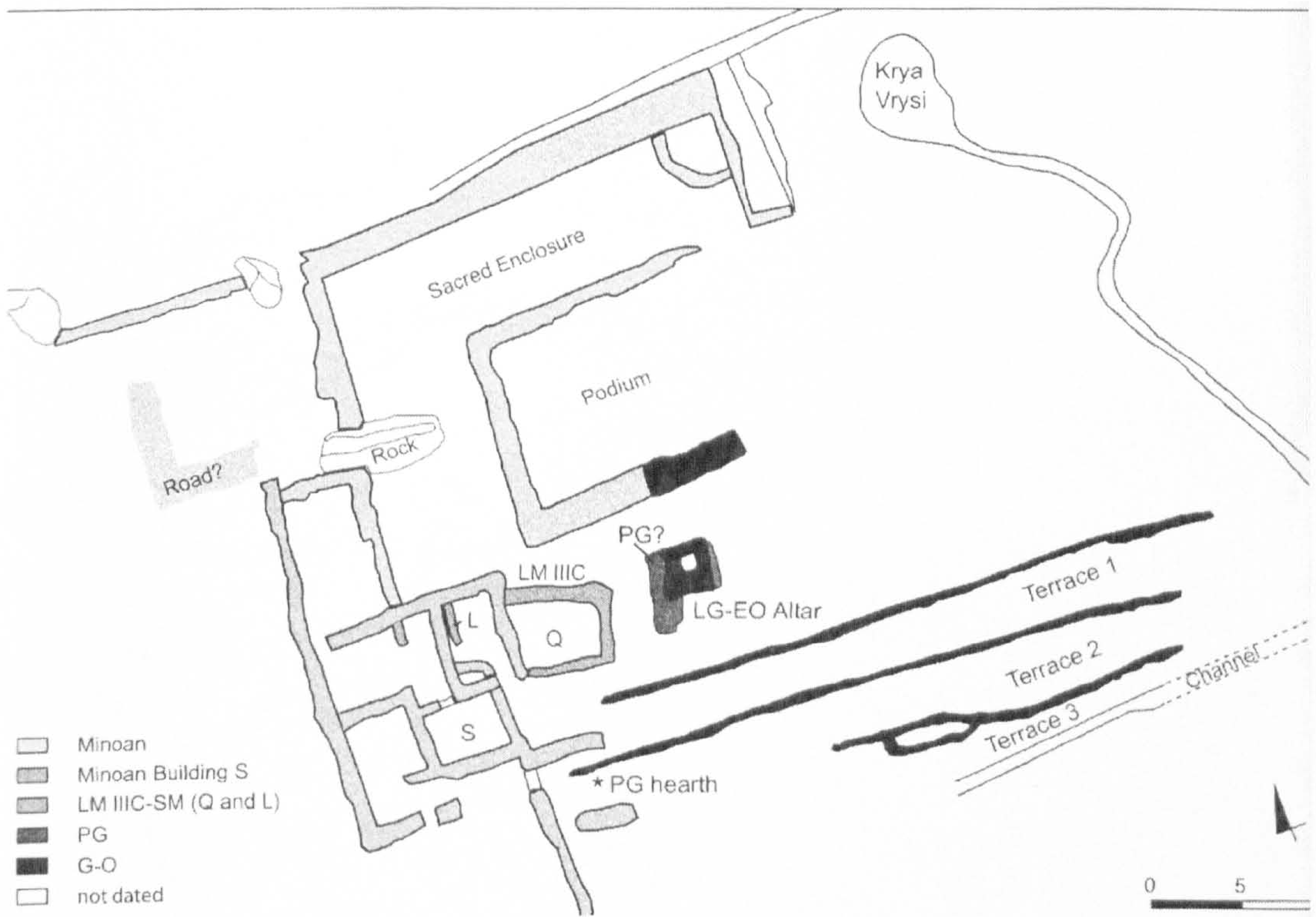
Figure 35:

Figure 36: (Scale 1cm: 46m)



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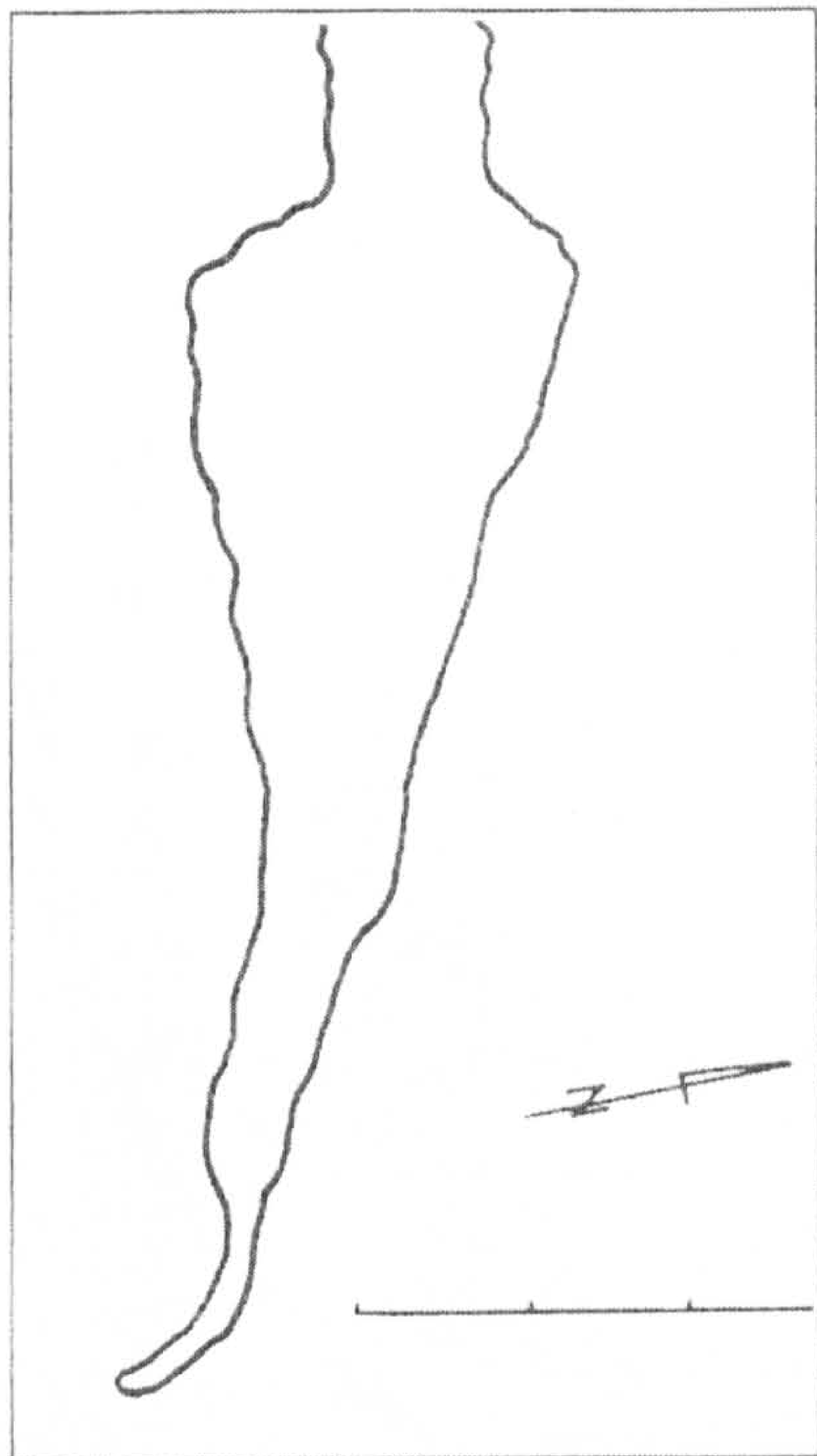

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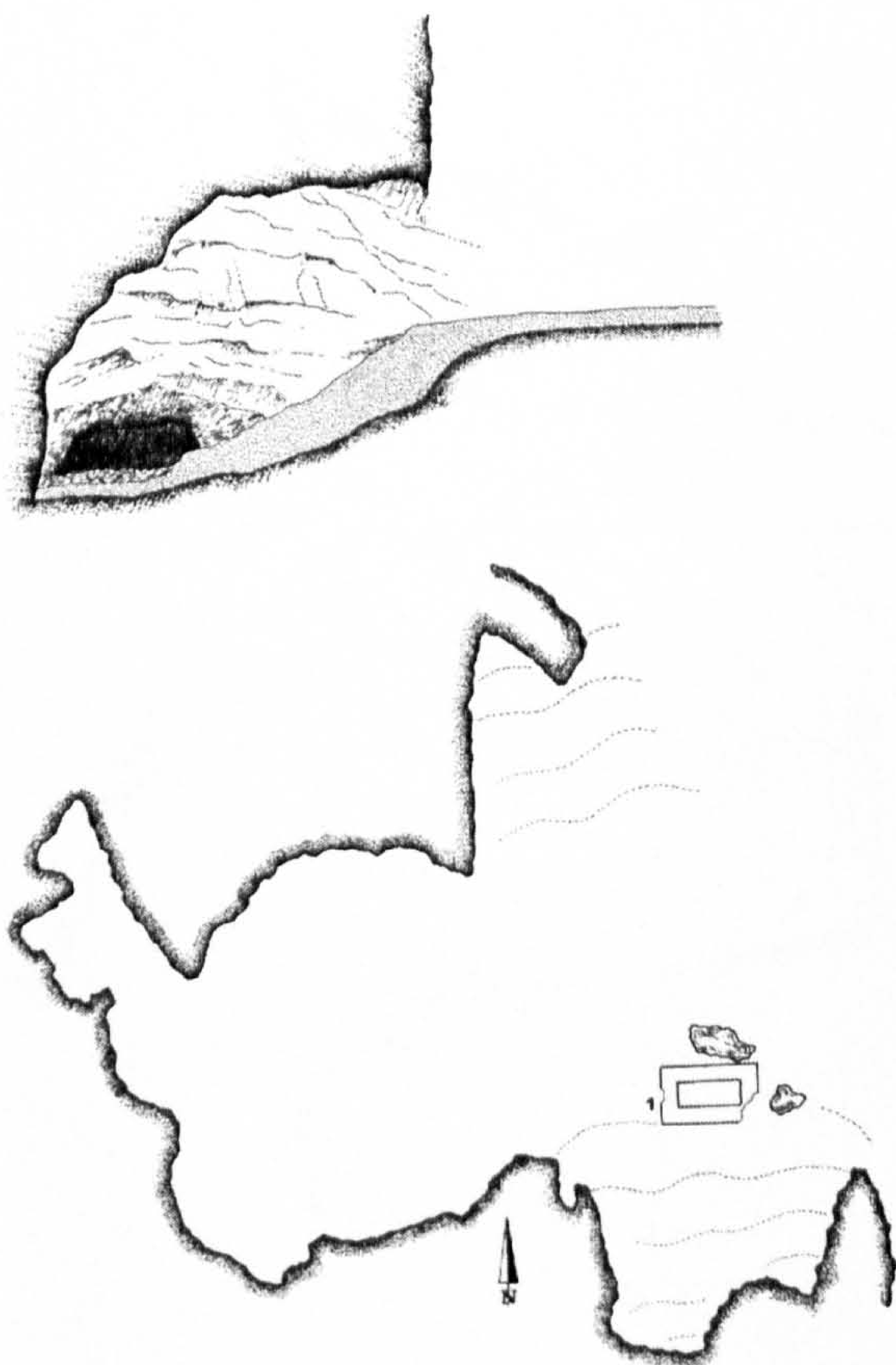

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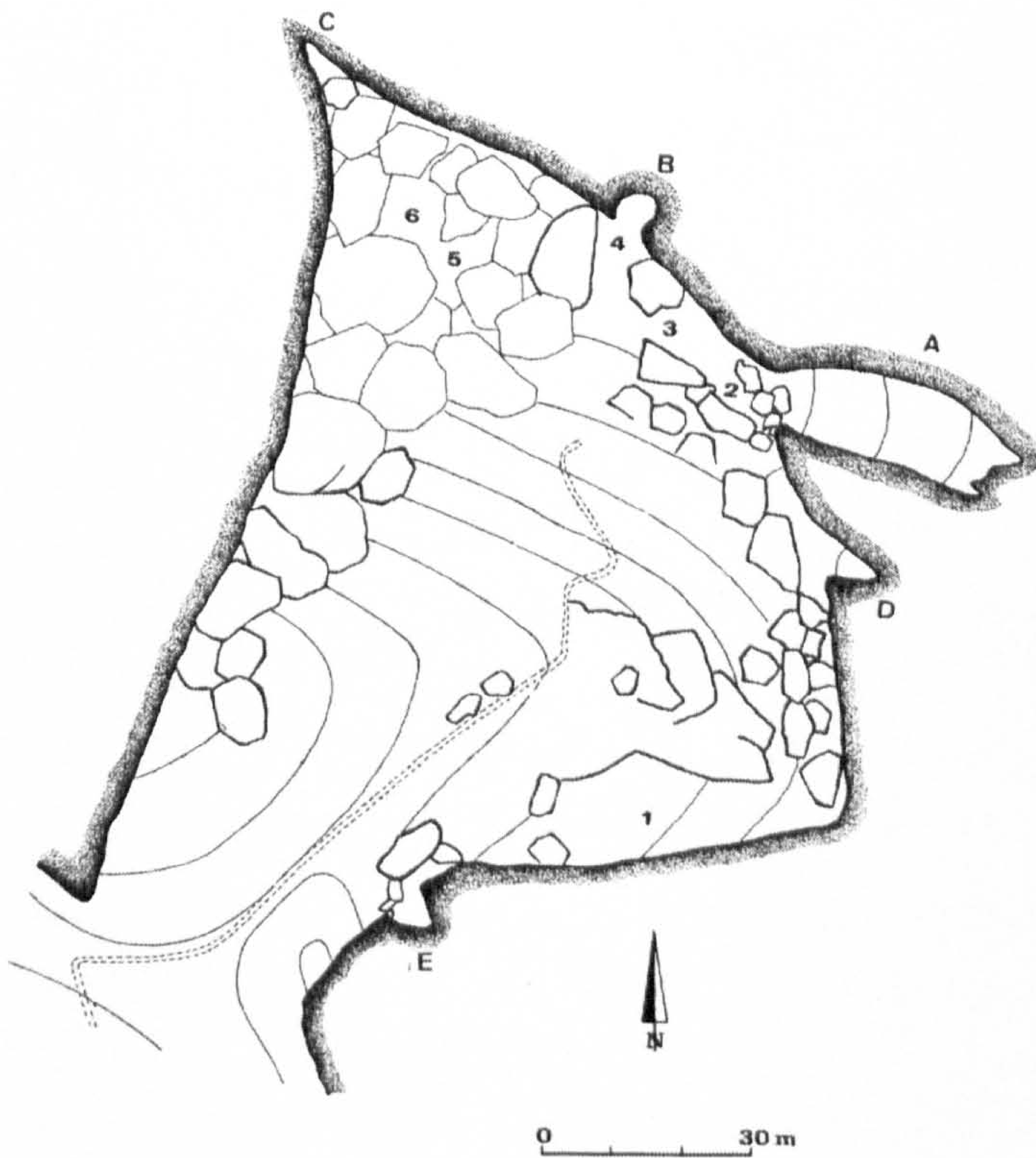

