

KYNOSFLEET

Ladies and Gentlemen, dear colleagues,

I am aware that the title of my paper sounds provocative, but I think it deserves it since Kynos until now has provided us with so many examples of Late Bronze Age ships as almost the whole number of the Lokrian ships, which took part at the expedition against Troy according to Homer¹.

Kynos was one of the towns of East Lokris, referred to by Homer in Iliad² and has been identified with a small hill by the coast near the modern village of Livanates, opposite Euboea³.

The excavation which is being conducted there since 1985⁴ has given some more examples of LH III C ships and more precisely three clay models, apart from the already known and published sherds with warships' representations⁵.

All three of them, partly preserved, but tantalizing because of it, they are very didactic as far as construction and typology of LH ships are concerned.

The first of them is a clay hand-made model (Fig. 1-4, Pl. I) found together with LH III C early material. Almost half of it is missing, as well as the upper end of the prow. The ridge of the hull is mostly broken apart from some small parts which are preserved so that we have the original height of the model⁶. Dark brown painted stripes, though not very carefully applied, mark and accentuate some functional and important parts of the ship, the keel, the gunwale and the stem-post⁷. Moreover the keel on the inside is marked by an additional band of clay⁸. No other decoration, painted or plastic, is to be seen on this model except of a dot of colour outside of the hull toward the middle of its length. Whether it is intentional or accidental I cannot decide, my opinion however is that it cannot be interpreted as an eye⁹. The upright, high end of the model and the existence of a cutwater characteristics of the prows of many other Late Bronze Age ships, allow us to identify this part of the model as the stem¹⁰.

The second model is also almost half-preserved (Fig. 5-8, Pl. II). We have to do again with a hand-made clay model of a ship of pure orange clay with a slip of diluted clay. It is found together with LH III C sherds. The pointed end is broken so that the identification of this part with stern or stem becomes difficult but not impossible. On this model again the functional parts are accentuated with the help

of colour. So a red-brown stripe marks outside and inside the keel. The frames are rendered in the same way. The vertical lines seen on the out-side of the hull, framed by horizontal stripes, cannot obviously be frames or beams, since they don't reach the keel, as on other examples, such as the one from Phylakopi on which the vertical stripes are identified with frames¹¹ or merely decorative features¹².

So according to my opinion and the examples so far known, either from vase-painting¹³ or from models¹⁴ we have in front of us the model of an oar-propelled galley whose rowing-posts are indicated by these vertical lines, which can also render stanchions of a rail or at the same time the tholepins against which the oars were worked.

On the preserved part eleven at least such rowing posts are counted and if it is taken into consideration that the widest part of this model measures 0,044 m. so that the whole could be 0,22 m. long, it is reasonable to suggest that this model represents a ship with at least twenty-five oars on each side, that is fifty altogether, a number that fits to pentecontoros, a kind of ship known during Late Bronze Age and described by Homer¹⁵.

Rowing-posts so close to the pointed end of the hull would be no comfortable for the rowers, but perhaps this happened due to lack of space for the artist to render the number of oars and similar rendering is not unknown to the art¹⁶.

To my opinion whatever feature or device the artists of that time showed on paintings or models, no matter how skillfully or abstractly they are rendered, they should copy real characteristics and usually the more important or impressive ones, and if today difficulties are arisen as far as identification of those characteristics are concerned this happens because we do not know how the world looked like at that remote period¹⁷.

Another remarkable and difficult to explain feature of this model is the presence of two plastic bands of clay across the inner side of the hull near the end, which, beginning from the keel, should project above the gunwale. The upper part of these projections is missing, but they should not be very high according to other known parallels¹⁸. They cannot belong to banks¹⁹ and they cannot be thole-pins for oars²⁰, as well. They could be supports for steering-oars, if this part is the stern. Double oars are not unknown during Late Bronze Age²¹ and some similar devices on other models, for example the well known one of Mochlos, have been given this explanation²².

