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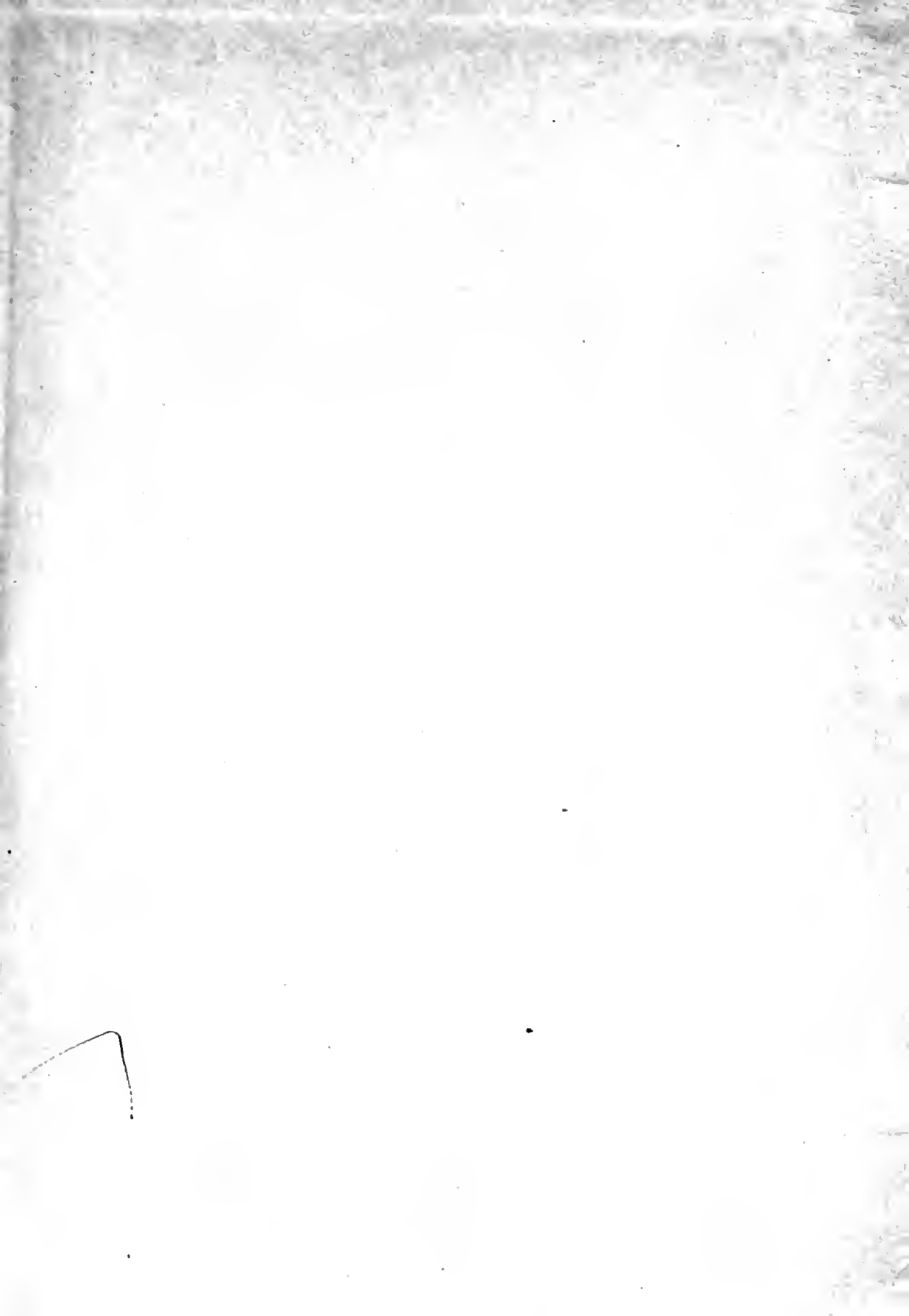
BRITISH SCHOOL AT ATHENS

No. XVIII.

SESSION 1911-1912

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# THE BRITISH SCHOOL AT ATHENS

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## EXCAVATIONS AT HALOS.

ALTHOUGH one of the smaller and less well-known cities in Thessaly Halos in Achaia Phthiotis has played an important part in history.<sup>1</sup> Tradition attributes its origin to Athamas,<sup>2</sup> and its position guarding the coast route between Othrys and the sea into the Spercheios valley, brought it on several critical occasions into prominence. In 480 B.C. together with the rest of Thessaly it submitted to Xerxes without a struggle, but in 346 B.C. it withstood a long siege by Philip and Parmenio. Some mediaeval and Turkish fortifications on the ancient Greek acropolis show that its strategic importance continued down to the last century. The walls which surrounded the city in the plain and the citadel on the hill to the west can still be traced, but of the city itself nothing is now visible.<sup>3</sup> The acropolis is the last peak of the projecting spur of Othrys, which running down towards the bay of Halmyros shuts off the plain of Sourpe from that of Halmyros. This is now a bare limestone hill covered with scrub, and whatever may exist in the plain is hidden beneath the cultivated fields. At the northern foot of the acropolis a copious spring (Kepha-

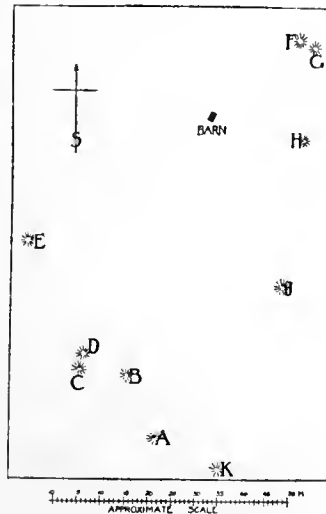


FIG. 1.—SKETCH PLAN OF  
TUNULI. (Scale 1 : 100.)

<sup>1</sup> See Pauly-Wissowa, *s.n.*

<sup>2</sup> It is not certain if this was also the Homeric Halos, cf. Allen, *Class. Review*, 1906, p. 196.

<sup>3</sup> Cf. Leake, *Northern Greece*, iv, p. 336; his identification based on Strabo's description has since been confirmed by an inscription found at Platanos (*I.G.* ix, 2, no. 107), for all the land in the neighbourhood belongs to Platanos. See also Stählin, *Ath. Mitt.* 1906, pp. 23 ff.

losis) of slightly brackish water gushes forth in such quantity that a short distance from its source it works several mills.<sup>1</sup> In the plain to the north of this about midway between it and the modern carriage road from Halmyros to its port, is a group of small tumuli (see plan Fig. 1), ten in all, which have more than once attracted the attention of archaeologists.

Heuzey, the French explorer,<sup>2</sup> is said to have excavated partially one of these tumuli (H on plan), and found that it was a funereal mound. More recently the Othrys Archaeological Society of Halmyros unearthed in trial excavations in another (E on plan) iron weapons, burnt bones, and fragments of Geometric pottery.<sup>3</sup> Of the other mounds, F has been partially excavated by Mr. Despotopoulos, the owner of the land, to obtain building stone, and G is said to have been opened by peasants, who found that it contained a domed tomb with an entrance from the east.<sup>4</sup> Near B or rather to the north of it, by a small vineyard where there was possibly an eleventh mound, some iron weapons now in the Halmyros museum were found, and near G during our excavation a ploughboy found an iron sword. Similar finds are also made from time to time by the peasants while working their land. For some time past we had been anxious to examine thoroughly one of these mounds and were enabled to do so in the spring of 1912 with the aid of funds given to the British School at Athens by the Hon. J. Abercromby, Caius College, Cambridge, and Professor Ridgeway.

We selected the largest tumulus (A on plan), and that which had been least damaged by ploughing or previous excavation, and began to work on April 23rd. At the end of a fortnight we had excavated the tumulus and had in addition, opened a small group of tombs which lie in the Halmyros-Sourpe road a few minutes to the south of the spring Kephalosis already mentioned. A third week was spent in Halmyros studying and cleaning the finds, where they are now exhibited in the local museum. Throughout the excavation ten men were employed, two of whom were skilled hands who had dug with us at other sites in

<sup>1</sup> Stählin, *op. cit.* Fig. 6.

<sup>2</sup> Cf. *Mission de Macédoine*, p. 412. He is wrong in supposing that all mounds or magoulas are funereal, for the majority are prehistoric settlements (see Wace-Thompson, *Prehistoric Thessaly*, pp. 4 ff), also most of the small conical tumuli seem to contain built tombs of Hellenistic date (see the references given in *Prehistoric Thessaly*, p. 55, note 1).

<sup>3</sup> Δελτίον τῆς Φιλαρχαίου Ἐταιρείας τῆς Ὀθρῆς, i, pp. 31 ff.

<sup>4</sup> This report is not altogether trustworthy. A peasant who saw the pile of large, rough slabs covering one of the pyres in the tumulus we excavated (see below, p. 10) described it as domed.

Thessaly. Our thanks are due to Mr. Despotopoulos of Platanos who lent us his barn near the tumuli to serve as our headquarters during the excavation. Mr. Priakos of Halmyros, the representative of the Greek government, most courteously gave us every assistance, as also did Dr. Varvarezos the President, Mr. Giannopoulos the Secretary and other members of the Othrys Archaeological Society.

A.—THE TOMBS.

As already mentioned above, we opened a group of eleven tombs at the foot of the acropolis of Halos. They lie in the Halmyros-Sourpe road,



FIG. 2.—VASES FROM TOMBS 4 AND 8 (Scale 1:3.)

which runs a few minutes to the south of the Kephalosis spring. Traffic along the road has worn away the surface earth, probably never very deep

over the rock which outcrops frequently, and exposed the tops of the slabs of the cist tombs described below. We noticed these signs and accordingly opened the tombs, and further trial trenches in the neighbourhood resulted in the discovery of others. The tombs and their contents are as follows:—

Tomb 1. A cist of slabs, measuring '45 by '26 m. and '30 m. deep, roof missing. This contained nothing but the skeleton of an infant in very bad condition.

Tomb 2. A cist of slabs measuring '60 by '30 m. and '30 m. deep, roof missing. It contained nothing but a few bones from a child's skeleton.

Tomb 3. A cist of slabs measuring '30 by '60 m. and '30 m. deep, roof missing. Contents—two fragments of a rough unpainted pot ending in a peak, and a few child's bones.

Tomb 4. A cist of slabs measuring 1'22 by '30 m. and '40 m. deep, roofed with two slabs. This contained the skeleton of a child laid out flat on its back. By the feet were two vases, a trefoil lipped jug (Fig. 2, 2, '18 m. high) and a plain one-handled mug covered with bad black paint (Fig. 2, 1, '7 m. high).

Tomb 5. A cist of slabs measuring '80 by '35 m. and '30 m. deep, roof missing. It contained only a few child's bones.

Tomb 6. This was a round enclosure resting on the rock and 1'60 m. in diameter. The enclosure wall is composed of three courses of medium-sized stones and stands '24 m. high. This contained the seven vases shewn in Fig. 3; a trefoil lipped jug with a pattern of half circles made by drawing complete circles with a compass and then painting over the lower half ('185 m. high), on handle two crossed lines; a trefoil lipped jug covered all over with brown-black paint ('11 m. high); a two-handled open bowl covered all over with black paint ('08 m. high); a small jug with a wavy line round the top of the body, otherwise covered all over with black-brown paint ('085 m. high); a jug ('12 m. high) with a plain lip and a pattern of hatched triangles round the top of the body (Fig. 3, 1), there were two small horizontal handles on the body,<sup>1</sup> but these were broken off in antiquity before the vase was placed in the tomb, the paint is brown-black; another jug

<sup>1</sup> Cf. *Tiryns*, i, p. 157, Fig. 21.

(.11 m. high) with a plain lip and a pattern of half circles round the top of the body (Fig. 3, 3); two-handed mug with a pattern of half



FIG. 3—VASES FROM TOMB 6 (Scale 1:3.)

circles depending from the rim (.11 m. high). In addition to these vases there were in the tomb a small bronze pin with a rolled head,

·085 m. long, and half of a small convex piece of bronze plate, pierced in the centre, ·025 m. in diameter.

Tomb 7. This was 1·40 m. long and about ·50 m. wide. It contained one skeleton of a youth laid out flat on its back with the feet to the west. The burial was enclosed by a low irregular wall of rough stones, roofed with slabs, and rested on the rock. It contained five vases



FIG. 4.—VASES FROM TOMB 7 (Scale 1:3.)

shewn in Fig. 4; two small one-handled mugs covered with plain black paint except for a narrow line round the body reserved in the colour of the biscuit (·05 and ·07 m. high); an oinochoe (·195 m. high) with a trefoil lip, on the handle are two lines crossed, the pattern on the top of the body is clearly seen in the illustration (Fig. 4, 5); an

oinochoe with a plain lip and a pattern of half circles (·155 m. high); a small oinochoe with a trefoil lip, handle broken off in antiquity, the pattern is clearly seen in the illustration (Fig. 4, 2), paint red-brown, (·13 m. high).

Tomb 8. Similar in type to Tomb 7, 1·30 m. long. The skeleton, which was that of a child of about fourteen years old, was laid out flat on its back. The tomb contained two vases shewn in Fig. 2, 3 and 4; a plain one-handed mug with a narrow belt round the body reserved in the colour of the biscuit (·07 m. high); an oinochoe with a trefoil lip and a pattern of half circles on the shoulder (·16 m. high).

Tomb 9. A cist of slabs measuring 1·13 by ·50 m. and ·40 m. deep, and roofed with three slabs. This contained two full grown skeletons laid in a crouched attitude on their right sides, with their heads to the north-west. The skeleton on the east was the second to be placed in the tomb.

Tomb 10. A cist tomb measuring 1·10 by ·60 m., and ·60 m. deep. Roof missing. This had been opened by peasants and was empty.

Tomb 11. A cist measuring apparently ·60 by ·40 m. and ·40 m. deep. The roof and two of the side slabs were missing and the tomb had been robbed.

The tombs in themselves present few remarkable features. Cist graves of slabs are common in Thessaly both in the fourth prehistoric period,<sup>1</sup> and in the Early Iron Age, the date to which the Halos tombs belong. Two tombs, Nos. 7 and 8, which seem to have had very low or no side walls at all, are peculiar. But this may have been caused by some disturbance of the ground. The only real variant from the ordinary type is the round enclosure, which may possibly be the foundation of a small tholos, though no door could be made out. Tholos tombs with Geometric pottery of the Early Iron Age have been found at Marmariane and Sesklo and there is a doubtful example at Zerelia.<sup>2</sup>

In these tombs there was no sign of any burning of the bodies: simple inhumation was the only practice. The tombs, with the exception of No. 9, contained only the skeletons of children which were laid out flat

<sup>1</sup> Wace-Thompson, *Prehistoric Thessaly*, pp. 66, 81, 113, 121, 133, 161, 166, 191, as aralic 209.

<sup>2</sup> *Op. cit.*, pp. 161, 214, 215.

on their backs. The two full-grown skeletons in Tomb 9 were in the contracted attitude so common in prehistoric burials.

As regards the vases found it will be clear from the illustrations given that no difference in date can be detected between the tombs themselves, and that all can be compared with the Geometric pottery from the Early Iron Age tombs at Theotokou and in Skyros.<sup>1</sup> Several of the vases are almost identical in style, and the only real difference is that at Halos there are no jugs with cut-away necks and no bowls with raised bases, shapes that occur both at Theotokou and Skyros. This however is of but little importance, for the total number of vases found at Theotokou exceeds that from Halos, and consequently some variety is to be expected.

The style and relationship of the vases from Theotokou and Skyros to other similar groups found in Crete and in the Aegean basin, as well as their connection with the early Geometric vases from Marmariane, Sesklo and other Thessalian sites has been fully discussed elsewhere.<sup>2</sup> For the present there is not sufficient new material to throw any fresh light on the problems involved. The Halos vases seem to belong to the same period as those from Theotokou, which owing to the fibula types and the evidence from other sources already referred to, must be placed near the beginning of the Iron Age, considerably earlier than the fully developed Dipylon style, but at the same time later than the Sesklo-Marmariane group.<sup>3</sup>

#### B.—THE TUMULUS.

The tumulus selected for excavation (Fig. 1, A) measured approximately eighteen to twenty metres in diameter being in shape a rough oval, and stood slightly over two metres above the present level of the plain. It was composed of large river-worn stones mixed with comparatively little earth. About the centre of the mound and 20 m. below the surface many fragments of Geometric pottery were found with a few scraps of bronze. This deposit went down to 40 m. and covered an area about a

<sup>1</sup> *Op. cit.*, pp. pp. 208 ff. This is the ware classed as Δ 1a, see *ibid.*, p. 20.

<sup>2</sup> Wace-Thompson, *Prehistoric Thessaly*, pp. 214 ff. To the vases there mentioned we may add some from Moustaphakli in Thessaly now in a storeroom in the National Museum at Athens, and two from Pagasai, Π. Χ. 'Αποστολίδης, *Παγασαί*, Figs. 1, 2. In the list of similar groups found outside Thessaly should be included a new find from Attica, 'Εφ. 'Αρχ. 1911, p. 251, Fig. 20.

<sup>3</sup> A minor point as regards the fabric is perhaps worth recording. Though the Halos vases are less well baked than the others, yet the paint is more lustrous than on the Sesklo-Marmariane vases.



metre in diameter, but no human remains or traces of burning were found with it. At 40 m. at the spot marked on the plan (Fig. 5) we found a trench grave with rounded ends, enclosed by small, uncut slabs, and roofed with five large slabs. The skeleton lay at full length on its back with the feet to the east, and on the third finger of the left hand were six bronze

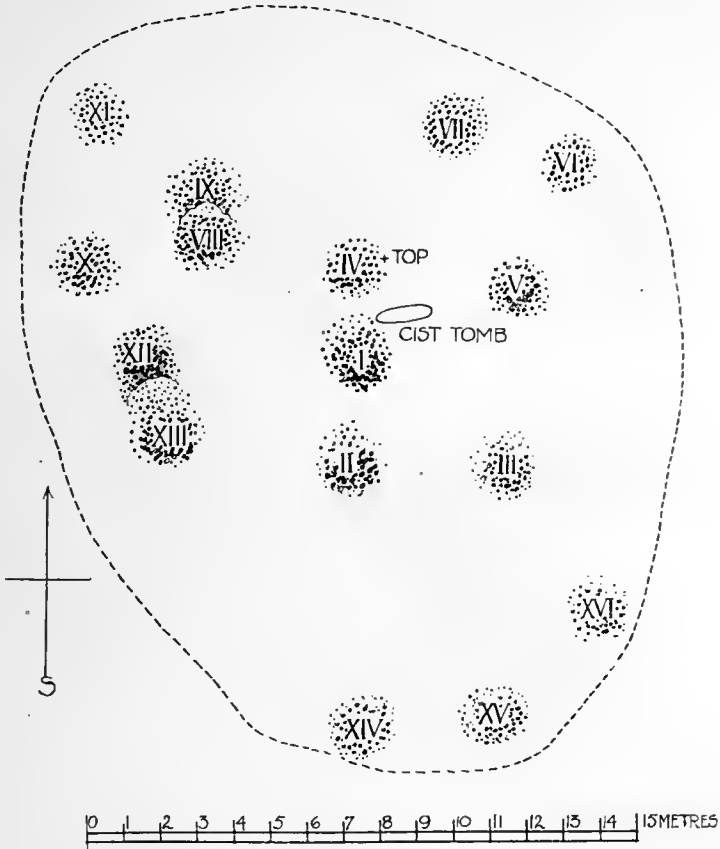


FIG. 5.—SKETCH PLAN SHEWING THE POSITIONS OF THE PYRES. (Scale 1 : 100.)

rings. Nothing else was found in this grave to give a clear indication of its date, but it is probable that it is Byzantine or later. The grave was 30-40 m. wide, 40-50 m. deep and 1.70 m. long. Round this grave at a depth of .80 m. the remains of three more skeletons were found, one just to the east and two slightly to the west. The bones shewed no signs of

burning, and round them were more fragments of Geometric pottery and a few small bits of bronze, all apparently unburnt, but with plentiful traces of carbonisation. Then still lower down at a depth of one metre we came upon a pile of large, rough limestone slabs, which proved to be the top of Pyre I. Further excavation shewed that the tumulus had been erected over sixteen separate burnt pyres.

Each pyre was covered by a heap of stones, principally very large, rough slabs probably obtained from the hills by Halos acropolis and a few



FIG. 6.—VASES FROM PYRES V (1), IX (3), XV (2, 4). (Scale 1 : 3.)

river-worn stones of smaller size wedged in between them. This cairn-like heap of stones was about 60 m. high, and 2.40 m. in diameter. Directly below was a burnt deposit 10-20 m. thick which contained wood ash, fragments of human bones, Geometric poetry, iron swords, or bronze fibulae and other gear. The earth on which this deposit lay was virgin soil and had been baked hard shewing that the bodies had been burnt on the spot. The shape of each pyre was irregular and there was no sign of any order or arrangement either of the gear in any particular pyre or in

the position of one pyre to another. Apparently this spot was used as an *ustrinum* where the bodies of the dead were burnt, and with them was laid all their gear, iron weapons, or bronze fibulae, and pottery. After the extinction of the pyre the large slabs mentioned were thrown on top so as to form a kind of cairn and protect it from violation. Lastly, when all the available space had been used up the tumulus of earth and stones was heaped up over the group of cairns.

The following list gives the principal contents of each pyre the positions of which can be seen on the plan (Fig. 5). In each pyre pottery was plentiful, but as all was much broken and badly burnt it is impossible to say certainly that any one shape does not occur in any particular pyre. In the following list only the prominent shapes etc. are mentioned.

Pyre I. Bronze, one fibula bow (cf. Fig. 14*a, b*), and fragments of pins and plates from others.

Iron, one small iron point (drill?).

Pottery, unpainted amphorae; two-handed open bowls (cf. Fig. 6, 3) with zigzag and maeander patterns; oinochoai (exact type uncertain); and a painted fragment from a large open bowl.

Pyre II. Iron, long sword with broad blade, hilt  $\cdot 10$  m. long, length of total part preserved,  $\cdot 82$  m.

Pottery, unpainted amphorae; ring-stemmed vases (Fig. 7), painted; large bowls with horizontal rolled handles on body, plain and painted; open two-handed bowls (cf. Figs. 6, 3; 8, 1; 9, 3, 4), painted; painted lid with crossed handles (Fig. 8, 2); painted plates (Fig. 8, 3, 4, cf. Fig. 11); jugs with cut-away necks (Fig. 12, 3) and twisted handles; large open bowls with vertical ribbon handles, painted with black or with narrow pattern below rim; conical lids; dishes plain and painted, with rectangular lugs sometimes bored with string holes; fragments of a bowl with a large hatched maeander; two-handed cups with handles projecting high above the rim.

Pyre III. Bronze, seven fibulae like Fig. 14*a, b* (two small and five big), three fibulae like Fig. 14*c*, and fragments of pins and plates of others; two rings decorated with parallel stripes,  $\cdot 025$  m. deep.

Iron, small knife (Fig. 14*d*)  $\cdot 15$  m. long.

Pottery, one-handed jug (cf. Fig. 6, 4) unpainted; two fragments of coarse red ware incised; open two-handled bowls (cf. Fig. 6, 3), some with plain black paint, others with patterns as Fig. 9, 2, 3; amphorae, plain and one painted with curved black lines crossed with white; large bowls with horizontal rolled handles; two-handled cups with high projecting handles; oinochoai with trefoil lips (cf. Fig. 10); jugs with cut-away necks.

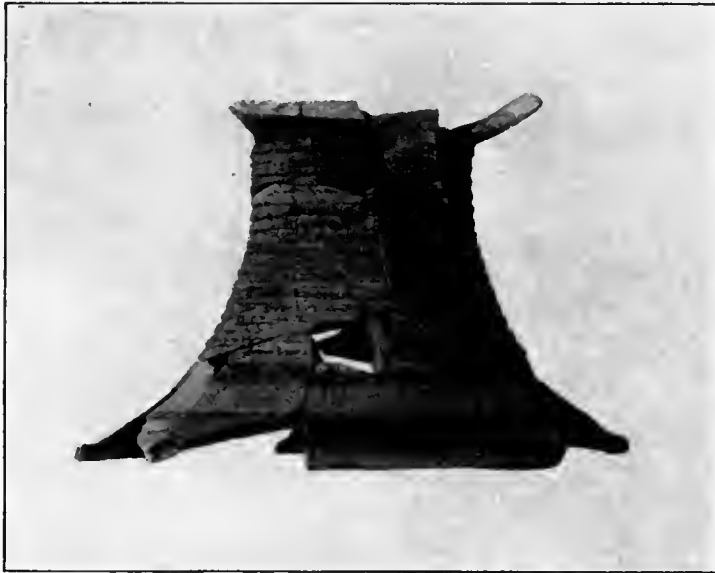


FIG. 7.—RING-STEMMED VASE FROM PYRE II. (Scale about 1 : 3.)

Pyre IV. Bronze, three fibulae as Fig. 14 *a, b* one ring as in Pyre III, and many fragments of pins, plates, etc. of fibulae.

Pottery, three one-handed mugs as Fig. 6, 4, plain: plain amphorae; two-handled open bowls as Fig. 6, 3, most plain, a few decorated as Fig. 9, 2, 3; plates, plain; oinochoai with trefoil lips, one fragment with breasts as Fig. 10, 4, and one piece painted with half-circles round the top of the body, all otherwise with plain black paint.

Pyre V. Iron, long broad bladed sword (Fig. 15, 1), hilt .12 m., total length .75 m., but the top of the hilt and the point of the blade

are missing; four knives as Fig. 15, 6, 7, none complete, length .25-.33 m.; broad bladed spear, blade only, and other small fragments.

Pottery, amphorae, plain; one-handed mug as Fig. 6, 4; trefoil lipped oinochoai, at least five large and one small (Fig. 6, 1); two-handed cups with high projecting handles, plain and with black paint; jug with cut-away neck and breasts (Fig. 12, 4); two-handed open bowls as Fig. 6, 3, plain and painted either with patterns as Fig. 9, 2, 3 or black paint; pieces of a jug with pattern of half-circles round the top of the body and plain belts below.

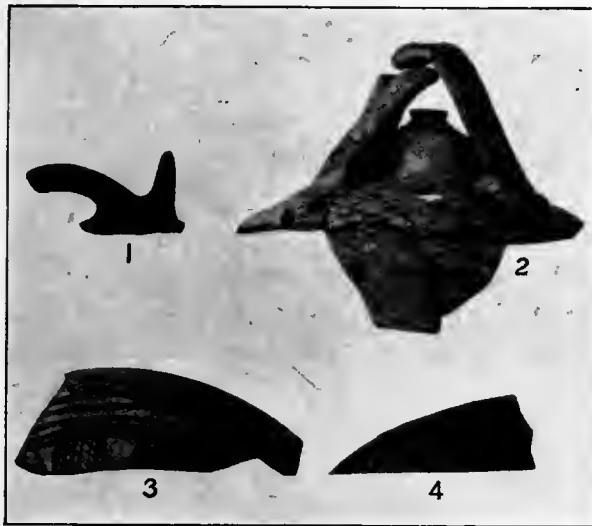


FIG. 8.—VASES FROM PYRE II. (Scale 1 : 3.)

Pyre VI. Bronze, two thin bracelets (one broken), and one thick, .065 m. in diameter; one fibula as Fig. 14c with traces of an iron pin; spirally rolled bronze ring.

Pottery, amphorae, plain; open two-handed bowls, one with pattern as Fig. 9, 4, and another similar to Fig. 9, 3; plate or lid with broad bent out rim; large bowl with horizontal round handles; large jug with plain, turn over rim, black paint, broken in antiquity and holes bored round the edge to set base on again; a breasted jug;

three thin fragments burnt black and red with patterns, chevrons, maeander, etc. burnt white.

Pyre VII. Bronze, rod .42 m. long (in two pieces, but complete), handle square in section .07 m. long and decorated at ends and in middle with raised bands, the shaft, which is circular in section, tapers to a point.

Iron, long sword with narrow blade, .91 m. in length, complete but for tips of blade and hilt, Fig. 15, 3; fragments of at least three knives like Fig. 15, 6, 7, as preserved, .33 m. long; fragments of three or four small knives; pieces of nails.

Pottery, two-handled open bowls, one with patterns shewn in Fig. 9, 1, others black paint; oinochoai with trefoil lips and twisted handles; two-handled cups with high projecting handles; breasted jugs; jugs with plain lips; amphorae, coarse and plain, one of fine ware with black paint, another shewing a hatched maeander pattern in panels below the rim.

Pyre VIII. Bronze, thin triangular plate probably from the tip of a wooden sword sheath, .065 by .035 m.

Iron, broad bladed sword, .05 wide, fragments as preserved .62 m. long; knife .21 m. long as Fig. 15, 6, 7; three fragments of a rod similar to the bronze example from Pyre VII; spear head, blade .04 m. wide, length as preserved .25 m.

Pottery, amphorae, plain: ring-stemmed vases; two-handled open bowls as Fig. 6, 3, black paint; open bowl, Fig. 12, 1; trefoil lipped oinochoe, black paint; jug with cut-away neck, black paint; part of neck and body of a jug (?), round neck maeander, below belt of oblique lines, on the body a wavy line, and a belt of oblique lines, between these patterns plain lines, paint black and thin.

Pyre IX. Bronze, fragments of a bowl; fragment of a sword sheath tip like that from Pyre VIII; three fragments of a rod like that from Pyre VII.

Iron, long sword in fragments, narrow blade, .04 m. wide, as preserved .62 m. long, both tips missing; long knife as Fig. 14, 6, 7, .45 m. long almost complete, and fragments of at least two smaller knives; narrow bladed spear head like that from Pyre VIII, incomplete.