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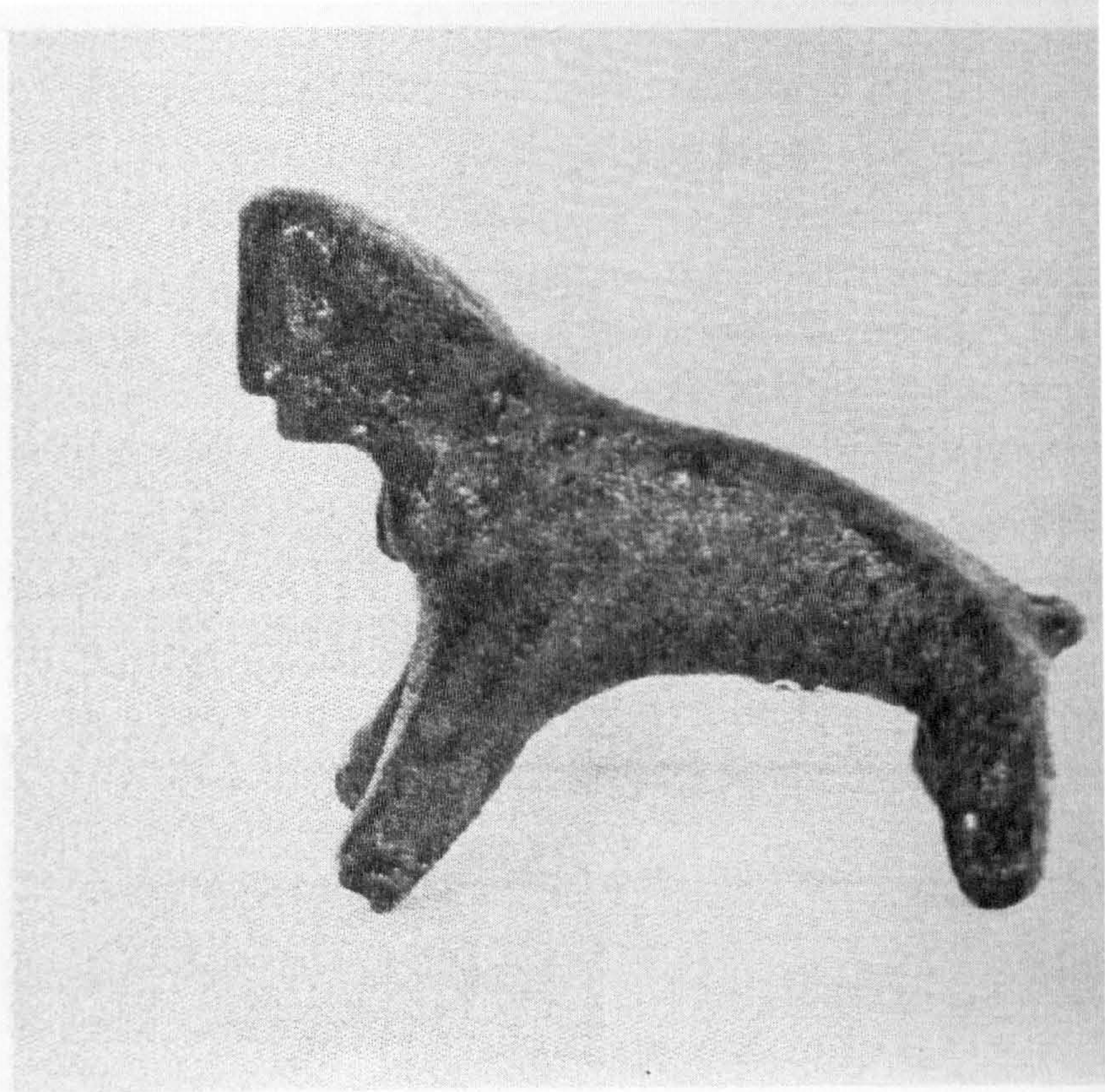

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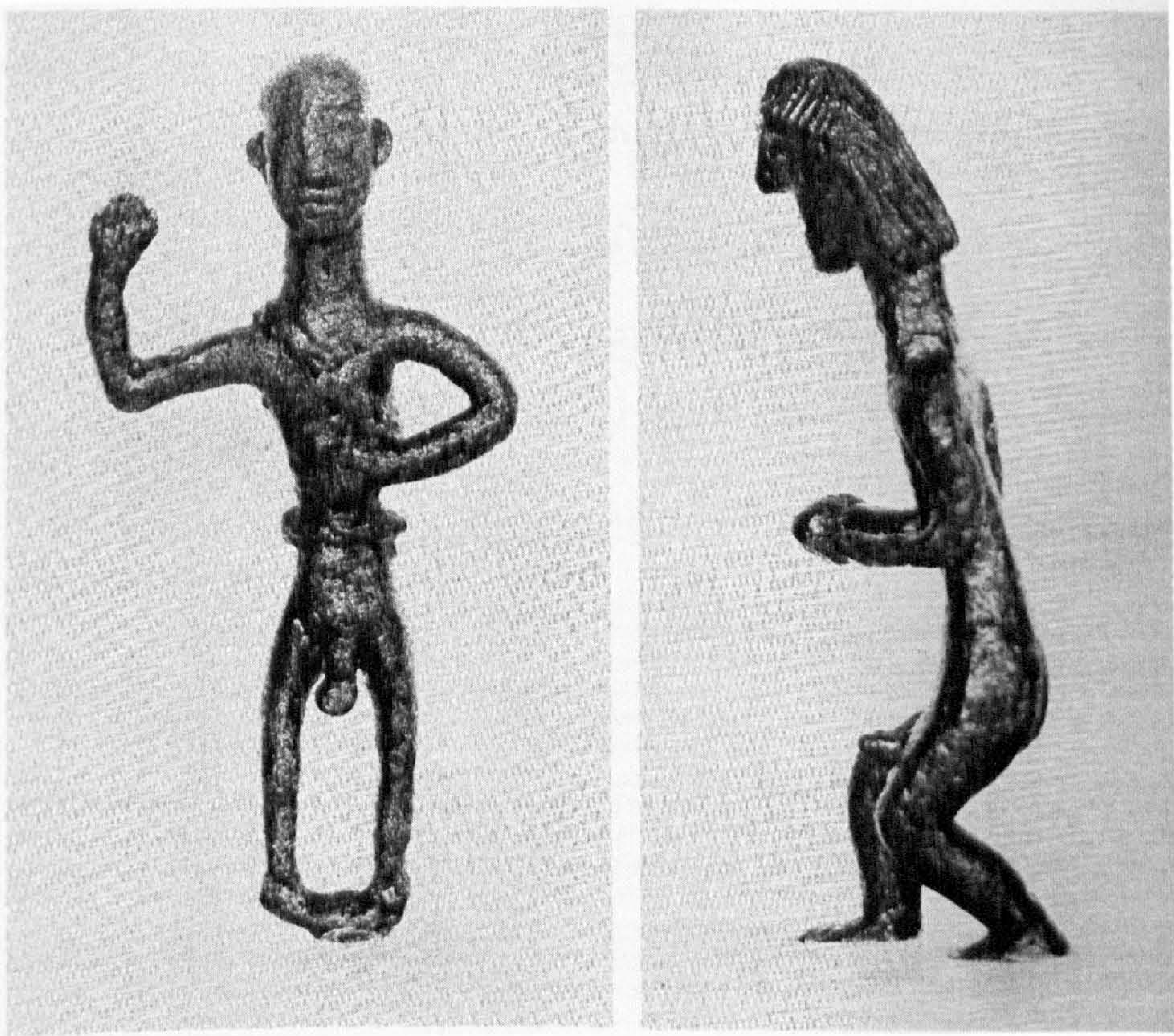

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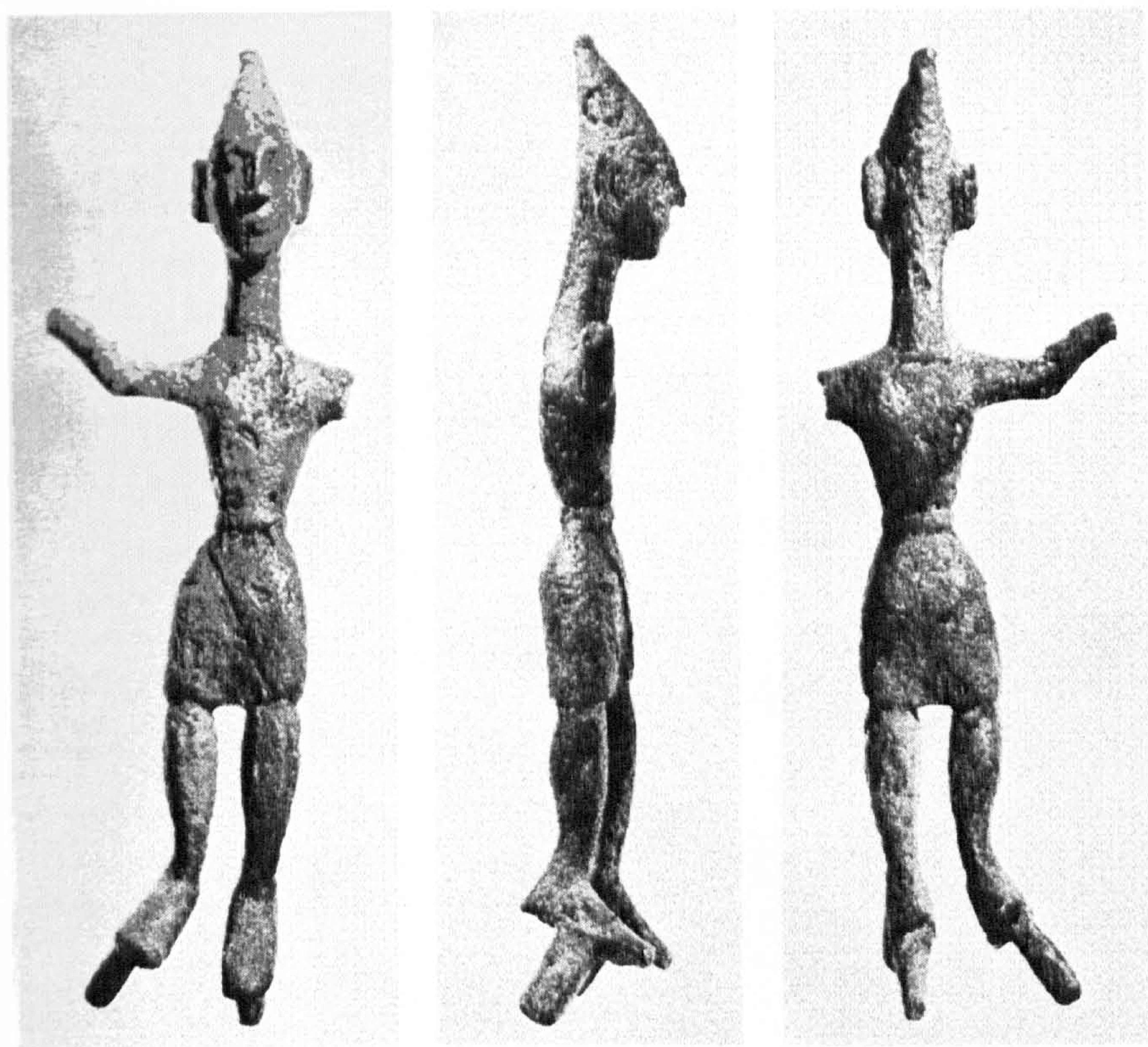