They cannot also be cross-beams since the frames are already rendered by colour. Nor they can be ropes, as the clay strip on Argos' model is interpreted²³. On the other hand if this part of the model is the stem these projections could be supports for the suspension of anchors²⁴. This last opinion cannot be excluded although to my knowledge there don't exist any such representations from this period in the Aegean area. A fact that contributes to the stem-conclusion is the presence of a cut-water, whose junction with the bow is marked by a vertical line on both sides. A third explanation that these projections supported a superstructure, like a cabin is not trustworthy.

Comparing the above two new models from Kynos we can draw some useful conclusions. We see that although both of them obey to the angular type of craft²⁵ however they differ from one another basically. The first one has a curved keel and it gives the impression of a deep, roomy, heavy merchant-man²⁶ of the so-called kaiki-type²⁷, well represented in the Aegean since Early Minoan period and whose characteristics have been recognised in many other ships, painted or models, for which the same identification is given by many scholars²⁸. The fact that the majority of such vessels are found at Greta and Cyprus perhaps implies the origin of the type²⁹ and the character of the people, who invented and used them: merchants.

The second one has a straight keel, low, slender hull, many oars, perhaps is a pentecontoros, and gives the impression of a fast war-ship such as the already known parallels from Kynos itself³⁰. Ships with similar characteristics belong mostly to the Central Aegean and the mainland of Greece³¹, areas which provided us with almost all the known examples of the type, a fact that cannot be accidental to my opinion.

So the more decisive conclusion drawn from the differentiation in rendering of the above models is that during LH III C period already existed at least two different types of craft each of them with its special function. So from now on and on the base of the above examples a typology of Late Bronze Age ships of Aegean can be suggested³².

The third example from Kynos consists of a part of a bird shaped-prow, actually the akrostolion, of the same date (Pl. III). The beak is missing and we have not found the main body of the ship which it belonged to.

The piece is decorated on both sides with an eye, at the proper place, and vertical stripes of colour, three of which have an additional hanging loop. What do these lines and loops represent is not clear. Do they suggest ropes? Or all of them

are intended to render the plumage of the bird?

It is certain that this last piece does not belong to either of the models of Kynos already described. The size of it shows that it belonged to a bigger model and to my knowledge we don't have any similar ones found intact, since such high extremities, like akrostolia, are more submitted to the danger to brake. The only other example that approaches the Kynos' model is the one found in Tiryns³³, which has some characteristics that correspond not only to this akrostolion but also to the other Kynos' model, that is low, long, slender hull, vertical lines on the stem-post and which is of the same date.

The question is to which kind of model it could fit better to the merchant or to the war-ship.

I made an experiment (Pl. IV, V) and to my opinion the bird shaped akrostolion suits better to the war-ship. And this opinion is supported by many other well known examples, among them the ones from Kynos itself.

Bird-shaped akrostolia is not a novelty of Late Bronze Age ships, since this device exists on the Aegean ships since Early Minoan Period³⁴. But this kind of prows - naturalistic or abstract rendered - are more often to be seen on war-ships, so that this feature tends to become a standard characteristic to them, without excluding its presence on other kind of craft, too.

War-ships should be more impressive and of more fearful outlook³⁵ and such devices help this purpose as the relative iconography teaches us.

The fourth ship I want to show you is already known, but only partly. It is the war-galley represented on a sherd of crater found in Kynos, which we have discussed about during the last symposium³⁶.

Now the good god of the archaeologist, whoever he or she is, after three years revealed us the missing other end (Fig. 9) on which the stern is pictured and the helm-man at his place working a big steering-oar with both hands, so that it is sure the ship is not pictured beached, nor sailing in open sea since mast and sail obviously have been lowered³⁷. The fighting warriors on her deck not only strengthen the character of the ship but also they imply that in Late Bronze Age events, like naval battles, perhaps not in their classical meaning, took place³⁸.

It is certain that this last ship will arise much discussion and many controversies among the scholars but I think that beyond any doubt we all agree that it proves that the geometric war-ships we know from the relative iconography are the direct

descendants of the Late Bronze Age ones³⁹.