Pottery, amphorae; two-handled cups with high projecting handles; ring-stemmed vases; plain open bowls, black paint; plain one-handled mug as Fig. 6, 4; small jug with a pattern of cross hatched triangles round the top of the body; two-handled open bowls, one shewn in Fig. 6, 3, others plain black paint; large black painted oinochoai with trefoil lips, twisted handles, and breasts (Fig. 10, 4), one fragment has a pattern of half circles round the neck.

Pyre X. Bronze, four large plate fibulae with knobbed bows, all in fragments, and other fragments.

Iron, one small point as in Pyre I, 06 m. long; and a small knife as Fig. 14*d* in fragments.

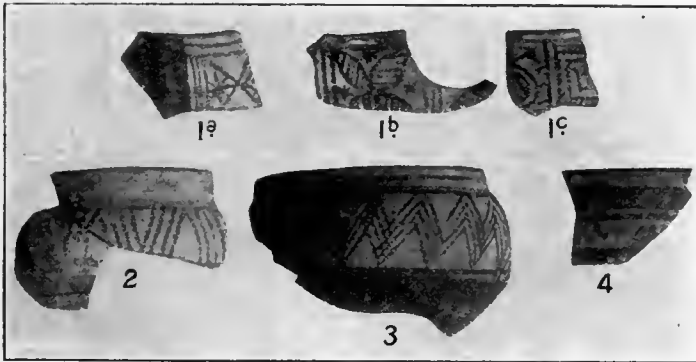


FIG. 9.—VASES FROM PYRES II (2, 3), VI (4), VII (1). (Scale 1 : 3.)

Pottery, amphorae, plain and coarse; ring-stemmed vases; oinochoai with trefoil lips and twisted handles; two-handled open bowls as Fig. 6, 3; 9, 2-4 with similar patterns; one painted plate (Fig. 11); fragments of a large bowl with a row of dots below the rim and below a double zigzag; plain open bowls.

Pyre XI. Bronze, fragment of a bowl as in Pyre IX.

Iron, one rod, complete, similar to the bronze rod from Pyre VII; narrow bladed spear, 04 m. wide, 35 m. long, but socket is broken; sword, narrow bladed, width 04-05 m., incomplete, hilt 12 m. long; small knife (Fig. 15, 4) 25 m. long, haft 06 m. long; and three fragments of another knife.

Pottery, breasted oinochoai with twisted handles and trefoil lips, black paint; jugs with cut-away necks, black paint; amphorae plain; large open bowls with rolled lips and horizontal rolled handles; ring-stemmed bowls; two-handled open bowls as Fig. 6, 3.

Pyre XII. Bronze, two fibulae as Fig. 14 *a, b* and many fragments; a broken ring similar to that from Pyre III; a narrow band probably to bind round the top of a wooden knife sheath.

Iron, small knife as Fig. 14 *d*.



FIG. 10.—VASES FROM PYRES V (1-3) AND IX (4). (Scale about 1 : 4.)

Pottery, ring-stemmed bowls; jugs with cut-away necks, black paint; one handled mug as Fig. 6, 4; convex lid; amphorae, coarse and plain; bowls with horizontal rolled handles, plain and coarse; two-handled bowls as Fig. 6, 3, black paint; plain jar; two-handled cup with high projecting handles.

Pyre XIII. Bronze, a narrow band for binding round the top of a sheath, and a few unrecognisable scraps.



Iron, fragments of a sword in very bad condition; two spears with narrow blades, '04 m. wide, one of these was not found in the pyre itself, but in the earth above it, the other is broken in three pieces.

Pottery, ring stemmed vases; two-handed open bowls as Fig. 6, 3 with similar patterns: oinochoai with trefoil lips, black paint; two-handed cups with high projecting handles; wide, open bowls with plain moulded rims; amphorae, plain; stamnoi (?); jugs with cut-away necks; jugs with twisted handles.



FIG. II.—PATTERN OF PLATE FROM PYRE X. (Scale 2 : 3.)

Pyre XIV. Iron, two spears with narrow blades, one complete '355 m. long, blade '04 m. wide; long sword with narrow blade, '04 m. wide, all over '76 m. long, hilt '12 m. long (Fig. 15, 2); hilt, point and other fragments of a blade of a similar sword; long knife, complete, but broken (Fig. 15, 7).

Pottery, amphorae; large bowls with horizontal rolled handles; ring-stem vases; jugs with cut-away necks, black paint; plain jars; two-handed open bowls as Fig. 6, 3 with similar patterns; bowls or plates with horizontal ribbon handles; one-handed mugs; fragments of a plate like that in Pyre X.

Pyre XV. Bronze, fragment of a fibula bow like Fig. 14 *c*, probably misplaced.

Iron, narrow bladed spear complete, .04 m. wide, .34 m. long (Fig. 15, 5)  
long knife complete (Fig. 15, 6), .49 m. long; hilt and fragments of  
blade of long, narrow bladed sword, hilt .125 m. long, blade  
.04 m. wide.



FIG. 12.—JUGS WITH CUT-AWAY NECKS FROM PYRES II (3), V (4),  
ABOVE IX (2), AND OPEN BOWL FROM PYRE VIII. (Scale 1 : 4.)

Pottery, one-handled mug (Fig. 6, 4); jug with cut-away neck; ring-stemmed vase, plain; amphorae, coarse and plain; large bowls; coarse and plain; open two-handled bowls as Fig. 6, 3 black paint; small jug (Fig. 6, 2); jug with ordinary bent-over lip; shallow bowls with horizontal ribbon handles; bowls with horizontal rolled handles.

Pyre XVI. Bronze, fragment of a fibula like Fig. 14 *c*, this was found outside the pyre.

Iron, a spear in fragments; hilt and part of blade of long sword, '045-'05 m. wide, hilt '12 m. long; fragments of two long knives.

Pottery, oinochoai with trefoil lips; black paint; black painted jar with vertical ribbon handle on rim; narrow necked jar, black paint; two-handled open bowls as Fig. 6, 3, some with no patterns, one with pattern as Fig. 6, 3; amphorae, plain; large bowls with horizontal rolled handles; large jars with plain rims; fragments of a large pot with a pattern of concentric circles on top of body and belts of lines below.

Not found in any Pyre. Bronze, fragment of a fibula like Fig. 14 *c*.

Iron, small knife like Fig. 14 *d*.

Pottery, small jug with cut-away neck (Fig. 12, 2), this when found contained two carbonised figs; oinochoe with trefoil lip, black paint (Fig. 13).

To this catalogue we may subjoin a list of the principal finds from Tumulus E.

Bronze, several unrecognisable fragments, possibly from fibula plates.

Iron, six pieces of long knives like those shewn in Fig. 15, 6, 7, part of the socket end of a spear-head, and an uncertain fragment.

Pottery, oinochoai with trefoil lips and twisted handles; jugs with cut-away necks; two-handled open bowls like Fig. 6, 3; plates, painted, as Fig. 11; one-handled mug as Fig. 6, 4; fragments of large bowls with handles projecting above rim, with simple linear patterns, hatched diamonds, triangles, zigzags, macanders and the like. Most of the sherds from this tumulus preserved in the Halmyros museum are painted with thin black paint or with simple linear patterns as indicated; the slipped vases are similar to those from the tumulus we excavated,

From near Tumulus B are the following:—

Iron, hilt of sword '095 m. long, part of sword blade perhaps belonging to same sword as hilt, in two pieces, '40 m. long, width '045-'05 m.; a small knife like Fig. 14 *d*, '145 m. long.

From Tumulus G is the following:—

Iron, narrow bladed sword in two pieces, '68 m. long, hilt '12 m. long  
blade '035-'04 m. wide, tip missing.



FIG. 13.—OINOCHOE WITH TREFOIL LIP. (Scale about 4 : 9.)

From the above list it will be seen that with the exception of Pyres XV and XVI the six pyres that contain fibulae contain either, only small iron knives of a special type that does not occur in the other ten pyres, or else no iron weapons at all, and that the pyres with iron weapons contain no fibulae. This makes it highly probable that the two small fragments of fibulae in Pyres XV and XVI are misplaced, and that fibulae are peculiar to women's graves. Thus Pyres I, III, IV, VI, X and XII may be considered to contain the remains of women and the rest those of men. Having thus divided the finds into groups we may now consider the pottery, fibulae, and weapons under separate headings. As to the dating of the pyres in relation to one another there is little to be said, for the fact that the objects found in them are all of the same types and style shews that there is no great difference in date between any of the pyres. All that can be said is that Pyre VIII is later than Pyre IX, which was underneath it, and that Pyre XII is earlier than Pyre XIII which was at a higher level, and slightly overlapped the other. Perhaps Pyres VII and IX, which contain bronze rods, are earlier than Pyres VIII and XI, which contain the same type of rod in iron, but this is merely a conjecture.

#### *The Pottery.*

The pottery found in the pyres is, as stated above, much broken and badly damaged by burning. The larger and coarser vases such as amphorae and bowls with horizontal rolled handles, and smaller unpainted vases are of badly levigated clay, very gritty and rather soft. The clay of the better made and smaller vases is also soft, but is well refined. Excepting a few large examples all the painted vases belong to this class. The clay of the painted and unpainted vases varies in colour from brick-red to grey, but the grey tint in most cases seems due either to overfiring when made, or else to the subsequent burning in the pyres. The paint is brown-black, not very lustrous, and varies greatly in colour from the same causes. The vases with painted patterns are covered with a cream-coloured slip which owing to the action of fire, is liable to flake off bringing the pattern with it. All the vases seem to be of local manufacture with the possible exception of a few of good fabric and of fine bright brick-red clay.

From the catalogue of finds it will be seen that there is no appreciable difference as regards pottery between any two pyres. The same shapes,

the same patterns occur in all the pyres alike. The most noticeable points in general about the pottery are the great quantity of plain coarse vases found, the absence of any elaborate patterns such as are typical of the ordinary Dipylon ware, and, compared with the number of painted vases found, the scarcity of patterns of any kind. When patterns occur they are, as will be seen from the details given below, not of the ordinary Dipylon kind, but of a simpler style. Thus the pottery from Halos must be compared not with the Dipylon ware from Attica, Boeotia, Laconia, Delphi, and elsewhere,<sup>1</sup> but rather with a particular phase of it found in Crete, Thera, and at Tiryns,<sup>2</sup> in which a large part of the surface of the vases is covered with a thin wash of black or brown paint, and the decoration is both restricted in space and simple in design.

The more important and striking shapes are the following :—

Two-handled open bowls. This was perhaps the commonest shape, for in some pyres great quantities of fragments of such bowls were found. They are on the whole the best made of all the vases found, and as a rule those most usually decorated. Unpainted vases of this shape are rare, those with simple patterns as shewn in Figs. 6, 3 ; 9, 2-4 are common, and those covered all over with thin brown-black paint, are very common. This shape is by no means rare in Geometric pottery : there are examples from Delphi, Tiryns, Thera, Aegina, and elsewhere.<sup>3</sup> Some specimens have projecting horns by the handle (Fig. 8, 1).

Plates. This is one of the commonest Dipylon shapes occurring frequently in Attica, Boeotia, the islands, and elsewhere.<sup>4</sup> At Halos however it is not common and comparatively few examples were found, and of these the majority were decorated (see Figs. 8, 3, 4 ; 11) with ordinary geometric designs.

Oinochoai with trefoil lips. These were common and the majority are covered with thin black paint.<sup>5</sup> A few have a pattern of circles or half circles on the shoulder in a belt reserved in the colour of the biscuit, though this is sometimes slipped. Many specimens have twisted handles,

<sup>1</sup> See Wide, *Geometrische Vasen* ; Poulsen, *Die Dipylongräber* ; *Fouilles de Delphes*, v ; Furtwängler, *Aegina* ; *B.S.A.* xiii, pp. 118 ff.

<sup>2</sup> See *B.S.A.* vi, pp. 83 ff. ; *ibid.* xii, pp. 24 ff. ; Hiller von Gärtringen, *Thera*, ii ; *Tiryns*, i.

<sup>3</sup> *Fouilles de Delphes*, v, p. 136, Fig. 511 ; Furtwängler, *Aegina*, Pl. 127, no. 15 ; Hiller von Gärtringen, *Thera*, ii, p. 51, Figs. 162-165 ; *Tiryns*, i, Pl. XVIII.

<sup>4</sup> Cf. e.g. Hiller von Gärtringen, *Thera*, ii, p. 150, Figs. 361, 362.

<sup>5</sup> This is a very common shape in Dipylon ware, Wide, *Geometrische Vasen*, pp. 49, 50, Figs. 88-91.

and some have two small breast-like projections at the foot of the neck in front, but neither of these points is peculiar to the Halos vases alone, for they occur in Geometric ware from Attica and other regions.<sup>1</sup>

Jugs with cut-away necks. These are as a rule unpainted, but well made. Those that are painted are simply covered with thin black paint, though some specimens shew the same patterns as the oinochoai with trefoil lips. Other examples too have breast-like projections (Fig. 12, 4). This shape has not yet been found amongst Geometric pottery in southern Greece as far as we know. It occurs in the Early Iron Age vases from Sesklo, Marmariane, Theotokou, and Skyros,<sup>2</sup> and is also to be met with in the plain ware of the fourth prehistoric period in Thessaly.<sup>3</sup> Further this shape is prominent amongst the Early Iron Age vases from Pateli in Macedonia.<sup>4</sup> We may therefore consider these vases to represent a survival, though of more developed style, from an earlier period and as we have suggested elsewhere, their origin is probably to be looked for somewhere to the north of Thessaly.

Ring-stemmed vases, shape of upper part unknown. These are also common, and though they are to be compared with some Geometric vases from southern Greece, may yet like the jugs with cut-away necks be regarded as one of the peculiarities of the Halos Geometric ware. There are vases with similar stems from Attica, Delphi, Rhodes, and elsewhere,<sup>5</sup> but these are of a more advanced style. The Halos specimens are often unpainted, and those that are painted are merely covered with the usual thin black paint, and seldom shew any patterns (Fig. 7).

Thus though we see that from its lack of decoration and patterns the Halos Geometric ware is uninteresting, yet its very simplicity marks it off as a separate class. This may be due to two causes. These vases may represent an earlier stage in the development of Dipylon ware, or isolation and poverty may have prevented this class of pottery from having attained in Thessaly the same height that it reached elsewhere. The latter reason is perhaps the more probable, for some of the patterns, especially the bird and others shewn in Fig. 9, 1*a*-1*c*, indicate that the Halos vases are to be

<sup>1</sup> E.g. Wide, *op. cit.* p. 48, Fig. 86; Athens, National Museum, Nos. 132, 811, 14412; *Ath. Mitt.* 1910, Pl. VI, p. 25.

<sup>2</sup> Wace-Thompson, *Prehistoric Thessaly*, p. 209, Fig. 145*b*; p. 210, Fig. 145*h*, p. 214.

<sup>3</sup> *Ibid.* p. 21, Δ2*a*.

<sup>4</sup> *Ibid.* p. 216.

<sup>5</sup> E.g. *Fouilles de Delphes*, v, p. 134, Fig. 504; *Jahrbuch*, 1886, p. 135; *Tiryns*, i, p. 164, Fig. 23; Athens, National Museum, Nos. 841, 990.

considered as belonging to a late rather than to an early period in the Geometric style.

*The Weapons and Gear.*

*The Bronze and Iron Objects from the Women's Pyres.*

The only bronze objects from Pyres I, III, IV, VI, X, XII, which we have attributed to women, that require further notice are the fibulae. In all of these the pin plate is large and fully developed and the bow is arched. Two types may however be distinguished. In the first, which is represented by only four much-damaged specimens, all from Pyre X, the

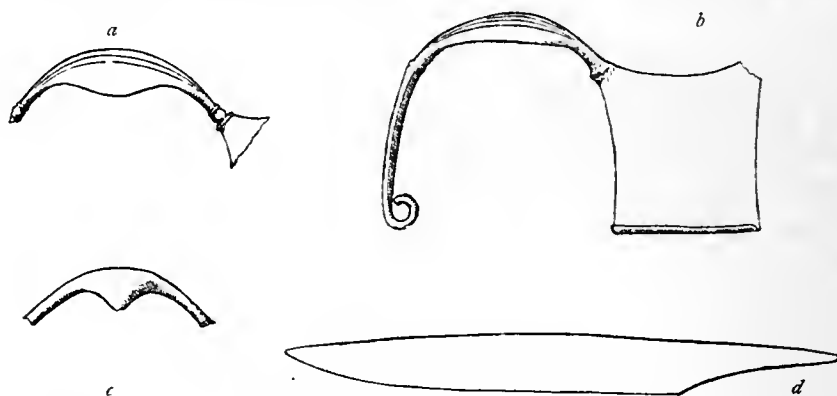


FIG. 14.—IRON KNIFE FROM PYRE III (*d*), BRONZE FIBULAE FROM PYRE III (*a*, *b*, *c*).  
(Scale 1 : 2.)

bow is strengthened or decorated by small solid knobs. In the second type, under which all the other examples may be classed, the bow is thickened at the top; the thickening usually takes a solid ovoid shape but in some specimens is almost cruciform. Examples from Pyre III, shewing these minor varieties, are illustrated in Fig. 14 *a*, *b*, *c*. One fibula from Pyre VI seems to have had an iron pin. Neither of the above types is in itself rare<sup>1</sup> though neither can be called a characteristic type of the period of Greek Geometric pottery. Their importance lies in the chronological conclusions they suggest. Both are clearly later in form than the simple bow fibula in which the bow, though arched, is scarcely thickened at

<sup>1</sup> Cf. Undset, *Zeit. für Ethnol.* 1889, pp. 218, 219, Figs. 27, 29; Montelius, *Die älteren Culturperioden*, 1, p. 52, Nos. 179, 180.



all and the pin plate is still in an elementary form. This earlier type occurs at Theotokou<sup>1</sup> in southern Magnesia in inhumation graves containing Geometric pottery which is exactly similar to that from the inhumation graves at Halos. Thus the evidence from the fibulae confirms the conclusion arrived at from a study of the pottery alone, that the cremation tumulus at Halos is of a later date than the inhumation graves close to the city wall, which have been described above on pages 4-8.

The iron objects from the women's Pyres are few in number; they consist of two small points of unknown use similar to the bronze points of an earlier period which are sometimes described as drills, and three small one-edged knives. These were fitted into handles by small tangs. A bronze band probably from the sheath but perhaps from the handle of one of these, was found in Pyre XII. The average length of these knives, including the tang is .15 m.; it is noticeable that they differ somewhat in type as well as size from the knives found in the men's Pyres.<sup>2</sup> The best preserved example from Pyre III is shewn in Fig. 14 *d*.

*The Bronze and Iron Objects from the Men's Pyres.*

The bronze objects from the men's Pyres were few in number and, apart from some fragments apparently of bowls and two thin triangular plates and a band probably from wooden sheaths, consisted of two long rods, perhaps spits, pointed at one end. Two examples in iron, but otherwise exactly similar, also belong to the men's Pyres: the best example measures .42 m. and all seem to have been of about this length. This deficiency in bronze is fully compensated by the magnificent series of iron weapons; in all, excluding a few indeterminable fragments, eleven swords, ten spear heads and seventeen knives of various sizes were discovered. These were distributed as follows among the Pyres. Pyre XIV contained two swords and two spears; in Pyre VII there was apparently no spear unless we have mistaken a few small fragments of one for the remains of a knife; the spear found above Pyre XIII probably belongs to Pyre II, which extended far in this direction and otherwise contained no spear. All the other men's Pyres contained one spear and one sword each and in addition one or more knives. This we may then assume to have been the

<sup>1</sup> Cf. Wace-Thompson, *Prehistoric Thessaly*, p. 212, Fig. 147 *a, b, d, g*.

<sup>2</sup> Cf. an iron knife from the Kynosarges site, *B.S.A.* xii, p. 91, Fig. 12, and another in the British Museum which was found with bronze fibulae with engraved plates and Geometric pottery etc. in tombs near Thebes, *Class. Rev.* 1887, p. 316, *Jahrbuch*, 1888, p. 361.

normal equipment and consequently it follows that Pyre XIV, which contained two swords and two spears, was a case of double burial. The best preserved weapons of all types are shewn collectively in Fig. 15, and although many of the other specimens are too much damaged to be photographed easily almost every one is sufficiently well preserved to enable its shape to be ascertained.

*Spears.*—Of the ten spear heads found all were socketed and eight were almost identical in shape and size; the best example, which measures .34 m. in length and .04 m. across the widest part of the blade, is shewn in Fig. 15, 5. Of the remaining two, one was somewhat broader in the blade and the other so damaged that its shape could not be seen. There was no trace of any butt piece.

*Knives.*—Although the knives differ greatly in size, there is little difference in shape: typical examples varying in length from .25 m. to .50 m. are shewn in Fig. 15, 4, 6, 7. All are single edged and were fastened into handles, presumably of wood, by tangs and small iron rivets. Except for the curve near the point the edge of the blade seems to have been almost straight, for the incurved profile which is seen in several cases seems due entirely to long use and repeated sharpening.

*Swords.*—Of the eleven swords found, one is too damaged for classification, but the rest may be divided into two groups in accordance with the width of the blade. The hilts, which are of the same type in all the examples found, are made in one piece with the blade and flanged except at the top. Originally they were completed by side pieces of wood, bone, or ivory, inlaid and attached by iron rivets, some of which still survive, cf. Fig. 15, 1, 2. No pommel was found, but a plain button pommel may have existed.

*Broad bladed Swords.*—There are three good examples and to these may be added the sword from Pyre XVI which is broad rather than narrow. In the best example, which is shewn in Fig. 15, 1, the blade measures .05 m. at the hilt and for some distance below the edges run almost parallel but afterwards diverge to a width of .06; the blade then tapers gradually to a point. In length the blade measures now .63 m. and the hilt .12, but neither is quite complete. The other examples seem to have been of about the same length. Owing to rust the exact section (a cusped rhomboid) of the blade is difficult to determine; the midrib, however, is very slight, and in one case (Fig. 15, 1) cannot be discerned.

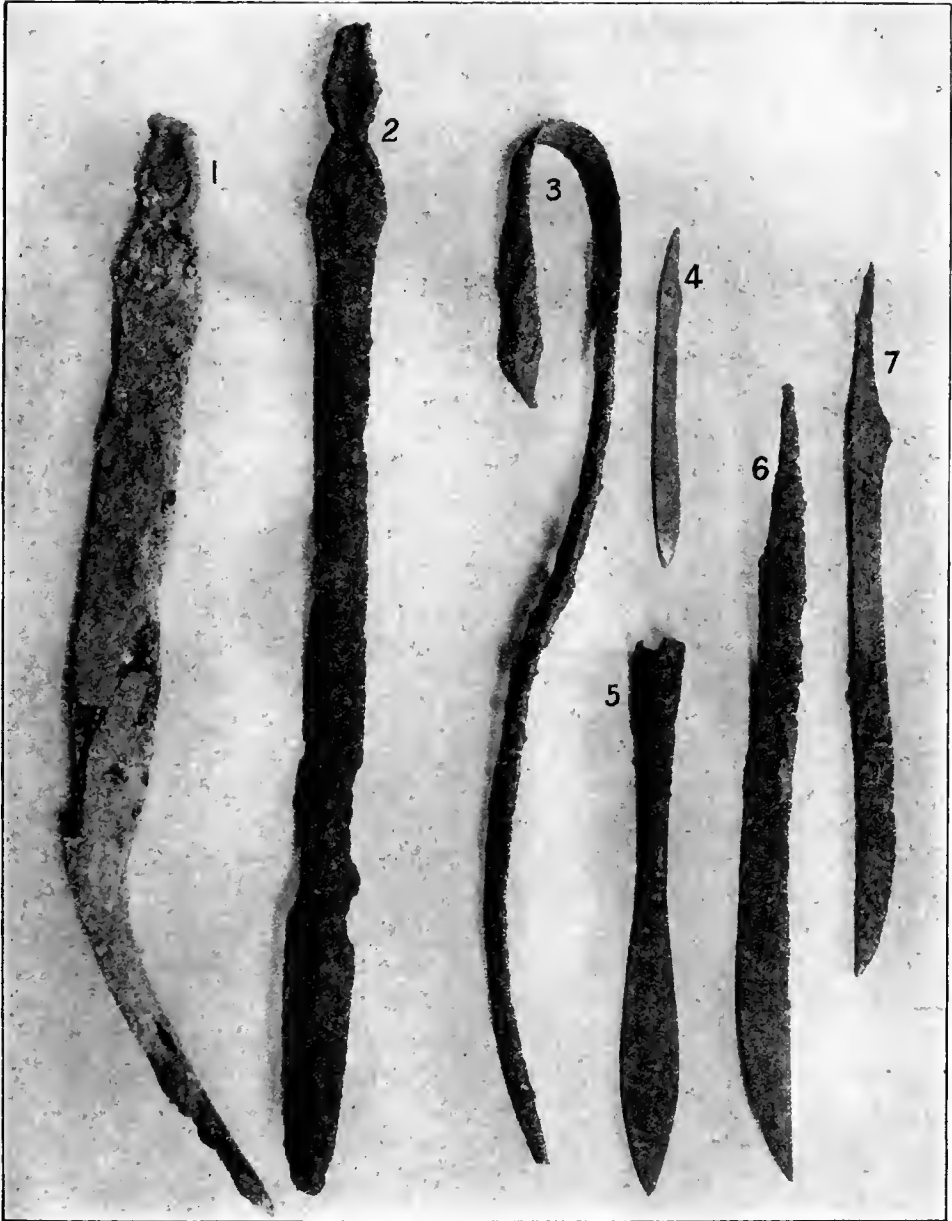


FIG. 15.—IRON WEAPONS FROM PYRES V (1), VII (3), XI (4), XIV (2, 7), XV (5, 6).  
(Scale about 1 : 4.)

*Narrow bladed Swords.*—To this group belong the remaining six specimens. The blade at the hilt is usually almost '05 m. in width, but decreases rapidly to '04; it increases again to '05, and finally tapers to a point. The width varies only very slightly in different examples, although some blades are considerably longer than others. The sword shewn in Fig. 15, 2 measures '76 m. including the hilt of '12 m.; this seems to have been the average length. The longest sword (Fig. 15, 3) which was found, although the point is missing measures '91 m. in length. The midrib is more defined than in the broad bladed class, and the blade in section is a cusped rhomboid.

Both groups of swords are closely connected with a wide spread type which has been found in Central Italy, the Balkan Peninsula, Greece, Cyprus and Egypt. This type occurs first in bronze in the Aegean as early as the end of the Mycenaean period; and the early iron swords of the 'Geometric' period are merely the translation of this bronze type into iron. As to where this type first arose opinion is divided mainly between Central Italy and the north Balkans. Egypt has also been suggested but there seems little evidence to support such a view.<sup>1</sup> The Halos swords being of iron can of course have little bearing on the question of the origin of the type. The increase in width in the lower part of the blade, which it should be noticed is very slight, shews that the Halos specimens are late rather than early in the class to which they belong, and this same increase in the lower part of the blade is a point of similarity with the swords from Central Europe and from Halstatt. In other respects, however, the Halos swords are very different from the Halstatt types:<sup>2</sup> antennae hilts one would hardly expect to find, but there was no trace of any pommels at Halos;<sup>3</sup> the angular points typical of the Halstatt period were also not represented, and the simple midrib and the cusped rhomboidal section of the Halos blades also denote a slight deviation in type. The Halos swords, though probably originally of a non-Greek ancestry, seem to belong to the usual type of sword found in the period of 'Geometric' or 'Dipylon' pottery.<sup>4</sup>

<sup>1</sup> Naue, *Vorrömische Schwerter*, pp. 12 ff., p. 26; A. J. Evans, *Journal of Anthropological Institute*, xxx, p. 218; Undset, *Zeit. für. Ethnol.*, 1890, pp. 10 ff.

<sup>2</sup> Von Sacken, *Das Grabfeld von Hallstatt*, Pls. V, VI.

<sup>3</sup> An iron sword with a simple button pommel, said to be from Amorgos, is in the National Museum at Athens, Inv. No. 9436.

<sup>4</sup> Two similar swords are in the National Museum at Athens, Inv. Nos. 9433 Thebes, 12156, provenance unknown.

At present there is not sufficient evidence to shew whether this type was absolutely uniform throughout Greece or whether it varied from place to place.

#### CONCLUSIONS.

The existence so close together of two cemeteries both belonging to the Early Iron Age, but shewing entirely different rites of burial, naturally gives rise to many questions which cannot as yet be answered fully on the available evidence. From the finds themselves, especially the pottery and the fibulae, there seems to be little doubt that the cremation tumulus is of later date than the cist tombs by the city wall, and probably, as we have seen above, belongs to the middle of the so-called Geometric period. If a date in years has to be given we would therefore suggest the ninth century B.C.

No exact parallels to the cremation burials have yet been found in Greece or elsewhere. They do not correspond either with those at Halstatt where the bones and gear were arranged in order, or with those described in the Homeric poems in which the ashes were placed in urns. Apart from the ritual itself the funeral gear does not correspond in either case: the Halos swords are of iron and so post-Homeric, and in type, as we have seen, differ from those at Halstatt. It is also to be noted that swords of any type are rare at Halstatt, where spears are far and away the commonest weapons, though axes are also found. At Halos, however, a warrior's equipment consisted of one sword, one spear, and two or more knives. Fibulae were worn both by men and women at Halstatt, but at Halos by women only.

Although the Halos tumulus is post-Homeric, it does not follow that it is not Achæan and it may perhaps be an Achæan burial in a degenerate or modified form. The position of Halos in Achaia Phthiotis makes this view seem plausible.

A. J. B. WACE.  
M. S. THOMPSON.



FIG. 1.—THE SITE OF THE APOLLO TEMPLE.