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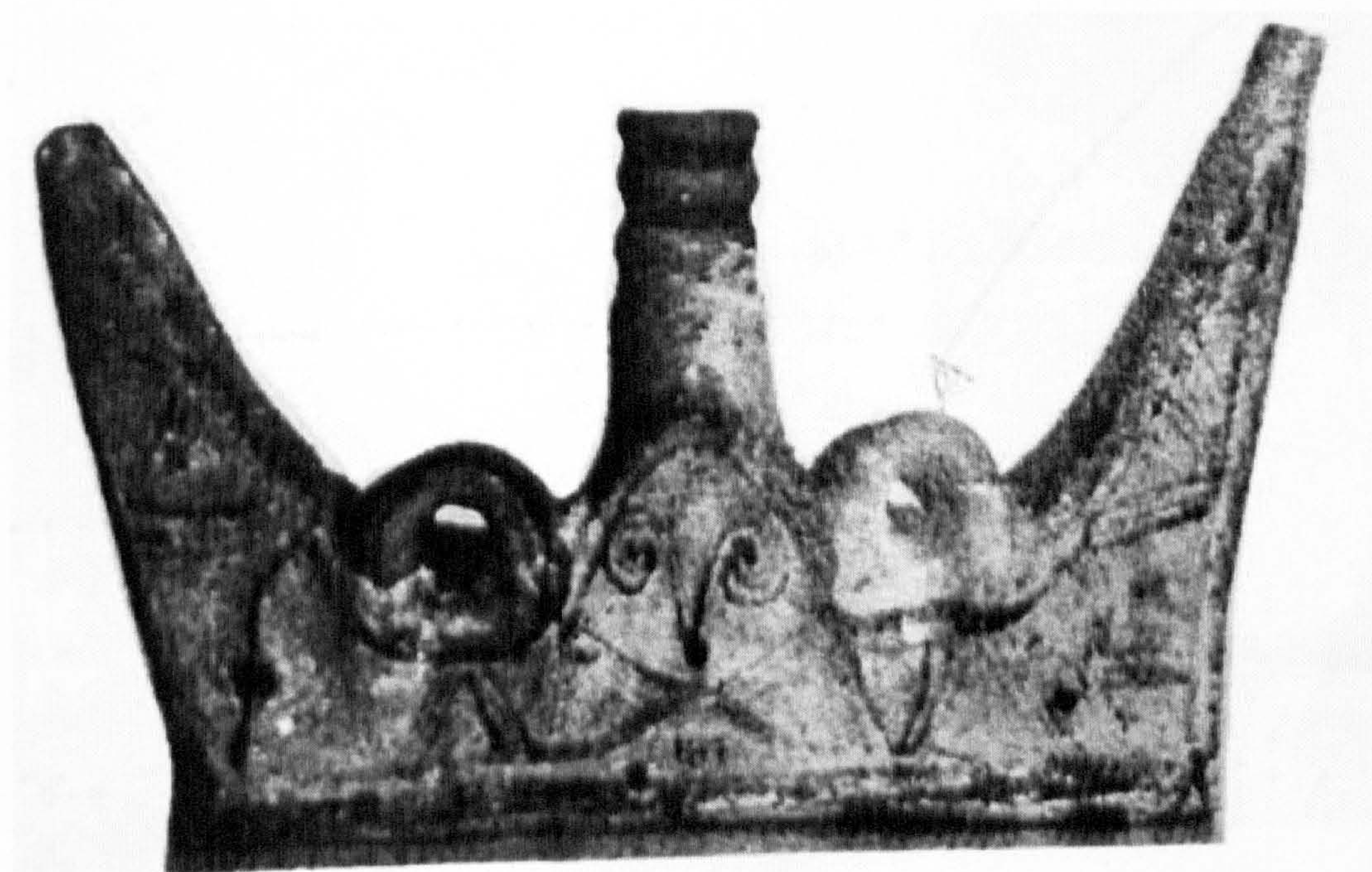

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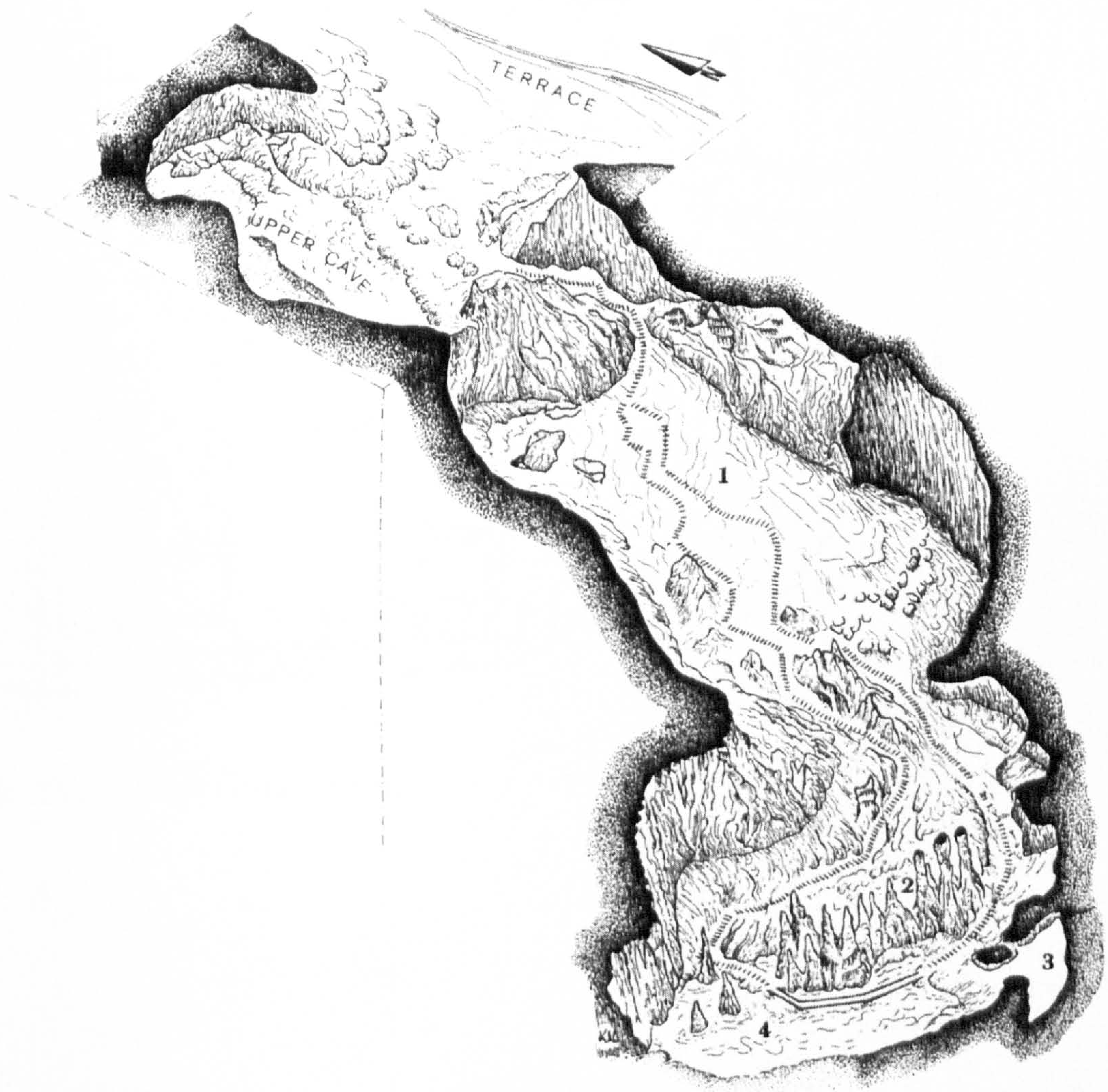

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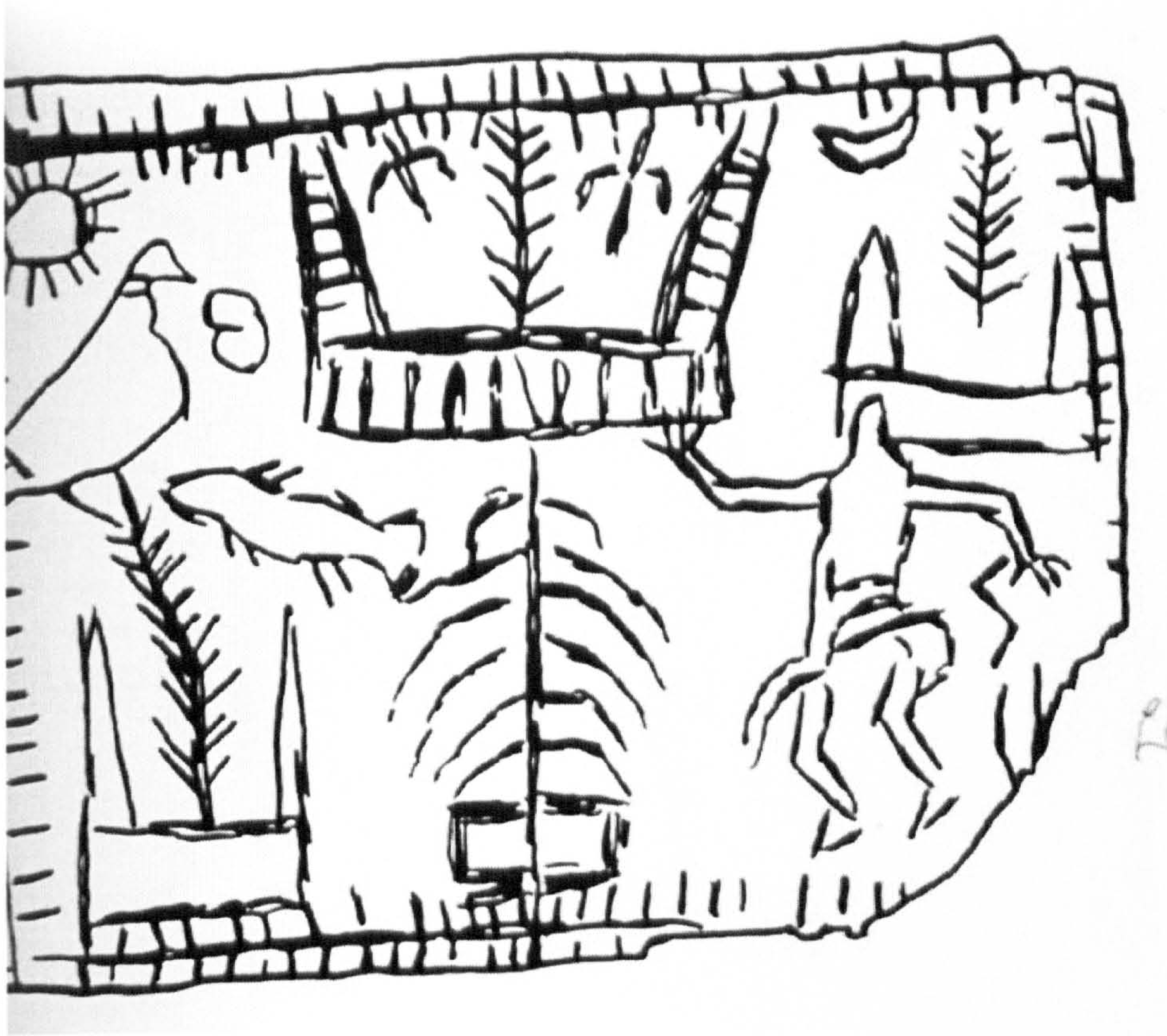

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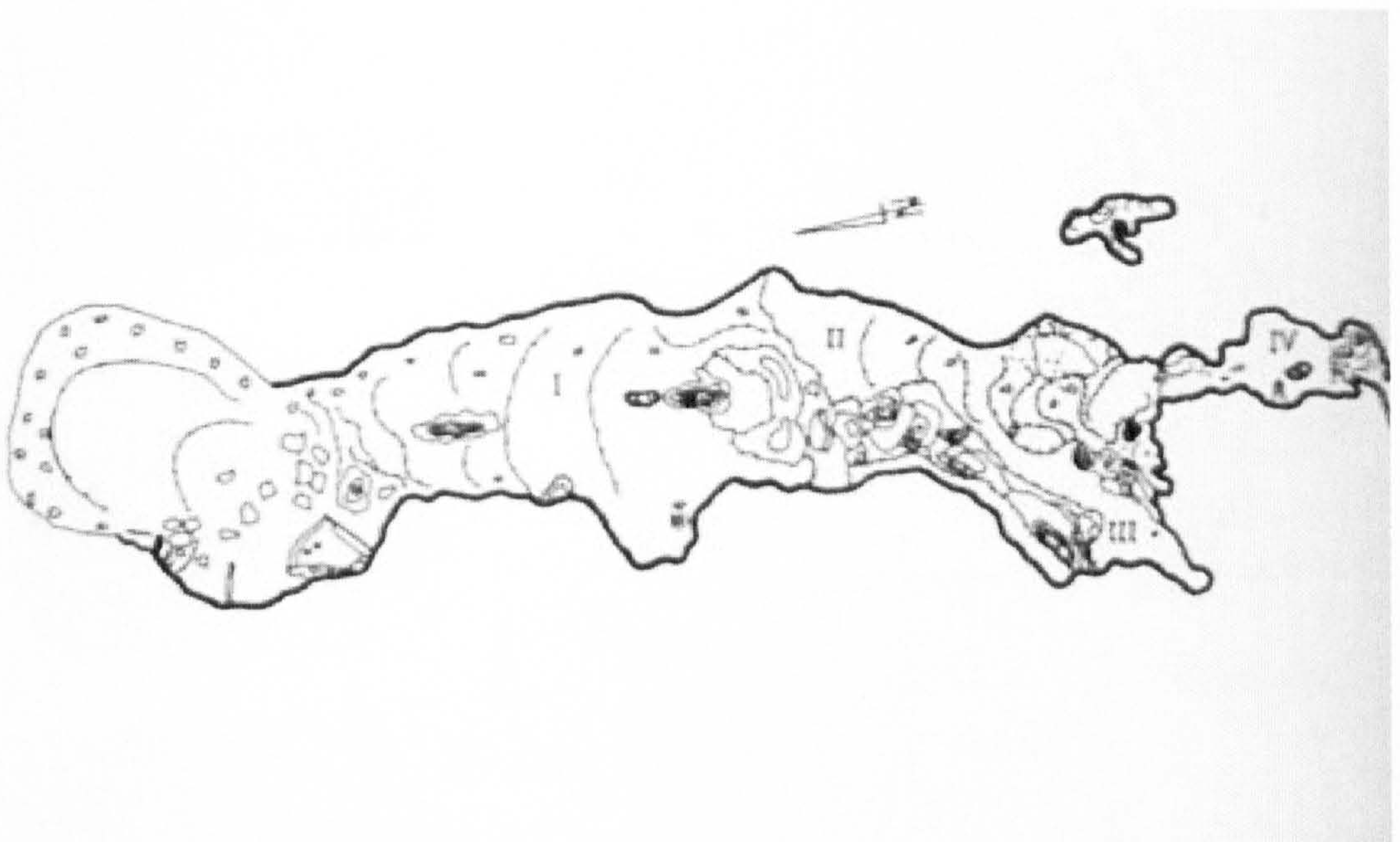