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NOTES

1. Iliad, B, 534.
2. Iliad, B, 531.
3. W. Oldfather, Kynos *R.E.*29. A. Phillipson: *Die griechische Landschaften* I, 2, 348, 360. W.K. Pritchett, East Lokris revisited, *Studies in ancient greek Topography*, V, 79 ff.
4. F. Dacoronia, Kynos, *Deltion* 40, B, 1985, 173. *Deltion* 41, B, 1986, 68. *Deltion* 42, B, 1987 *Deltion* 43, B, 1988 *Deltion* 44, B, 1989 (under press) *Deltion* 45, B, 1990 (under press). F. Dakoronia, Warships on sherds of LH III C Kraters from Kynos, *Tropis II*, 117 ff.
5. *Tropis II*, 117 ff, Fig. 1-3.
6. The model in its present condition measures 0,107 m. in longitude. Its maximum height is 0,06 m. the height of the hull is 0,045 m. and its width 0,06 m.
7. Colour, not merely for decoration. is often used on clay models for the same purpose, that is to render different parts of the ships, for example on the well known model from Phylakopi, S. Marinatos, La Marine Créto-mycénienne, *BCH* 57, 1933, Fig. 15, 26.
8. Gray, Seewesen, *Arch. Hom. I.G.* 1974, 51, Abb 14. L. Basch, *Le Musée imaginaire de la Marine Antique*, 1987, 141 Fig. 293-294.
9. Plastic rendering of different parts on clay models is not unknown, for example on the model from Argos, H. Palaiologou, Aegean ships from the second Millenium B.C. *Tropis I*, 227, Fig. I-4.
10. An eye is to be seen on the bow of the above mentioned model from Phylakopi (*loc. cit. supra* 7). It is not a usual decoration on ships of Late Bronze Age, but it becomes a characteristic of the geometric ones. About its meaning or its use Gray, *loc. cit.* (*Supra* 7) 60. L. Basch, *loc. cit.* (*supra* 7) 141. J.S. Morrison-R.T. Williams: *Greek Oared Ships*, Cambridge 1968, 37, Cecil Torr, *Ancient Ships*, 1954, 69.
11. The existence of a cutwater in front of the bow already in Late Bronze Age has been accepted by many scholars s. S. Wachsmann, The ships of the Sea Peoples, *I.J.N.A.* 1981, 10:3, 202, 209, 216. G.Kirk, Ships on Geometric Vases. *BSA* 44, 1949, 126. B. Landström, *The ship*, London 1961, 27.
12. Cl. Laviosa, La Marina Micenea, *ASAtene*, XLVII-XLVIII, (1969-1970), 24 footnote 3.
13. Morrison-Williams *loc. cit.* (*Supra* 9) 11. Wachsmann, *loc. cit.* (*Supra* 10) 209.
14. For example the ship on the pyxis from Tragana, K. Kourouniotes, *AE* 1914, 107 ff. G. Korres, Representation of a Late Mycenaean ship on the Pyxis from Tragana, Pylos, *Tropis I*. 117 ff. For the vertical lines above the gunwale different interpretations have been suggested as for example that they are frames (Korres *loc. cit.* Laviosa, *loc. cit.* (*Supra* 11)), decorative (Morrison-Williams *loc. cit.* (*supra* 9) 8) stanchions (Wachsmann *loc. cit.* (*supra* 10) 209) thole-pins (Σ. Αλεξίου, Λάρνακες και αγγεία εκ τάφου παρά το Γάζι Ηρακλείου, *AE* 1973, 93). Basch *loc. cit.* (*supra* 7) 142). As for the ship on the larnax from Gazi Alexiou proposes two different explanations, that is the vertical lines above the keel are frames and the one of the second zone above them are thole-pins and the open spaces between these lines are interscalmia (Alexiou *loc. cit.* 92).
15. Basch. *loc. cit.* (*supra* 7) 141, Fig. 293, 1.
16. Torr *loc. cit.* (*supra* 9) 3. Morrison-Williams *loc. cit.* (*supra* 8) 8. Alexiou *loc. cit.* (*supra* 13) 93. Σ. Αλεξίου, Πρακτικά Γ' Κρητολογικού Συνεδρίου, Ρέθυμνο 1971, Α. 5. Hom. Iliad, B 719, Π 170 Hom, Odys. θ 35. L. Casson, *Ships and Seamanhip in the ancient world*, 1971, 44. Basch *loc. cit.* (*supra* 7) 148.