## THE APOLLO TEMPLE ON SIKINOS.

MODERN archaeological effort, in its zeal to exhibit every surviving vestige of antiquity, has removed from most ancient buildings all the accretions of later ages, and although much has been gained for our knowledge of their original condition quite as much has often been lost to our realisation of history. The buildings of the ancients, when no longer needed for their first purposes, were not always or even generally destroyed; they were adapted to the needs of the newer world, and of this process, by which the Parthenon became first a church and then a mosque, and the theatre of Marcellus at Rome is still an inhabited block of shops and dwellings, a small but interesting example is to be found on the island of Sikinos, where the temple of the Pythian Apollo, at some period converted into a church by the addition of the features necessary to the Greek rite, still remains in that condition as the church of the Episkope. It is, therefore, not the cleaned-up ruin to which our eyes have grown

so accustomed, but an untouched historical document of the vicissitudes undergone by so many of the buildings of antiquity.

It is probably owing to its position on an island proverbial for its remoteness, that the temple in the first place has been preserved at all<sup>1</sup>—no one has wanted to rob its blocks in order to put up a new building in this out of the way part of Sikinos,—and in the second that it has not been reduced to a more scientifically archaeological condition by the removal of the ecclesiastical accretions, which, from the historical point of view, form the main interest of a building in itself so unimportant.

An ancient temple in Greece, however humble its style, has however naturally not escaped the attention of travellers. The best description is that of Ludwig Ross, who gives also the earliest reference to the building from Pasch van Krienen's *Breve Descrizione dell' Arcipelago*, 1773.<sup>2</sup> Tozer and Bent also visited it, and it is described briefly by Gavalás in his account of the island of Sikinos. In spite of these accounts and the drawings given by Ross, it seems worth while to publish the following notes, which with the plan and photographs, were taken on a visit to Sikinos in the Summer of 1907 in company with Mr. A. J. B. Wace. The photographs give a more accurate idea of the condition of the building than the drawing in Ross, and the plan differs from his, which is archaeological rather than actual, in shewing the modifications made in converting the temple into a church.

The building lies about an hour-and-a-half west of the present village in an elevated position on the southern side of the central ridge of the island near the site of the ancient town (Fig. 1). The land around is terraced for cultivation and many of the walls near the temple contain worked blocks. In front of the building is a paved space and by this are small roughly built huts or shelters, probably for the use of worshippers at the church. Its dedication to the Pythian Apollo is certified by an inscription of

Cf. Solon, 2 (Bergk). *Εἶπεν δὴ τότε ἔγὼ Φολεγάνδριος ἢ Σικινήτης*  
*Ἄντι γ' Ἀθηναίου, πατρίδ' ἀμειψάμενος.*

<sup>2</sup> Ross, *Reisen auf den griechischen Inseln*, i. pp. 150-153, with a steel engraving of the temple made from a sketch by his companion Carl Ritter. This engraving is copied in the rough woodcut in Gavalás' book *Περὶ τῆς νήσου Σικίνου πραγματεία κ.τ.λ. ὑπὸ Ζαφειρίου Δ. Γαβαλά, ἐν Ἀθήναις*, 1885, which contains (pp. 19-23) an account of the temple. Ross repeated his description at greater length in *Ἀρχαιολογία τῆς νήσου Σικίνου* published in the 1837 Programme (*Πίναξ*) of the University of Athens. In this he publishes the two inscriptions found at the temple and a plan and front elevation. The other references are Tozer, *Islands of the Aegean*, 1890, p. 92 and Bent, *Cyclades*, p. 175.

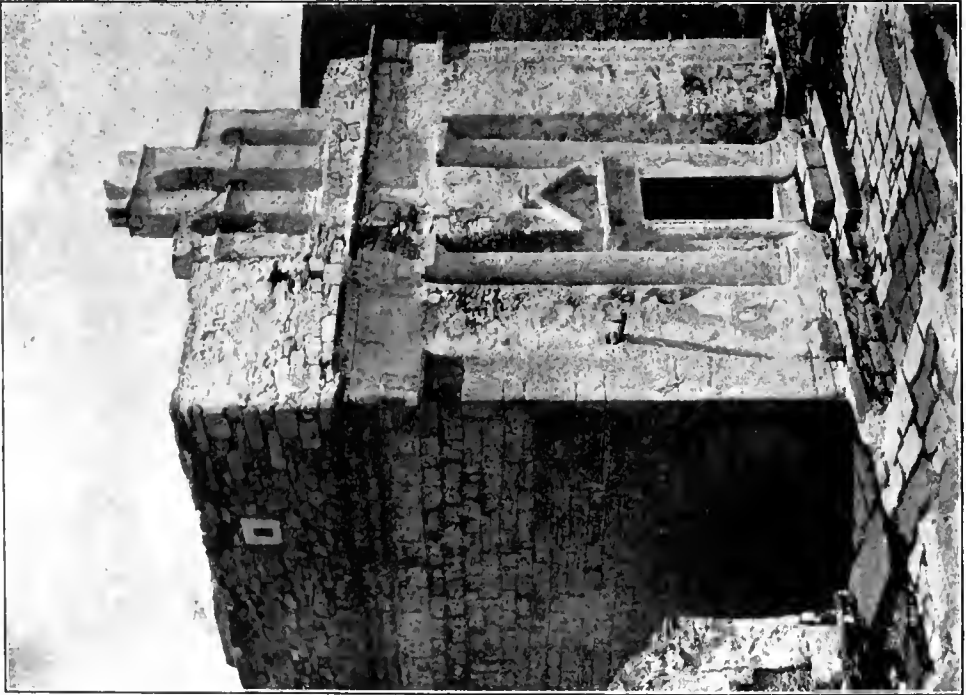


FIG. 2.—THE ENTRANCE AND FAÇADE.



FIG. 3.—THE EAST END WITH THE MODERN APSE.

FIGS. 2, 3.—THE APOLLO TEMPLE ON SIKINOS.



the second or third century B.C. on a marble *stèle* preserved in the porch.<sup>1</sup> The only other inscription in the building is on a block now forming part of the modern doorway between the porch and the cella. It is an elegiac epitaph on a woman dating to the Roman period.<sup>2</sup>

The material of the building, a small distyle temple *in antis*, is the local grey marble, the blocks being well fitted, but of various dimensions. Contrary to the usual custom of Greek temples, but in accordance with the

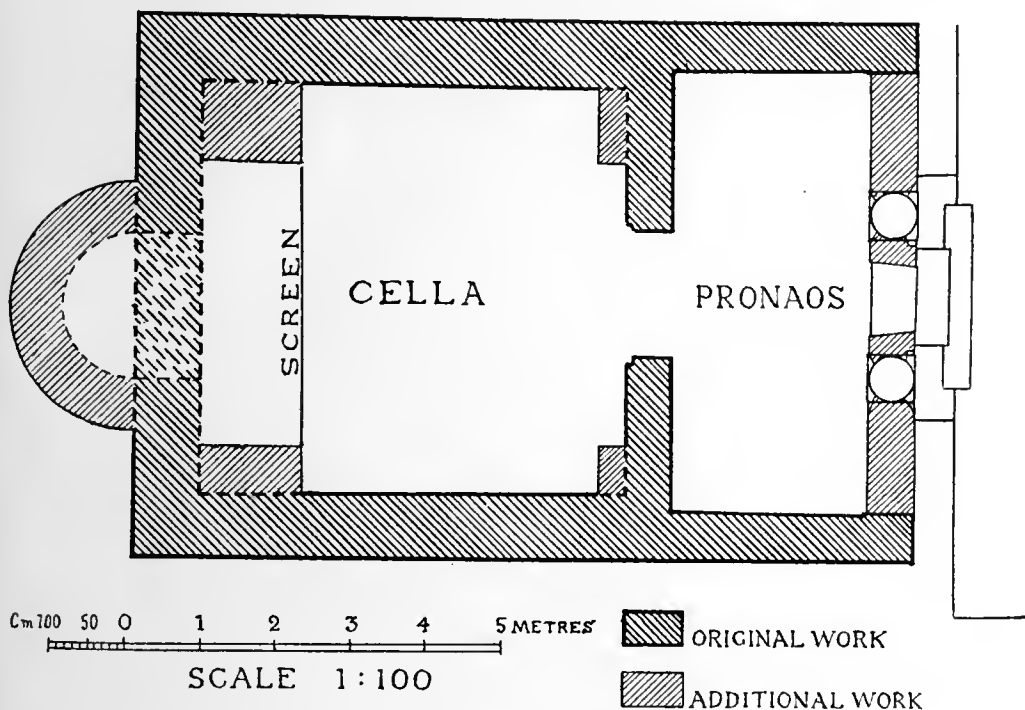


FIG. 4.—THE APOLLO TEMPLE OF SIKINOS. GROUND-PLAN.

rule of Vitruvius,<sup>3</sup> the entrance is towards the west, a circumstance which considerably simplified its use as a Greek church, where the chancel must be at the east end. The capitals are Doric, but the columns are unfluted

<sup>1</sup> This is stated in most accounts of the temple. Ross (*Reisen*) says that it is built into the outbuildings at the west end of the temple. I have no note on the point, but of the association of the temple with the inscription there is no doubt. It is published by Ross in his *Ἀρχαιολογία τῆς νήσου Σικίνου* mentioned above.

<sup>2</sup> *C.I.G.* 2447.

<sup>3</sup> Vitruvius, iv, ch. 5.

and stand upon bases. They consist, according to Ross, each of two sections, but the present thick coating of whitewash prevents this from appearing at all clearly. Their height, including capital and base, he gives

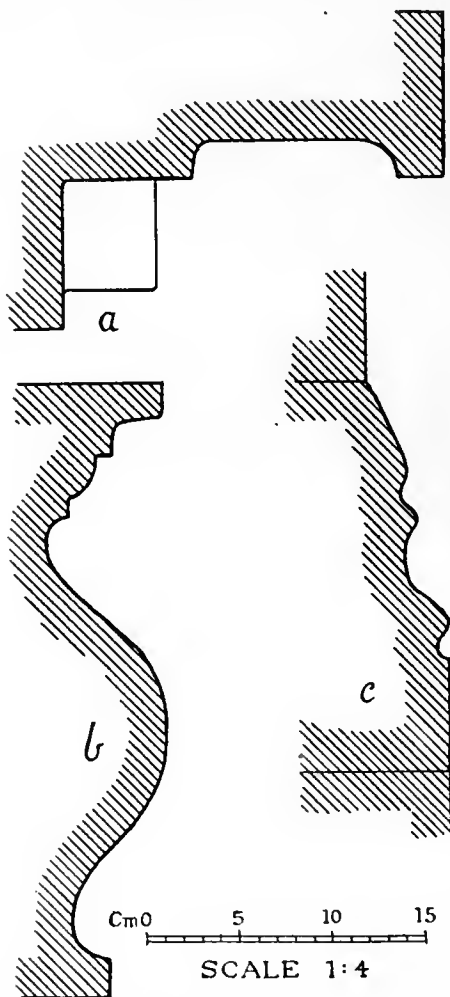


FIG. 5.—THE APOLLO TEMPLE ON SIKINOS. PROFILES OF MOULDINGS.

at about 4.90 m. The epistyle is carried as a cornice all round the building. The mouldings of the bases of the columns, of the projecting cornice with dentils and of the middle member of the epistyle are shewn in Fig. 5, drawn from dislodged fragments now lying about or built into

modern walls near by. The character of the mouldings of the architrave and the capitals appear in the photographs (Figs. 2, 3). All point to the late date of the building, which was, however, not raised in the Roman fashion on a podium, but rested on steps; the blocks in front of the door are probably remains of these.

The arrangement of the temple, cella, pronaos, *antae* and pair of columns is shewn in the plan in Fig. 4, in which the old work is distinguished from the modern by a different system of hatching. The process of conversion into a church has involved the blocking up of the spaces between the *antae* and the columns, and the construction, largely out of old blocks, of a central door, as also the breaking open of the east wall to make room for the apse. The original roof has for the most part disappeared, its place being taken by a dome. Of the pediments no more is preserved than a very small piece at the south-east corner; it appears in the photograph in Fig. 3. In place of the front pediment there is now a campanile of a type very common in the Cyclades, consisting of three arches to hold as many bells. Where the eastern pediment was before the destruction of the back wall, and all along the north side of the cornice, a low wall has been built to make a kind of shelter on the roof, access to which is given by a ladder placed in the porch. Bent, who thinks that the huts by the church were made for monks, suggests that they lived here when the church was besieged by pirates, and that the little window near the north-west corner was used for shooting at their enemies. It seems more likely that the fireplace, which is to be seen in this shelter was used not as Bent supposes as a kitchen on such occasions, but as a beacon: the rude buildings at the west end of the temple are no more than temporary resting places for worshippers at the annual festival, or at most, accommodation for a solitary hermit.

The present door of the church gives access to the porch of the temple, in which a good deal of the ancient building is still to be seen. As on the outside, the columns with their bases and capitals appear between the new masonry of the front wall, and most of the architrave, a good deal disguised outside, is to be seen above the capitals. Of the wall between the porch and cella, it is impossible to see exactly how much is old, the whole being so thickly covered by repeated coats of whitewash, but the doorway in its present form is a new construction which makes use of old material, amongst which is the late metrical inscription already mentioned.

Above the door parts of a horizontal moulding from the outer cornice have been built in as an ornament.

Although the doorway is thus new, the wall must, on the whole, be old, because the roof of the porch which rests upon it, is for the most part well preserved. It is divided into three compartments by two double stone beams, which are supported at the outer end by the architrave and at the inner by two corbels projecting from the cella wall. The north half of the north beam has disappeared. These beams support stone slabs, which form the ceiling; these are preserved *in situ*, except in the northern compartment, where they have been removed to make room for the ladder which leads to the roof.

The condition of the cella itself is very different; no remains of the ancient condition of the building can be traced through the thick white-wash. The plan shews four irregular blocks of masonry which fill up the four corners of the space; these are additions put in to support the modern dome which has taken the place of the old roof. The dome and the apse which has been added to the eastern end of the temple, are not central with the main axis of the building, but are about 30 m. too far to the north; this irregularity appears very markedly on the plan in the greater size of the supports for the dome on the south side. It will be noted that the walls of the cella are considerably thicker than those of the porch. The screen of the church, by which the altar and chancel are shut off, runs between the corners of the two eastern supports of the dome; we did not go into the chancel; the measurements of the inside of the apse are therefore conjectural, and are marked on the plans by broken lines.

The ground upon which the building stands falls to the south so abruptly that it is in fact on the edge of a terrace<sup>1</sup>; the result of this is that the south wall has given way to some extent, and that it has been found necessary to prop it up with large buttresses built partly of rough stones and partly of worked blocks. The large buttress in the south-east corner appears in the photograph in Fig. 3. Any work undertaken for the better preservation of the building should be confined to the strengthening of these buttresses; no other signs of weakness are apparent, and to interfere with its function as a church would be to destroy much of its claim to interest.

R. M. DAWKINS.

<sup>1</sup> This difference in level has probably helped the local belief mentioned by Ross, that there is a large vault underneath the floor of the temple.

# SKETCHES IN THE RELIGIOUS ANTIQUITIES OF ASIA MINOR.<sup>1</sup>

(PLATES I-IV.)

## I.—THE TWO SANCTUARIES OF MEN.

IT is well known that in pre-Greek time a large part of Asia Minor was portioned out in theocracies, *i.e.* priest-kings representing the god, at great sanctuaries ruled over a considerable district whose population were servants and subjects of the central *hieron*. Such were Pessinus, Comana Pontica, Comana of Cappadocia, Venasa, Tyana, Antioch of Pisidia, the *hieron* of Sabazios in the Milyadic country,<sup>2</sup> etc. It would appear to be a necessary characteristic of such a theocracy that there should be only one centre, one *hieron*, one sanctuary. In the case of Antioch, however, this seems not to have been the case. Strabo, p. 577, indeed describes the *hieron* at Antioch as if it were a single centre ruling a wide tract of country peopled by a large population; but in p. 557 he says that there were two sanctuaries in the Antiochian country, 'the *hieron* of the Askaian (Men), which is beside Antioch-towards-Pisidia,

<sup>1</sup> In this paper I have profited by frequent conversation with Mr. Anderson during the winter. He is treating the cult of the goddess Demeter at Antioch in the *J.R.S.* from his own point of view: his article and mine supplement without contravening each other. I have occasion often to refer to articles of my own on aspects of this subject: (1) *The religion of Asia Minor and Greece* in Hastings, *Dict. Bible*, V. p. 112 ff.; (2) *The permanent attachment of religious veneration to ancient sites in Asia Minor* and (3) *Pagan Revivalism and the later persecutions in Pauline and Other Studies*: (4) *Studies in the Eastern Roman Provinces* (sometimes quoted as Q): (5) *The Tekmoreian Guest-friends* in *Journal of Hellenic Studies*, 1912 (sometimes quoted simply as *Journal*). Our first impressions regarding the unexcavated *hieron* are described by Mrs. Hasluck in *J.H.S.* 1912, and by myself in the *Contemporary Review*, 1912.

<sup>2</sup> On this *hieron*, whose exact site is unknown, but about which we have learned more than we know about any other of the great *hiera*, see my *Cities and Bish.*, i. ch. ix.

and the *hieron* (of Men) in the region of the Antiochians.' The meaning of 'the region of the Antiochians' as a geographical term I hope shortly to discuss in the *Journal of Roman Studies*, and will only say here that it applies to the entire Phrygian region of the Galatic province, of which Antioch was the metropolis. But why has Antioch apparently two *hiera*? Why has this ancient theocracy two seats of the god?

The answer was given in the excavations conducted by the Asia Minor Exploration Fund in 1912 on the top of a lofty peak overhanging the site of the Colony. Here is the *hieron* of Men Askaios beside Antioch, marked by hundreds of dedications; but the adjective has the form Askaênos except two cases of Askaios.<sup>1</sup> We began to excavate, hoping to find the vestiges of a pre-Greek *hieron*; but at first we were disappointed to be unable to find any early remains. Everything was of the Roman period except some scraps of Hellenistic pottery, one inscription, and perhaps the peribolos wall of the main central sanctuary. At last the explanation became clear. The *hieron* beside Antioch was founded along with the city in the third century B.C. The ancient sanctuary was too far away, and the Seleucid city required a sanctuary near at hand. Thereafter there were the two *hiera*, the ancient *hieron* in the region of the Antiochians and the Greek close to the city.

It may be supposed that the new *hieron* would reflect in some degree the character of the city population. It was the sanctuary of the civilized and Hellenized urban people, while the other was rustic and frequented mainly by the old village-dwellers, who spoke the Phrygian tongue and did not share in Greek manners until a comparatively late date, and had no autonomy or self-governing institutions, but were only a small degree removed from the condition of serfs *adscripti glebae*. As in Palestine at the death of Solomon the theocratic kingdom was split into two, the modern and 'progressive' north and the conservative Judah in the south, so the Antiochian theocracy was divided between two sanctuaries presenting a general contrast to each other like that in Palestine. The city sanctuary was by far the most brilliant: it had buildings, and feasts and outward show, whereas the old *hieron* was so humble in appearance that as yet we have been unable to determine its site with certainty.<sup>2</sup> But in ritual the probability is that there was no essential

<sup>1</sup> In both cases *Ἄσκαία* denotes the land of the god.

<sup>2</sup> It may possibly have been at Saghir: see later in this paper.

difference, nothing but varying degree of magnificence. So far as natural probability goes, we should expect that the new sanctuary beside Antioch was modelled on the old, and even that the general features of the situation were similar, for the new *hieron* was not placed in or quite close to the city, but at some distance, high on the summit of a steep and rough mountain, 1300 ft. above Antioch. The situation was probably chosen because it presented a general similarity to the old *hieron*.

In ritual, also, the intention would doubtless be to reproduce the established features. The gods of the land had taught man how to approach them by acts and words; and these constituted the only way of approach. The gods must either be abandoned, or must be worshipped in their own proper ritual. As we excavated the *hieron* and the hall of initiation beside it, we thought that certain late features appeared; but on closer examination these prove to be parts of the old Phrygian custom. What we have found may be used with confidence as evidence of the primitive forms of the cult.

## II.—THE HALL OF INITIATION AT ANTIOCH (PLATE I.)

It is premature at present to describe the central sanctuary and the numerous hieratic and festal buildings around it. Further excavation is needed first. I restrict myself to a small number of monuments and to certain features in the hall of initiation. These show some striking characteristics; and it is a preparation for further study on the spot to attempt a description and classification of them. The reliefs are valueless as works of art, being rude village work. There was in later time no art on the central plateau. One may suspect that anything artistic even in the first century was imported or was the work of a stranger; but in the later third century it is clear that barbarism in art reigned at Antioch, and that there would have been no wish even to import a work of good art, and no appreciation of it if it had been imported.

None of the sculptures published or referred to in this article have any value for Museum purposes. We had to leave some of them in the possession of the native owners; those which we excavated were not thought by the officials worthy of transport to Constantinople, but were left in the cellar of the government house at Yalowadj.<sup>1</sup>

<sup>1</sup> The best things found were taken to Constantinople: the rest were piled in this local museum: some were buried where found, such as pottery (all valueless), large inscribed stones, etc.

The hall of initiation was probably a closed chamber, roofed and entered by a single door.<sup>1</sup> The Mysteries were celebrated at night, and the light came from one large torch, carried by the Dadouchos priest (Section XIV.). The hall, therefore, was an *ἄντρον* (*Journal*, p. 163, No. 26): the word *ἄντρον* is applicable both to artificial and to natural covered chambers. It was 53 ft. long by 45 ft. broad, as shown in the plan (Fig. 1). Its orientation is that of the central Sanctuary, which was built first and accommodated to the lie of the ground. The level space for the hall was got partly by cutting the sloping rock of the mountain. The wall N.E. nearest the Sanctuary was partly cut out of the rock. Its thickness is unknown, as the excavation has not been finished on that side.<sup>2</sup> On the inside a seat or divan 1 ft. 8 in. broad cut in the rock, extends from end to end.

The two walls N.W. and S.E. are about 4 ft. thick. The wall S.W. is 8 ft. thick: it had to be thicker, because it runs across the slope of the hill, and was liable to be pushed outwards and downwards. The corresponding wall of the central Sanctuary is about 20 ft. thick.<sup>3</sup> These walls are all built of dry stones, laid on without any binding material; and they derive their strength entirely from their weight and mass. They have no foundation, but are laid on the soil, and piled up. Similar walls are built very skilfully by the local masons at the present day: we employed a man to build some, and it was interesting to watch his way of working. The walls of the Sanctuary were faced with squared stones, but were otherwise made, like those of the present time, of unshaped stones chosen by the mason to suit the place where they were to be put. Plate I. gives four views taken in the hall.

<sup>1</sup> In 1913 we found that there was a second narrow door, 3 ft. wide, in the S.E. wall, 1 ft. 8 in. from the corner E. inside. This door was blocked in ancient times very roughly. Its purpose is obscure. A sort of Pronaos was added to the initiation hall, as shown in the plan, at some later time (whether before or after this door was blocked remains as yet uncertain): its floor was paved with large stones, and under these stones we found many bones, probably of sacrificial victims (though some were declared to be human), also some pottery fragments, which seem to imply that the Pronaos was a very late addition. The floor of the initiation hall consists of a layer of small stones close packed (exactly like the flooring of the stadium, except that the stones are smaller). The soil above the floor, both in hall and Pronaos, is full of bones and teeth of animals. Beneath the Pronaos floor and elsewhere teeth of pigs or wild boar were found, showing that the pig was not forbidden at this sanctuary (see *Histor. Geography of Asia Minor*, p. 32).

<sup>2</sup> In 1913 we found it to be nearly 4 ft. broad, like the N.W. and S.E. walls. All measurements in the Sanctuary and surroundings are only approximate.

<sup>3</sup> It is also strengthened by eight buttresses and two projecting gate posts, built contemporaneously with the wall.



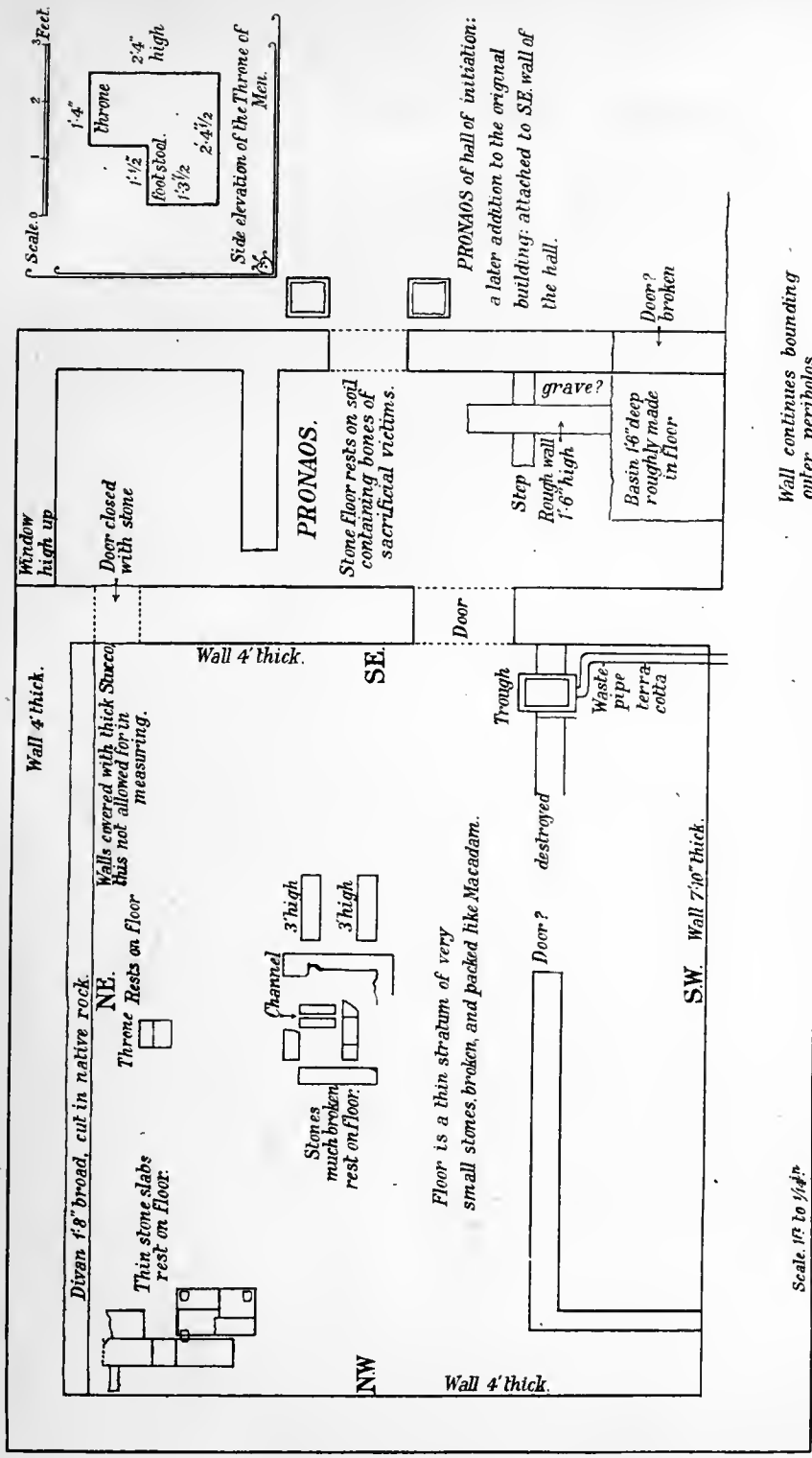


FIG. 1.—PLAN OF HALL OF INITIATION IN THE SANCTUARY OF MEN, EXCAVATED IN 1912, 1913.

Scale. 1/2 to 1/4 inch

While the information which we possess regarding the Phrygian Mysteries is very scanty, and the equipments of the hall are almost completely destroyed, yet the appearance of the chamber and study of the authorities suggest the theory which is stated in the following pages.

The hall of initiation is entered by a door in the S.E. wall, not in the middle, but nearer the S. corner. When the *mystes* entered, he found on his left a high shallow trough, perhaps intended for a preliminary purification; and in the S. corner and along the S.W. wall a series of constructions, now almost totally destroyed, with only faint traces remaining. Between the door and the S. corner, a terracotta waste-pipe carried off the liquid used in the trough, passed under the wall and went out downhill. A partition wall passed from the trough right across to the opposite (N.W.) wall of the initiation hall; but everything here is destroyed almost down to the level of the floor.

Appearances, therefore, point to the view that the part of the hall which lay on the left of the *mystes* as he entered, was separated in a certain degree from the larger part on his right. This separated part constituted a long narrow space or room distinct from the main hall though the separating wall may perhaps not have reached up to the roof, and may in part have consisted only of a colonnade with screens or hangings. The high trough projects 1 ft. beyond the bounding line of the separated chamber.

On Plate I. the view which is numbered 4 is taken from the N.W. wall looking along the dividing wall towards the chamber in the S. corner, and the trough and the door.

My theory is that this separate portion on the left, lying along the S.W. wall, was the scene of what is called *μύησις* in the strict sense. After the *μύησις* the *mystes* proceeded to the next, the higher and perfect stage of initiation, which took place in the centre and right hand part of the hall. The reasons for this view will appear in the sequel: it is stated at this stage only for clearness and to guard against misconception. The reason for separation between the part devoted to *μύησις* and the part devoted to the higher stage was that the former was not in the presence of the god, whereas the latter took place under the eye and before the face of the god. The *mystes*, after his first stage of initiation, was fit to enter the god's presence.

I assume also from the outset that the initiatory rites are those of the

Phrygian Mysteries, and not special Mysteries of the god Men. The grounds of this assumption will appear in detail throughout the article ; and the reasons for it seem conclusive.