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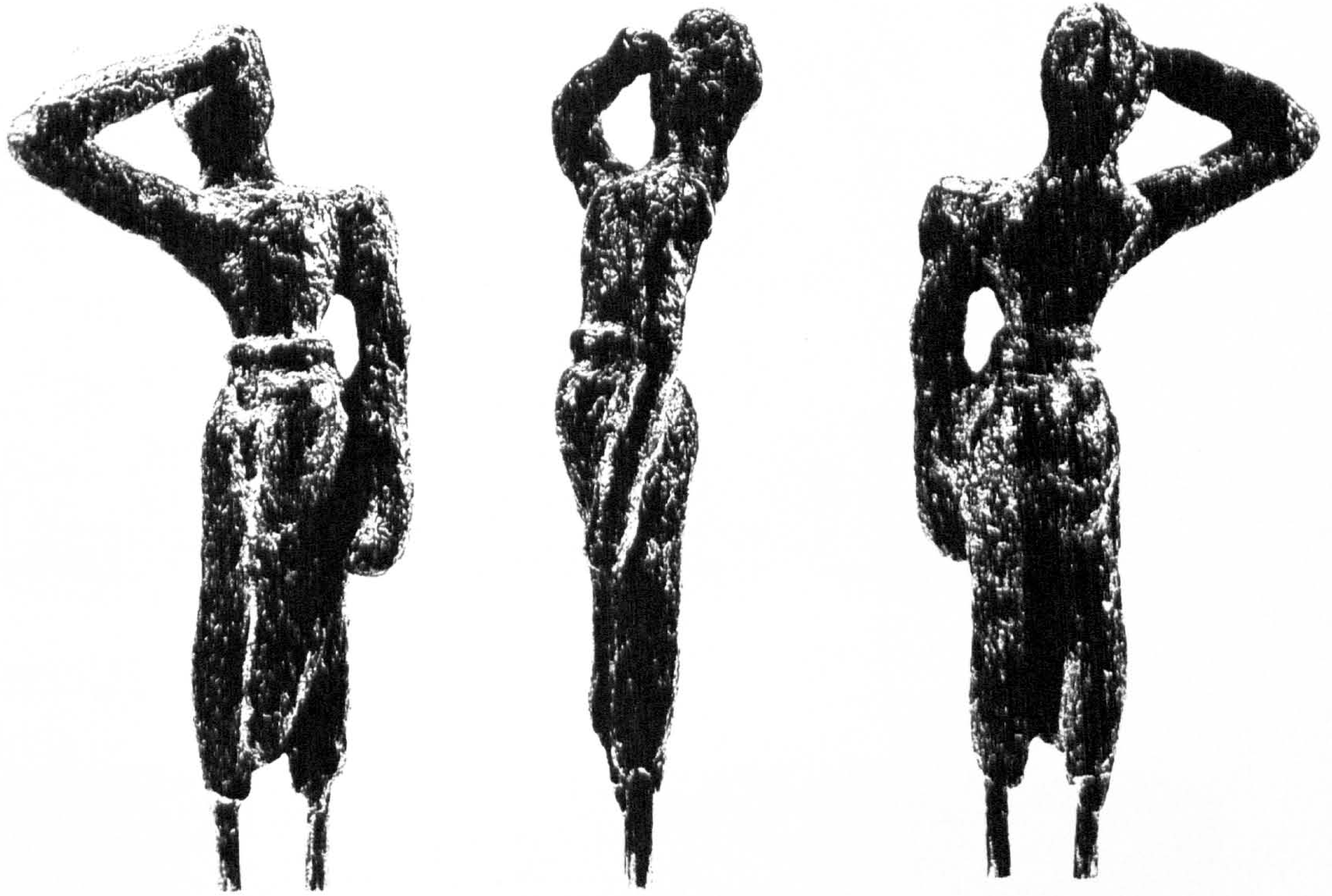

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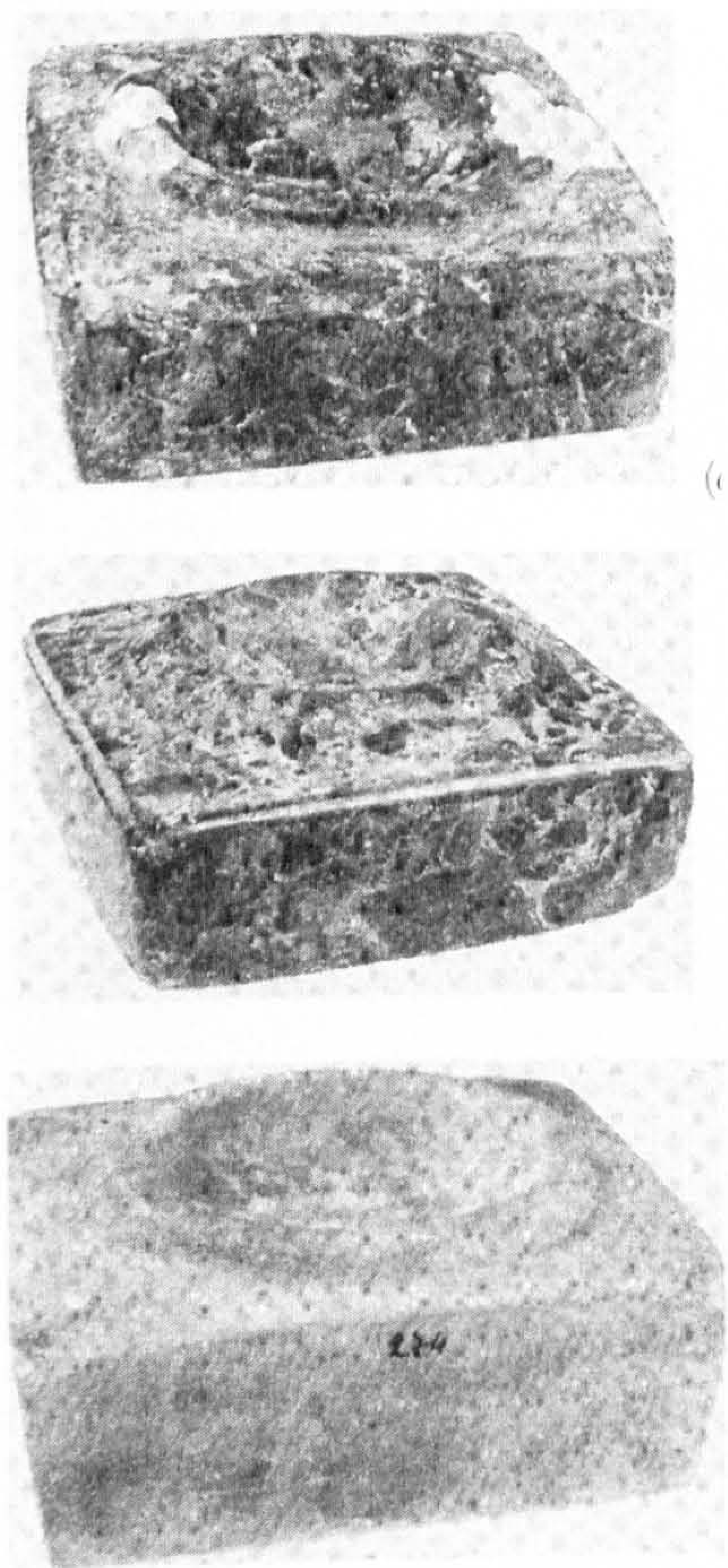

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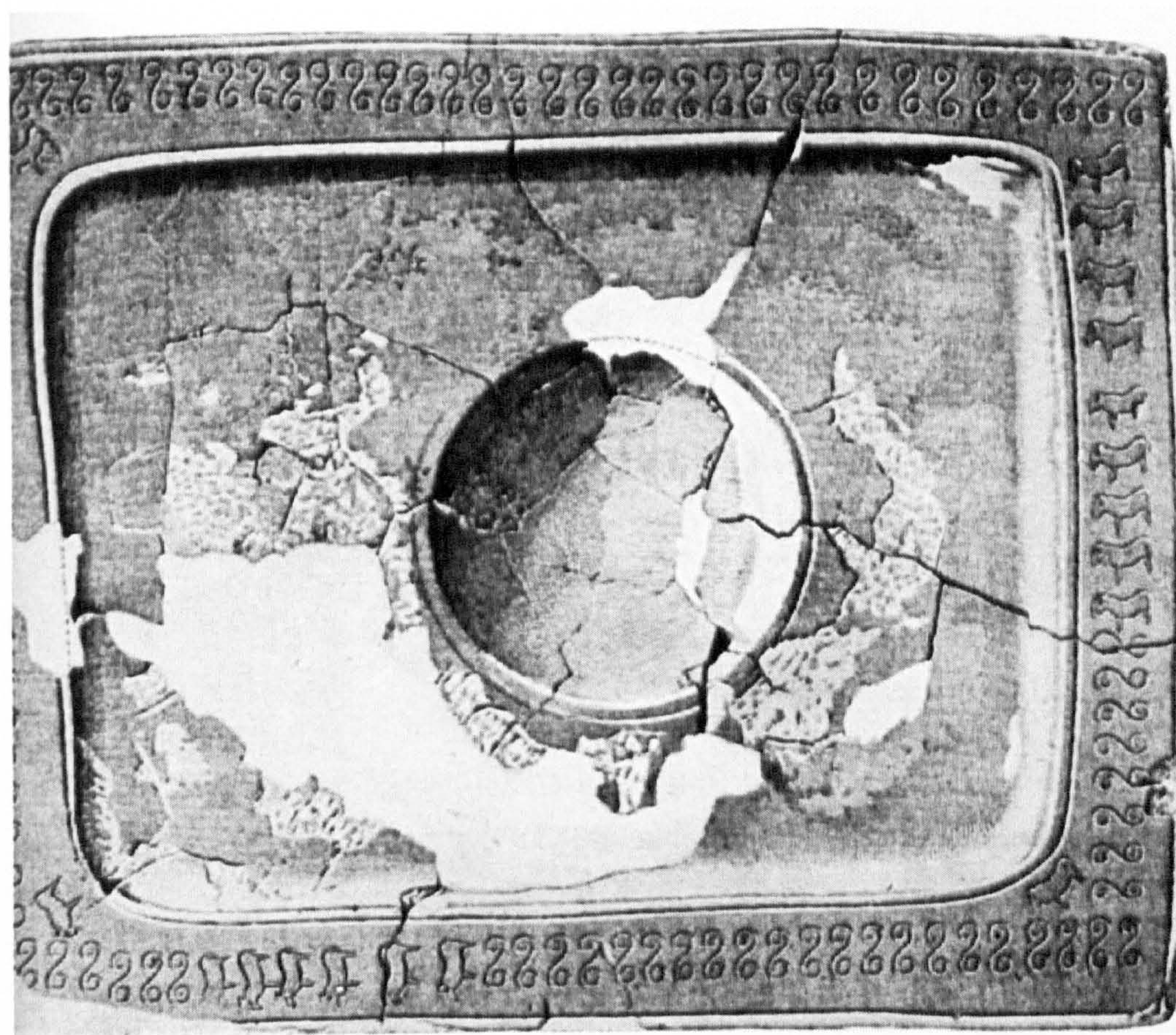

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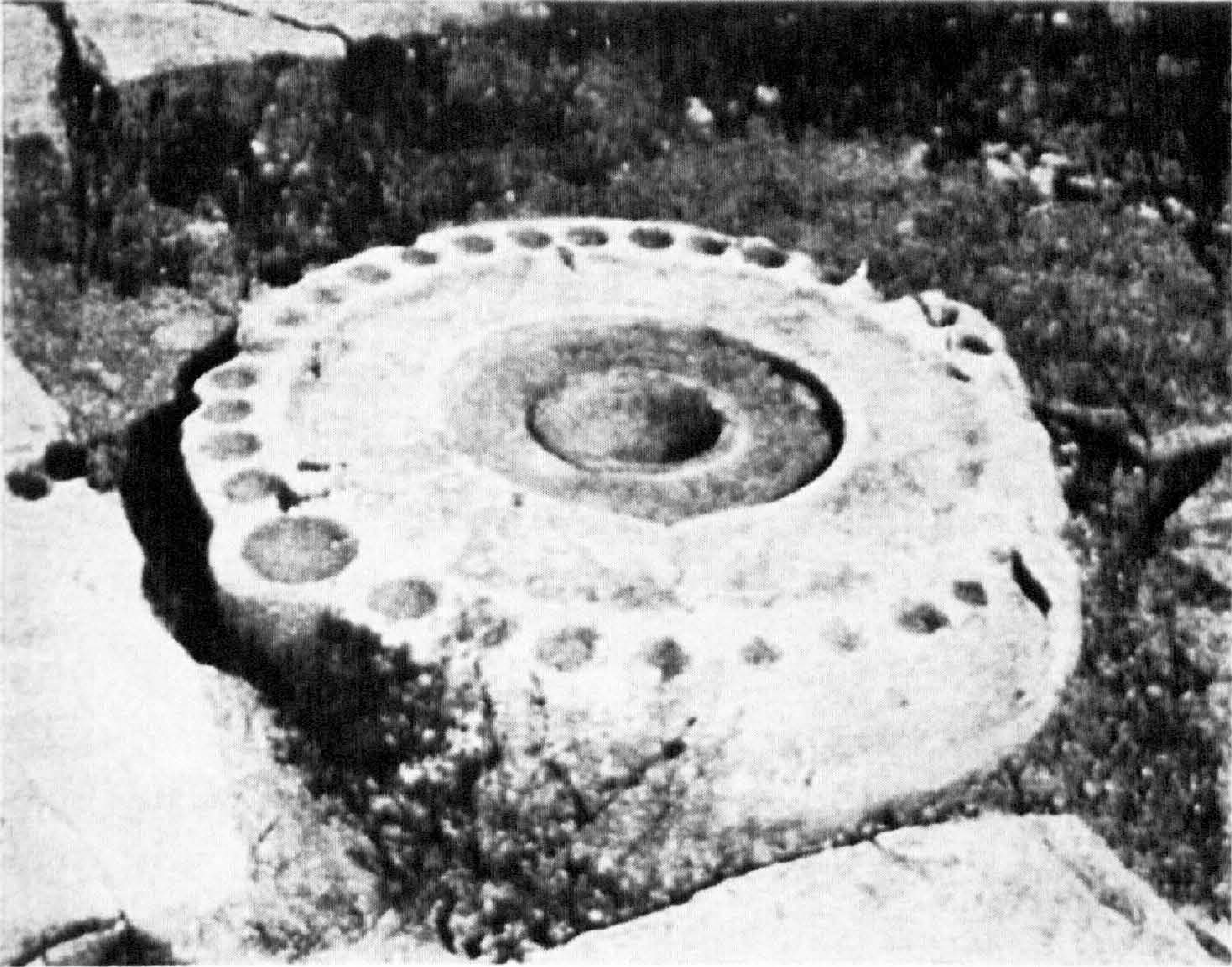