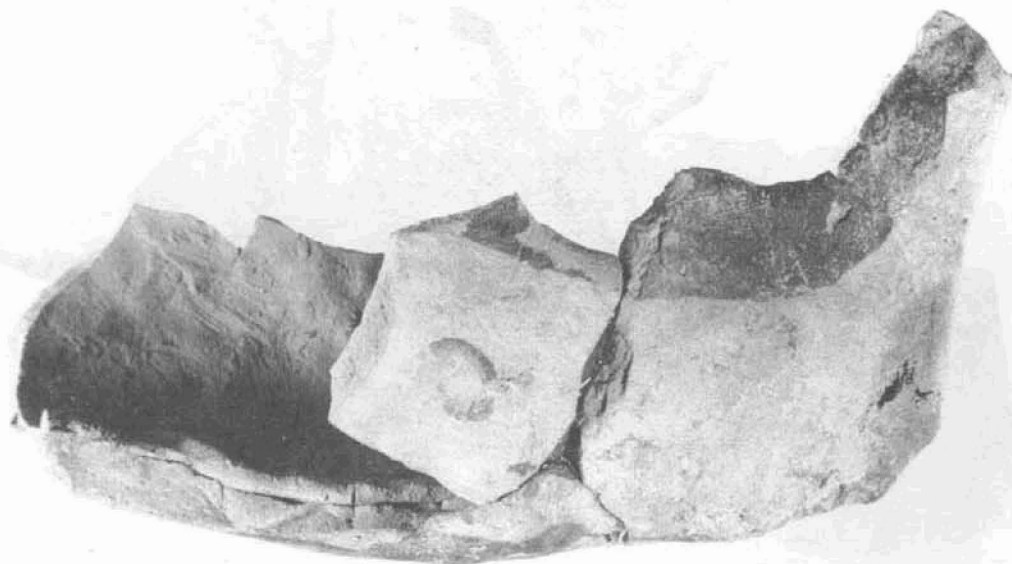
16. For example on Pylos ship Korres, *loc. cit. (supra 3)* on the Gazi ship, Alexiou *loc. cit. (supra 13)* on the ship on a bronze fibula from Thebes, Basch *loc. cit. (supra 7)* 192 Fig. 406.
17. Laviosa *loc. cit. (supra 11)* 8.
18. For example the clay model from Mochlos Basch *loc. cit. (supra 7)* 133 Fig. 276. Marinatos *loc. cit. (supra 7)* Fig. 14, 2. Gray *loc. cit. (supra 7)* 15. Ph. Betancourt. *The history of Minoan Pottery*, 1985, 51 Fig. 32A.
19. As banks have been interpreted by Laviosa the plastic stripes on the bottom of the hull, which however do not reach the gunwale. Laviosa *loc. cit. (supra 11)* 26 Fig. 26. Palaiologou *loc. cit. (supra 8)* 222.
20. Such projections are often interpreted as thole-pins Basch *loc. cit. (supra 7)*. Betancourt *loc. cit. (supra 18)*. Κ. Δαβάρας Μινωϊκό κηριοφόρο πλοιάριο της Συλλογής Μητσotάκη ΑΕ 1984, 55, 65.
21. Αλεξίου *loc. cit. (supra 13)* 91. Αλεξίου *loc. cit. (supra 15)* 3. Double steering oars are referred to by Homer, *Odys.* μ, 218.
22. The projections of Mochlos model are interpreted by Marinatos as supports for double steering-oars and he supposes that this kind of ship was constructed to sail to both directions Marinatos *loc. cit. (supra 7)* 215.
23. Palaiologou *loc. cit. (supra 8)* 220, 221.
24. Torr, *loc. cit. (supra 9)*. That anchors were dropped from the stem of a ship is certain as relative representations teach. Basch, *loc. cit. (supra 7)* 26 Fig. 563, 261 Figs 564, 567.
25. The angular type of craft is thought that characterises the ships of the Aegean. Marinatos *loc. cit. (supra 7)* 212 ff. Laviosa *loc. cit. (supra 11)* 8. Casson *loc. cit. (supra 150)* 32, 39. Basch *loc. cit. (supra 7)* 148.
26. Casson *loc. cit. (supra 15)* 65.
27. Gray, *loc. cit. (supra 7)* 44, 56.