The constructions in the hall of initiation are very obscure ; and at first sight we found them almost unintelligible. They have for the most part been destroyed down to the floor ; and the destruction is so complete that, as in the case of the central Sanctuary, it may be presumed to have been intentional. No mere chance destruction by Turkish peasants making use of the building would account for such systematic and complete ruin : the traveller is familiar with the ruin caused by ignorant peasants, but it is always sporadic, accidental, and often comparatively slight. The distance of the modern town, the inferior quality of the stones, and the difficulty of transport down a very steep and rough mountain, prove that the ruin was not caused by spoliation to make the buildings of the present or the old Turkish town : the ruins of the colonia Antiochia were much nearer and supplied better material. The marble, probably, was carried away from these buildings at the Sanctuary, but not the common stone.<sup>1</sup>

The clue to the explanation of the equipments in the initiation hall<sup>2</sup> lies in the observation that the ritual as a whole was Phrygian, and not foreign, and that the initiation rites must be interpreted by what is recorded regarding the Phrygian mystic ritual.

In doing this it is needless to discuss whether the testimony of Clement and other Christian writers refers to the Eleusinian or the Phrygian Mysteries. My view<sup>3</sup> is that in the Roman period the popular Mysteries had been to a large degree assimilated throughout the Eastern provinces. The process was partly by way of contamination, in such a fashion that each absorbed elements from the others ; but part of the cause lay in the original character of the most widely popular Mysteries, which was not essentially different in different places. Therefore the assimilation to a common type was easily produced. While considerable modifications may have taken place in certain Mysteries during the Roman

<sup>1</sup> The limestone blocks of the Sanctuary were taken in part to build the church close by.

<sup>2</sup> About the purpose of this building as a hall of initiation no doubt can exist ; and no doubt was felt by us after the clearing of the building was completed. We began the hall under the impression that it was the residence of the priest of Men. Its situation, outside the Sanctuary and oriented in the same direction, suggested this opinion ; but the progress of the excavation showed clearly the nature of the building.

<sup>3</sup> Of course this view is not special to myself ; I merely define my position.

period, the change was almost always in the way of addition: the original ritual remained as the nucleus of an elaborated ceremonial. Probably the Mysteries which are called Phrygian offer the best means of studying the others. The key to interpret the Antiochian Mysteries was found at Klaros near Colophon.

### III.—THE MYSTERIES AT KLAROS.

The excavations made by Makridi Bey for the Turkish Imperial Museum have thrown light on the Klarian Mysteries. He has published a series of inscriptions<sup>1</sup> from the *hieron*, which record the visits paid by single delegates, or more frequently groups of delegates or visitors, from foreign states to Apollo of Klaros. The delegation frequently was accompanied by a chorus of *hymnodoi*<sup>2</sup> (in one case called *molpoi*), which sang a hymn in honour of the god. Laodiceia on the Lycus sent more than one delegation to consult and do honour to the Klarian Apollo. There was a shrine of the Pythian Apollo at Laodiceia, and the prophet of this shrine was in one case the delegate to Klaros. On coins of Laodiceia Pythian types hardly appear,<sup>3</sup> but the games Pythia are once mentioned:<sup>4</sup> this Pythian Apollo was not the great Laodicean deity, but more probably only the god of the Hellenic colonists who were introduced to strengthen Seleucid authority and civilization; while the native Phrygian population kept their god (Zeus, as he was Hellenized, or once apparently Ascis). The Apollo of Laodiceia spoke to and enquired of the Apollo of Klaros.

In passing we may note that this chorus of singers is an extremely interesting feature, and we should gladly learn something about the music and the hymns that they sang. The chorus sometimes came from a long distance to Klaros: it consisted of youths and maidens, called *κόροι* and

<sup>1</sup> *Oest. Jahreshefte*, 1906 and 1912.

<sup>2</sup> Bodies of *hymnodoi* were common in Phrygia and Asia Minor generally, e.g. at Akmonia and Hypaipa: see *Cities and Bish. of Phrygia*, ii. pp. 630, 646, 359; Keil-v. Premerstein, *Oest. Jahreshefte*, 1908, p. 105.

<sup>3</sup> *Cities and Bish. of Phrygia*, i. p. 53.

<sup>4</sup> Mr. Head has cut this coin out of the new edition of his *Hist. Num.*, evidently regarding the authority as insufficient. Eckhel quotes it from Gori, *Mus. Flor.*; but no good numismatist has verified the coin.

κόραι, or ἡίθεοι and παρθένοι. In one of the inscriptions it is stated that the chorus came in accordance with an oracle.

Evidence is found in distant inscriptions of similar delegations to the Klarian Apollo. In the Praipenissian territory of North Phrygia an altar was erected to this god, and the oracle which he had given was engraved on it.<sup>1</sup> In Lydia at Troketta, west from Sardis, a dedication was made to Apollo the Saviour in accordance with a Klarian oracle, which is engraved on the basis.<sup>2</sup> The date of all these monuments both at and far from Klaros seems to be generally about 50 to 200 after Christ.

These delegations usually sought an oracle. The leaders of the delegations are called 'enquirers' (θεοπρόποι); but the response of the god is not given in the Klarian texts, which mention only the names of the delegates and chorus, and the religious rites which they performed at the temple.

Some of the enquirers were initiated in the Mysteries. The words recording this rite vary. In one case the enquirer ἐπετέλεσε καὶ μυστήρια 'performed also the mystic ritual (besides consulting the oracle).' This describes the act in the most general, vague, and uninformative terms. More illuminative are two other cases.<sup>3</sup> In one there appear two enquirers, who being initiated performed the act called ἐμβατεύειν (μνηθέντες ἐνεβάτευσαν): here this act is apparently a climax or sequel to the initiation. The other case is even more interesting: the enquirer, 'having received the mystic things and words' from the hierophant, performed the act called ἐμβατεύειν (παραλαβὼν τὰ μυστήρια ἐνεβάτευσεν). The general term used in the other case, 'being initiated,' is here more specifically defined in the words, 'receiving the mysteria' from the hierophant. The correlative expression indicating the act of the hierophant, 'the handing over of the mystic things' (παράδοσις τῶν μυστηρίων), is also technical. Both terms must be understood to indicate the ceremony of initiation as a whole (as M. Ch. Lecrivain says),<sup>4</sup> including the exhibition of the mystic objects, the performance of the mystic acts, and the utterance of the mystic formulae

<sup>1</sup> It is published by Professor A. Petrie in my *Studies in the History and Art of the Eastern Provinces*, p. 128.

<sup>2</sup> Published by Buresch in his *Klaros*, and more correctly by Keil and v. Premerstein in their first *Reise in Lydien* in *Wiener Jahreshefte*, 1910, pp. 8 ff.

<sup>3</sup> Makridi Bey published an earlier article on his excavations in the *Jahreshefte* for 1906. One of the two texts is in that first article.

<sup>4</sup> See art. *Mysteria* in Daremberg and Saglio's *Dict. des Antiquités*, iii. p. 2142 A, note 6.

(δεικνύμενα, δρώμενα, λεγόμενα); but the exhibition of the objects is the most important part of the whole and gives origin to the title of the Hierophant (ἱερά φαίνων). The 'tradition or reception of the mysteria,' then, includes all that is given or received, words, enlightenment, etc.

The climax of the 'tradition and reception' is the act called Ἐμβατεύειν, 'taking stand on.' This is the word that Paul caught up and used as preeminently suitable for his purpose in Colossians, ii. 18, where he is writing against one of the Colossian Christians who was introducing into the teaching of the Church, ideas caught from the Mysteries.<sup>1</sup>

The century following A.D. 140 was apparently the time when the fame of Klaros was most widely spread. The oracle and cult must have exercised real influence in bringing about that revival of pagan religion which played such a marked part in the last struggles against the growing power of Christianity (commonly called the 'persecutions' of Decius, Diocletian, and Maximin). In these, and in the last especially, the Empire allied itself with the old cults to resist the new faith.<sup>2</sup>

#### IV.—THE ACT CALLED Ἐμβατεύειν IN THE PHRYGIAN MYSTERIES.

We need not hesitate to assume that the Mysteries celebrated at Klaros were closely allied to the 'Phrygian' Mysteries, and may be used to illustrate them in all important respects. This term, ἔμβατεύειν, which was evidently technical at Klaros, was known to Paul, and is understood by him to be familiar to the Colossians (ii. 18). It was, in the Phrygian cities, technical for some important act in the Mystic ceremonial. This act was not part of, but followed after the μύησις proper: *μνηθέντες ἐνεβάτευσαν*. What, then, was this act? Can we determine its nature? A hypothesis is forced on us by a careful scrutiny of certain features in the Antiochian hall of initiation: the act seems to have been performed in this hall, not during the μύησις, but in the centre of the hall during the higher stage of the Mystic ritual. It was therefore a highly significant ceremony.

The verb ἔμβατεύειν means to step into, set foot on, take one's stand on: often it suggests entrance with the purpose of staying. The use in

<sup>1</sup> On this see an article in the *Contemporary Review*, 1913, also a short letter in the *Athenaeum*, Jan. 25, 1913.

<sup>2</sup> Some features in these persecutions as revealed by inscriptions are described in a paper on *Pagan Revivalism and the Persecutions* (see the writer's *Pauline and other Studies in the History of Religion*, Art. IV.).

respect of a ship is typical: the voyager sets foot on the ship with the intention of making the voyage in it. This has led the Revisers in Colossians, ii. 18 to render the verb as 'dwelling in,' which is not right, though one sees how the translators were led to use the expression. The marginal 'taking his stand upon' is better: whereas the Authorized Version, 'intruding into,' suggests a quite wrong idea. *Ἐμβατεύειν* is to enter on one's own, to tread the right path, rather than to intrude unlawfully.

Although the word (with derivatives) is never used<sup>1</sup> on coins, yet there is a common coin type, characteristic almost exclusively<sup>2</sup> of Asia Minor, in which this action must be recognized. The type is a hero stepping on to the prow of a vessel: he usually is represented in warlike guise and action, looking back as if he were calling others to follow.<sup>3</sup> The person represented is usually the local hero,<sup>4</sup> and, as the ship occurs on coins in the heart of Asia Minor, hundreds of miles from the sea, the embarkation must be understood as typical of emigration from a foreign transmarine country: the hero leads the migration and cheers on his comrades to follow him. At Erythrae however the hero, who on the coin is named Erythros, steps quietly on to the prow, looking forward, not back. At Amastris, Nicomedeia, etc., the hero is probably starting on the Argonautic Expedition; and this expedition is a mythical expression of the coming of Greek colonization and civilization into those regions. In other cases the hero is landing, stepping from the ship to the shore. At Abydos the scene is local: the tower indicates the coast of the Hellespont, and the hero (named on the coin Lucullus) is landing: probably Lucullus was worshipped as a local hero since the Mithradatic wars, and he steps on to the shore where his cult was to be perpetuated. At Laodiceia on the Lycus, also, the scene is local, for the two rivers appear on each side of the hero, who typifies therefore the colony settled between the rivers Lycus and Kapros: there is no ship in this case, as Laodiceia was an inland

<sup>1</sup> Vaillant has Apollo *Ἐμβάσιος* on an Ephesian coin; but Mr. Head considers that this (otherwise unknown) coin is misread, and is a bad specimen of the *Ἰκείσιος* coin.

<sup>2</sup> It is found also at Thebes in Thessaly and at Elaious of the Chersonese.

<sup>3</sup> In what follows I do little more than select from what is said by Dr. F. Imhoof-Blumer in *Nomisma*, v. pp. 25 ff., vi. 1. He differs from the interpretation suggested by Dr. Regling in *Klio*, viii. pp. 489 ff., and recurs to the usual and accepted interpretation.

<sup>4</sup> Regling takes him as Hector or Aeneas on Phrygian coins, and does not take the other coins into consideration.

city.<sup>1</sup> The idea common to all these coins is the new city life, symbolized by the hero founder stepping on to the land of the colony, or on to the ship that is to bear him to that land across the sea. The entrance on a new life, the settlement in a new home—that is *ἐμβατεύσαι*. The word, it is true, is not engraved on the coins, but it is clearly indicated.

This thought of stepping into a new life, therefore, was familiar in Asia Minor, and it would be in accord with the philosophic thought which underlay the Mysteries (as we shall see) that a similar idea should find some symbolical expression in them. The term, as used in both the inscriptions, evidently indicates the climax or final act in the mystic ceremonial; 'being initiated,' or 'receiving the mystic things and words, they performed the act called *ἐμβατεύειν*,' symbolizing that they had entered on a new life, and intended to continue therein.

#### V.—ENTRANCE TO THE HIGHER STAGE IN THE MYSTERIES.

The act called *ἐμβατεύειν* followed upon and was the climax of the *μύσις*: this is clearly indicated by the two expressions *μνηθέντες ἐνεβάτευσαν* and *παραλαβὸν τὰ μυστήρια ἐνεβάτευσεν*; and yet the act is only an entrance and a beginning. The initiation is here conceived as a preparation leading up to a new beginning: the *mystai* received the mystic things and words (from the hierophant): thereafter they 'entered,' or 'set foot on' (the new stage). There is implied in this a ceremonial in two stages, the *Μύσις* and the *Embateusis*, if we may coin a technical term from the verb. The second stage must evidently correspond to the *Epoptika* at Eleusis (where the word *ἐμβατεύειν* does not occur, so far as is known).

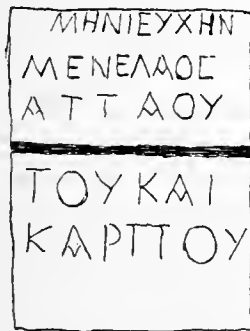
The two stages correspond admirably to the arrangements in the hall of initiation at Antioch (Pl. I. and Fig. 1). The *μύσις* took place in the separate part of the hall, along the S.W. wall. Then the *mystes* was led into the centre of the hall (which is on the right hand as one enters by the door already described, probably the only door of the hall). Here there took place a new series of rites, which we can trace in their general

<sup>1</sup> Allied cases are at Dardanos, the hero Dardanos embarking on a voyage: at Thebes of Phthiotis, Protesilaos from Thebes newly landed on the coast of Troy, which was to be his home in death; at Elaïos in the Thracian Chersonese Protesilaos, whose grave and shrine were here, stands on a ship's prow looking forward. At Samos, Imhoof thinks that the hero (of the usual type) is Ankaïos starting on the Argonautic expedition.



sequence. The *mystes* was brought to an entrance between two upright slabs of stone not unlike the two famous sculptured slabs in the *Forum Romanum* (supposed by some to have stood on the Rostra), but much simpler.

These two slabs, of roughly hewn limestone, about 3 ft. high and 4 ft. 6 in. long and 1 ft. 6 in. thick, stood parallel to one another, so as to form an entrance 2 ft. 8 in. broad, and 4 ft. 6 in. long. As the *mystes* approached this entrance, he saw that a slightly architectural look was imparted to it by some cutting on the front of the two slabs (on the corresponding back part of the slabs there is no cutting).<sup>1</sup> Outside the entrance, to the left side of the left-hand slab, there stands on the ground a very large shallow bowl of stone (Plate I. 1): whether this was its original position is hard to say. The *mystes* entered this doorway, passed through it, and emerged into the presence of the god himself. The god's throne was placed in front of the N.E. wall of the hall, free in the open space (Plate I. 2, 4). It is marked as his throne by the inscription engraved on it in late letters, about 300 A.D.



Μηνὶ εὐχῆν

Μενέλαος

Ἀττάου

τοῦ καὶ

Κάρπου

As it would be unsafe to suppose an error of the engraver for Ἀττάλου, the name Attaês must be assumed for the father of Menelaos. It has been pointed out in the already quoted paper<sup>2</sup> on the Pagan Revivalism that divine names were much used during the reaction against Christianity: Attaês otherwise called Karpos must be interpreted in this light, like Theoteknos, Athanatos and many others.

<sup>1</sup> The appearance of the tops proves that cut stones or other material must have rested on the slabs which are still standing in the hall. Thus the entrance formerly had an even stronger resemblance to a door than at present. (Pl. I, 4)

<sup>2</sup> Section III, p. 46.

The hypothesis that suggests itself is that the two slabs mark the entrance to the divine presence and the new life. The person who presents himself at this gateway after being initiated in the first stage is permitted to set foot on the threshold and to enter on the higher life (*ἐμβάτευσεν*). Having entered, he is admitted to the advanced stages and scenes of the Mysteries; and these take place before the throne of the god and in his presence.

Whether the throne was empty during this and the next scene, being reserved for the unseen god, or was occupied by the priest as representing the god on earth, must remain uncertain; but the latter alternative is more probable. The whole ceremonial of the higher grade was the approach of man to god, and its subject was the identification of the *mystes* with the god. The promise was given to the purified 'Happy and blessed, thou shalt be god instead of mortal.' The priest and priestess played the parts of the god and goddess through the scenes of the higher grade. To be identified with the god and goddess is the goal of human life. The goal was attained, as many epitaphs in Phrygia show, at blissful death, when the dead returns to the mother who bore him; and it was attained also as the result of initiation and *Embateuein*.<sup>1</sup> Moreover, we know that the active part in the next scene of the ceremonial was performed by a minister; and there seems no place for the priest (who must have been present), except as presiding and occupying the holy chair.

#### VI.—THE HIGHER PURIFICATION.

Having passed through the entrance way, the *mystes* found himself close to a quadrangular pool or *lacus*, like the *impluvium* of a Roman *atrium*. This *lacus* is 1 ft. 4 in. from the ends of the entrance slabs (Plate I. 4). It stretched before him, about 9 ft. long, and 7 ft. 6 in. broad. A water channel enters from N.E., but where the water (or other liquid) came from is uncertain.<sup>2</sup> The pool must have been quite shallow, so that no thought of immersion or complete baptism can occur. In the *lacus* and parallel to

<sup>1</sup> The same idea, which in these examples is expressed in an antique religious form that remained throughout the later pagan period, appears also in epitaphs in a philosophic form: all (material) things spring from the earth and return to the earth (*ἐκ γῆς εἰς γῆν τὰ γαῖα* and other variations): on which see Keil-v. Premerstein, ii. *Reise in Lydien*, p. 46 and the references which they mention.

<sup>2</sup> The channel runs far into the pool, and is bordered by two small slabs of stone, 2 ft. 6 in. long, 6 in. broad. It is at the bottom of the pool. The sides of the pool were never cemented, so that it could never have held water, except in very small quantity.

its S.W. border is a line of two or more stones, which stand in the space between the end of the channel and the opposite (S.W.) border.

Presumably some kind of purificatory ceremony was performed at this pool. The stones look as if the *mystes* and the officiating priest both stood in the *lacus*, the priest on the stones, the *mystes* beside him (probably cowering down on his heels at first).

A rite of similar type formed part of the Phrygian Mysteries. Demosthenes describes it,<sup>1</sup> in his invective against Aeschines, whose mother was a strolling priestess—one of those that carried the religion of Phrygian Cybele about Attica in the fourth century B.C.—and who had acted as her assistant minister. ‘When you grew to man’s estate,’ says the orator, ‘you assisted your mother as she performed the ritual: you read from the books the words of the formulae and helped her in the rest of the foolery. By night you used to put the fawnskin on and pour water from the krater over, and perform the rite of cleansing for those whom she was initiating, and you used to scrub them with mud and bran, and make them stand up<sup>2</sup> after the purification, and bid them say: “I have escaped the evil: I have found the better” (*ἔφυγον κακόν· εὖρον ἄμεινον*).’

This was the rite, probably, that was performed at the *lacus*, before the throne of the god.

I have never been able to doubt that words like this formula had a moral sense, and implied that in the Mysteries some suggestion of progress in social life was set forth before the *Mystai*. There was in the Mysteries no formal dogmatic teaching; but by means of actions, verbal formulae, and things that were shown to the initiated, certain ideas and lessons about human nature and its relations to the divine power were suggested.

## VII.—THE HOLY MARRIAGE.

From the purificatory scene, the *Mystes* moved on—perhaps through several intermediate scenes—to the perfect scene of human life, the representation of the foundation on which society rests. This was the mystic marriage of the god and the goddess, as symbolic of earthly marriage. The divine life is the model of human life. The gods have taught what men should do, both in their relation to one another and in their relation to god. Many reliefs represent the deity as teaching

<sup>1</sup> *De Corona*, 259 f.

<sup>2</sup> They had been cowering before.

man by doing in person what man should do in approaching god. The gods themselves reveal to men the right way of living. As an example a relief of Koloe in Lydia may be quoted: a drawing of it is published in my *Letters to the Seven Churches*, p. 63, and another in Roscher's *Lexicon*, iv, 244, by Keil and v. Premerstein.<sup>1</sup> The relief is in two zones: in the upper the god performs the same act of libation on an altar which the priest is performing in the lower zone. There is a heavenly counterpart and model for everything on earth.

Much might be said about the Holy Marriage in the Mysteries. My view is that the early marriage ceremony of the Anatolian and pre-Hellenic Greek religion was the performance by the human pair of the mystic rite. The gods have taught what should be done, and men must do the same. According to a scholiast, the married pair celebrate the sacred marriage in honour of Zeus and Hera. Usener, *Ital. Mythen* in *Rh. Mus.* xxx. p. 227, quotes this from *Lex. Rhetor.* p. 670 (Porson), p. 345 (Nauck), and unhesitatingly refers it to the Athenian rite. The rites of early Anatolian Marriage were adopted by the Gauls of Galatia long before the Christian era, as is proved in my *Historical Commentary on the Epistle to the Galatians*, pp. 88-91. A survival of the same rite is alluded to in the legend of St. Abercius.

In the Attic marriage rite the formula, ἔφυγον κακόν· εὖρον ἄμεινον, was pronounced. The Attic rite, therefore, goes back to a model in the earliest form of the Mysteries, a form common to Anatolia and Attica. This marriage rite was a performance of the sacred marriage as shown in the Mysteries, with the bride and bridegroom playing the parts of the goddess and the god, while the priestess of Demeter taught them. In the Mysteries the priest and priestess represented the divine pair; and, as ancient authorities from different points of view mention, the rite of the divine marriage was enacted by the priest and the priestess within the *Pastos*, the holy nuptial chamber. Considering the character of several scenes which are mentioned as occurring in the Mysteries, and considering the duty of service at these Anatolian sanctuaries, mentioned by Strabo as being in his time still imposed on women, we must infer that the holy marriage was exhibited as the newer and higher law. The Mysteries present human life as a progress from savagery: the life of the

<sup>1</sup> Less accurate representation in Wagener's art. in *Mémoires Couronnés par l'Acad. de Belgique*, xxx. The relief has often been described.

god and goddess was played as a drama of progress in moralisation. The servants of the goddess in their human life passed as a matter of ritual through the same stages of knowledge and life as the goddess herself; and the service as *παλλακίς* was required from devotees as a preliminary to the higher life of marriage in the Lydian city of Tralleis as late as the end of the second century after Christ.<sup>1</sup> In no other way can the testimony of Cicero and other good authorities as to the purifying and elevating influence of the mystic ceremonial be interpreted.

Dieterich thinks that the marriage in the Mysteries was of the god and the *mystes* (conceived always as female). That this was so seems not probable. The Mysteries are originally the cult of Cybele, in whose life the god is a by-figure and an episode. The goddess was originally the embodiment of the divine idea, as the mother, nurturer, teacher, and guardian of her people. Dieterich's idea could only be true in a late development of the Anatolian religion, when the god had become the principal figure. Yet we may accept his view in this form, that the *mystae* identify themselves in sympathy with the life and the action of the divine pair.

Now at the N. corner of the hall at Antioch are what I take to be traces of the *Pastos*, viz. the supporting stones on which probably the *Pastos* rested, and in it the marks of three of the feet of the holy bed for the marriage ceremony. To this *Pastos* belongs the scene alluded to in the formula quoted by Clemens: 'I have eaten from the tympanon: I have drunk from the cymbal: I have carried the kernos: I have gone into the Pastos:' *ἐκ τυμπάνου ἔφαγον· ἐκ κυμβάλου ἔπιον· ἐκερνοφόρησα· ὑπὸ τὸν παστὸν ὑπέδυν*. It is probable that all these four acts were parts of the same final scene. Eating from the same bowl and drinking from the same cup (in each case divine utensils being employed) were naturally parts of the marriage rite;<sup>2</sup> but the words are not certain, as Firmicus gives them differently: *ἐκ τυμπάνου βέβρωκα· ἐκ κυμβάλου πέπωκα· γέγονα μύστης Ἀττεως*. Similar words may have been used at two separate parts of the holy drama. The words quoted by Firmicus imply, perhaps, that the eating and drinking which he has in mind took place in the *μύησις*; and that these acts are quoted in the *Embateusis*

<sup>1</sup> See the inscription which I published in *B. C. H.* 1883, p. 276, and which has frequently been reprinted and commented on.

<sup>2</sup> On the meaning and nature of the rite see my article on *Anatolian Religion* in *Hastings' Dic. Bib.* V. p. 127 A.

as justification for the *Mystes* presenting himself for the higher stage. He had become initiated and he enters on the higher grade: *μνηθεὶς ἐνεβάτευσεν*, according to the Klarian inscription.

It may be regarded as highly probable that the verb *ἐμβατεύειν*, while strictly denoting the first step in the higher initiation, implies also the succeeding steps; and that *ἐνεβάτευσεν* in the Klarian inscriptions means that the person after being initiated in the (lower grade of the) Mysteries, *i.e.* *γεγονὸς μύστης Ἄττεως*, performed the whole higher grade: in other words, *Embateusis* implied the entire *Ερφοτικά*, following on the actual entrance.

#### VIII.—THE GOD OF ANTIOCH.

The ritual, as far as we can trace it, is purely Phrygian. The god Men, if he was in origin foreign and non-Phrygian (as to which I express no positive opinion), was taken into the divine family of the Anatolian cult, and identified with a figure of that cult. This figure was Attis, Atis, Attes, or Atys.<sup>1</sup> On this supposition the assumed immigrant Men, the god of a foreign incoming race, was identified with the Phrygian Atis, just as in Attica the immigrant Poseidon was identified with the Erechtheus of the Athenaia cult, and the double name Poseidon-Erechtheus remained in official use (though popular tradition and custom in Attica preserved the memory of the two distinct figures and kept the names separate, as in Phrygia).

Men continued to be the predominant figure of the Antiochian cult. The main Sanctuary belongs to him. Every one of the hundreds of dedications is to him (where any name is mentioned).<sup>2</sup> Yet the title of his priest was *ἱερεὺς Μηνὸς καὶ Δημητρός*, and in the process of clearing the Sanctuary we found a small 'chapel' in the S. corner, which was evidently sacred to a goddess of the Demeter or Cybele type, as all the objects found in it were of that cult. It may be assumed that in the title of the priest (towards 300 A.D.) Demeter is a Hellenization of the Phrygian Cybele. When the priest was made into an Archiereus, the name of

<sup>1</sup> The spelling varies, and the second vowel: Atis occurs in an official Pessinuntine inscription of the second century B.C., Atyochorion in the Hyrgalean plain near Dionysopolis, Attiokome at Orkistos, and Attoudda on the Phrygo-Carian frontier.

<sup>2</sup> Zeus of Heliopolis is once mentioned as consecrated in the sanctuary.

the goddess was dropped, and only ἀρχιερεὺς πατρῖου θεοῦ Μηνὸς Ἀσκαηνῶ remained.<sup>1</sup>

This would, even standing alone, be a sufficient and complete proof that, in Antioch, either Men was adopted into the ritual of a Demeter-Cybele goddess, or *vice versa*; and in Phrygia the latter alternative may be mentioned only to be dismissed as impossible. The importance of the goddess is confirmed by the fact that she had also a separate temple at a little distance from the great Sanctuary. This temple is in a very ruinous condition, but there were found in it only objects of the Cybele or Artemis ritual.<sup>2</sup> There were no inscriptions with the name of the deity; but the objects showed clearly that the goddess was regarded both as Artemis and as Cybele. The same double identification is characteristic of the whole Antiochian region: the name used is generally Artemis, but the features are those of Cybele or of the Ephesian goddess, and the priest is an *Archigallos* (who is peculiar to the Cybele worship).<sup>3</sup>

If Men Askaênos was a foreign god introduced into the Phrygian cult, he would certainly have to be regarded as coming from the East, for his presence in Pontus and among the Albanoi favours that view. On the other hand there is no evidence to disprove the opinion expressed in my *Cities and Bish. of Phr.* i. p. 169: 'Men and Attis are deities of similar character, probably derived ultimately from the same cultus, but differentiated by development in different surroundings: in the fact that the city where Men Karou is worshipped bears the name Attoudda "City of Attis," we may fairly see a proof of the ultimate identity of these two deities.'

Yet it must be remembered that from the inscriptions alone we could find no evidence to differentiate Anaitis of Lydia and Maconia as foreign from the native Anatolian Artemis. In the cult, as it appears in inscriptions,

<sup>1</sup> On the whole process see Anderson in *J.R.S.* 1913: he states the evidence and proves the inferences fully.

<sup>2</sup> This temple is too ruinous to give positive evidence; but probably it is older than the central Sanctuary. It stands on the highest peak of the mountain, close under the summit, and is perhaps pre-Hellenic, representing the original sanctity of this spot as an isolated lofty mountain (clearly divided from Sultan Dagh by a deep chasm) among the old Phrygian and pre-Phrygian natives. In my article in the *Contemp. Rev.* 1912, stress was laid on the spring near the top of the mountain, close to the church, as being probably an element in causing the sanctity: this is corroborated by a dedication to the Nymphs (*Nyphai*) found in the wall of the church in 1913. The surface of the mountain top is strewn with scraps of haematite iron ore; but we saw no sign that the ore was smelted.

<sup>3</sup> Anderson, *l.c.*

the foreign and Persian Artemis was quite merged in the native goddess. It is however certain both that Anaitis was an immigrant goddess, brought by the foreigners whom the Persian kings planted in Lydia, and that there were features in her cult (as Pausanias mentions) which betrayed her difference in character from the purely Lydian goddess. It may be the same with Men. The case is not yet decided.

As Men is paired at Antioch with Demeter, so in the Lydian Katakekaumene (*i.e.* Maeonia) he is paired with Anaitis or Meter Artemis or Meter Atimis: see Keil-v.Premmerstein, *Reise in Lydien*, 1908, p. 29; Drexler in Roscher's *Lex. art. Men*, ii. 2703 f.; S. Reinach, *Chron. d'Orient*, i. 159; Perdrizet, *B.C.H.* xx. 1896, pp. 99 f.; Buresch, *Aus Lydien*, p. 67.