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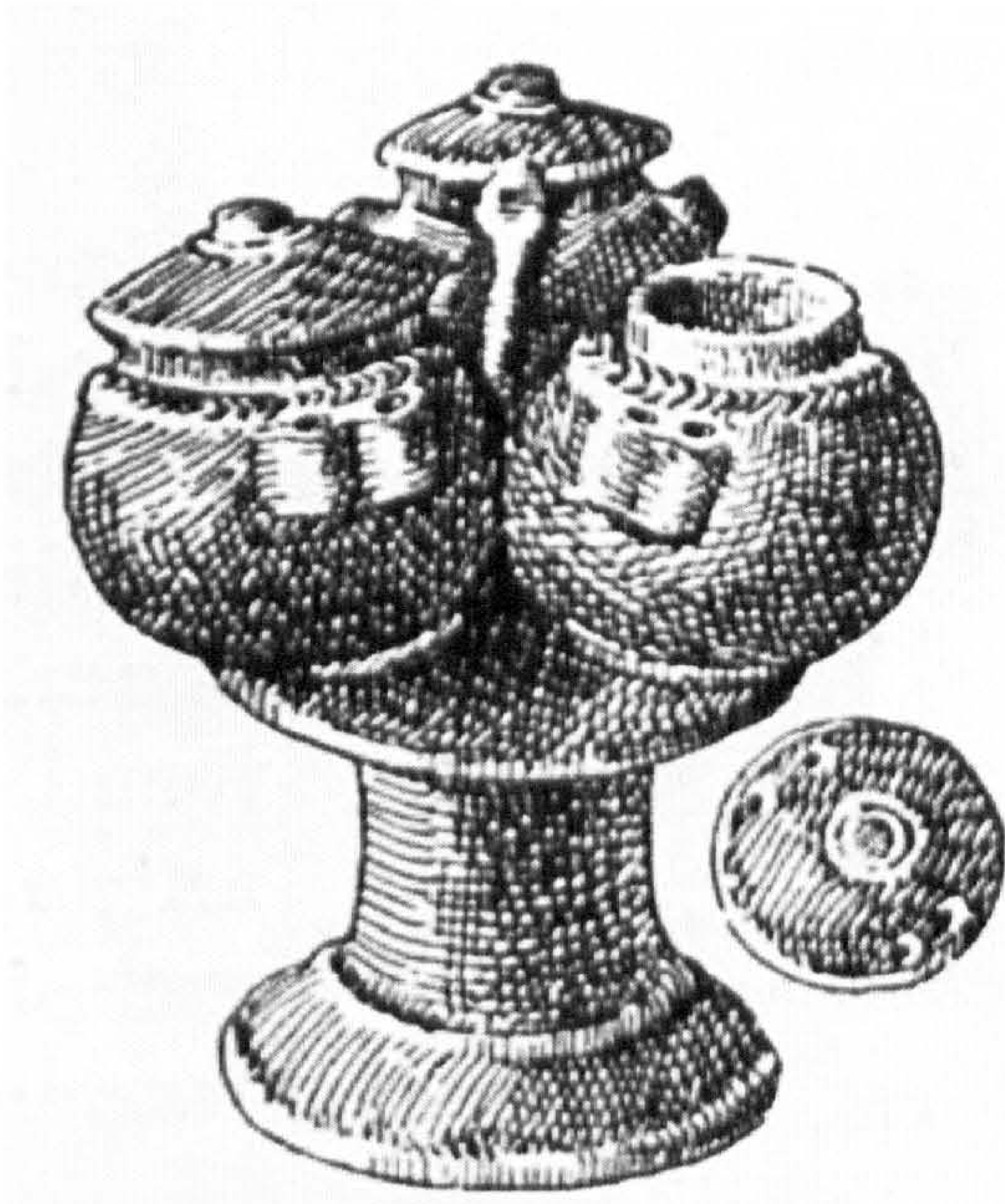

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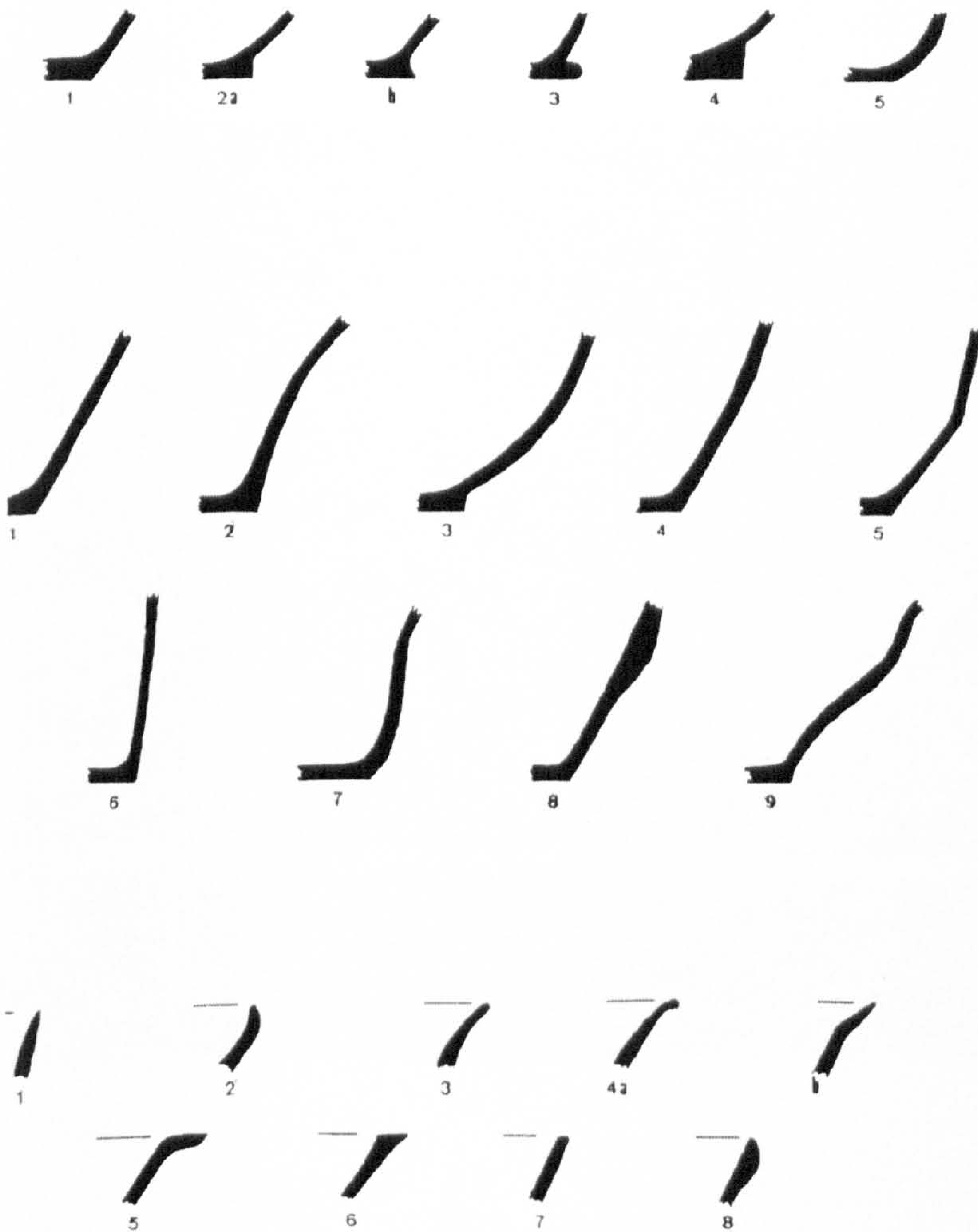

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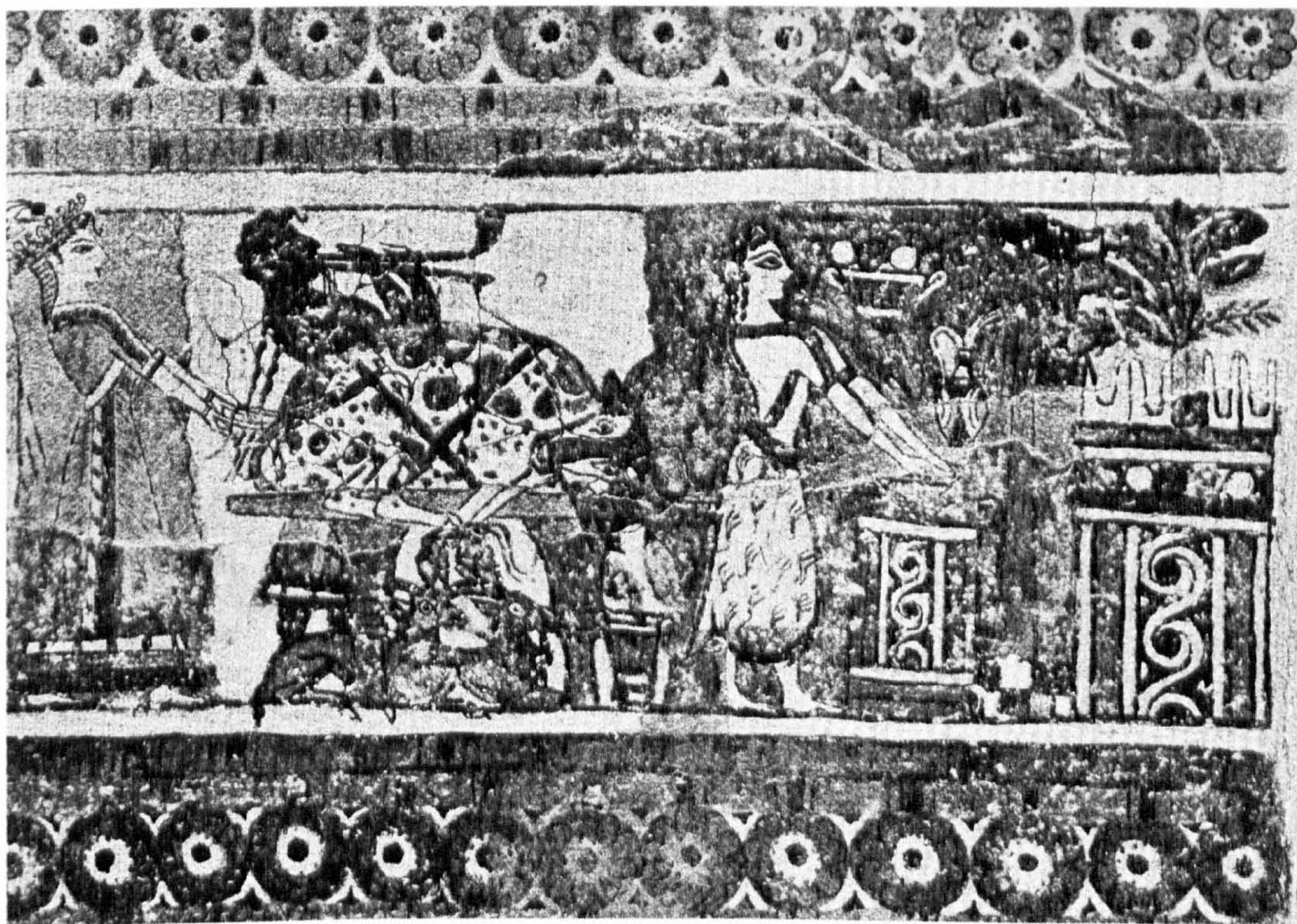

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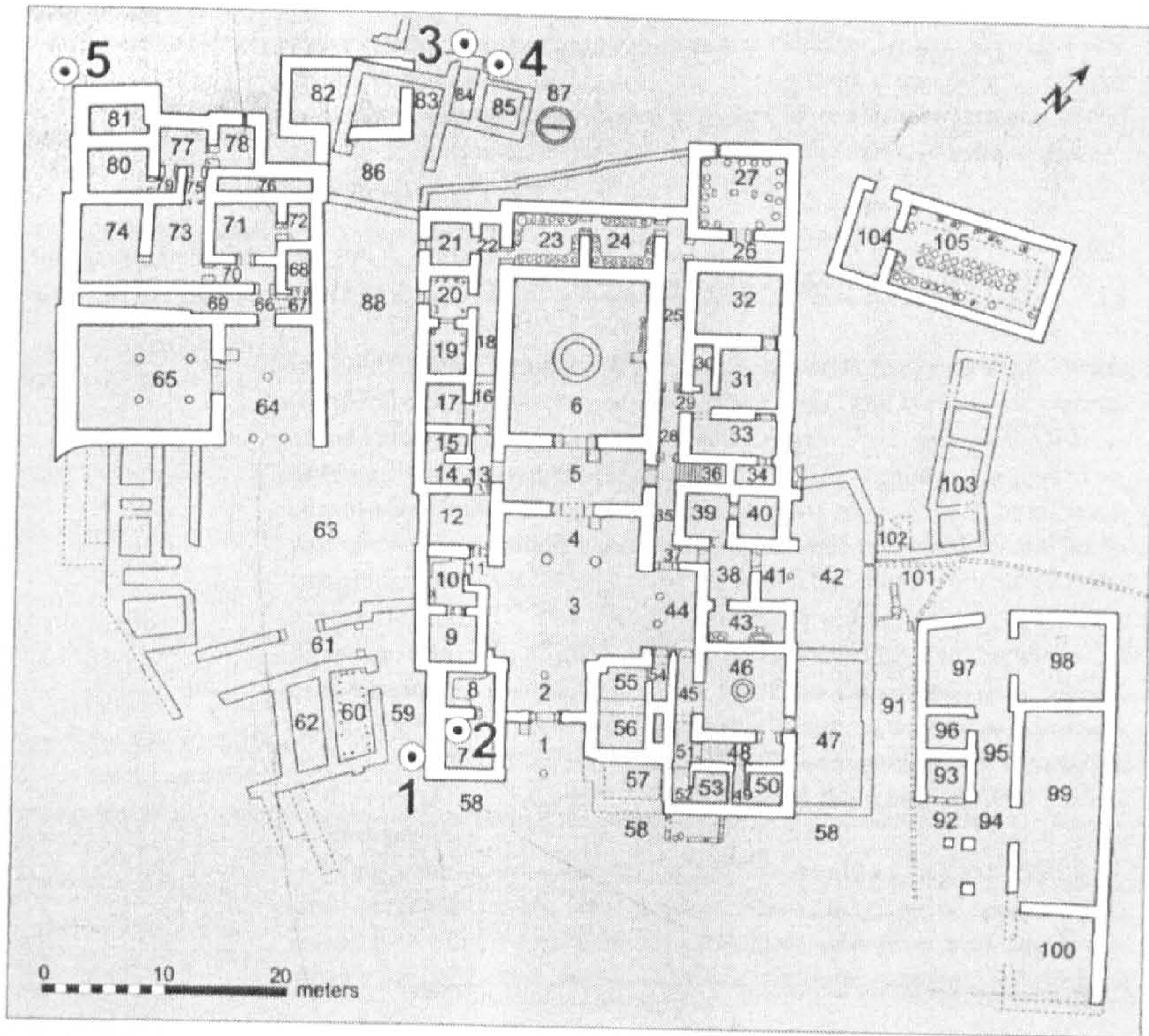