28. For example the ship on the "pitharaki" from Faistos (Laviosa, *loc. cit. (supra 11)* 11 ff. Figs. 3a, b, c) the ship on the Krater from Enkomi (Laviosa *loc. cit. (supra 11)* 30 ff. Fig. 35. Morrison-Williams *loc. cit. (supra 9)* 11) and the models from Maroni and Kazaphani from Cyprus (Gray, *loc. cit. (supra 7)* 46, Abb 11 a, b, c, d. Laviosa, *loc. cit. (supra 11)* 31). For the ships of Enkomi an identification as war-ships has also been proposed (Basch *loc. cit. (supra 7)* 147, Fig. 311. Wachsmann, *loc. cit. (supra 10)* 198 ff. Fig. 14A.
29. Laviosa, *loc. cit. (supra 11)* 8.33. Casson, *loc. cit. (supra 15)* 32.33.39. Basch *loc. cit. (supra 7)* 94.
30. Dakoronia, *loc. cit. (supra 5)*.
31. Basch, *loc. cit. (supra 7)* 94, 148 ff.
32. That ships suitable for war existed already in Late Bronze Age has been accepted by many scholars (Wachsmann, *loc. cit. (supra 10)* 197 ff. Σ. Ιακωβίδης, *Ιστορία Ελληνικού Έθνους*, 1970, Α. 269. Torr, *loc. cit. (supra 9)* 23. Casson, *loc. cit. (supra 15)* 32). That they also existed ships with the suitable structure to be used as merchant ships is also attested. (Torr. *loc. cit. (supra 9)* 23. Laviosa, *loc. cit. (supra 11)* 12). Laviosa recognises merchant-ships and other ships different in character from them, which she avoids to call them war-ships, because she believes that there do not exist any certain documents about sea-battles during LBA.
33. K. Kilian, *Augrabungen in Tiryns 1982/83*, A.A. 1988, 2, 140, Abb. 37, 8.
34. Ι. Σακελλαράκης, *Ελεφάντινον πλοίων εκ Μυκητών*, ΑΕ 1971, 211, 216. Λ. Παρλάμα, *Η Σκύρος την εποχή του χαλκού*, 1984, 196. Wachsmann, *loc. cit. (supra 10)* 210.
35. Gray, *loc. cit. (supra 7)* 138.
36. Dakoronia, *loc. cit. (supra 5)* 118, Fig. 1.
37. Torr, *loc. cit. (supra 9)* 92.
38. Sea-battles during Late Bronze Age in Eastern Mediterranean have been recorded. Gray *loc. cit. (supra 7)* 122 ff. Wachsmann, *loc. cit. (supra 10)* 188 ff. N.K. Sanders, *The Sea Peoples*, 1978, 50, n.14.
39. Kirk, *loc. cit. (supra 10)* 95, 135, Morrison-Williams, *loc. cit. (supra 9)* 44. Basch, *loc. cit. (supra 7)* 148. Wachsmann, *loc. cit. (supra 10)* 198 ff. Casson, *loc. cit. (supra 15)* 32.