#### IX.—THE GODDESS AT ANTIOCH.

The goddess to whom the chapel in the Sanctuary of Men was dedicated, was indicated as Demeter, not merely in the official title, but also by a marble statue of small size, perhaps about 3 ft. high. This stood in the chapel which was appropriated to the goddess in the corner of the sanctuary of Men. In the wreck of the sanctuary the statue was broken in pieces, and we found nothing of it except the head, which is figured in an article by Mr. J. G. C. Anderson in a forthcoming number of the *Journal of Roman Studies*. This head is one of a Janiform pair, two complete heads joined at the back, with a single high *kalathos* rising between them. Either we have here a duplication of the goddess, perhaps in two different aspects as Demeter and Artemis, or Demeter and Selene (compare the triplication described in the following Section X.), or the statue presents conjoined heads of Men and Demeter. On one side of the *kalathos* is a crescent, and on each of the two fronts of the *kalathos* is a star. Thus each head has its own star, while the crescent belongs to the two heads in common. A simple duplication of Demeter might be compared with the two Nemeseis of Smyrna.

That the goddess Demeter, who is paired with Men at Antioch in the official title on inscriptions, must be simply a Hellenized form of Cybele, seems to me to be beyond doubt. The cult, so far as we can trace it in the archaeological evidence, is the Phrygian ritual. Demeter has no footing in Phrygia, except through the tendency, which grew strong in late Roman times, to identify the divine conceptions of different regions, and to empha-



size the similarity of the Mysteries at Eleusis with Mysteries in general. On coins of Antioch Cybele occurs, and Artemis, both of the type Pergaia and of the Hellenic type; but not Demeter.

My view has been and is, that in a large number of cases the names of Hellenic gods in Asia Minor were applied in Greek inscriptions to the native gods. Dr. Drexler on Men, p. 2757, thinks I have carried this principle too far, but acknowledges that it is true to a certain extent.<sup>1</sup> I do not count it as invariably applicable: *eg.* at Laodiceia (as above mentioned) I think that Apollo was a true Greek god, but Zeus was a Hellenic name used of a Phrygian god (and so also Asklepios in the same city). Opinions will be different as to the limits of application of this principle. But in the case of Demeter at Antioch I am sure that Dr. Drexler will recognize Cybele under a Greek name, quite as confidently as I do.

An example of the late tendency to introduce into Anatolia Eleusinian forms appears in an inscription of Almasun in Lycaonia (near the site of Derbe), published by Sterrett, W. E. No. 40, and recopied by me in 1901.<sup>2</sup>

Τιβέριος Κλαύδιος Οὔετρα(νός?) πατήρ καὶ Ἀτιλίᾳ Ἰνγένοια μήτηρ  
ἐκόσμησαν Ἀτιλίαν | Μαρτίαν θυγατέρα | ἐτών ιε'. | wreath | παρθέναν  
ἰπὸ Δα[εῖ]ρας τιμῆς χάριν.

The last two lines, separated by a wreath, express a title of honour which belonged to the lost girl. Mr. Calder pointed out to me that Daeira is an old Attic or Eleusinian heroine or goddess, wife of Eumolpos the hero-ancestor of the Eumolpidae priests. Her nature has been much discussed,<sup>3</sup> and the question need not here be treated; but the fact that she appears in native Attic ritual inscriptions of the fourth century B.C. shows that she is ancient in Attica, and therefore cannot be regarded as a true Lycaonian figure. She belongs to the extension of Hellenic names and forms over Asia Minor.

<sup>1</sup> Ramsay's an verschiedenen Stellen ausgesprochene Ansicht, dass die beiden grossen einheimischen Gottheiten Kleinasiens, die er sich zu einander im Verhältniss von Mutter und Sohn stehend denkt, unter den mannigfachsten Namen, je nach den verschiedenen Seiten ihres Wesens, uns entgegentreten, verdient ja gewiss Beachtung. Aber . . . then he assigns a larger share than I think right, to the Greek element in the population of inner Asia Minor.

<sup>2</sup> I made the following corrections on Sterrett's copy, comparing it with the stone: 3, for THN read THP (as St. corrects in transcription), 8, for IAC read PAC. A and C are difficult to distinguish from A and E.

<sup>3</sup> Farnell, *Cults of the Greek States*, iii. pp. 138f., 338 and the ancient authorities and modern scholars quoted by him on Daeira.

What the exact sense of *παρθέναν ἀπὸ Δαείρας* may be is doubtful. The words cannot mean 'descended from Daeira,' for in that case *τῶν ἀπὸ Δαείρας* would be the proper form, compare Ἄρδους τῶν ἀπ' Ἄρδους Ἡρακλειδῶν at Klaros. Perhaps it means 'maiden of the course or service of Daeira': Atilia was a *parthenos* in a chorus of the ritual. Of this kind of chorus of *Hymnodoi* examples are mentioned in the earlier part of this paper. Possibly the *ἡίθεοι* of the chorus were called ἀπὸ Εὐμόλπου, and the *παρθένοι* were ἀπὸ Δαείρας: Mr. Calder compares *aedituus a Diana*.

On *παρθέναν* for *παρθενόν* see Hatzidakis in *Einleitung in die neuogr. Grammatik*, p. 24. It is possible that *οὔετρα* may be an abbreviation of *οὔετρανός*, and that Ti. Claudius was a retired soldier; but this abbreviation is rare in Anatolian epigraphy<sup>1</sup>; and we should perhaps regard it as a cognomen, treating *Vetera Οὔετρα* as accusative used for nominative. The name Ti. Claudius requires some cognomen (like *Vetus*).

The hieratic use of *παρθένος* may be illustrated from another Lycanian inscription (found between Lystra, Korna?, Nova Isaura, and Isaura, at the village of Appa)<sup>2</sup>: *Μᾶ, Παππᾶ θυγάτηρ, παρθένος κὲ κατὰ γένος ἰέρεια τῆς θεοῦ κὲ | τῶν ἀγίων, ἐκ τῶν ἰδίων ἀνέλαβεν κὲ | ἐκεράμωσεν τὸν ναόν.* From this text it can be confidently gathered that Ma belonged to a priestly family: she bears the name of the goddess whose priestess she is, and her father bears the name of his god (though *Παπᾶς* is a more usual spelling than *Παππᾶς*). Doubtless in her youth she had acted as one of the *παρθένοι* in a chorus of *Hymnodoi* (such as are described in Section III.). Hieratic duty in the late pagan revival seems to have lain to some considerable extent in certain old priestly families, for several inscriptions lay stress on the hereditary nature of the duty. The family of the Epitynchanoi played an important part in the movement from the time of Decius to that of Maximin.<sup>3</sup> Aurelia Aemilia, the *pallakis* (already mentioned in Section VII, p. 53 note), mentions that she was sprung *ἐκ προγόνων παλλακίδων καὶ ἀνιπτοπόδων*.

<sup>1</sup> I know no other example.

<sup>2</sup> In *B.C.H.* xi, 1887, p. 63 the text (which I have vainly sought in repeated visits) is published by MM. Radet and Paris: their copy seems almost perfectly correct, but not their transcription. The copy needs only one correction: **K** three times should have a short horizontal stroke in the angle, making it a *lettre liée* of **κ** and **ε**. This ligature is very common, but is not often observed by copyists.

<sup>3</sup> Various examples of this class of inscriptions of the pagan reaction are given in a paper on *Pagan Revivalism and the Persecutions of the Early Church*, in my *Pauline and Other Studies*, pp. 103 ff. (where, as I observed too late, the inscription of Ma is quoted and restored).

## X.—THE GODDESS OF ANTIOCH AS HEKATE. (Plate II.)

A small marble statuette, 6 inches high, found in the temple of Artemis Cybele, presents a remarkable (and so far as my knowledge extends, unique) conception of the goddess. It has a certain resemblance to the Greek Hekate Trimorphos, showing a triple-bodied, and triple-headed female figure, united in a single half-columnar form; but whereas the triple Hekate is a completely rounded columnar form, whose three heads look in widely divergent directions (inclined at an angle of  $120^\circ$  to each other), this triple Cybele seems to have stood against a flat background, so that her three heads all look forwards (one at right angles to the background, and the other two right and left of the central body). Probably, however, the difference from the Hekate-Trimorphos type is only artistic and sculptural: the idea in the cult is the same, but this form is adapted to exhibition in a temple with a wall as background.

Each of the six hands of the triple Artemis-Cybele holds and presses to her side a bird, a good deal mutilated in most cases, but all clearly of the same form. The preservation is so bad, that only one of the six objects held in the six hands is evidently a bird; but the look of this one leaves no doubt what the others are. Mr. Hogarth identified the birds, and pointed out the striking analogy to a small figure found in the lowest stratum of the excavations at the Ephesian temple of Artemis. This figure (*Excavations at Ephesus*, p. 157, 2, and Pl. XXIV. 8) is a single goddess-form, holding two birds pressed to her two sides<sup>1</sup>; and the shape of the head, combined with the analogy of many other cases (on which, see Mr. Hogarth in the same volume, p. 336) shows that the birds are hawks. The goddess is conceived as the patron of the wild, *πότνια θηρῶν*. The analogy is convincing: the Antiochian figure has hawks in her hands. Here, again, we have an ancient ritual conception, lasting practically unchanged from a very early stage in the cult down to the late Roman period. The ritual of this Helleno-Roman shrine of Men and Demeter preserves the exact forms of the old Anatolian cult.

<sup>1</sup> Sir Cecil Smith's description p. 157 is as follows: 'modelling somewhat rough: feet not indicated: part in columnar form, but from feet up more carefully treated. She holds in each hand at her waist, a hawk. The dress is the usual girl Ionic chiton. The hair is arranged like that of No. 1 without the tectix, and the surface of the head itself is carved in a series of ridges concentric with the crown.'

That the goddess herself, and not a priestess, is intended in this figure seems beyond doubt. The hawk-bearing figure from Ephesus would be doubtful, if it stood alone; but the analogy of the Antiochian Hekate-Cybele now makes its character certain also. The hawk-bearer is the goddess herself.

The triplication of the goddess-body implies, then, no real alteration of the conception. Whether with two hands, or with six, she grasps her own fosterlings, as their protector. As to the origin of the triple form, I see no reason to shrink from maintaining the suggestion, which I put forward many years ago in an article on *the Religion of Asia Minor and the pre-Hellenic Religion of Greece*,<sup>1</sup> and which may be summarized thus:

The goddess was not merely mother and nurse of her people: she was also their teacher, and their guide in the ways of civilization, social progress, agriculture, apiculture, etc. Where human power was unable to secure respect for institutions required in the common interest of the social body, the divine power was invoked to ensure respect and inviolability. The cleanliness of streets and public places was guarded by hermai or pillars which represented Apollo Agnieos. The boundary stones between properties were made inviolate as abodes of divine power. The public advantage was the concern of the god, who punished all infraction of the respect due to him, for all wrong-doing or uncleanness or violence in presence of his image or abiding-place was a crime against him. Thus roads and communication from town to town were placed under divine protection by upright god-stones (which often had information or numbers engraved on them and thus became 'mile-stones'): such a stone is a 'Beth-El' or 'home of god.' These road-stones frequently developed into road-shrines, similar in general character to the shrines of the Virgin in Catholic countries on roads. A meeting or crossing of roads or streets (*compitum*), being specially important, was placed under divine guard.<sup>2</sup> As the anthropomorphic tendency grew, the guardian of the three meeting roads became the triple form of the goddess, looking along the three roads. In Italy the guardian of the archway and door was a Janus looking with two faces in opposite directions. Before anthropomorphism grew strong the divine presence was perhaps indicated by the *Triskeles*, whose three legs

<sup>1</sup> In Vol. V. of Hastings' *Dict. Bib.* pp. 109 ff. : published 1904, but written two years earlier.

<sup>2</sup> *Ibid.* V. p. 111.

diverging from a centre typified the three lines of intercourse meeting at the *compitum*. The religious ritual of the *compitalia* in Italy had, doubtless, an Anatolian counterpart, which was connected with the triple-formed *τρικάρανος* goddess and also with the *Triskeles*. Similarly the goddess of crossing streets was *τετρακάρανος*, *τετραπρόσωπος*, *τετραοδίτις*; and Hekate is so called in a late hymn, and at the same time *τρίκτυπε*, *τρίφθογγε*, *τρικάρανε*.<sup>1</sup>

#### XI.—THE MONUMENTS AT SAGHIR IN THE REGION OF ANTIOCH.

At Saghir, 6 hrs. N.N.E. from Antioch, high on the slope of the Sultan Dagħ, many of the Tekmoreian monuments and lists have been found;<sup>2</sup> and there can be little doubt that here was the chief Tekmoreian religious (but not social) centre. It is marked as an old sacred place by Mohammedan belief. There are in the village two Turbes, the upper and the lower. The upper Turbe is a small rude building, into which we were not admitted: the 'Dede' who is buried there is called Saghir-Ishik: there is beside it a Tekke of Cutchuk Ali (Little Ali). The lower Turbe is a rude enclosure of stones surrounding a grave open to the sky, said to be the resting place of Selmani Pak. A Turbe with its habitant Dede is a regular feature on all ancient sites in Asia Minor, as is pointed out in my article on *The permanent attachment of religious awe to special sites in Asia Minor*.<sup>3</sup>

The whole series of the known epigraphic monuments of Saghir were published in two articles on 'The Tekmoreian Guest-Friends,' one in my *Studies in the Art and History of the Eastern Roman Provinces*,<sup>4</sup> pp. 305-377, the other correcting and completing it, in *Journal of Hellenic Studies*, 1912, pp. 151 ff.<sup>5</sup> At present I add a new fragmentary inscription with a date; also an account of some religious reliefs found in the village. There is a possibility that 'the *Hieron* of Men in the region of Antiochians' (see Section I.) was at or near Saghir; but hitherto all

<sup>1</sup> *Hermes*, iv. p. 64: Ramsay, *Histor. Comm. on Galatians*, p. 219.

<sup>2</sup> The opinion of Professor Sterrett (who in many ways did much service in the discovery and correct copying of these monuments) and Dr. Ziebarth (*Gr. Vereinswesen*, p. 67) and Dr. Judeich (*All. von Hierapolis*, p. 120), that Tekmorion was a place, is now antiquated.

<sup>3</sup> *Pauline and Other Studies*, pp. 163 ff.

<sup>4</sup> It is quoted henceforth as Q.

<sup>5</sup> It is quoted henceforth as *Journal*.

the monuments found there belong to the late second or the third century after Christ, and mostly to the third. One alone is clearly of the first century.<sup>1</sup> If that *hieron* was at Saghir, its exact position has yet to be found; and until really ancient remains have been discovered, there can be no assurance about the identification. See below, Section XII.

The *hieron* of Zeus Ourydaménos or Eurydaménos, who is mentioned in four inscriptions, may have been situated either at Saghir or at Kundanli (Gondane, where several Tekmoreian monuments have been found), or further west. On the Phrygian and non-Hellenic character of this deity, see Q, pp. 359 f.; as he had a chorus of flute-players he must be regarded as a Phrygian god.

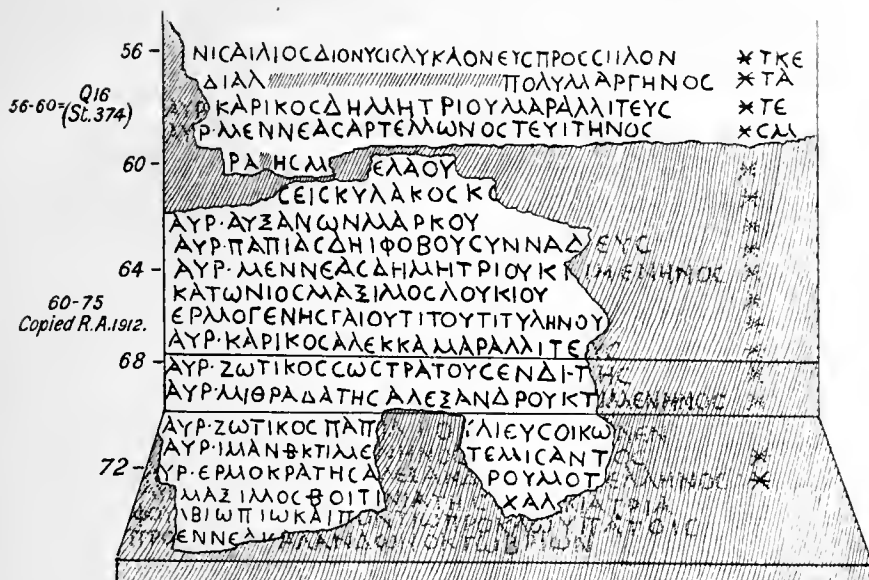
One of these inscriptions was found at Apollonia, but was probably carried, as it is built into the wall of a modern building. Another was found in the valley between Apollonia and the lake Limnai (Hoiran-Göl). A third belongs to Genj-Ali on the lake, at the west end, where the Apollonia valley and the road from Apollonia to Antioch touch the lake. The fourth reference to the god occurs incidentally in a Tekmoreian list at Saghir.

These are all enumerated in Q, pp. 359 f.; and I have only to add that the first text was recopied by Mr. Anderson and myself in 1912. The localities would point rather to a western site for the sanctuary of Ourydamenos than to Saghir or even Kundanli; but that he is a form of Men, hellenized in an unintelligent fashion by ignorant popular etymology, still seems to me very probable (as in Q, p. 360).

## XII.—DATE OF THE TEKMOREIAN LISTS.

These lists belong to the third century, as has been recognized since 1883, when the first was published in *J.H.S.*, with the solitary exception of Q 9 (see *Journal*, p. 158), which is earlier than A.D. 212, and probably of late second century. No exact date, however, occurred, until in 1912 Mr. Anderson and I copied a fragment at Saghir. It contains the last lines of an inscription, which may perhaps be the conclusion of Q 16 (St. 374).

<sup>1</sup> Q No. 24 p. 345 and *Journal*, p. 162.



- 56 ΝΙΣΑΙΛΙΟΣ ΔΙΟΝΥΣΙΟΥ ΚΛΩΝΕΥΣ ΠΡΟΣΚΟΙΛΟΝ \* ΤΚΕ  
 ΔΙΑΛ ΠΟΛΥΛΑΡΓΗΝΟΣ \* ΤΑ  
 56-60 (Q 16 (St. 374)) ΑΥΡ. ΚΑΡΙΚΟΣ ΔΗΜΗΤΡΙΟΥ ΚΑΡΑΛΛΙΤΕΥΣ \* ΤΕ  
 ΑΥΡ. ΜΕΝΝΕΑΣ ΑΡΤΕΜΩΝΟΣ ΤΕΥΙΤΗΝΟΣ \* ΣΛ
- 60 ΠΡΑΨΙΣ ΕΛΑΟΥ \*  
 ΣΕΙΣΚΥΛΑΚΟΣ ΚΕ \*  
 ΑΥΡ. ΑΥΞΑΝΩΝ ΜΑΡΚΟΥ \*  
 ΑΥΡ. ΠΑΠΙΑΣ ΔΗΜΗΤΡΙΟΥ ΚΑΡΑΛΛΙΤΕΥΣ \*
- 64 ΑΥΡ. ΜΕΝΝΕΑΣ ΔΗΜΗΤΡΙΟΥ ΚΑΡΑΛΛΙΤΕΥΣ \*  
 ΚΑΤΩΝΙΟΣ ΜΑΞΙΜΟΣ ΛΟΥΚΙΟΥ \*  
 60-75 Copied R.A. 1912. ΕΡΜΟΓΕΝΗΣ ΓΑΙΟΥ ΤΙΤΟΥ ΤΙΤΥΛΗΝΟΥ \*  
 ΑΥΡ. ΚΑΡΙΚΟΣ ΑΛΕΚΚΑ ΜΑΡΑΛΛΙΤΕΥΣ \*
- 68 ΑΥΡ. ΖΩΤΙΚΟΣ ΣΩΣΤΡΑΤΟΥ ΣΕΝΔΗΤΗΣ \*  
 ΑΥΡ. ΜΙΘΡΑΔΑΤΗΣ ΑΛΕΞΑΝΔΡΟΥ ΚΤΙΜΕΝΗΝΟΣ \*
- 72 ΑΥΡ. ΖΩΤΙΚΟΣ ΠΑΠΙΟΥ ΚΛΙΕΥΣ ΟΙΚΩΝΕΣ \*  
 ΑΥΡ. ΙΜΑΝ Β' ΚΤΙΜΕΝΗΝΟΣ ΤΕΜΙΣΑΝΤΟΣ \*  
 ΑΥΡ. ΕΡΜΟΚΡΑΤΗΣ ΑΛΕΞΑΝΔΡΟΥ ΜΟΤΕΛΛΗΝΟΣ \*  
 ΜΑΞΙΜΟΣ Β' ΟΙΤΙΜΙΑΤΗΣ ΧΑΛΚΙΑΤΡΙΑ \*  
 ΒΙΩ ΠΙΩ ΚΑΙ ΠΙΟΥ ΠΡΟΚΛΟΥ ΥΠΑΤΟΥΣ \*  
 ΠΡΟΕΝΝΕΑΣ ΚΑΛΑΝΔΩΝ ΟΚΤΩΒΡΙΩΝ \*

60 Μενε<sup>?</sup>]κρά[τ]ης Μ[εν]ελαίου

Αύρ. ]ς Εισκύλακος Κε[ρασιανός ?

Αύρ. Αύξανων Μάρκου [ . . . . .

Αύρ. Παπίας Δημόφου Συνναδ[εύς

65 Αύρ. Μεννέας Δημητρίου Κ[

Κατώνιος Μάξιμος Λουκίου

Ἐρμογένης Γαίου Τίτου Τιτυληνού

Αύρ. Καρικός Ἀλεκκᾶ Μαραλλιτε[εύς

Αύρ. Ζωτικός Σωστράτου Σενδήτ[ης] . . . .

70 Αύρ. Μιθραδάτης Ἀλεξάνδρου Κτιμενηνός

Αύρ. Ζωτικός Παπ[ίου] Ἰου]λιεύς οἰκῶ[ν ἐν . . . . .

Αύρ. Ἰμαν β'. Κτιμε[νηνός] τεμίσαν[τος] ?

Αύρ. Ἐρμοκράτης Ἀ[λεξάνδ]ρου Μοτ[ελληνός] ?

Αύρ. Μάξιμος β. Οἰτι[μιάτης] χάλ[κια τρία] ?

75 Φουλ]βίω Πίω καὶ Π[οντίω] Πρόκλω ὑπάτοις

πρὸ] ἑννέα Κ[αλανδῶν] Ὀκτωβρίων

Conjecturally I restore this fragment, which begins in the middle of line 60, on the supposition that it is the conclusion of Q 16 (St. 374). Aur. Karikos son of Alekkas in 67 is the same person who is named in Q 15,

60. The present fragment, therefore, is nearly of the same time as Q 15, but cannot be a part of the same stone. Now Q 16 is of that description, and the M of Q 16, 60 is probably the beginning of the name, whose last five letters are preserved in the first line of this fragment. In general arrangement the two parts suit each other; but there cannot be any certainty until they have been placed against one another, which is not possible. In the text of lines 56-59 and the first half of 60, I follow Professor Sterrett's copy as published. In 1886 I revised his copy on the stone, but restricted my revision to the local names, which I recopied with considerable alteration in 56, and some other slight changes, but I did not interest myself in the personal names, being hurried.

In l. 60 the first name may be [Μενε]κράτης or similar name, or [Αύρ] Κράτης. In Q 15, 60 Ἀλεκκᾶς is an error of the engraver for Ἀλεκκᾶ. Now Q 15 and Q 16 contain a very large proportion of identical names, and the order is approximately similar in the two lists, so that beyond doubt they were engraved in successive years, or with no long interval of time between them. Yet the differences in names and in sums contributed prove that the two lists are not duplicates. This parallelism does not facilitate the further restoration of the present fragment, so far as I can see.

In l. 65 Catonius Maximus has not the pseudo-praenomen Aur. He belongs to a family which had acquired the *civitas* before A.D. 212.<sup>1</sup> This corresponds to the inference which can be drawn from Q. 2, 17, where C. Catonius M.F. Mordianus belongs to a Roman family.

In l. 66 Γάιος should probably be read, and also Τιτυληνός (unless further change is needed in this name, e.g. Βιτυληνός). The engraver has evidently got mixed up in his letters and cases. Another example of such confusion is Q 4 (R. iii.) 42-43.

Line 71 presents a serious difficulty. Ἀρ]τεμις<sup>2</sup> Ἀντ[ήνορος] seems an easy restoration; but there is not room for Αρ after Κτιμε[νηνός].<sup>3</sup> Moreover, this inscription has invariably one name in each line, and τεμις cannot safely be taken as part of the name of a second contributor. I conjecture that τ is for θ; and that the archaic and poetic word θεμίζω was revived (like δάος etc.<sup>4</sup>) in this artificial Greek, and that there is false concord as so often the case with δοντός (used in these lists where δούς

<sup>1</sup> On this see Miss Hardie (Mrs. F. W. Hasluck) in *J.H.S.* 1912, p. 147.

<sup>2</sup> ι for ει: the name Ἀρτέμεις is common.

<sup>3</sup> Κτιμενηνός fills the gap, and τεμι (=θεμι?) must be the beginning of a word.

<sup>4</sup> See *Journal*, pp. 153, 163.



is required). *θεμίξειν* was, as I conjecture, a duty in the Tekmoreian Association.

In 72 *Μοτ[ελληνός]* is a tempting restoration. Motella was closely connected with an ancient *Hieron* of the Hyrgalean country and Imperial estate, on which see *Cities and Bish. of Phrygia*, i. p. 141.

*Σενδήτ[ης]* must be a native of Sinda, either a village on the estates near Antioch, or Sinda in Pisidia, *Cities and Bish.* i, 267, 317.

In 73 *Οἰτι[μάθης]*, probably an error of engraving for *Οἰτιυιάτης*, occurs in Q. 2, 119 (R. I.). In both cases it is preceded by β' = *δῖς*, and Professor Sterrett reads *Βοιτιυιάθης* in Q 2 ; but the cross-mark on B is clear.

This small fragment is of the highest value. (1) It gives a date,—the first known among the Tekmoreian lists—by the Consuls of A.D. 238. (2) It shows that the Imperial Asian Calendar introduced into the province Asia by Imperial decree shortly before Christ (arranged according to the birthday of Augustus A.D. ix. Kal. Oct., so that every month began on a day called Sebaste on the ninth before the Kalends), was employed also on the Estates, where the Tekmoreian Religious Society existed. (3) It proves that some one of the days Sebaste was selected for the festival and contribution commemorated in the list, of which this fragment is a part : therefore the Tekmoreian Association connected its ritual with the Imperial cult, as arranged by Augustus. (4) If we could trust the above restoration of the name of the month, we should have the first day of the Imperial year and birthday of Augustus as the great day of the Tekmoreian cult. This would prove that, as I supposed (see Q), the religious organization of the population on the estates originated from Augustus.

These inferences, which except (4) are all obvious and certain, confirm the main conclusions stated in my two articles. The Tekmoreian Association was the organization of the cultivators of the great Imperial estates, originally the property of Men (in association with Artemis-Cybele) near Antioch, as described by Strabo, pp. 557, 577. These estates came into the possession of Augustus as a part of the kingdom of Galatia, which he inherited from Amyntas in 25 B.C. Augustus governed the population of the estates through his procurator, who *ex officio* was priest of the local religion of Artemis-Cybele and Men. The Emperor thus succeeded to the position of the god as Lord, master, father, and guardian of the people ; and the great holiday and festival of the year in

the religious association of the coloni on the estates was the birthday of Augustus.

All these inferences, though rather bold, had already been accepted by Professor M. Rostovtzev in his *Studien zur Geschichte des röm. Kolonats (passim)*; but the confirmation is welcome. The further opinion advanced in my two papers that this Association became connected with and a centre of the anti-Christian movement is neither disproved nor confirmed by the dating: it stands as before, quite possible and suited to the date, but still only a hypothesis. Mr. Anderson's forthcoming paper in the *Journal of Roman Studies* offers some indirect corroboration of it.

In my two papers, especially Q pp. 355 f., it is pointed out that the lists of names fall into two groups: one mainly consists of Q 2 (*i.e.* R I), p. 319, the longest of the series and almost complete (except parts of a few lines):<sup>1</sup> we may call this series B. The other contains Q 15 and Q 16 (St. 373,374), and probably also Q 17 and Q 4 (St. 375 and R IV.): it is Series A. As is there shown, Series B is nearly a generation later than Series A. Several sons of persons in A appear in B; but in one case the same person appears in A and in B. 'The interval must therefore be less than fifty years, and probably not more than 25 or 30 years.' It seemed then necessary to keep the inference wide; but now we may say that Series A is less than one generation (30 years) earlier than B.

Further, as a positive date, both Series are later than A.D. 212, as the *pseudo-praenomen* Aur. is regular in both. Yet series B is not very late: 'there is a total absence of names marking the period towards A.D. 300.' The conclusion is there stated: 'a fair mean for the two groups would be (Series A) about A.D. 215-225 . . . (Series B) about 245-255. This explains the number of entries in (Q 2), (R I); it belongs to the pagan revival under Decius, and its probable date is A.D. 250-251.'

We now find that Series A is dated A.D. 238; and it remains uncertain whether B should be left in 250-251, or should be carried down a few years. In *Journal*, p. 158, the name Οὐαλελιανός is found in Q 2 (R I), l. 86. This might be derived from the Emperor Valerian; but that is a mere vague possibility,<sup>2</sup> as Valerianus was not an Emperor whose

<sup>1</sup> To it belong also Q 18 (St. 376), which is very much dilapidated and of small use, and perhaps Q 20 as enlarged in *Journal*, p. 160.