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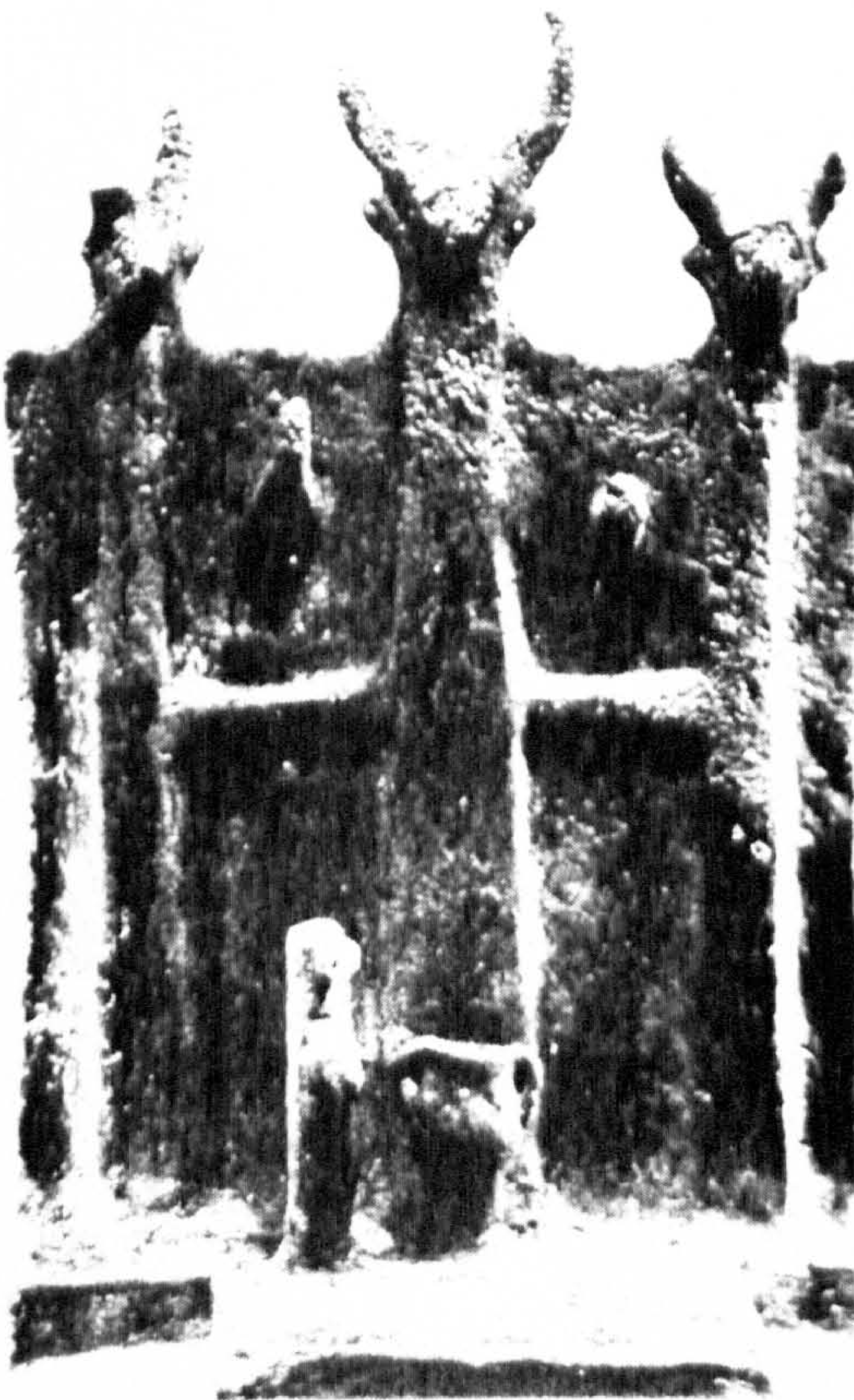

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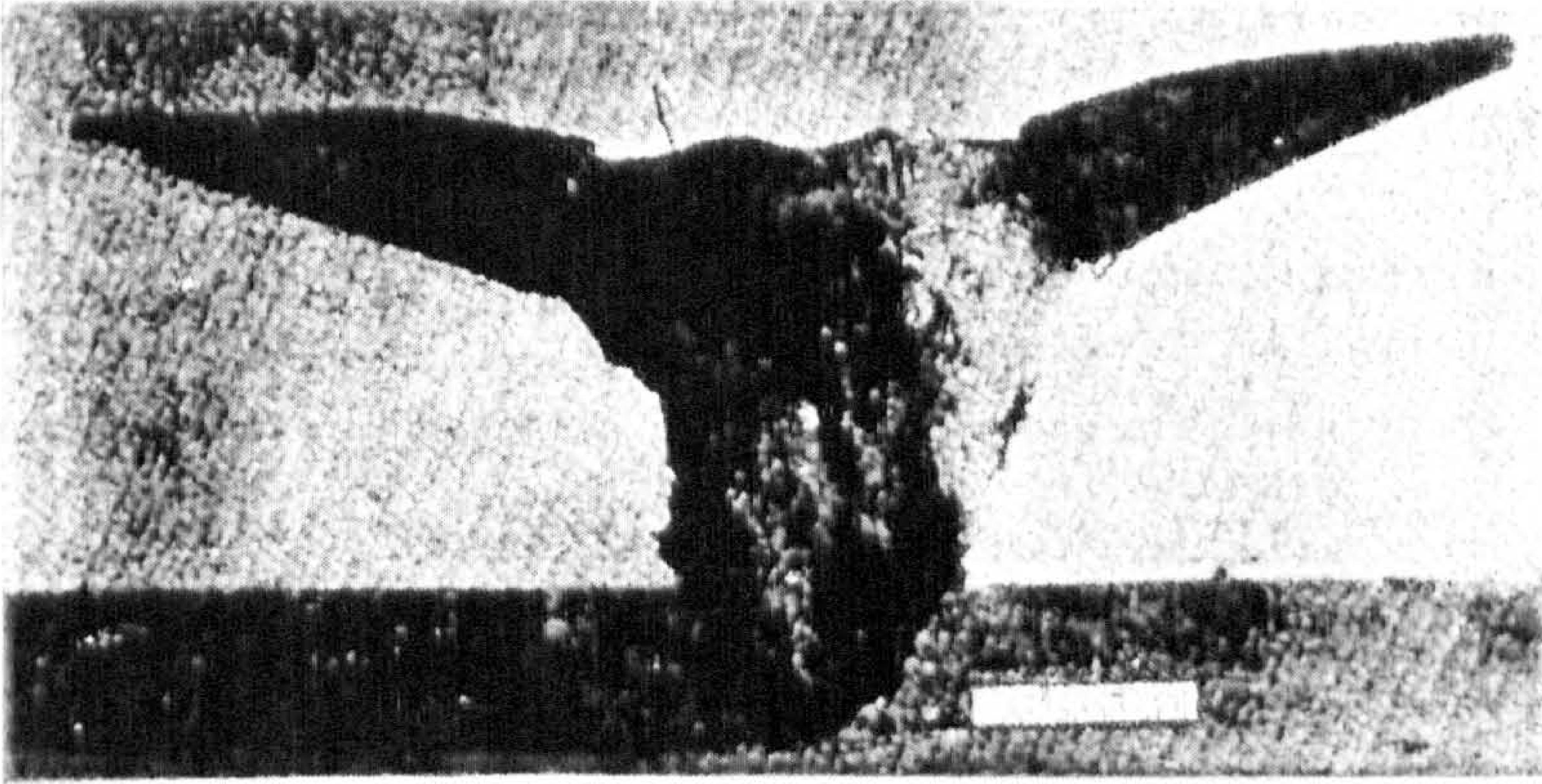

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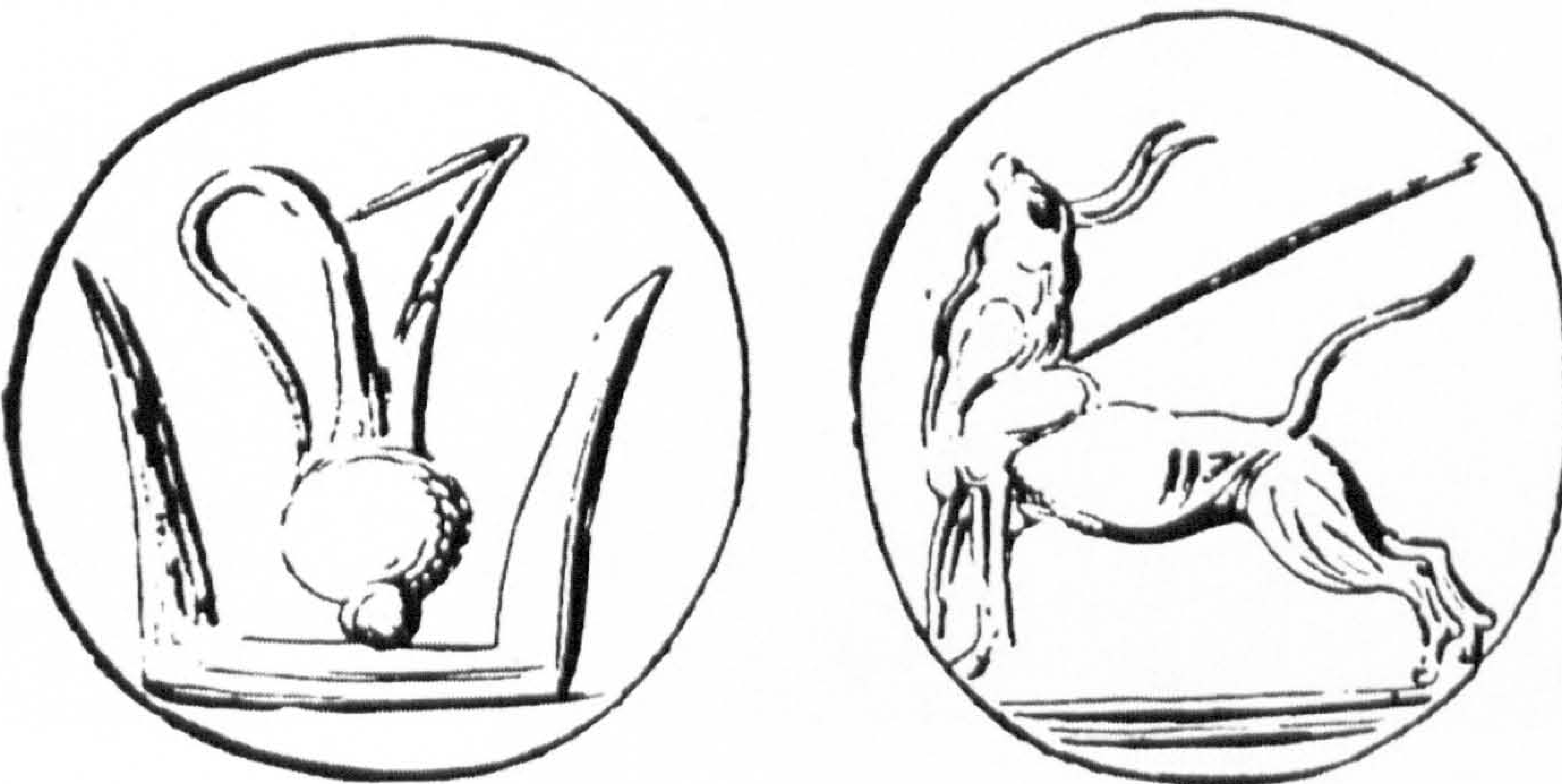