Fig. 1



Fig. 2



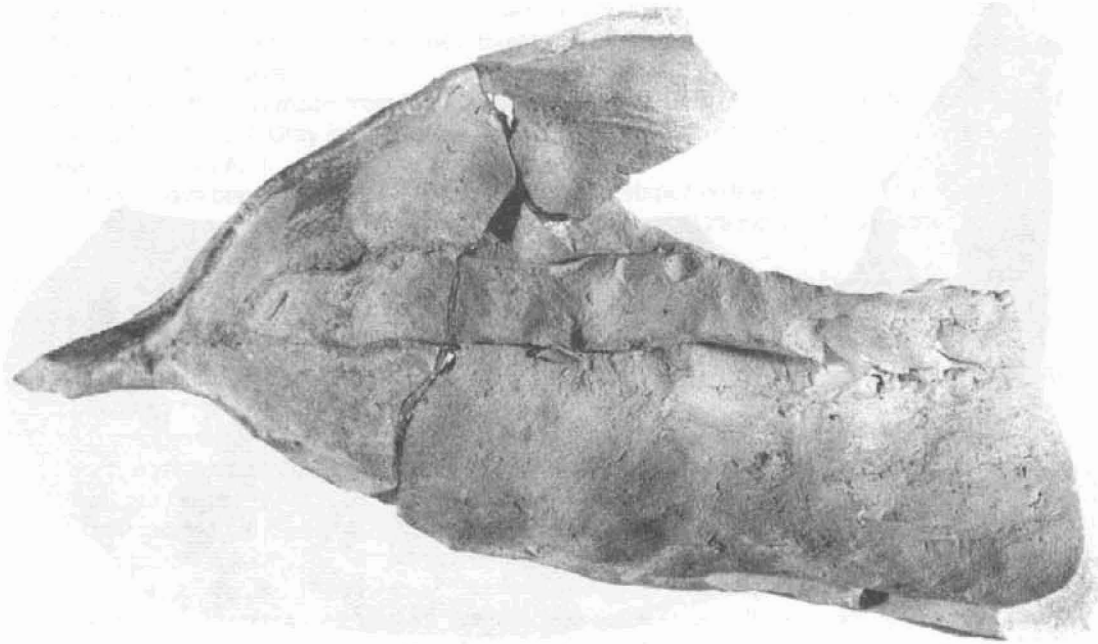
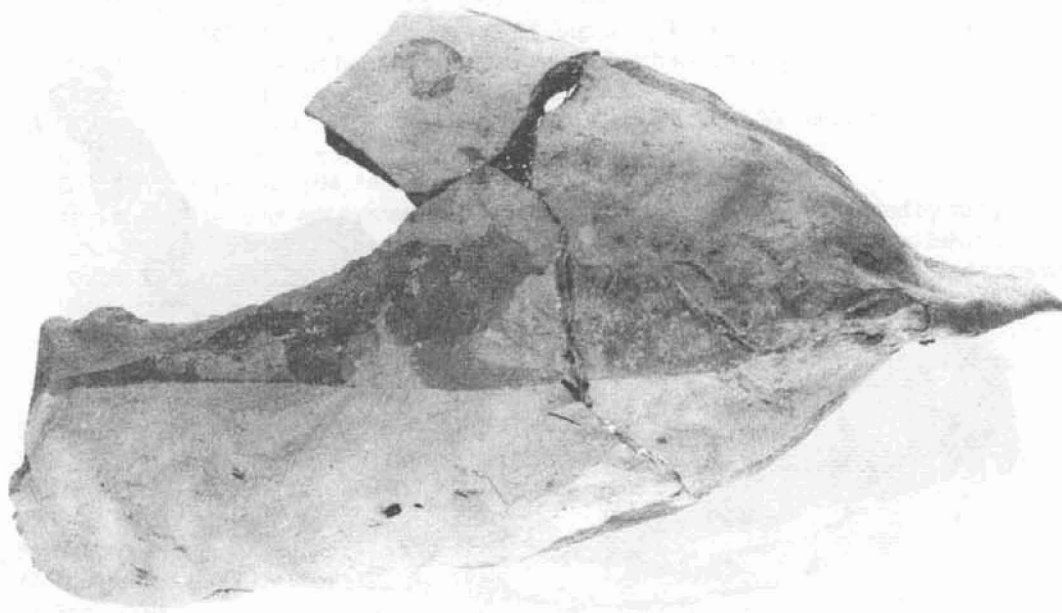