<sup>2</sup> A person named after Valerian at birth would imply a date 280-300, which seems too late. Valerianus was used without reference to the Emperor, as was Maximianus at Antioch (see Anderson, *l.c.*).

name was likely to be popular in the East; and the already suggested date 251 remains possible, and on the whole 250-270 may be regarded, for the present and provisionally, as obligatory.

### XIII.—THE EPHESIAN ARTEMIS AT SAGHIR NEAR ANTIOCH.

A relief of great interest, but in shockingly bad preservation, is shown in a photograph by Mr. Anderson on Plate III. and Fig. 2. It is on the edge of a large thin slab of marble, buried perpendicularly in the ground



FIG. 2.—RELIEF *in situ*.

in a narrow lane at Saghir. We tried to take it out, but after some digging, found that it could not be extracted without demolishing the walls on both sides of the lane. This would have required the consent of all the owners, and much time would have been lost in negotiation. Mr. Anderson, therefore, balanced a pole across the walls, and, sitting on this, photographed the relief from above. (Fig. 2.)

The relief must have been about 6 inches in height, and the large slab must have been part of a building, of which it was probably the frieze. Doubtless this building was the temple of the goddess and of the god associated with her. In the courtyard of a house a few yards up the lane

were found the sculptured altar shown in Section XIV. (Plate IV.) and also a slender hexagonal pillar on which is engraved the inscription mentioning an Archigallos, also a fragment of a Tekmoreian list. The temple therefore probably stood close to the lane; and it would be well worth while to buy and pull down all the houses on the lane in search of fragments.

The central scene of the fragment shows the goddess after the Ephesian type, standing between two stags (whose small size suggests the gigantic scale on which her form has to be imagined). All the details of the Ephesian type are suggested, the shapeless body tapering downwards, the five double scenes of ornament on the robe (or framework), the supports for her hands, the *mammae* (as they are usually interpreted), the strange projections at each side of the head. The semblance of human feet can be seen protruding underneath the sort of garment which envelops the lower part of the divine figure. The goddess stands between two columns: perhaps, if the upper part of the frieze were entire, it would be found that these rested on the two capitals, a rounded top completing the niche in which she abides. (See note on p. 79.)

Right of the niche is an altar, and a priest (or priestess) stands on the right side of the altar, pouring a libation, or laying an object, on the altar with the right hand. The figure is dressed in a voluminous garment and the only criterion of sex is the form of this garment. It has some appearance of being a sort of spreading petticoat, marked with slanting folds or bars; and this garment taken by itself would prove the figure to be a priestess. On the other hand there is no indication of dress on the body above the waist, and if the body be understood as nude, it would be that of a man. The art, however, is extremely rude; and, I think the intention may be to show a priestess with tight-fitting bodice and bulging petticoat, after an archaic fashion. The figure, so interpreted, recalls the priestesses at Frahtin and Eyuk: see Ramsay-Hogarth, *Pre-Hellenic Monum. of Cappadocia* in Maspero's *Recueil de Travaux*, xiv. Pl. V. 1 and Fig. 5, also a very rude priestess on a sarcophagus at Bin-Bir-Kilisse (see Fig. 377 in the *Thousand and one Churches* by Miss Bell and the present writer).

On this interpretation the figure in this late relief, of the third (or possibly the second) century after Christ, takes us back to primitive Anatolian religious art, and shows an almost stationary unchanging ritual

and symbolism. Such is the impression that all these religious monuments of the Antiochian Region make on the spectator: the old Phrygian cult remained practically almost the same in its fundamental features for a thousand years or more; and instead of calling it Phrygian we may move a step further and employ the name 'Hittite.'<sup>1</sup> The Phrygians, a conquering tribe from Macedonia (or Illyria) adopted the religion of the conquered country, though doubtless they in some degree affected its character in their part of Asia Minor.

I should add that in my hurried notes written before the stone I indicate no doubt as to the sex, and apply to it the term priest.

On each side of the central scene is a conventional ornament, a large heavy garland supported by two Amores; who are probably winged. Above the middle of the garland is a head of Medusa. Ornament of this kind is common in late Roman work in Asia Minor, sometimes in even ruder form than here. Examples from Isauria are published by Miss Ramsay in the first paper in *Studies in the Art and History of the Eastern Provinces*, pp. 10 and 11, but the figures were so rude that none of us recognised them as Amores at the time.

On the left the frieze breaks off here: on the right is a second scene: probably the frieze showed only two scenes, one the worship of the goddess, the other the worship of the god; and these two scenes were separated and bounded by garland-bearing figures.

To the right of the middle garland is an altar, beside which sits on the right a god, who pours a libation (or lays an object) with his right hand on the altar. This sitting deity wears an upper garment which rests on his knees, leaving the body and the legs from knee downwards bare.

Right of the god is a scene marked off by two shapeless upright boundaries. Between these boundaries is a sacred tree on the left, and an altar with a priest on the right pouring a libation from a patera (or laying a round object) on the altar.

Outside the bounds of this scene is a figure, broken in half longitudinally. Evidently this was an Amor, and the garland which he and his lost companion bore terminated the frieze on the right.

Here the frieze is broken; but the two scenes form a miniature picture of the cult.

<sup>1</sup> Probably the Hittites, in their turn, may have been conquerors; and the best term to use is 'Anatolian.'

The priest of the god bears a long sceptre or lance, or (as I prefer to think) the same long flaming torch which is carried by a priest on the altar shown in Plate IV. (Section XIV.). This Dadouchos will be described there.

That the deity to whom the Tekmoreian ritual was specially dedicated was Artemis is shown by several of the inscriptions. She was also regarded as Cybele, as is proved by the fact that her priest was Archigallos, and by the statuette, which I shall now describe.

As we were leaving Saghir a small marble statuette was brought to us, and we purchased it, intending to leave it in the 'Museum' which had been commenced in the cellar of the Government House at Yalowadj. We carried it with us for five or six days; but on the day that we reached Yalowadj, it was either lost or stolen. It was valueless in respect of artistic quality; and, in the way of evidence, the following description affords quite as much basis for inference as the actual figure. We saw several of the same type at Saghir, all more or less broken, and all quite rude. The type is common also on coins of Phrygia. I have seen examples at Ephesus and throughout Lydia and Phrygia, including the sanctuary at Antioch. Cybele sits on her chair. In her right hand she holds a patera, in her left a broken object (probably a tympanon). She wears a long tunic reaching to the feet and girt high above the waist; and a mantle is loosely wrapped round the lower part of her body and rests on her knees, hanging down nearly to the feet. On each side of the chair there is a lion, sitting on its haunches.

#### XIV.—A DEDICATION TO SELENE.

In the courtyard of a house at the top of the short narrow lane (in which the frieze described in Section XIII. is embedded) there is an altar or basis, very much dilapidated, which presents features of great interest.<sup>1</sup> (Plate IV.) It should probably be called a basis shaped like an altar, on which stood some dedicatory object. On the top is a small shallow circular depression, in the centre of which is a quite small deep hole. The dedicated object fitted into this hole by a small projection on its underside.

This square basis, about 4 ft. high, bears no inscription, but has reliefs

<sup>1</sup> In the same house, the inscription of the Archigallos Q 22 is built into the wall, and inside is the fragment of a Tekmoreian inscription.

on all four sides. The principal side is marked as such by the figure of the goddess resting on a double support. The other three reliefs rest each on a single support.

The goddess stands on a car, probably looking back, (though the head is lost), with her left arm above the front rail of the car, holding the reins, doubtless. The attitude of the horses implies a galloping motion, and the goddess's cloak like a chlamys flies behind her as if she were borne rapidly forward; but otherwise her attitude does not imply that she is moving, but is more like a person at rest. She is evidently to be understood as the charioteer in a rapidly moving car. The art, of course, is rude; but less rude than in other cases. The goddess seems to wear a girt tunic. The wheel of the car apparently has seven spokes.

There are perhaps three horse's heads, in which case we should have to understand a quadriga; but the photograph leaves this doubtful. The appearance that suggests a third head is perhaps illusory, due to the bad preservation of the surface; and I am disposed to think that there are only two heads, and that the sculptor intended to show a biga. If he had meant a quadriga, he would have been careful to show four by some detail. The legs do not suggest a quadriga.

The goddess, then, is Selene riding, as commonly, in a car drawn by two horses or mules. This recalls the words of Strabo, p. 557, regarding the worship of Men in Asia Minor. Speaking of the *hieron* of Men Pharnakou at Ameria in Pontus, he adds *ἔστι δὲ καὶ τοῦτο τῆς Σελήνης τὸ ἱερόν, καθάπερ τὸ ἐν Ἀλβανοῖς καὶ τὰ ἐν Φρυγίᾳ*. Formerly I took this to mean that the god Men was the moon-god; but Mr. Anderson pointed out to me Strabo's true meaning, *viz.*, that along with Men the *hierou* was dedicated to a goddess Selene; and he quoted *C.I.L.* III. 6829, *diebus festis Lunae*,<sup>1</sup> as a proof that this goddess was worshipped also in Antioch along with Men. I am now inclined to agree with his interpretation, and to regard the altar which is here published as dedicated to the goddess Selene. In that case, however, we should have to regard her as an intrusion into the Cybele-Artemis worship in Phrygia, in which case there would result a distinct probability that Men also, is an intrusion from the East. The question which is put in Section VIII. is thus answered by this relief, which I had not comprehended while writing that Section.

<sup>1</sup> Previously I took Luna here as Men. The inscription was copied by Sterrett in 1885, and by me in 1886 and by Calder and me in 1911, 1912. Quodannis is certain.

Another difficulty would be solved at the same time. On this interpretation we should have to suppose that, together with Selene, Men also came into the Saghir pantheon; and, as Saghir was indubitably the seat of a rather important *hieron* and the religious centre of the Association in which the people of the Imperial Estates (originally the estates of the god called Men by Strabo, p. 557) were united, it would follow that the hieron of Saghir was Strabo's 'hieron (of Men) in the region of the Antiochians'; see Section I. The temple, which stood close to the lane (already described) in Saghir was the ancient sanctuary of this district of Phrygia. Here we should look for old Phrygian traces of the pre-Hellenic period; but to do this it would be necessary to buy and demolish two dozen modern houses.

The arguments against this identification are two:—

(1) No archaic remains or pottery have been found at Saghir. The situation amid the crowded houses of a village furnishes the explanation. The surface is entirely covered with mediaeval and modern accumulation; and not much of the earth's surface can be seen on account of blocks of stone, walls and coarse pavement. Too much stress is sometimes laid on the need for proof of an archaic site by finding archaic remains inside a village or town: this proof need not be expected. For example, some American scholars who have explored in Asia Minor, have refused to believe that Konia is the site of the pre-Hellenic Iconium, because they found hardly a scrap of archaic pottery on the hill of Ala-ed-din. I have excavated in the hill, and found that a large part of it is an accumulation of soil over the foundations and basement of the Seljuk palace. When I first saw the hill in 1882 there were still considerable ruins of the palace, but almost all are now destroyed. In a surface like this, a great part of which is more recent than 1882, it is not reasonable to expect that pre-Hellenic pottery should be found. So at Saghir.

There is, however, in Saghir at least one inscription in the Phrygian language of Roman time, which Mr. Calder and I copied in 1911: it had escaped the careful search made by Professor Sterrett in 1885, by me in 1886, and by Professor Callander in 1905. Even one inscription (which is different in character from all others) proves that Phrygian was spoken here as late as the second or third century after Christ. If the ground were bought and excavations made,



then archaic remains would be found, or the identification would have to be abandoned.

(2) No dedications to the god Men have been found at Saghir. This is answered by what has been stated in Section I, as to the archaic and pre-Hellenic character of this Hieron compared with the 'progressive' character of the Hellenistic and Roman Hieron beside Antioch. The goddess remained here the principal figure, as in the old Anatolian religion.

The relief on the right side shows a figure perhaps of the Attis type. He stands facing, wearing a short tunic, with his left arm bent at the elbow and the fore-arm turned towards the body. The right arm is broken below the elbow. There may have been a dog or other animal (or perhaps a low altar) beside him under his right hand. He was represented stretching his right hand towards the animal (or pouring a libation on the altar). Some object protrudes downwards on his left side, and the same or another object upwards above his left shoulder.

On the back of the altar the figure represented is probably the Dadouchos priest, holding a very long flaming torch (which cannot possibly be explained as a thyrsos or a lance or a sceptre). The slanting projection at the top may best be explained as flames.

The dress of the Dadouchos cannot be determined with certainty: part of it hangs over his left arm: whether this is a chlamys, which leaves the body nude, is doubtful: perhaps it is the end of a more voluminous garment which draped the body; but my notes made before the stone speak of the Dadouchos as nearly nude, with a heavy garment hanging from his left arm.

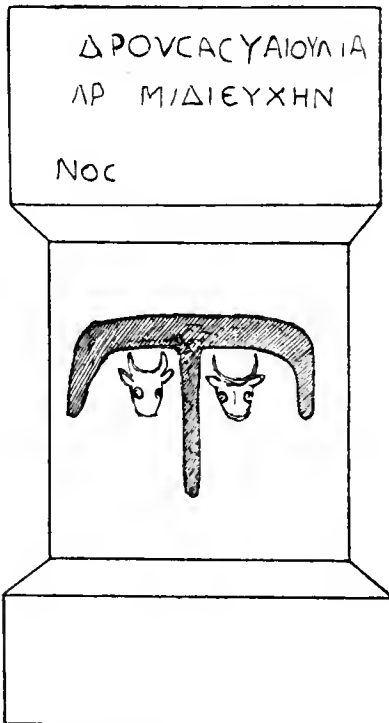
That 'the torch' was a very important part of the equipment of the initiation chamber (*atron*?) is proved by the inscription published in *J.H.S.* 1912, p. 163 (the reading of which has been confirmed by Mr. Anderson and me in 1912). If there was a torch, there must have been a Dadouchos. Evidently the illumination which is mentioned as a striking feature in the Mysteries, was given in Phrygia by one huge torch, which was lit amid the darkness of the celebration. The Dadouchos occurs also in the relief described in Section XIII.

The left side shows two figures, presumably male, in short tunics, standing side by side, both looking straight forward. The figure on the right has the left hand on the breast grasping an object like an

axe or baton, which protrudes above the left shoulder. He is girt with a narrow girdle, like a rope. Over the left shoulder and upper-arm hangs part of a robe, perhaps a small cloak. The other figure, on the left, holds some object in his depressed right hand. I refrain from stating any conjecture as to this pair.

#### XV.—AN ALTAR OF THE MYSTIC RITUAL.

In the mosque at Kirkbash, a village two hours west from Saghîr, not far from the direct road to Kundanlı, there is a very rude monument having the form of an altar or of a basis to support a dedication, in the most helpless style of village workmanship. This altar, however, is extraordinarily interesting in respect of religious ritual, if my interpretation be correct. The principal side is inscribed with a dedication to Artemis in letters of the rudest form, which are perhaps to be read



ΔΡΟΥΣΑΣ ΚΑ(Ι) 'ΙΟΥΛΙΑ  
 ΑΡ ΜΙΔΙΕΥΧΗΝ  
 ΝΟΣ

1. Δρουσᾶς κα(ι) 'Ιουλια-
2. 'Αρτέμιδι εὐχὴν
3. νός

Δροῦσ[ο]ς is perhaps to be understood as the first name (either misspelt or badly engraved); but it seems much more probable that the feminine form Δρουσάς is intended. No example of this form occurs to me (as I write at Eski-Sheher without books), but it can be quite well supported by analogies from the nomenclature of Phrygia. That the woman's name should come first can also be defended by similar examples in this region; it would suit the old matriarchal style of pre-Phrygian Anatolia, of which traces may be observed here and there. This matriarchal custom is sometimes called Phrygian; but it should be considered old Anatolian. The Phryges, a conquering race, inevitably went against this custom. The dominant men took wives of the women of the subject people; probably they had not sufficient women of their own stock; but they would not adopt the matriarchal rule, nor would they maintain it even if they had known it in Europe. The matriarchate goes with peace, and tends to perish among a conquering caste and in a state of war.

The last letter of the name Drousas or Drousos is followed by Υ, probably a rude form of Κ. The final letter of καὶ is omitted by the engraver on account of the following Ι. The name Ἰουλιανός seemed to us certain, though the last three letters are out of place. Under this inscription, on the shaft of the altar, are two bull's heads beneath a sort of canopy (which is simply in relief without marking or ornament). This may be a helpless attempt to indicate some part of the temple or its equipment. I should conjecture that the intention is to indicate the front of a village temple, or the *atron* (natural or artificial) in which the Mysteries were celebrated (Sections II., XIV.): compare the interpretation suggested for the Isaurian monuments in Miss Ramsay's paper on Isaurian Art (*Studies in the History and Art of the Eastern Provinces*, No. 1) and in the concluding article of my *Luke the Physician and other Studies in the History of Religion*, p. 380.

On the left side of the altar is a very rude representation of a tree and serpent, a common religious device.

On the right side is a large ornament, nearly (but not quite) in the centre of the surface, coarsely and roughly cut (Fig. 3). It probably represents rudely a brooch or other object which formed part of the dress of a priest or priestess of the goddess. In the centre are eight bosses arranged in a circle round a central boss. Two of these have a cross on them, and probably the others had the same ornaments, but the

surface is too much worn to show the original marking. The cross is familiar in old Phrygian work (as on the Midas tomb); and the whole character of this ornament suggests that it is a rude copy of some archaic priestly object.

On the back of the altar are two vines, on the right and on the left, growing out of two vases. Between them is an object, which is apparently a pot of simple form, out of which grows a large ear of corn. As the other sides of the altar are adorned with hieratic representations, the same must be the case here; and this pot with the ear of corn must probably be interpreted as a reminiscence of a scene in the Mysteries described

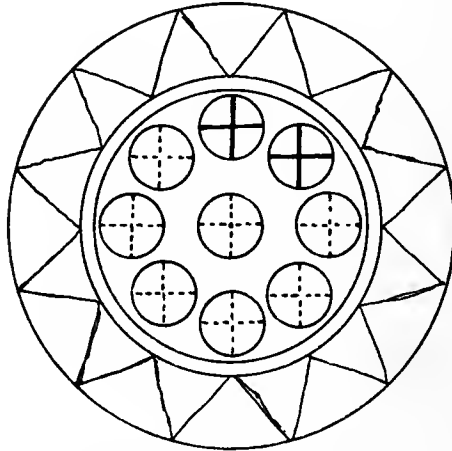


FIG. 3.—ORNAMENT ON THE RIGHT SIDE OF THE ALTAR.

in the *Philosophumena* (Miller, p. 117, Cruice, p. 171), 'the great and wonderful and most perfect mystery placed before those who were initiated in the higher order [at Eleusis] was a stalk of corn harvested in silence.' On the effect and intention of this scene I have said something elsewhere.<sup>1</sup>

There is no authority for attributing this supreme mystic revelation to the Phrygian Mysteries; but the general similarity of the Mystic ritual on both sides of the Aegean seems to be a sufficient proof<sup>2</sup> that this act was performed in Phrygia as Eleusis; and we recognise the

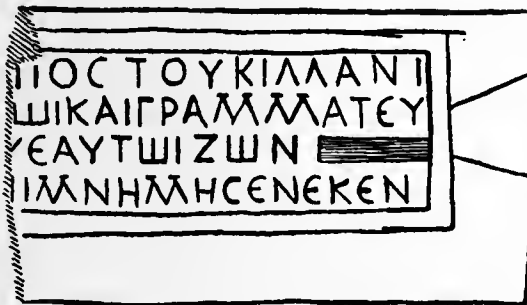
<sup>1</sup> *Letters to the Seven Churches*, p. 164.

<sup>2</sup> See *Religion of Anatolia* in *Hastings' Dict. Bib.* V. 126; and above, p. 43.

preparations for the scene in the representation on this altar (where the ornament are doubtless all hieratic). From this rude altar we gather that the stalk of corn was brought into the hall of the Mysteries growing in a pot. The vine-plants on each side are merely ornamental, like the garland and Amores in the relief described above, Section VIII. Such ornamental pairs of vines are very commonly introduced on grave-stones of the Roman period in Phrygia: an example is shown in *Studies in the Eastern Provinces*, p. 84 in an article by Miss Ramsay.

XVI.—THE *Arca Sanctuarii*.

(R. and C. 1911.) Tcharyk Serai. Published by Professor Sterrett from his own copy, *E. J.* No. 176: his epigraphic copy is accurate, except that the corner of  $\Upsilon$  at the beginning of l. 3 is taken by him for part of C.



This fragment is of the highest importance, if the following restoration be correct. The stone is of a common form, viz. a tablet. In my experience such tablets are frequently broken straight down the middle, so as to form two pieces almost exactly corresponding. This fragment is broken straight down; and a considerable, but not extremely long part of the inscription was engraved on the lost portion. Moreover, such tablets are never very long and narrow. Therefore the size of the lost part may be taken as fairly certain; and the following restoration assumes that the size of the lost piece is approximately the same as that which is preserved. Consideration of the possible restoration, also, points to the same opinion.

The preserved part of l. 1 almost certainly begins with a broken  $\Pi$ :

the distance between I and I suits: the readings NI, MI, are excluded. A personal name and a title ending in -πος (obviously ἐπίτροπος) are wanted here. At the beginning of l. 2 the restoration -ου πεδίου is certain. At the beginning of l. 4 καὶ with a personal name and συμβίωι<sup>1</sup> are needed. These conditions govern the restoration.

In l. 1 before [ἐπίτρο]πος a personal name is required. Probably there was only a single name without the father's name (although two very short names might find room in the space that remains open). The ἐπίτροπος τοῦ Κιλλανίου πεδίου must have been connected with the Imperial estates there: on which see Chapter IX. of my *Cities and Bishoprics of Phrygia*, I.: he was therefore, of course, a member of the Imperial household, and therefore *nullo patre*. A name like Eirenaios or Hymenaios would suit the conditions well; and I insert the former *exempli gratia*.

In l. 4 the restoration is fairly certain, except the length of the wife's name; but this is sufficient to show that some defining expression was added after πεδίου in l. 2. When I submitted the restoration of the other three lines to Mr. Calder, with the gap in l. 2, he suggested ἐπὶ τῷ σίτωι (the ending ωι being certain on the stone). This has some advantages (as we shall see) and the construction is justifiable, though this exact title is not known, for the genitive is usual.

Thereafter Eirenaios (?) was promoted to be γραμματεὺς . . . . . υ and in this office he resided near Antioch, apparently on the Imperial estates south of the Colony. Now this part of the estates seems to have been charged with the income needed for maintaining the Sanctuary of Men; and the modern village name Gemen, south of Antioch, seems to be Γῆ Μηρός (as Mr. Calder first suggested). The old priesthood was suppressed, as Strabo says; but the ritual and buildings were maintained, and the fund for the maintenance was called the *arca sanctuarii*. There was a curator of this *arca*, who seems to have been a citizen of the *colonia*; but, as the money must ultimately have come from the estates, originally the property of the god and then of Augustus and his successors, there must also have been an Imperial manager of the revenue, whom I conjecture to be γραμματεὺς τοῦ ἱεροῦ θησαυροῦ. What the Latin form of the title may have been is uncertain.

<sup>1</sup> γυναικί is inadmissible: the preceding letter was not Κ, but might be Ω.

The full restoration would then be as follows :—

Εἰρηναῖος? ἐπίτρο]πος τοῦ Κιλλανί-  
 ου πεδίου ἐπὶ τῶι σίτ]ωι καὶ γραμματεὺ-  
 ς τοῦ ἱεροῦ θησαυρο]ῦ ἑαυτῶι ζῶν erasure  
 καὶ Νείκη? συμβίωι μνήμης ἕνεκα

As Eirenaios was promoted from the Killanian estates to manage the *arca*, his office on the former cannot have been that of the supreme procurator of the estates, who was certainly a person of considerable importance; but, if he was only [ἐπίτρο]πος [ἐπὶ τῶι σίτ]ωι, we may understand that the duty at Gemen was higher. Here he prepared the grave for himself and his wife, probably on the death of the latter. This inscription has been carried with several others to build the mosque at Tcharyk Serai, which seemed to us to be certainly not an ancient site, as the cemetery contained no ancient stones.<sup>1</sup>

W. M. RAMSAY.

<sup>1</sup> Professor Sterrett considered the village an ancient site; but he mentions no proof except the stones of the mosque, which furnish no evidence: mosques are usually built by a contractor who brings stones. The cemetery does not suggest a site.

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NOTE TO P. 68, L. 12: The theory of the nature of Artemis Ephesia, stated in my article on *Anatolian Religion* (Hastings' *Dict. Bib.* V. pp. 116 f.), dominates the expression here and elsewhere.

W. M. R.

# PREHISTORIC REMAINS IN SOUTH-WESTERN ASIA MINOR.—II.<sup>1</sup>

(PLATES V-VII.)

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## THE MOUNDS AT SENIRDJE AND BOUNARBASHI.

### I. SENIRDJE.

THE village of Senirdje is situated some 15 km. to the N.N.W. of Isbarta (Baris), in northern Pisidia, in a gap in the hills dividing the plain of Isbarta from the plain of Ketchiborlu, through which the line of the railway-extension from Ketchiborlu to Egerdir now passes. Close to the village is a low, flat mound,<sup>2</sup> in marshy ground, which, when I visited it in 1911, was entirely flooded owing to the severity of the previous winter. The mound, the northern part of which is traversed by the railway-cutting, rises to a height of 13 feet above the level of the plain, and 11 ft. 6 in. above the rail, at a point 150 feet to the right of the centre-line. The top of the northern bank of the cutting is about five feet above the rail, the southern bank about 9 feet. Some 18 inches down to the level of the plain remain unexcavated.

The majority of the vases described below were found before my arrival, and there is no stratigraphical evidence as to their original position. A detailed examination of the mound could not be made for fear of disturbing the cuttings; it was possible however to ascertain roughly the

<sup>1</sup> See *B.S.A.* xvi, p. 89. On p. 103 of the previous article omit the words (scale 2 : 5) below Fig. 9.

<sup>2</sup> Two similar mounds were noted in this part of the plain, of which I was able to make only a hurried inspection: a low mound of large circumference close to the railway, near the village of Gondüler, and a similar but smaller mound to the north of the road from Egerdir to Isbarta, near Findos. On the surface of both these mounds I found fragments of pottery similar to that obtained from the mound at Senirdje.



levels of a large number of sherds, and five new vases, more or less complete, were also discovered.

On the southern bank it was possible to examine only the upper strata, to a depth of about 6 feet. Below this point the embankment had already been made up and could not be disturbed. On the northern side the upper strata had been denuded, but a perpendicular section could be obtained through the lower levels, from a height of about five feet down to the level of the rail. In it were observed two burnt floor levels, as in the mound described at Tchai Kenar,<sup>1</sup> the lowest about 90 cm. above the level of the rail, the other separated from it by about 30 cm. of deposit. The earth above the second of the two levels was in parts almost wholly denuded, but at certain points was about 30 cm. thick. At one point in the lowest stratum could be seen what appeared to be the end of a house-wall or its foundations, and at about 50 cm. below the top of the same stratum remains of a cobble paving appeared at intervals, traces of which were said by the men working in the cutting to have been found in other parts of the mound.

The pottery found in the mound is all of a primitive type and shows little development. On none of the whole vases or sherds is there any trace of the use of the wheel or any painted decoration. The commonest ware is of dark grey appearance with a burnished surface. The clay is usually a deep black, very porous and of coarse character, frequently containing small stones and grit. The exterior of the vase, and in more open examples sometimes also the interior, is covered with a thick slip, black or dark grey, which is usually highly polished. In certain cases unevenness of firing has imparted a brown or yellowish colour to the slip. The ware is common throughout the whole deposit, being found in the lowest levels on the northern side and within a few inches of the surface on the south.

Abundant, but less common than the grey-slipped ware is a red-faced ware with glaze of ferric peroxide, similar in all respects to that described previously from sites in the Milyas.<sup>2</sup> It occurs only sparingly in the middle part of the lowest stratum<sup>3</sup> on the northern bank (that below

<sup>1</sup> *B.S.A.* xvi, p. 94.

<sup>2</sup> *B.S.A.* xvi, p. 98 (A 2).

<sup>3</sup> At present it would be inadvisable to lay over much stress on this fact, and to assume that the red-glazed ware is an intruder, though this may well be the case. In the lowest 30 cm. of the stratum in question I found no trace of the red-glazed ware, in the 30 cm. in the middle of the stratum only occasional pieces, the ware being common only in the 30 cm. immediately below the first burnt level. A more complete excavation might, however, quickly modify these results.

the lowest of the two burnt floor-levels), but becomes increasingly common upwards. Fragments of a large bowl with a crescent-shaped ledge-handle were found immediately below the first burnt level, the exterior of which is thickly coated with the red glaze, the interior merely burnished except for a narrow band below the rim. It is particularly common in the higher strata exposed on the southern bank and, like the grey-slipped ware is found within a few inches of the surface.

A coarse ware of brick-like appearance, with a hard black core and a brownish-red surface, which is scraped but not polished, is common in the upper strata of the northern side and in the lower levels on the south. In the upper levels of the southern side it tends to disappear.

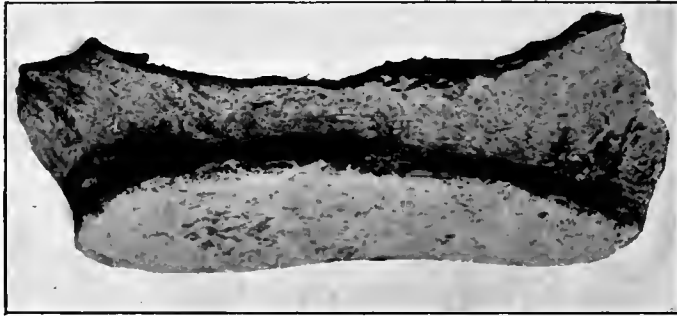


FIG. 1.—FRAGMENT OF PITHOS, SHOWING FOOT.