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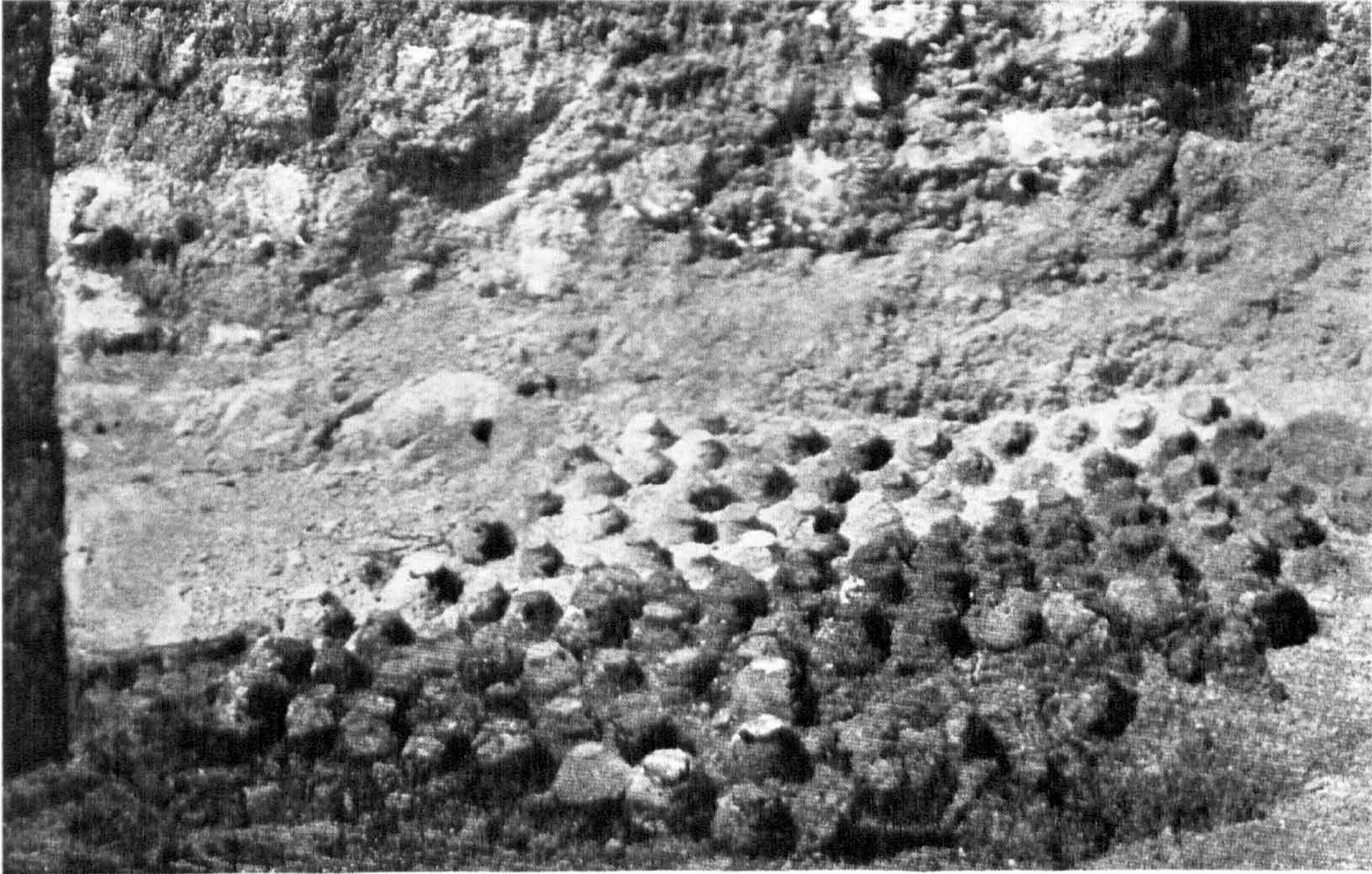

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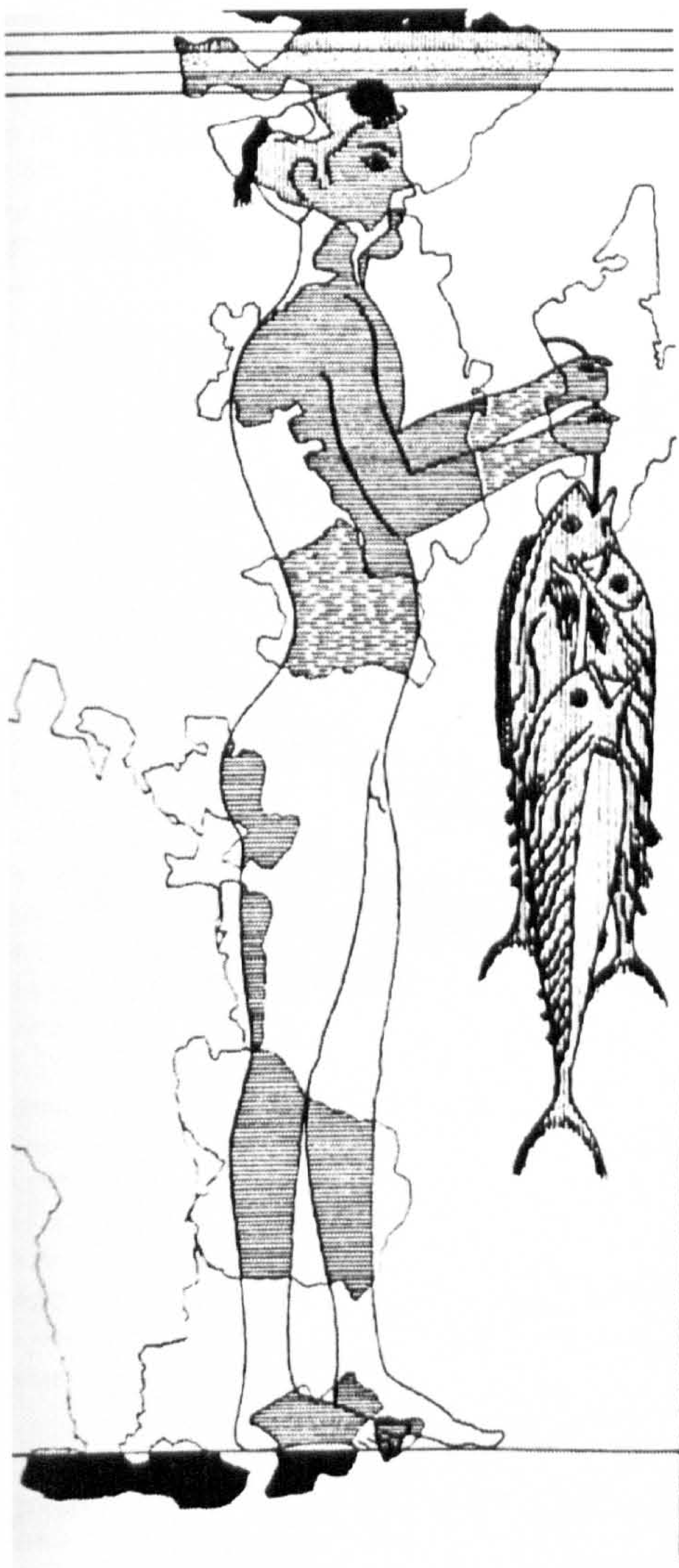

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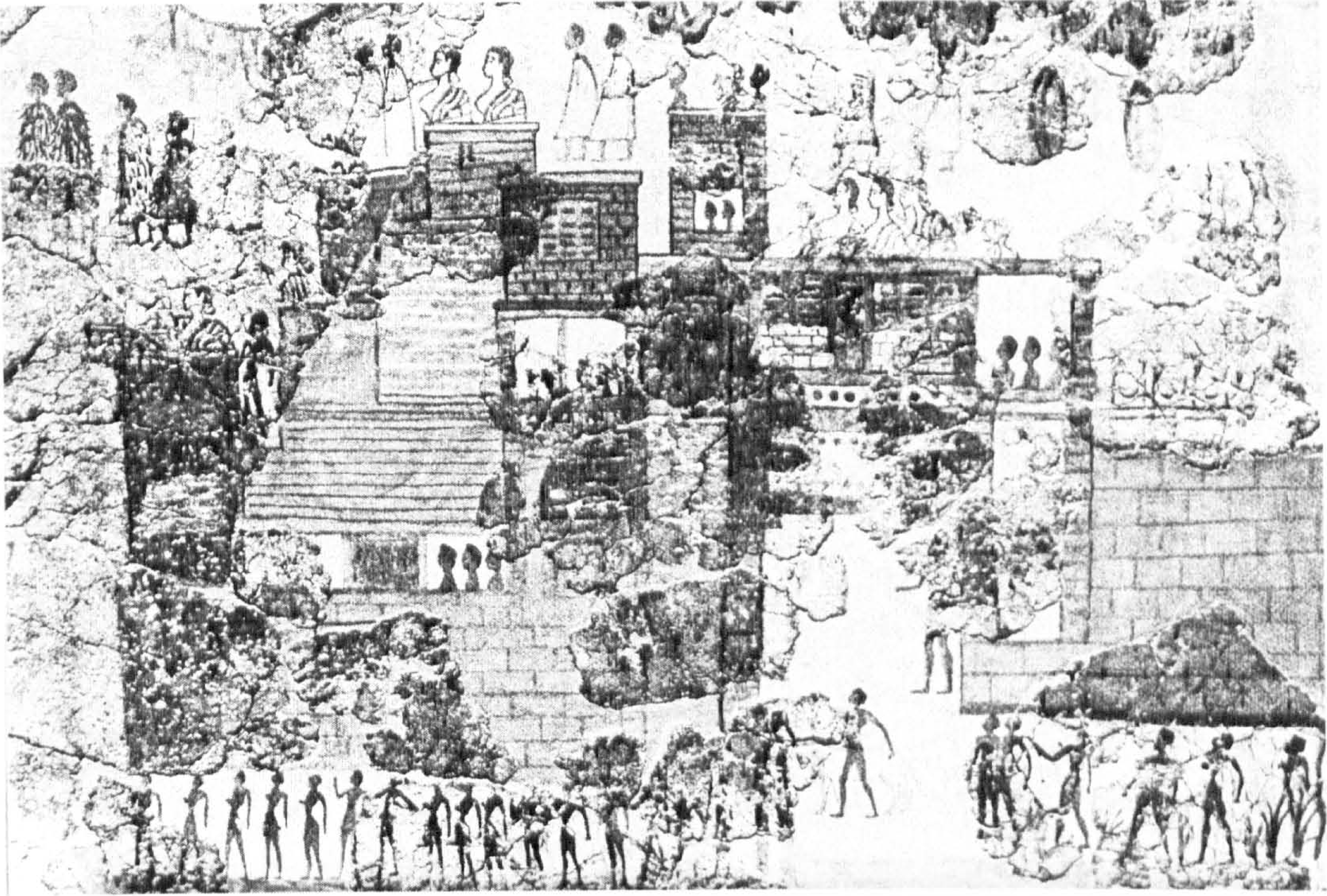

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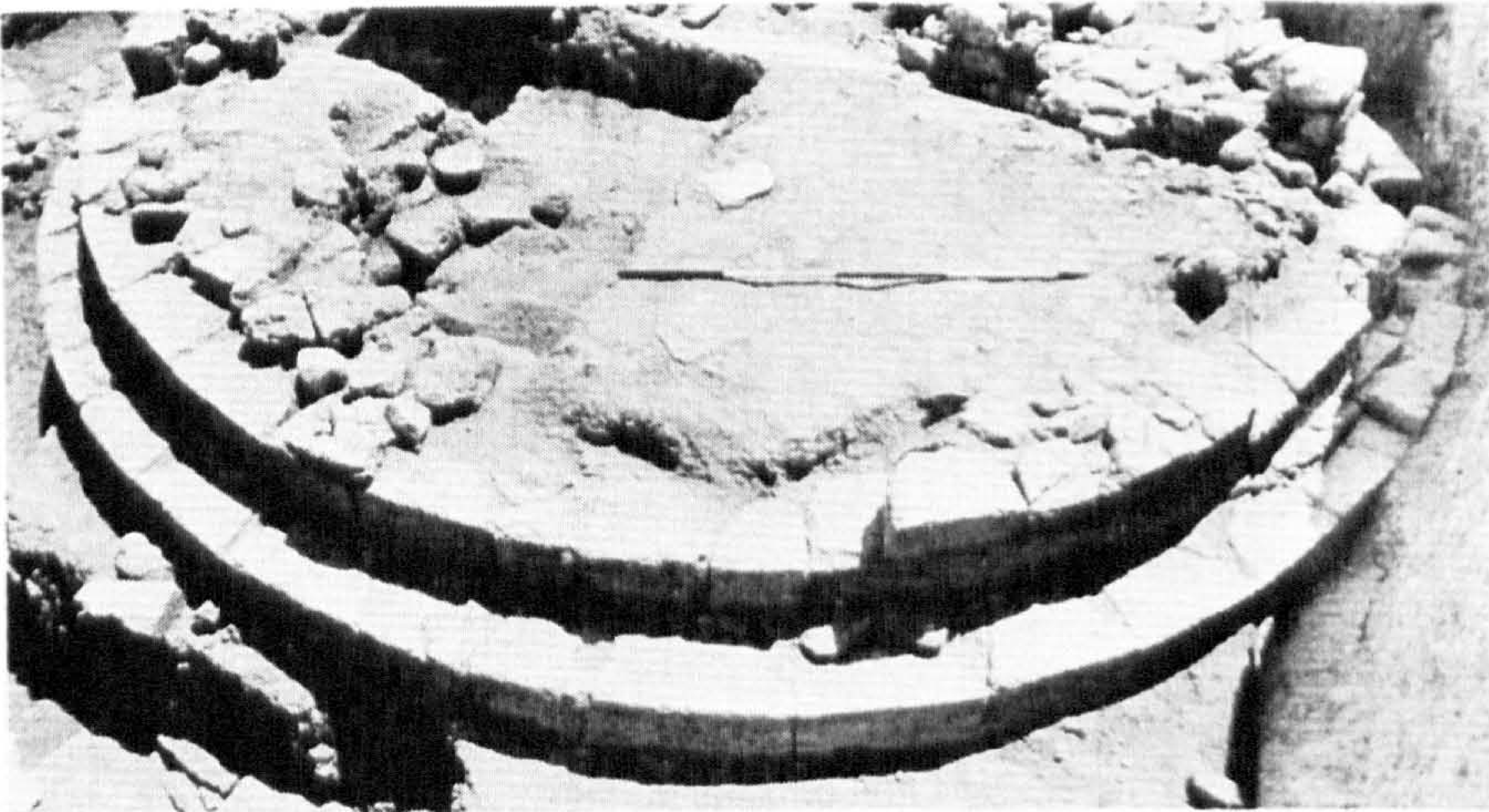