Fig. 3



Fig. 4



Pl. I

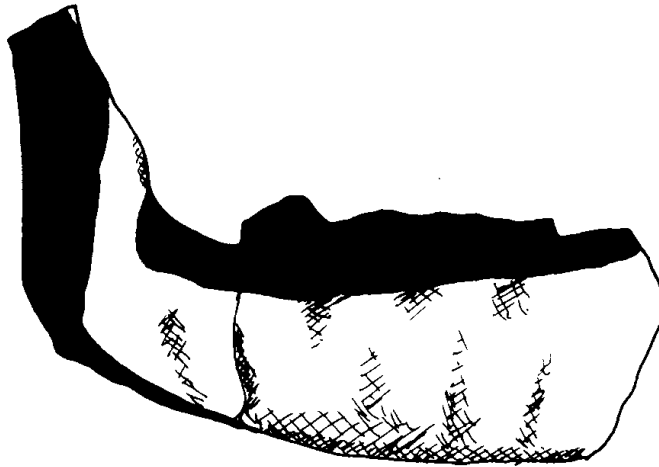
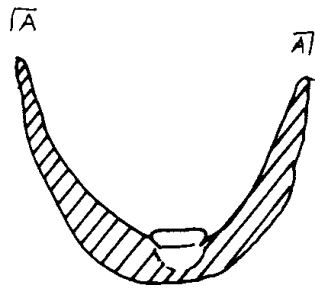
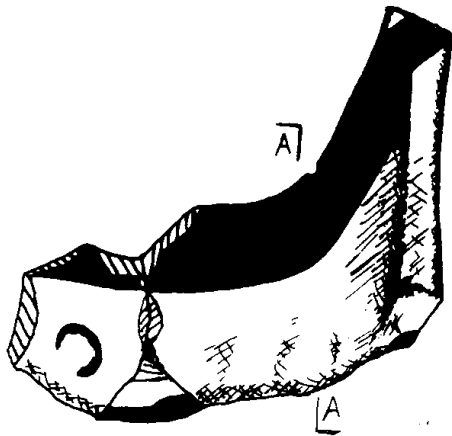