Besides the sherds a large number of vases, more or less complete, were found during the progress of the work on the mound, the fabrics of which agree with the analysis of the sherds described above. Among the vases the commonest fabric is the grey-slipped ware, the surface of which is not always polished. One whole jug has a black slip with highly burnished surface not unlike the black ware of Yortan, and some of the larger pithoi and smaller vases are of the red-glazed fabric. The vases are hand made, the forms being all of an early type. The base is usually merely flattened or slightly concave, a fragment of a large red-glazed pithos found at a depth of 65 cm. on the southern side being the only piece to show any sign of a true foot, which in this case is of a primitive description (Fig. 1). The decoration is of the simplest kind, being for the most part confined to broad flat scorings made with a blunt instrument on

the surface of the clay, when half-dried. In some cases this system of scoring has developed into regular fluting (Fig. 2), while a small group of vases shows simple decoration in relief, pinched up out of the clay. The practice of applying small warts to the clay is not uncommon, the barbotine decoration of Pl. VII, 13 being an interesting development. In one case only (Pl. VII, 1) is it possible to speak of incision rather than scoring, where the design is cut in the wet clay with a sharp instrument and filled with a white incrustation. The design and technique of this vase is discussed more fully below.<sup>1</sup>

The commonest form among the vases is a jug with globular body and narrow neck. In no case unfortunately has the whole of the lip survived. In the majority of examples it was probably merely circular like the Cypriote bottle-jugs and certain examples from Hissarlik.<sup>2</sup> The appearance however of Pl. VI, 2 makes it probable that in certain cases the front part of the lip rose into a high spout like some of the narrow-necked jugs from Hissarlik and Bos-euyuk.<sup>3</sup>



FIG. 2.—FLUTED DECORATION.

A fragment of a narrow-necked jug with a high, vertical *Schnabel* was found among the sherds from the deposit between the two burnt levels on the northern side (Fig. 3, *a*, *b*). The fragment is of the burnished grey-slipped ware. The upper part of the neck and spout is slightly carinated in front, and below the lip are three rude scorings on either side.

The most remarkable examples in this class are the two vases (Pl. VI, 3 and Pl. VII, 3) on the shoulder of which is placed a small closed spout, pierced with holes to form a strainer. The larger of the two (Pl. VI, 3), which measures 144 mm. in height, and 129 mm. in diameter, is of coarse buff-coloured clay with a central black core. The surface perhaps was originally covered with the red glaze. The top of the neck is

<sup>1</sup> p 89.

<sup>2</sup> E.g. *S(chliemann) Sammlung*, no. 2227.

<sup>3</sup> S.S. 400; *Ath. Mitt.* xxiv, Pl. I, 8.

missing and only the base of the handle remains. The strainer is pierced with four holes. The jug is globose and the base only slightly flattened.

The smaller of the two is less globose and has a more pronounced base. The jug is of the red glazed ware. Most of the rim is missing, but from what remains it is probable that it rose in front to form a spout. The handle, which is entirely missing, was fixed to the rim and a circular depression on the wall of the pot marks its junction with the body. (Ht. 128 mm., diam. 120 mm.).

The object of the strainer placed on the shoulder is uncertain. Its position in relation to the handle makes it unsuitable for pouring, and the

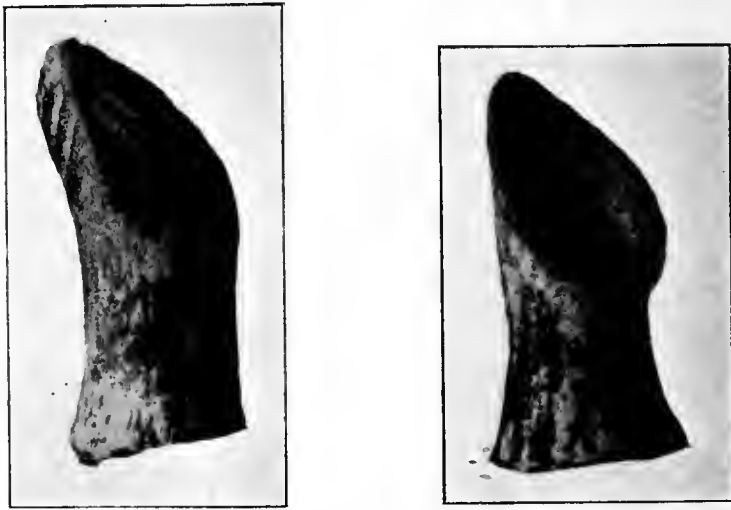


FIG. 3 *a* AND *b*.—HIGH VERTICAL *Schnabel* OF A JUG.

normal position for such a strainer would be in the neck. It has been suggested to me that the strainer was intended to prevent the intrusion of creatures such as leeches, while the bottle was being filled. The bottle would be submerged in the water and filled through the opening in the side, the true opening above being held clear of the water. Some such explanation may very probably be the true one.

The small jug Pl. VI, 5 (Ht. 130 mm., diam. 109 mm.) was found with a less complete example at a depth of 55 cm. below the surface on the southern side. Both are covered with a thin polished grey slip which

varies to buff and is in places smoke-stained. Most of the carbonaceous matter has been burned out of the clay, which is hard and brittle and has a yellowish colour on its outer edges. The upper part of the vase illustrated is decorated on either side with a triple group of rudely scored chevrons, the extremities of which meet one another on the front of the vase. On the larger example is a third group of chevrons, starting from above the base of the handle, which joins the other two and makes a continuous band of zigzags round the whole of the upper part of the body.

The three vases, Pl. VII, 2, 12, 13 are of deep black clay, finely worked and covered with a dull grey slip which shows signs of polishing only in the case of Pl. VII, 13. The lip and most of the handle are missing in every case, and the narrow neck survives only in the case of Pl. VII, 13. The body of Pl. VII, 12 is more globular than the rest, and the base only slightly flattened. Round the bottom of the collar are two raised bands in relief, which give a fluted appearance. On the front and two sides are groups of double chevrons in relief, which are not connected with one another. On either side of the handle and of the apex of the chevron on the front of the vase are small bosses. (Ht. 77 mm., diam. 91 mm.)

Pl. VII, 2 has a single raised band round the collar and decoration in relief similar to the last on the front and on two sides of the body. The apex of the chevrons is however slightly rounded, and the bosses of the preceding example are lacking. (Ht. 68 mm., diam. 70 mm.)

The decoration of Pl. VII, 13 is peculiar. On either side of the handle is a small boss above its junction with the body, and a groove surrounds the vase at the junction of neck and shoulder. The body of the vase is surrounded by a triple band of zigzags, which just fails to meet below the handle; both above and below the zigzags is a line of bosses, which runs continuously round the vase, following the lines of the zigzags. (Ht. 100 mm., diam. 96 mm.)

The vase, Pl. VI, 2, is of a hard-baked clay and has almost the appearance of stone ware. The exterior is carefully smoothed, but not polished. The neck is narrow and slightly set-back, and though most of the lip is missing, the vase was almost certainly high-beaked. The lower part of the handle is pierced with an oval-shaped hole made with the finger when the clay was wet, a device which is employed also in the case of the large jug, Pl. V, 3, 4. The upper side of the handle is decorated with eight small parallel grooves, possibly to provide a better grip for the hand

in pouring. The upper part of the body is scored with a zigzag pattern which surrounds the vase and practically meets under the handle. (Ht. 176 mm., diam. 140 mm.)

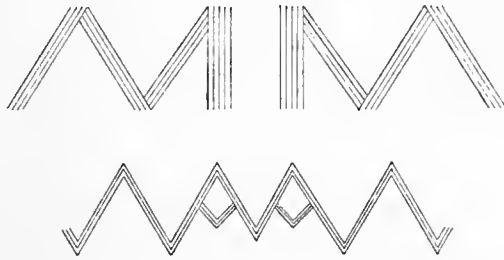
Among the series of wide-necked jugs, all of which are provided with a high spout, the largest (Pl. V, 3, 4) was found near the top of the southern bank, standing together with the two large pithoi (Pl. V, 1, 2), there being only 20 cm. of deposit between the top of the largest vase and the surface. The clay is of a hard, gritty character, grey-black in colour, the exterior of the vase and the inside of the neck being covered with a highly polished grey slip. On one side of the vase over-firing has turned the slip to a buff colour and the clay in the wall of the pot has at this point burned to a yellowish colour. Darker patches on the exterior show traces of a later burning. The handle of the vase is broad and flat, and slightly flanged. At the bottom of the handle is a large hole made with the finger, from either side of which start shallow grooves which run the whole length of the upper side of the handle. The inner side of the spout is nearly flat and, to facilitate the pouring of the liquid, a small, shallow groove has been made, about 15 mm. broad. A shallow groove runs round the bottom of the neck at its junction with the body, from which on the front of the vase depend vertically two groups of five parallel straight lines. On each side of the vase is a fourfold chevron, carelessly executed, the front arm of which in both cases is connected with the five vertical lines in front by four diagonals (Fig. 4). On either side of the neck in front are two bosses (Ht. 460 mm., diam. 323 mm.)

The shape of Pl. VI, 6 is similar to the last, though the body of the vase is more squat and the neck is wider in proportion to the body. The lip is without the runnel described above, the pouring side not being so flat. The handle is round in section. The clay is of a deep black colour throughout, with a highly burnished black slip with a simple decoration of zigzags. (Ht. 193 mm., diam. 146 mm.)

There are a considerable number of fragments of jugs of this shape, usually made of the ordinary grey-slipped ware. Some of the fragments have a large boss in front on the shoulder below the spout. The decoration usually consists of simple zigzags round the upper part of the body, but one fragment of the lower part of such a jug has three flutings below the zigzag ornament.

Plate VI, 4 is an interesting example of this class. On the shoulder is

a large knob below the spout, and at the junction of the handle with the body is a large protuberance. The general effect is a striking resemblance to some of the jugs among the *Buckelkeramik* of Hissarlik VII,<sup>1</sup> but there seems no reason to bring the vase into a nearer connection with the *Buckelkeramik*. The lines of the lip are different from any of the jugs among the Trojan *Buckelkeramik*, and the projection in front is not a true *Buckel* pressed out from the inside, while the protuberance behind is probably due only to a certain clumsiness in joining the handle to the body of the vase. The body of the vase is surrounded by a zigzag band, but in the angles formed on either side of the knob are placed small inverted chevrons,



FIGS. 4 AND 5.—LINEAR DECORATION ON VASES.

depending from the middle of the lines containing the angle formed above (Fig. 5). (Ht. 165 mm., diam. c. 150 mm.)

Not uncommon is a class of small cream-jug, two examples of which (Pl. VII, 9, 11) were obtained with the pottery from this mound. A smaller example with rather lower spout was obtained from the mound at Bounarbashi, and a similar specimen was bought in the bazaar at Isbarta which may have come from either of the two mounds. There is a vase of similar shape from Asia Minor in the Louvre,<sup>2</sup> where the exact provenance is not stated, and the form is not unknown in Cyprus.<sup>3</sup> Of the two examples from Senirdje, Pl. VII, 9 is of black clay with unpolished grey slip. There is a slight depression at the junction of neck and shoulder, from which on the front of the vase five parallel lines depend vertically, from the top of which starts a series of zigzags surrounding the whole vase. (Fig. 6), (Ht. 103 mm., diam. 98 mm.)

<sup>1</sup> *E.g. T. und I. i*, Beilage viii, 20. 41 = S.S. 3508.

<sup>3</sup> *E.g. K.B.H. clxix*, 7. e. (with differences of handle).

Louvre, C.A. 1359.

The other example, Pl. VII, 11, the handle of which is lacking, is of the red-glazed fabric. The decoration is of the same character as the last, the zigzag bands being carried completely round the vase. Below the upper angle formed under the spout is a group of four short parallel scorings (Fig. 7), and the ends of the lines forming the two lower angles on the front of the vase are prolonged so as to intersect and form a lattice pattern. (Ht. 100 mm., diam. 95 mm.)

The two large jars (Pl. V, 2) were found together with the large jug (Pl. V, 1). Pl. V, 3, 4, which was found in fragments and is not complete, is of coarsely worked clay, the exterior and the upper part of the interior being covered with the red glaze. On the shoulder are two rising handles set horizontally, and between the two handles on both sides of the vase are two small parallel vertical bars, moulded on the shoulder. The lip is nearly flat. (Ht. 372 mm., diam. 330 mm.)

The clay of Pl. V, 2, is very brittle and apt to break in flakes, being of a buff colour varying to red, with a black core, and unpolished. The handles are set vertically, the base is slightly concave, and the mouth elliptical in shape. (Ht. 378 mm., diam. 305 mm.)

With these two jars was found a large fragment of a third with a crescent-shaped ledge handle. Part of a similar handle was found immediately below the lowest burnt level on the northern side.<sup>1</sup>

The small two-handled jar (Pl. VI, 1) is of hard coarse clay of pinkish-buff colour, with a rough and unpolished surface. One side of the pot is much blackened by fire. (Ht. 128 mm., diam. 115 mm.)

The small scoop or dipper (Pl. VII, 8) is of a very hard, polished grey clay. The lower part of the vase is broken, but the base was probably rounded, the appearance of vase and handle being similar to an early scoop from Hissarlik,<sup>2</sup> which is however, considerably larger. (Ht. 55 mm., diam. 95 mm.)

The small cup (Pl. VII, 4) with slightly flattened base is of grey unpolished clay, and rather porous. The broken handle is probably to be restored like the handle of a small cup of rather later date from Bos-euyuk.<sup>3</sup>

<sup>1</sup> See above p. 80. For the shape compare Bos-euyuk, (*Ath. Mitt.* xxiv, Pl. II, 9), and Hissarlik (*S.S.* 417).

<sup>2</sup> *S.S.* 97. See also Schuchhardt, *P.Z.* ii, p. 151. The discovery of the type in the interior of Asia Minor makes it no longer necessary, with Schuchhardt, to derive the type from a non-Anatolian source.

<sup>3</sup> *Ath. Mitt.* xxiv, Pl. III, 10.



The fragment represented on Pl. VII, 1 is probably from a small jar with a high wide-open neck, which is to be restored like *S.S.* 2251. The horn-shaped, unpierced handles are found on other fragments from the mound. The base is only slightly flattened, the clay a deep black, with a grey unpolished slip. The incised pattern was cut in the wet clay with a sharp instrument, and shows distinct traces of a white filling. (Ht. 90 mm., diam. 116 mm.) This incised and encrusted technique is found on none of the other pieces from the mound, the width and character of the scorings being such as to make encrustation impossible.<sup>1</sup>

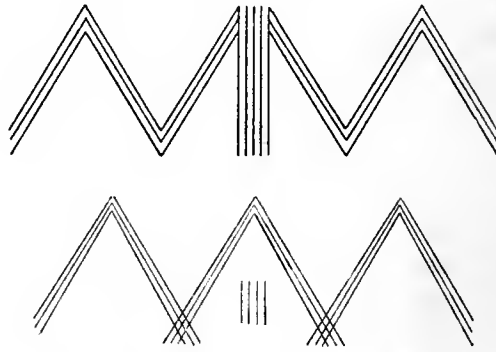
In the present example the combination of design and technique are significant. A similar band of fourfold zigzags, at the angles of which the lines intersect and form a lattice pattern, is found on a fragment of a jar from Hissarlik I, where it is executed in white paint on a dark ground.<sup>2</sup> Among the pottery from Yortan in Berlin and in Paris, the commonest decoration on the larger jugs is a similar design executed in white paint on both the red and black pottery from the site, which is of rather later date than the examples from Hissarlik quoted above. The design on the vase from Senirdje is less carefully executed than the examples from Hissarlik and Yortan, the intersections at the angles being sometimes omitted. It is clear, however, that in both cases the design is similar in intention, and the solitary occurrence of the encrusted technique in connection with a design which definitely recalls the painted designs of Hissarlik I, and Yortan makes it extremely probable that the white filled incisions are an attempt to imitate the decoration in white paint. The reverse is of course possible, namely, that the decoration with white paint is an imitation or

<sup>1</sup> Similar white encrustation is found on the figurines from Tchai Kenar (*Annals*, ii, p. 146), but I have found no trace of it on any of the pottery from the numerous mounds in this part of Asia Minor that I have examined, except in the present example. At Bos-euyuk there is no trace of it on the pottery, white filling being employed only in the eyes and eyebrows of a clay figurine (*Ath. Mitt.* xxiv, p. 25). The figurines from Tchai Kenar were assigned by Mr. Peet to the Neolithic Age, though I was inclined to regard them as of a rather later date (*B.S.A.* xvi, p. 105). If Mr. Peet's view is correct, it is possible that the encrusted technique disappeared in this district at the close of the Neolithic Age, and that the complete excavation of the lower strata of any one of these mounds would bring to light more examples of this style. The Senirdje vase would then be a survival from an earlier date. (See, however, below).

<sup>2</sup> *S.S.* 229, cf. *T. und I.* i, p. 252, where it is suggested that the white paint is a preparation of ashes. Similar white paint on a black or brown surface from Hissarlik I, (*S.S.* 154, 230). This pottery is compared by Tsuntas with the white or black ware of Thessaly. (Pl. 2 in Messrs. Wace and Thompson's classification. See *Prehistoric Thessaly*, pp. 232, 237, and Fig. 55, a-l. Fig. 55 f. is a fragment of a design similar to *S.S.* 229, which is not uncommon on the painted Thessalian pottery).

development of the encrusted technique, the former being originated in Hissarlik I, and being further developed at Yortan.<sup>1</sup> But the rarity of the encrusted technique in the interior of Asia Minor and the carelessness of the execution of the design on this particular vase, make the former view, on the whole, more probable.<sup>1</sup>

It should, however, be borne in mind that the design on the vase from Senirdje fits naturally into the whole decorative system of the pottery from the mound, within which, if of native growth, it is a somewhat highly developed example. On the majority of the vases the decoration is limited to the upper part of the body, and usually takes the form of isolated groups of chevrons, scored or in relief, which are occasionally combined to form a series of zigzags surrounding the whole vase. In the



FIGS. 6 AND 7.—LINEAR DECORATION ON VASES.

design from Hissarlik described above, Dr. Hubert Schmidt<sup>2</sup> refuses to recognise any influence of the so-called *Bandkeramik* of Europe, but analyses the pattern into a series of independent hanging ornaments.

The painted patterns on the vases from Yortan make this clear (Fig. 8). That the continuous zigzag bands at Senirdje are derived from such pendent ornaments as on Pl. VII, 2, 12, (cf. Fig. 8a) seems certain. In a large number of cases the zigzag band is not continuous round the vase, but

<sup>1</sup> The rarity of the style in Hissarlik I makes it probable that the few sherds represented are an importation from a foreign source, possibly Thessaly. (Cf. the Thessalian  $\Gamma 1 \alpha 2$  ware at Besika Tepeli and Bos-euyuk, Wace and Thompson, *op. cit.* p. 232). Messrs. Wace and Thompson are inclined to deny the connection between Hissarlik and Thessaly postulated by Tsuntas in the matter of the  $\Gamma 1 \alpha 1$  ware, but do not take into account the further development of the style at Yortan.

<sup>2</sup> *Zeitschrift für Ethn.* 1903, p. 453.

the final angle is omitted under the handle. In other cases the zigzags are interrupted by simple pendants from the neck of the vase, (Figs. 4, 6), a reminiscence of which occurs in Fig. 7. In the last example the pendent character of the zigzag band is emphasised by the prolongation of the lines forming the lower angles on the front of the vase, so as to intersect and form a lattice pattern similar to Fig. 8, *c*. In such an example as Fig. 5 there is a continuous zigzag band round the whole body of the vase, but the pendent character of the ornament is again emphasised by the insertion of two inverted chevrons based on the lines containing the two upper angles formed on the front of the vase. Plate VII, 10 has groups of simple diagonals depending from the neck without additional ornament.

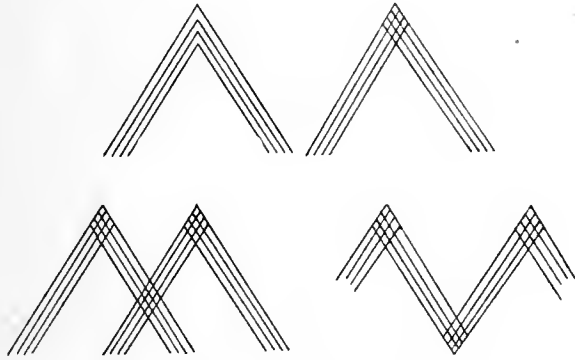


FIG. 8 *a, b, c, d*.—LINEAR DECORATION.

I reserve for the present a more detailed discussion of the chronology of the pottery from this mound and its affinities with the pottery of other prehistoric sites in Asia Minor. It is clear that we have to deal with a series parallel to that from Bos-euyuk, which has, however, very distinct local differences and, from the position of the site, is subject to influences from the South-east as well as those from the North-west, represented by Hissarlik. The entire absence of painted decoration is important, as the Hellespontine and North Phrygian area of non-painted pottery is thereby further extended to the South-east.

## 2. BOUNARBASHI GIÖL.

The second mound to be described is situated at the southern end of the Dombai ovasi in the centre of the small marshy lake behind the ridge of

Djebel Sultan, above Dineir (Apamea). The lake which in parts is little more than a reedy marsh, is formed by the confluence of the waters of the fountain Bounarbashi (Aulokrene), and of a small stream from the North, which drains the Dombai ovasi. The waters of the marsh escape by three *diidens* to the South-west, and according to the local belief, reappearing near Dineir, form the sources of the rivers Marsyas and Maeander.<sup>1</sup> The mound is almost circular, being 900 feet in diameter, and rises 28 feet above the level of the lake.<sup>2</sup> At a few feet from its outer edge it is surrounded by a low embankment, one to two feet high, the space between embankment and mound forming a kind of moat, in which water appears on one side of the mound. The excavation made for the railway cutting did not go deep enough to show any traces of piles, and further excavations can alone decide whether the original settlement was a true *palafitta*, or whether the first inhabitants, for greater security, made use of a natural island rising in the middle of the lake.<sup>3</sup> The mound was inhabited until a late period, sherds of Hellenistic and Roman as well as of prehistoric date being seen in the slopes of the cutting. There were also discovered a stone axe-head, human and animal bones, the remains of burnt corn and a saddle-quern, and a number of shells (*Limnaea* and *Planorbis*) from the lake.

The following objects merit discussion :—

The three small vases (Pl. VII, 5, 6, 7) are of grey-black clay, the surface of Pl. VII, 6 and 7 being polished. Pl. VII, 6 is a small jug similar to those described above from Senirdje. The surface seems to have been scraped with a knife or sharp instrument before polishing, and has slight diagonal flutings. The handle is thick, and flat on the upper and lower sides. (Ht. 77 mm., diam. 76 mm.)

Pl. VII, 7 is a small narrow-necked jug with a single handle, which is now missing. The base is rounded and pierced with four small holes. (Ht. 72 mm., diam. 61 mm.)

<sup>1</sup> See Ramsay, *C.B.* ii, p. 409. The lake is now crossed by the extension of the Ottoman Railway line, which makes access to the mound, through which it passes, possible. The water is full of leeches and there are said also to be pike. When the mound was inhabited, it is probable that there was some secret approach by means of the tufts, which rise frequently in the lake, but so far as I am aware, the knowledge of the approach has been lost.

<sup>2</sup> The top of the mound is 3,300 feet above sea-level.

<sup>3</sup> In favour of the second alternative it is perhaps relevant to quote the mound described (*B.S.A.* xvi, p. 93, No. 16) beside lake Karalitis (Sügüt-Giöülü), which stands on an outcrop of rock in marshy ground on the dried-up lake-bed.

The surface of Pl. VII, 5 is unpolished. It is a small wide-open jar with tubular suspension handles, one of which is missing. (Ht. 65 mm., diam. 54 mm.)

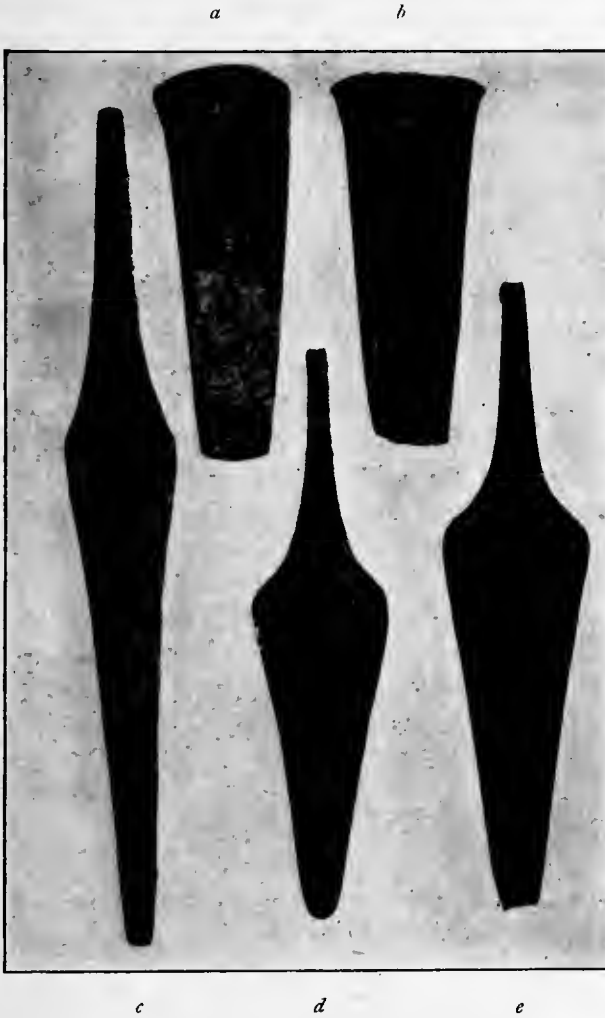


FIG. 9.—EARLY BRONZE IMPLEMENTS.

From this mound came also the five early bronze implements, represented in Fig. 9.<sup>1</sup> The two celts (*a*, *b*) are flat on both sides,

<sup>1</sup> I am at present unable to give the chemical analysis. From their appearance they contain a large percentage of copper.

with the blade slightly splayed, and butt-end square or slightly rounded.<sup>1</sup> The larger of the two measures 165 mm. in length, with blade 60 mm., the other is 157 mm. in length, with blade 67 mm.

The two daggers (*d*, *e*) are of early Cypriote type,<sup>2</sup> with sloping shoulders, flat tang, the tip of which is curled, and well-marked medial rib. The larger of the two (*e*), the point of which is broken, measures 267 mm. in length, and 62 mm. in width, the smaller 239 mm. in length, 58 mm. in width. The object represented by *c*, it is most natural to assume, is an unfinished dagger of similar type, to be completed by hammering. The surface is flat on both sides, the edges square, the point blunt and the tang not curled at the tip as in the other examples. It is possible that originally the metal for making daggers of this type was exported in this half-finished form from Cyprus, and this fact would help largely in the explanation of the wide diffusion of the Cypriote form,<sup>3</sup> the weapons being completed locally by hammering. The mould however, from Bos-euyuk<sup>4</sup> shows that daggers of this type in Asia Minor were cast locally in western Asia Minor in a form which required but little additional hammering, although, at the beginning of the metal-using age, when such proficiency had not been gained, the natives may have been more dependent on the Cypriote industry. There is of course the possibility that the piece in question represents merely a small ingot of a convenient form for export. If such be the case the form, which is distinctly reminiscent of the early Cypriote daggers, is only an additional proof of the dependence of western Asia Minor upon the Cypriote metal supply.

H. A. ORMEROD.

<sup>1</sup> The butt-end of *b* is worn but seems to have been almost square.

<sup>2</sup> See Déchelette, *Manuel*, ii, pp. 47-195.

<sup>3</sup> See Déchelette, *loc. cit.*; Dümmeler, *Ath. Mitt.* xi, p. 218; Myres, *C.M.C.* p. 18; Von Lichtenberg, *Mitt. Vord. Gesell.* 1906, p. 147.

<sup>4</sup> *Ath. Mitt.* xxiv, Pl. IV, 1.

(To be continued.)

## A MYCENAEAN BRONZE IN THE CYPRUS MUSEUM.

(PLATE VIII.)

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AMONG the latest acquisitions of the Cyprus Museum are seven pieces of bronze which, when put together, form the handles and circular rim of a large vessel.

Their history is as follows. They were found (together with a gold enamelled sceptre and two bronze tripods, a description of which I hope to give later) in a field near the Church of Hagios Armenis, at the village of Episkopi, the site of the ancient Curium. All the objects together were sold to an Armenian merchant of Limassol and were seized by the police of Larnaca in December, 1903, when they were about to be secretly exported from the Island. They have been kept at the Custom House at Larnaca till lately when they were transferred to my custody and deposited in the Cyprus Museum.

Their provenance, therefore, is the site of ancient Curium, where many Mycenacan objects were found during the British Museum excavations in 1895. I have been told lately by villagers that a bronze vessel was also found with the objects above mentioned, but in a very fragmentary condition; and that this vessel was broken up and has wholly disappeared. It is not improbable that this was the vessel to which the present rim and handles once belonged. A similar rim with handles, from a bronze caldron, differing only in decoration, may be seen in the Cesnola Collection of the New York Museum. It is No. 2604 of the new numbering of that Collection, and is figured in Perrot and Chipiez, iii, Figs. 555 and 556, and repeatedly elsewhere.

The rim (which is  $1\frac{3}{8}$  inch broad and  $\frac{1}{8}$  of an inch thick) is quite circular, leaving an opening of 13 inches in diameter (Pl. VIII. A). It was fixed on the top of the vessel by means of bronze rivets, all still preserved, together with fragments of the bronze vessel still adhering to the rivets.

A very graceful Mycenaean ewer or prochous, chiselled in relief, is repeated seventy times to fill the upper surface of the rim. This ewer is of quite Mycenaean type and similar to that held by the lion-headed demons on a Mycenaean gem from the Vaphio tomb,<sup>1</sup> and on the bronze handles in the Cesnola Collection.