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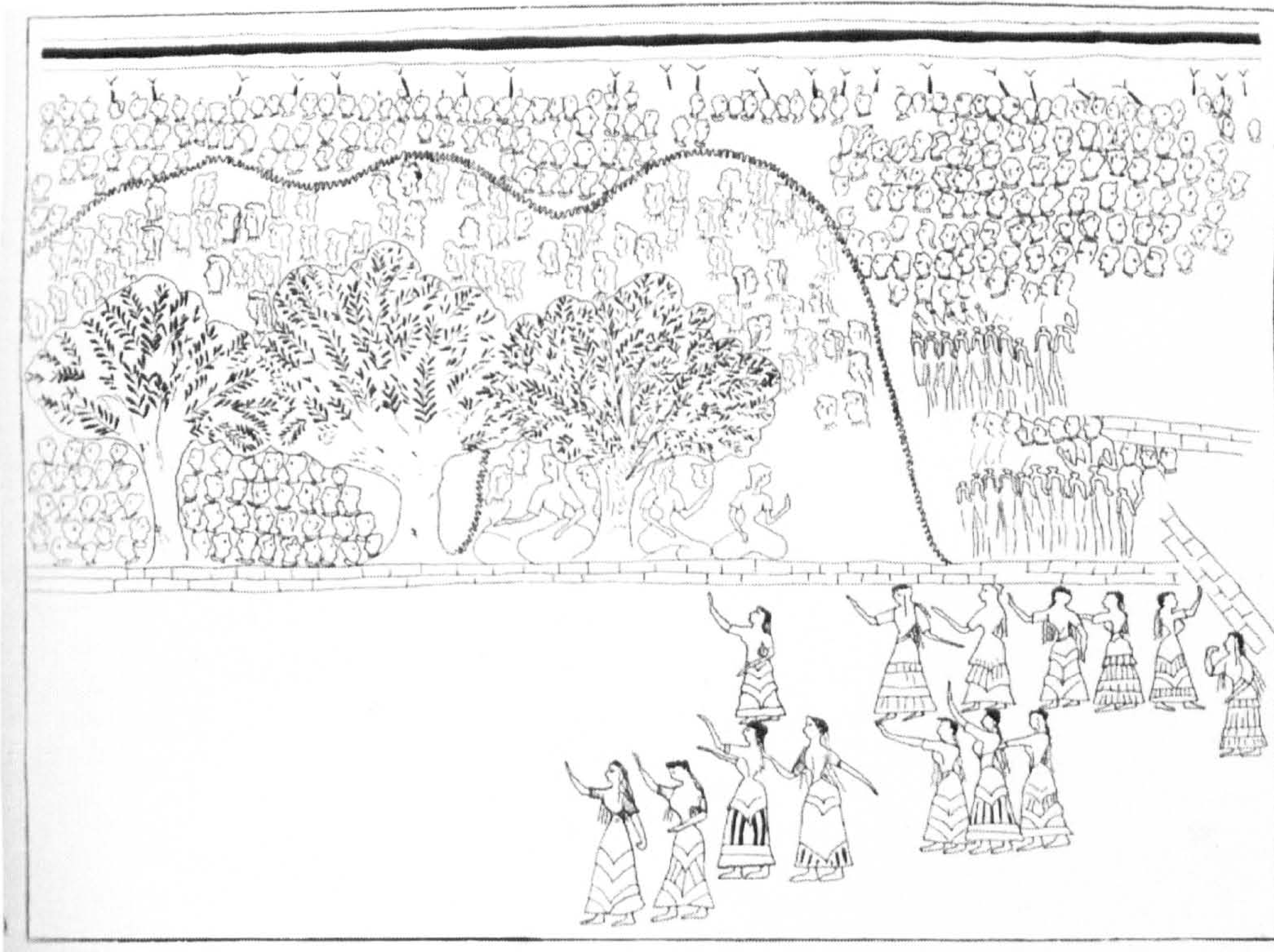

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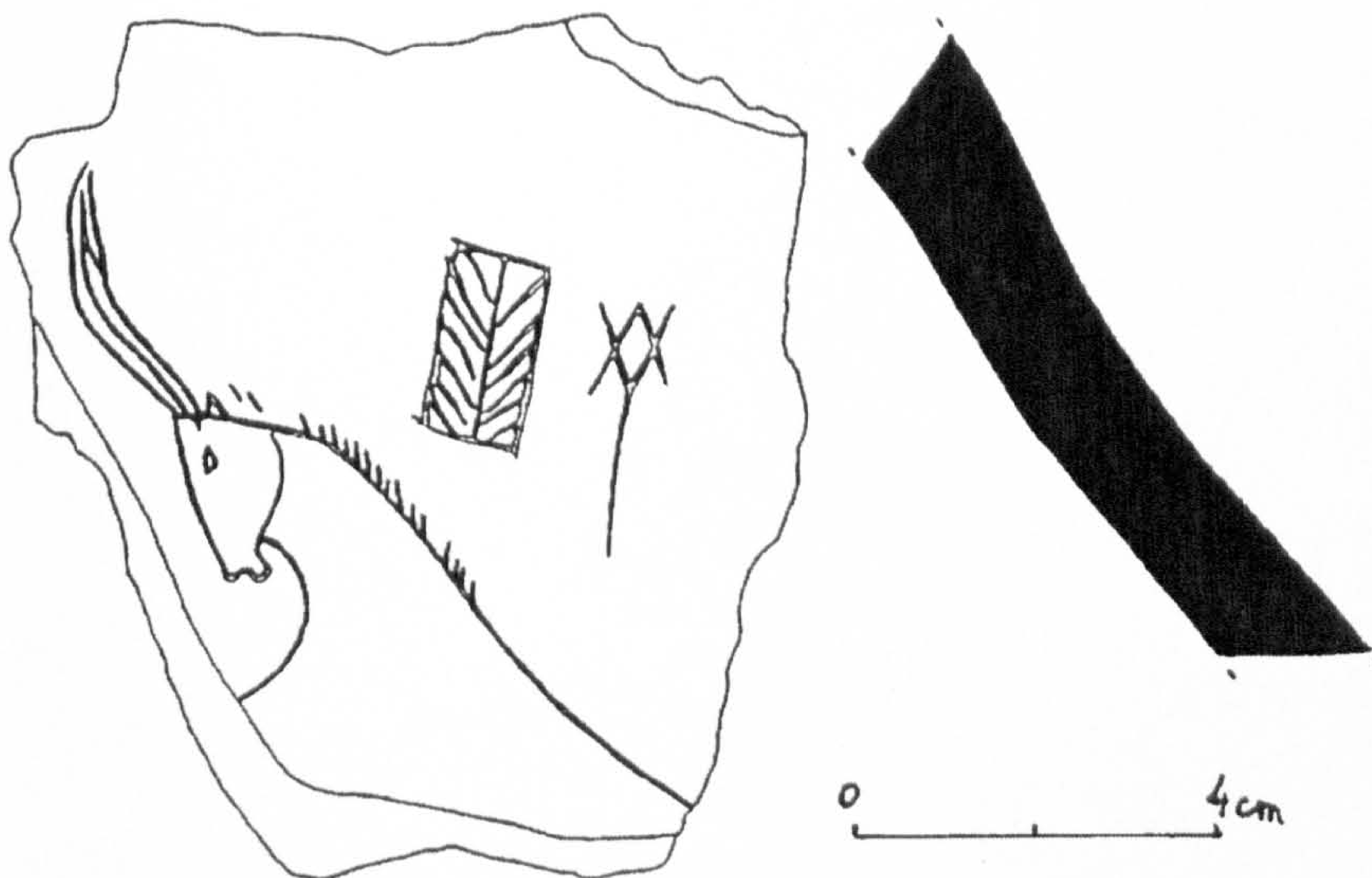
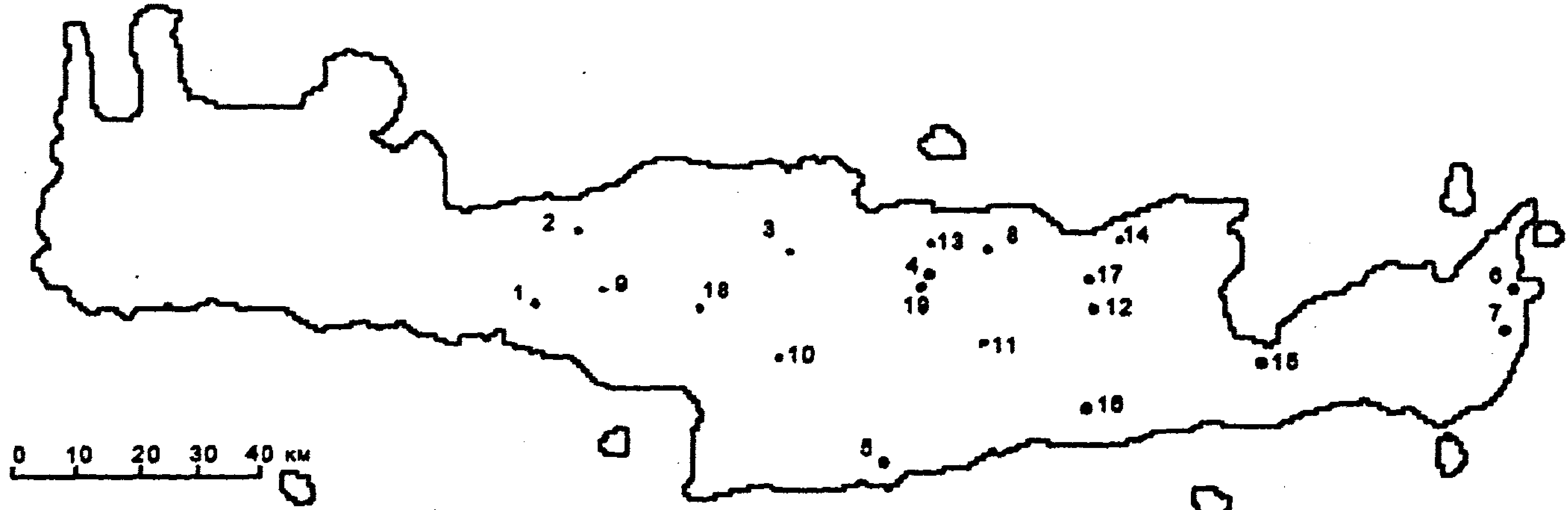


Figure 77:

APPENDIX TWO: MAPS

Map 1:



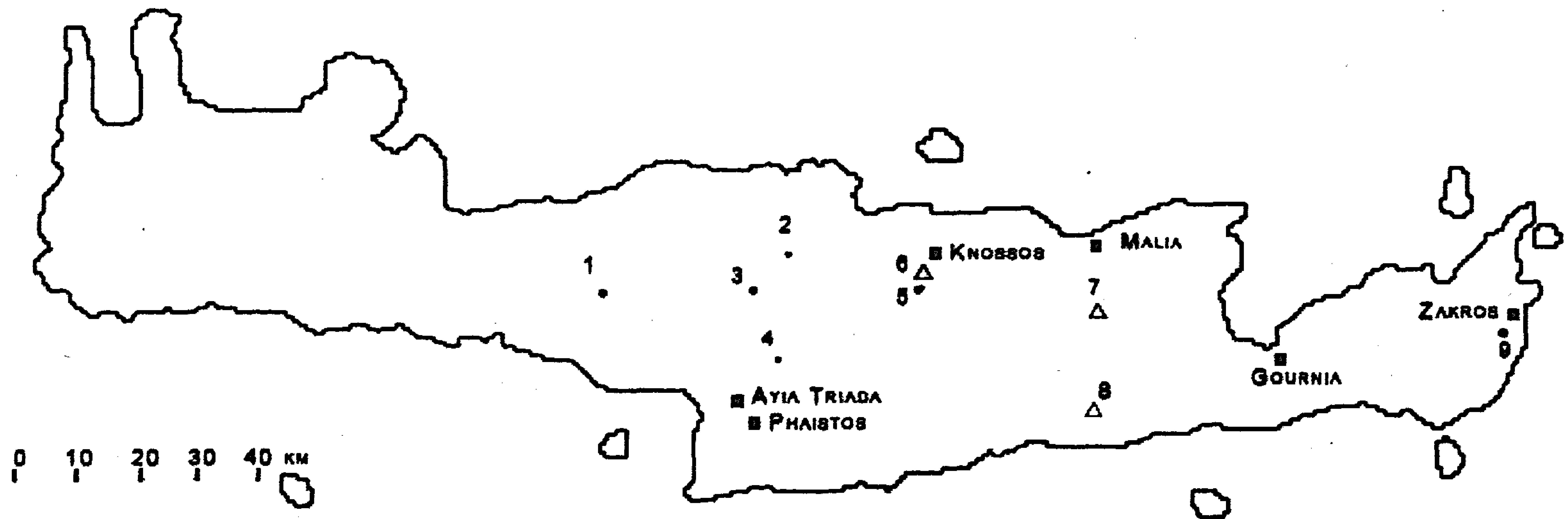
Site Key

1. Atsipadhes Korakias 2. Vrysinas 3. Gonies 4. Juktas 5. Kophinas 6. Petsophas 7. Traostalos

8. Skotino 9. Patsos 10. Kamares 11. Arkalochori 12. Psychro 13. Knossos 14. Malia 15. Gournia

16. Kato Syme 17. Karphi 18. Idaean Cave 19. Anemospilia

Map 2:



Site Key

1. Patsos 2. Vrysinas 3. Idaean Cave 4.Kamares 5. Anemospilia 6.Juktas 7.Psychro

8. Kato Syme 9. Traostalos (Triangles mark sites with definite Minoan faunal remains)

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ABBREVIATIONS

AJA	American Journal of Archaeology
Arch. Reps.	Archaeological Reports (Supplement to the Journal of Hellenic Studies)
BCH	Bulletin de correspondence hellénique
BSA	Annual of the British School at Athens
HM	Herakleion Museum (Catalogue)
JHS	Journal of Hellenic Studies
MMR	Nilsson, M.P., 1950, *The Minoan-Mycenaean Religion and its Survival in Greek Religion*, Leiden
PM	Evans, A.J. Sir, 1921-1935, *The Palace Of Minos at Knossos*, Vol. I: 1921, Vol. II: 1928, Vol. III: 1930, Vol. IV: 1935, London
SCABA	Hägg, R., and Marinatos, N. (eds.), 1981, *Sanctuaries and Cults in the Aegean Bronze Age, Proceedings of the First International Symposium at the Swedish Institute at Athens, 12-13 May, 1980,* Stockholm

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