Fig. 6



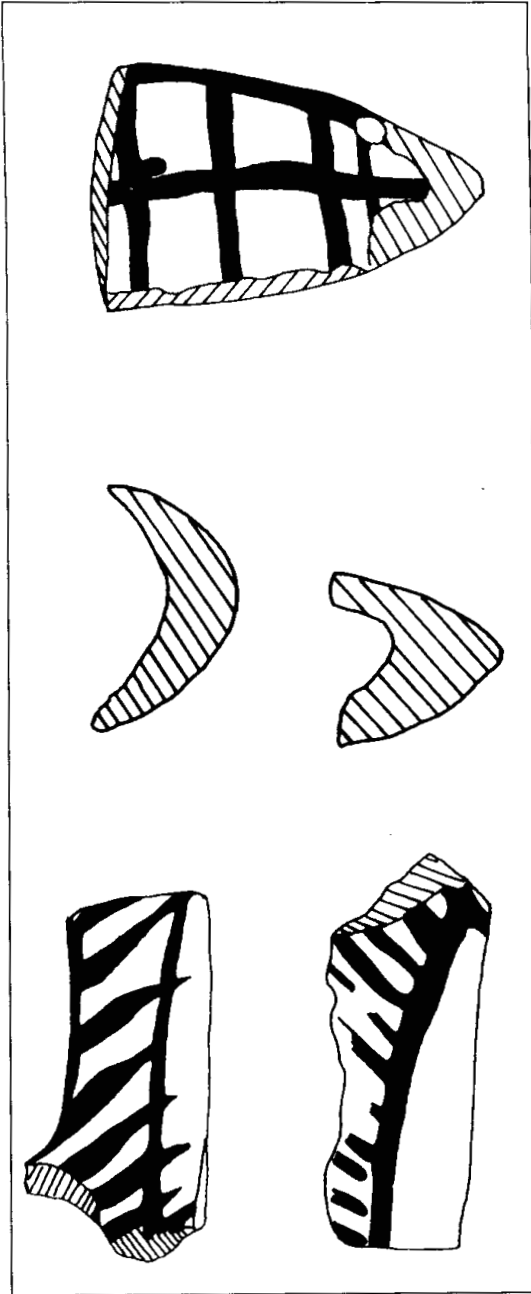
Fig. 5



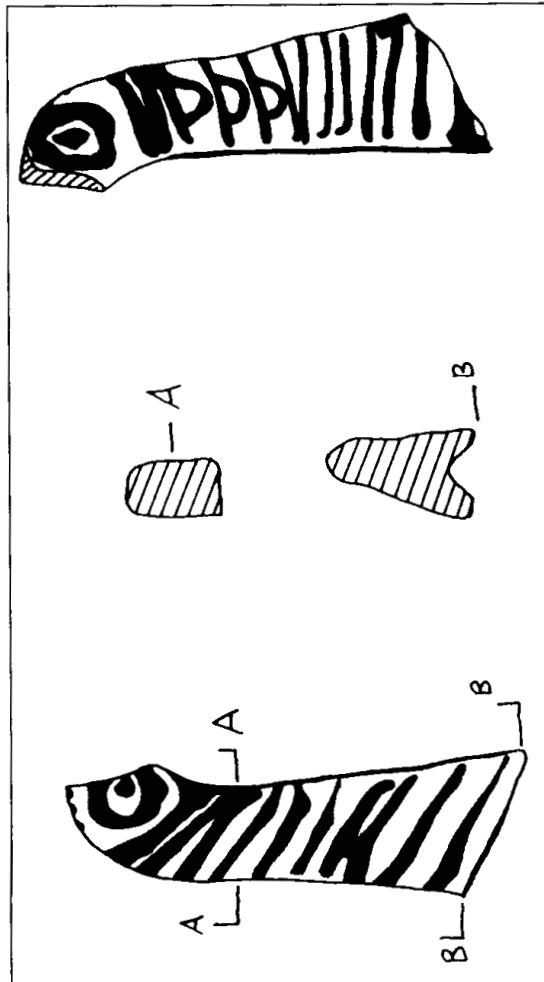
Fig. 8



Fig. 7

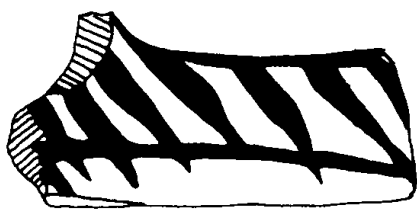
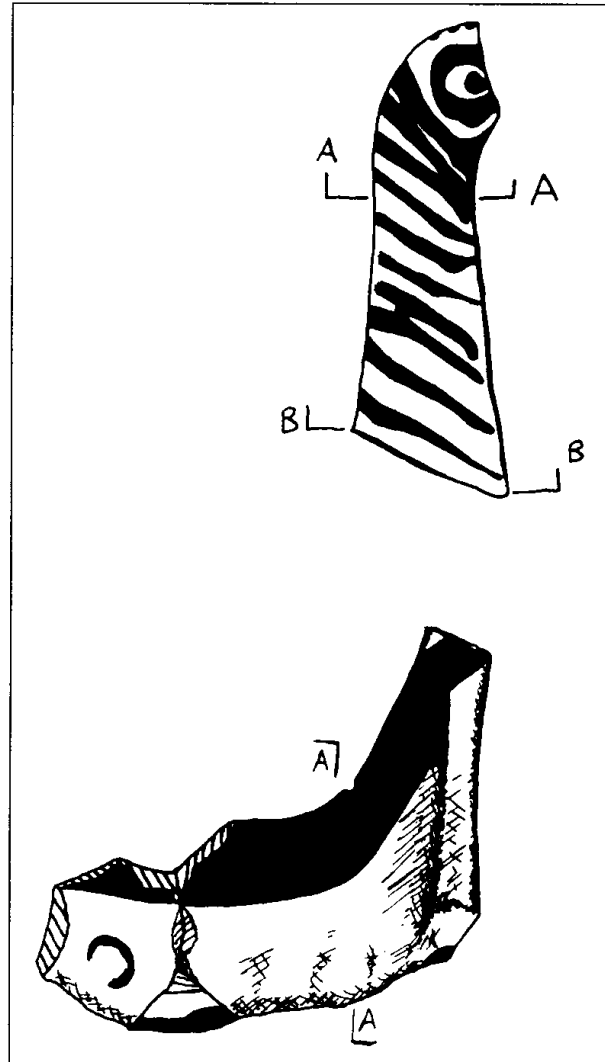


Pl. II



Pl. III

PI. IV



PI. V



Fig. 9