The handles are S-shaped, and have their upper part fixed to the rim by means of bronze rivets, while at the lower end the metal plaque expands into a kind of disk so as to afford a larger surface for attachment to the body of the vase, pieces of which still adhere to this part of the handle, fixed each with three bronze rivets. The decoration of the handles is far more interesting than that of the rim (Pl. VIII. C). On each of them there are five pairs (the fifth pair consisting only of the lower part of the figures) of those animal-headed demons so common in Mycenaean decoration and especially on Mycenaean gems; for example, the lion-headed demons on the Vaphio gems, and on the bronze handles of the Cesnola Collection, already mentioned; the ass-headed demons on a wall-painting from the Acropolis of Mycenae,<sup>2</sup> and the animal-headed demons on a plaque from Phaestos,<sup>3</sup> and on Mycenaean gems.<sup>4</sup>

Here the demons are lion-headed with body and legs like those of a bird; they wear on their backs a skin, which is described by Perrot as a fish-skin, and by Tsountas as a lion-skin with a long mane, or a particular skin worn as a himation. They stand on their hind legs facing each other on either side of what may be described as a tree-trunk. The forepaw on the outer side is lowered along the body, while the other is raised above the head, in the so-called "act of adoration." Thus the demons are evidently represented as paying homage to the sacred tree between them,

<sup>1</sup> Vaphio gem: *Eph. Arch.* 1889, Pl. X, 35, cf. p. 169. Cesnola handles: Perrot-Chipiez, iii. Fig. 556; compare the small gold jug from Mycenae, Acropolis, Grave IV. (Schuchhardt, *Schliemann's Excavations* (Engl. Transl.), Fig. 243), and a bronze prochous from a tomb at Enkomi (Old Salamis), (*B.M. Excavations in Cyprus*, p. 16, Fig. 29, 1533).

<sup>2</sup> *Eph. Arch.* 1887, Pl. X, 1.

<sup>3</sup> Dussaud, *Les Civilisations préhelléniques*, p. 243, Fig. 179.

<sup>4</sup> Milchoefer, *Anfänge der Kunst in Griechenland*, pp. 55 and 68.



in the same way that the demons on the Vaphio gem are nursing the sacred tree.

Of the same Mycenaean character is also the decoration of the disk at the lower end of the handle (Pl. VIII. B). Two large octopods, and a third of which the tentacles only are represented, fill with their tentacles the whole area of the disk, vacant spaces being filled with an ornament probably meant for submarine rocks.

This octopus-design is executed in a very graceful and naturalistic manner, and has nothing of the conventionalism shown in the latest period of Mycenaean art, when the eyes and head are developed to excess, the body is atrophied and the tentacles have degenerated into a mere sinuous line, as on a large pseudamphora of the same provenance.<sup>1</sup> Our octopus resembles in execution that on a stone pyxis from a tomb of the lower town of Mycenae,<sup>2</sup> and is slightly better executed than those on two kraters from Old Salamis.<sup>3</sup>

Both subjects and execution show great affinities to other works of Mycenaean art, and our bronze belongs certainly to the first centuries of the Mycenaean colonization of the Island, before the Mycenaean art in Cyprus, influenced by the indigenous art, began to show divergencies of style and a wider range of subject than we find in other parts of the Mycenaean world. We are certainly not far wrong in dating this bronze to the fourteenth century B.C.

M. MARKIDES.

(Keeper of the Cyprus Museum.)

<sup>1</sup> *B.M. Excav. in Cyprus*, p. 74, Fig. 128 from Curium; *B.M. Cat. Vases*, I, ii (C. 501).

<sup>2</sup> *Eph. Arch.* 1888, Pl. VII, 1.

<sup>3</sup> *B.M. Excav. in Cyprus*, Fig. 73, 968, and Fig. 74, 1149; *B.M. Cat. Vases*, I, ii (C. 413 and C. 377).

## THE GREEK NUMERAL NOTATION.

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### I.

#### I.—OBJECT AND SCOPE OF THIS ESSAY.

THE object of the following articles is to set forth as briefly as possible the epigraphical evidence at our disposal for determining the numerical systems employed in the various cities of Greece, and to state afresh some of the conclusions which we are entitled to draw from it. I am not sanguine enough to believe that I have overlooked none of the available materials, but I hope that my essay may contribute something towards a fuller understanding, at least in this country, of a department of Greek epigraphy which has, as it seems to me, been unduly neglected by recent scholars.

Setting aside the eighteenth-century discussions of the subject, which are now wholly antiquated, we may note the following as the only attempts to treat the question fully and scientifically :—

- J. Franz, *Elementa Epigraphices Graecae*, p. 346 ff. 1840.  
A. Westermann *s.v.* Notae in Pauly's *Realencyklopädie*, v. 703 ff.  
J. Gow, *The Greek Numerical Alphabet* in *Journal of Philology*, xii. 278 ff. 1883.  
J. Gow, *History of Greek Mathematics*, p. 40 f. 1884.  
S. Reinach, *Traité d'Épigraphie Grecque*, p. 216 ff. 1885.  
G. Hinrichs, *Griechische Epigraphik* in Iwan Müller's *Handbuch*, i. 433 f. 1886.  
J. Woisin, *De Graecorum notis numeralibus*, Kiel. 1886.  
W. Larfeld, *Griechische Epigraphik* in Iwan Müller's *Handbuch*, i.<sup>2</sup> 541 ff. 1891.  
W. Larfeld, *Handbuch der griechischen Epigraphik*, i. 416 ff. 1907.

For the Attic system in particular we must add :—

K. Meisterhans, *Grammatik der attischen Inschriften*, 3rd edition, p. 9 ff. 1900.

W. Larfeld, *Handbuch der griechischen Epigraphik*, ii. p. 543 ff. 1902.

A glance at the foregoing list will show that the Greek numeral systems as a whole have been systematically discussed in only two treatises published within the last quarter of a century, and we still frequently find Woisin's dissertation cited as a standard authority. But though that work has done good service and did indeed mark a striking advance as compared with its predecessors, yet it has now become a very misleading guide. For the years which have elapsed since its appearance have witnessed a great increase in the amount of evidence available for this study, the correction, thanks to a more careful examination of the actual stones, of a number of texts imperfectly known to Woisin, and the true interpretation of inscriptions misunderstood by him or left unexplained as insoluble enigmas. To this advance in our knowledge various scholars have contributed, amongst whom the foremost place is taken by Professor Bruno Keil, whose masterly elucidations of an Oropian inscription (*I.G.* vii. 3498) in *Hermes*, xxv. 608 ff., of a Halicarnassian financial record (No. 57 below) in *Hermes*, xxix. 249 ff. and of a puzzling Attic table of numerals in the *Strassburger Festschrift*, 1901, p. 117 ff., have inaugurated a new era in the history of our knowledge of this subject.

At the present day, however, Larfeld's *Handbuch der griechischen Epigraphik*, which has superseded that same indefatigable scholar's discussion in Iwan Müller's *Handbuch der klassischen Altertumswissenschaft*, is universally regarded as the authoritative text-book on Greek epigraphy, and we naturally turn to it with confidence on a subject like the present. In the case of Attica that confidence is fully justified, but for the rest of Greece it is sadly disappointed; in fact this section of the work is perhaps its least satisfactory portion.

To treat the whole question within the limits of a single article would involve either an undesirable compression of the materials available for study or an unfair demand upon the restricted space of the *British School Annual*. I shall therefore discuss in the present article only the so-called 'acrophonic' or 'initial' class of numeral notations; leaving to a future occasion some observations upon the other main class, in which the letters

are used in their alphabetical order as numeral signs. It will be convenient to review at the outset the extant examples which form the chief basis of our knowledge, arranging them in geographical order: we may start with Attica and pass thence in succession to the Peloponnese, Hellas north of the Isthmus, the Greek islands, Asia Minor, and the Euxine basin. A concluding section will be devoted to the name and history of this type of notation.

I shall not attempt to discuss fully each of the systems to which I shall refer in the following pages. Conclusions of previous writers which are not, to my mind, open to serious objection will be simply stated, without argument or proof, and I shall only linger over those inscriptions which have been misinterpreted or only partially explained by the writers to whom I have referred. I take for granted one fact which is of the utmost importance for the right understanding of the numeral notations of the Greeks,—of those, at least, which fall within the acrophonic class,—namely, that, while the number represented by a combination of elements is always the sum of its component elements (and to this extent the Greek systems differ radically from that of Rome, in which IV and VI are not equal in value),<sup>1</sup> the elements are always arranged in descending order of value, and, where sums of money are represented, the higher denominations always precede the lower. By the aid of this canon it is often possible to arrive at conclusions regarding the value of signs which would otherwise baffle explanation.

## II.—REVIEW OF THE EXTANT EVIDENCE.

1. ATTICA. Hundreds of inscriptions illustrate the system employed by the Athenians, with which we may well begin our survey, since a numeral notation of this class appears in Attica before we have any traces in extant inscriptions of its existence elsewhere.<sup>2</sup> Only a very brief account of it will be required here, for the subject has been treated fully by Larfeld (*Handbuch*, ii. 543 ff.), and indeed little has been added to our knowledge of this system within the last half century.

The simple numeral signs are six in number: I = I, Π (πέντε) = 5,

<sup>1</sup> Herodian is wrong in saying αἱ δὲ παραθέσεις τούτων, ἡνίκα μὲν αὖξιν τοὺς ἀριθμοὺς δέη, ἐπὶ τὸ δεξιὸν μέρος γίνονται, ἡνίκα δὲ μειοῦν ἐπὶ τὸ ἕτερον. ἡ γὰρ παράθεσις ἐκείθεν, σημαίνει ὅτι χρὴ τοῦτον τὸν ἐλάττω ἀριθμὸν ἀπ' ἐκείνου τοῦ πλείονος ἀφαιρεῖν (Appendix to Stephanus' *Thesaurus*, ed. Didot, viii. p. 345).

<sup>2</sup> With the possible exception of *Koutsopodí* No. 4 (below).

$\Delta$  (δέκα) = 10,  $\text{H}$  (ἐκατόν) = 100,  $\text{X}$  (χίλιοι) = 1000,  $\text{M}$  (μύριοι) = 10,000.<sup>1</sup> In addition there are four compound signs:  $\text{P}^{\text{a}}$   $\text{P}^{\text{b}}$   $\text{P}^{\text{c}}$  = 50,  $\text{P}^{\text{d}}$  = 500,  $\text{P}^{\text{e}}$  = 5000,  $\text{P}^{\text{f}}$  = 50,000. Thus, for example, in accordance with the general rule already stated, the number 1913 would be represented by  $\text{X P}^{\text{d}} \text{H H H H H} \Delta \text{I I I}$ . The forms assumed by these numerals vary with the development of the letter-forms, *apices* and ornamental variations being frequently found in later examples:  $\text{P}$  and its compounds, for instance, may occur in any of the numerous forms taken by  $\text{P}$  when used as an ordinary letter.

In a decree of 325-4 B.C. (*I.G.* ii. 5. 179 *b*)  $\text{P}$  is twice written as part of a compound word: in l. 9 :  $\text{X X X}$  : *μεδίμνους πυρῶν* :  $\text{P}$  : *δράχμους* = *τρισχιλίους μεδίμνους πυρῶν πεντεδράχμους*, and similarly in l. 67 we have  $\text{X X X}$  *μεδίμνους P* *δράχμους*.

For sums of money the drachma is taken as the unit, and the ordinary numerals are used to express sums in drachmas, save that  $\text{I}$ , not  $\text{I}$ , denotes a single drachma:  $\text{I}$  (repeated up to five times) represents the obol,<sup>2</sup>  $\text{C}$  the  $\frac{1}{2}$  obol,  $\text{D}$  or  $\text{T}$  (*τεταρτημόριον*) the  $\frac{1}{4}$  obol,  $\text{X}$  the *χαλκοῦς* ( $\frac{1}{8}$  obol).<sup>3</sup> Occasionally the word *δραχμαί* is written either before or after a number, but even then  $\text{I}$  denotes the obol, not the drachma. The mina (100 dr.) is usually ignored, the talent ( $\text{T}$ ) being the only denomination above the drachma which is recognized:  $\text{T T T T}$  is written for 4 talents,  $\text{P}^{\text{d}}$  for 5,  $\text{P}^{\text{e}}$  for 10,  $\text{H}$  for 100,  $\text{X}$  for 1000 and similarly with the compound signs, so that every element in a number representing a sum of talents has  $\text{T}$  as a component part, the horizontal stroke usually coalescing with that of the numeral. Thus, *e.g.*  $\text{H P}^{\text{e}} \text{P}^{\text{d}} \text{T T T P}^{\text{e}} \text{H H H P}^{\text{d}} \text{P}^{\text{c}} \text{I I I I I}$  = 128 tal. 5357 dr. 5 ob.

Other units of money, weights, and measures, such as  $\text{M}$  (*μνᾶ*) and  $\text{S}$  or  $\text{Ξ}$  (*στατήρ*, *στάδιον*), are treated in the same way (*Larfeld, op. cit.* p. 546).

Leaving Attica we may now pass by way of Aegina to the Peloponnesian states.

2. AEGINA. *I.G.* iv. 39 (430-405 B.C.), inventory drawn up by Attic cleruchs in Aegina. Only the numbers :  $\text{I}$  : :  $\text{II}$  : :  $\text{III}$  : :  $\text{IIII}$  : occur; weights and values are not recorded.

<sup>1</sup> Priscian gives  $\text{X}$  and  $\text{X}$  as alternative forms for 10,000, but neither occurs in any extant inscription.

<sup>2</sup> The obol is represented by  $\text{O}$  on two Attic *abaci*, *Πρακτικά*, 1884, 74 and *Δελτίον*, 1888, 175.

<sup>3</sup> See B. Keil, *Hermes*, xxvii. 643 ff.

## 3. ARGOS.

(a) *I.G.* iv. 616 (ca. 362 B.C.), arbitral award assessing the compensation to be paid by the Arcadians and Stymphalians for damage done during their tenure of Olympia in 365-3 B.C. The arbitral court being that of Cleonae, it is possible that the numerals here used are those of that town rather than of Argos. The difference, however, is not likely to have been great. In l. 11 we have ΧΒΒΒΒ, in l. 16 [ΧΧΧ.]ΒΒΒΒΒΓΟ:::ΠΠ, in l. 19 τι(μὰ) ΒΒΒΟΟΟ, which may serve as examples of the system. The sums are frequently followed by the letters ΧΡ, interpreted by the editor as χρ(υσοῖ).<sup>1</sup>

The system used is evidently the following:

Χ = 1000 (dr.)	Ο = 10 dr.
Β = 100 "	. = 1 "
Γ = 50 "	- = 1 ob.

(b) *I.G.* iv. 617 (ca. 320-300 B.C.), a subscription-list. Every number is followed by Διγυναίανς or Ἀλεξανδρείανς (sc. δραχμάνς). The system employed is the same as the foregoing, save that Ο is replaced by ⊙.<sup>2</sup> Only the following signs occur:

Γ = 50 dr.	. = 1 dr.
⊙ = 10 "	- = 1 ob.

4. ΚΟΥΤΣΟΠΟΔΙ (about equidistant from Argos, the Heraeum, and Mycenae). *I.G.* iv. 553 (middle of 5th cent.?), fragment of a sale-list. This inscription, known only from a poor copy made by Fourmont, has in l. 2 ΠΠΔΠ :: τι(μὰ)<sup>3</sup> :: ΒΒΒΒΒ . . . . Granting the correctness of the copy, we seem to have here a system in which Β = 100 and there is no single sign for 500 (cf. No. 7 a). The numbers preceding the word τιμί can hardly refer to money, and the ΠΠ probably stand for two plethra, in which case ΔΠ represents twelve units of area smaller than the plethron. This Π recurs at the beginning of l. 5. The Β of l. 7 is interpreted by Fränkel as = ἡμίπλεθρον, but it may well represent 100 here also, as in l. 2.

<sup>1</sup> But see B. Keil, *Anon. Argent.* 278, note 3.

<sup>2</sup> Cf. F. Lindemann, *Sitzungsberichte d. Akademie zu München.* Math.-phys. Classe. 1896, p. 678.

<sup>3</sup> Fourmont's copy has ΤΙΑΑ; the correction is due to Keil.

5. The ARGIVE HERAEUM.

(a) *I.G.* iv. 523-525 (probably 4th cent.), fragments of records of the sale or purchase of land. We have in 523 l. 3 : ΠΠΠΠΠ, l. 4 : ΠΠΠΠΠ, l. 5 : τιμὰ : Π⊙⊙⊙⊙, in 524 l. 1 : Π⊙⊙⊙ :. Here therefore, as in 3 b above, we find.

$$\begin{array}{ll} \Pi = 50 \text{ dr.} & \cdot = 1 \text{ dr.} \\ \odot = 10 \text{ dr.} & \Pi \text{ or } \overline{\Pi} = 1 \text{ plethron.} \end{array}$$

Cf. 524 l. 3 - - - ΠΠ 525 ΓΠΠΠΠΠ - - -. The condition of the stone's surface renders it uncertain whether there was a dot in the centre of the Π in other cases beside the two in 523 l. 4. In 523 l. 5 Η stands for ἡμίπλεθρον.

(b) *I.G.* iv. 526 (3rd cent.). In l. 1 we have ὀλκὰ μναὶ ΔΔ||=||, in l. 2 ὀλκὰ μναὶ Α///. Wheeler, with whom Fränkel agrees, interprets the first of these sums as 22 minas 20 dr. 2 ob., in which case

$$\begin{array}{ll} \Delta = 10. & - = 10 \text{ dr.} \\ | = 1. & \text{I} = 1 \text{ ob.} \end{array}$$

6. NEMEA. *I.G.* iv. 481 (4th cent.), fragment of a building-record. L. 3 has : ⊙⊙⊙⊙ : l. 5 ■■■■ : : ■■-Ξξ : l. 7 ■■Π⊙⊙⊙⊙ :. These numbers give us the following table :

$$\begin{array}{ll} \blacksquare = 100 \text{ dr.} & - = 1 \text{ ob.} \\ \overline{\blacksquare} = 50 \text{ ,,} & \Xi = \frac{1}{2} \text{ ,, ?} \\ \odot = 10 \text{ ,,} & \xi = \text{some smaller fraction of} \\ \cdot = 1 \text{ ,,} & \text{an obol.} \end{array}$$

7. EPIDAUROS. The Epidaurian notation, as illustrated by a series of building-records discovered at the Asclepieum, is of peculiar interest : the earliest document must be treated separately, since the system there employed differs from that of the later texts.

(a) *I.G.* iv. 1484<sup>1</sup> (early 4th cent.), sixteen fragments of a large stele containing the building-accounts of the temple of Asclepius. Of the many sums there expressed the following may serve as examples : l. 8 ■■■■■■■■ ■■■ : : : , l. 47 XXXXXXXXXXXXXXXXXXXX, l. 67

<sup>1</sup> Michel 584 turns the numerals into their Attic equivalents and is therefore useless for our present study.

ΧΘΘΘ = - :: ::, l. 163 :: :: ::, l. 222 = :: :: :: · III C, l. 292 :: :: · IIII Π,  
l. 299 · III T, l. 302 · IIII < Ξ. We thus recover the following table (see  
Fig. 1):

Χ = 1000 dr.	C < = 9 χαλκοῖ or ½ ob.
Θ = 100 "	Π = 5 "
- = 10 "	T = 4½ " " ¼ "
· = 1 "	Ξ = 2 " " ⅓ "
I = 1 ob.	X = 1 χαλκοῦς " ⅕ "

This system is almost unique (cf. No. 4) in the absence of signs for 5000, 500, 50, and 5 dr.

(b) A more developed system, in which these gaps are filled, is illustrated by *I.G.* iv. 1485-1491, 1493-1497 (350-300 B.C.), of which the first contains the building-accounts of the Tholos. So far as obols and fractions of an obol are concerned, the system does not differ from that just examined: for sums expressed in drachmas Fig. 1 should be consulted.<sup>1</sup> In the last lines, 192-329, of 1485 the numerals relate sometimes to money, sometimes to medimni: the word *δραχμαί* or *μέδιμνοι* is therefore prefixed to each number. Similarly in 1488 the figures are preceded by the word *δραχμάς*. It should be noted that, though · represents one drachma, I is used for the unit of other denominations.

(c) *I.G.* iv. 1492 (a little later than 1485), a building-record. The system here used differs in some points from those just described and may therefore be treated separately. Many numbers are written out in words, but signs are also used (Fig. 1).

(d) *I.G.* iv. 1508 A (not before late 3rd cent.), record of a debt of Ἀλεξανδρείας (sc. δραχμάς) ΘΘΘΘΠ,<sup>2</sup> i.e. 450 dr. (l. 12).

## 8. TROEZEN.

(a) *I.G.* iv. 823 (4th cent.), building-record of a temple. The system used will be found in Fig. 1.

(b) *I.G.* iv. 750 (ca. 287 B.C.). From ll. 16, 17, [ἀργυρίου Ἀλεξαν] | δρέιου ΧΗΗΗCC, we see that in the third century C was still retained as the sign of the drachma, but Θ (100) had been modified to H.

<sup>1</sup> For further details see B. Keil, *Ath. Mitt.* xx. 61 ff.

<sup>2</sup> Wrongly printed ΗΗΗΗΠ in Michel, *Recueil*, 1336.



VALUE	EPIDAUROS			TROEZEN	HERMIONE	
	No. 7a	No. 7b	No. 7c	No. 8a	9a	9b
10,000 dr.			M			
5000 .	No Sign	Ϟ <sup>1</sup>		Ϟ <sup>1</sup>		
1000 .	X	X	X	X		
500 .	No Sign	Ϟ <sup>2</sup> Ϟ <sup>1</sup> Ϟ <sup>2</sup>	Ϟ <sup>2</sup> Ϟ <sup>1</sup>	Ϟ <sup>2</sup> Ϟ <sup>1</sup>		
100 .	Ϟ	Ϟ H <sup>3</sup>	Ϟ	Ϟ	H	
50 .	No Sign	Ϟ <sup>4</sup> Ϟ <sup>5</sup> Ϟ <sup>6</sup> — — — <sup>7</sup>	Ϟ Ϟ	Ϟ Ϟ Ϟ Ϟ <sup>9</sup>	N	
10 .	—	—	—	Ϟ Ϟ <sup>10</sup>	Δ	⤴
5 .	No Sign	::: Ϟ <sup>8</sup>	Ϟ Ϟ	Ϟ		Ϟ
1 .	.	.	.	C	P	P
1 obol				—		
½ .	C <	C	C	7 <sup>11</sup>		—
¼ .	T	T				T <sup>12</sup>
⅛ .				O		

FIG. 1.—TABLE SHOWING THE SIGNS USED AT EPIDAUROS, TROEZEN, AND HERMIONE.

Notes 1-8 refer only to *I.G.* iv. 1485. <sup>1</sup> Ll. 8-15, 88-179. <sup>2</sup> Ll. 57, 66, 75. <sup>3</sup> Ll. 125, 127, 136. <sup>4</sup> Ll. 40-116. <sup>5</sup> Ll. 129, 133. <sup>6</sup> From l. 146 onwards. <sup>7</sup> Ll. 6-15, 120-125, 130, 131. <sup>8</sup> From l. 144 onwards. <sup>9</sup> L. 31? <sup>10</sup> Once only, l. 22. <sup>11</sup> L. 16. <sup>12</sup> I cannot agree with Fränkel, who transcribes |||—T at the end of l. 4 as |||— . τ.: that would require |||— : T. I therefore read |||—T and interpret T as ¼ obol.

## 9. HERMIONE.

(a) *I.G.* iv. 741 (early 4th cent.), a fragment, perhaps of a subscription-list. For the numerals employed see Fig. 1. The sign for 5 drachmas is accidentally absent.

(b) *I.G.* iv. 742 (4th cent.), fragment of a building-record. Here the system is slightly different (see Fig. 1, last column).

10. TEGEA.<sup>1</sup>

(a) *I.G.* v. 2. 6 B, 7 (4th cent.), subscription-list. The sums mentioned are all reckoned in minas and drachmas, the system in use being the following:

<sup>1</sup> Freiherr Hiller von Gaertringen has kindly allowed me to use proof-sheets of *I.G.* v. 2, which is not yet published, for these inscriptions.

$\overset{\wedge}{\text{M}}$ = 10 minas.	$<$ = 1 dr.
$\overline{\text{M}}$ = 5 "	l = 1 ob.
$\text{M}$ = 1 mina.	$\text{E}$ = $\frac{1}{2}$ "
$\overline{\text{M}}$ = 50 dr.	$\text{T}$ = $\frac{1}{4}$ "
$\Delta$ = 10 "	$\text{X}$ = $\chi\alpha\lambda\kappa\omicron\upsilon\varsigma$ .
$\overline{\text{M}}\overline{\text{M}}$ = 5 "	

Since we find  $\text{XX}$  at the end of a sum of money five times (6 B, ll. 59, 73, 84, 102, 110) but never  $\text{XXX}$ , it is a probable, though not a necessary, inference that  $\text{XXX} = \text{T}$ , *i.e.* that in Tegea the obol contained twelve  $\chi\alpha\lambda\kappa\omicron\iota$ . Various forms of letters, often hardly distinguishable from each other, are used in the numbers referred to above: in addition to  $\text{M}$  we find  $\overline{\text{M}}$ ,  $\overline{\text{M}}$  and  $\Pi$ , while  $\text{M}$  appears sometimes as  $\text{M}$ . In 7, in which the numbers are very carefully written, the  $<$  is never omitted from the sign for 5 drachmas.

(b) *I.G.* v. 2. 8<sup>1</sup> (4th cent.), conclusion of a document which relates to the same question, containing three sums-total. The first is given in drachmas,  $\Psi\P\text{E}\text{E}\text{E}\text{E}\overline{\text{M}}\text{IIII}$ , showing that  $\Psi = 1000$  dr.  $\text{E} = 100$  dr. The second and third are expressed in talents, minas and staters, the numerals used being those shown in Fig. 2 (p. 107).

11. MEGALOPOLIS. Le Bas-Foucart ii. 331 *c* twice uses the sign  $\overset{\wedge}{\text{M}}$ . Since, however, an unpublished inscription from Megalopolis contains the sign  $\overset{\wedge}{\text{M}}$ ,<sup>2</sup> this may denote 4 rather than 10 minas and belong to the alphabetical system.

12. REMOUSTAPHA (in south-western Messenia), *J.H.S.* xxv. 49 ff. No. 10 (late 3rd cent.), regulations for the worship of Demeter. In ll. 5, 9 we have  $\overset{\wedge}{\text{H}}\overset{\wedge}{\text{H}}$  *i.e.* 200 drachmas.

13. MESSENE.<sup>3</sup> *I.G.* v. 1. 1434 (1st cent. before or after Christ), list of landowners with the values of their estates. According to the editor's interpretation

<sup>1</sup> Le Bas-Foucart, ii. 341 *c*.

<sup>2</sup> I owe this information to Freiherr Hiller von Gaertringen.

<sup>3</sup> I owe my knowledge of this and the following inscription to the kindness of Prof. W. Kolbe, who has sent me proof-sheets of *I.G.* v. 1 containing these two texts.

$\Lambda$  = 100,000 den.                       $\Upsilon$  = 5,000 den.  
 $\Pi$  = 50,000 „                               $\uparrow$  = 1,000? „  
 $M, M$  = 10,000 „

but I am inclined to attribute to these signs the values 10 minas, 5 minas, 1 mina, 5 staters and 10 staters respectively (see Fig. 2), partly because analogy seems to me to favour this interpretation, partly because otherwise the sums are surprisingly large, but also because it appears to me almost impossible to give to  $\Pi$  the meaning 5000 denarii. For the sign of 10 staters cf. No. 14.

VALUE	TEGEEA No. 10 b	MESSENE No. 13	ANDANIA No. 14	DELPHI No. 22 b	NAUPACTUS No. 24
5 talents	$\Upsilon$				
10 minas	$\Delta$	$\Lambda$	$\Delta$ $M$		$\Delta$ $M$
5 ..		$\Pi$			$\Upsilon$ $\Upsilon$ $\Upsilon$ $\Upsilon$
1 mina	$M$	$M$ $M$	$M$		$M$ $M$
50 staters				$\Upsilon$ ?	
10 .	$\Delta$	$\uparrow$ ?	$\Sigma$ $\uparrow$ ?	$\Sigma$	
5 .		$\Upsilon$	$\Upsilon$	$\Upsilon$	
1 stater	$\Sigma$		$\Sigma$	$\Sigma$	
1 drachma	$<$			$\dagger$	
1 obol	$ $			$ $	
$\frac{1}{2}$ .				$C$	
$\frac{1}{4}$ .				$T$	
1 χαλκοῦς				$X$	

FIG. 2.—TABLE OF SIGNS USED AT TEGEEA, MESSENE, ANDANIA, DELPHI, AND NAUPACTUS.

14. ANDANIA. *I.G. v. 1. 1532*; 'enumerantur tributa, quae singuli cives solverunt.' The sums are expressed in minas and staters, as shown in Fig. 2. Several mistakes have been made either by the engraver or by the copyist who published the text in *Παναθήναια*, 15th Nov. 1905:  $\Delta$  in col. i l. 4,  $\Sigma$  in l. 5,  $\Sigma$  in l. 12 and  $\Sigma$  in col. iii l. 13 must all stand for  $\Sigma$ . Col. iii l. 9, if correctly deciphered, has  $M^{\Sigma}\uparrow\Sigma\uparrow\Sigma$ : the sign  $\uparrow$ , which

is strikingly like  $\Uparrow$  in No. 13, must, in consequence of its position, represent 10 staters,<sup>1</sup> but I can think of no reason why this sign should twice be written in place of  $\xi$ .

15. DYME (Achaea). *Am. Journ. Phil.* xxxi. 399 ff. No. 74 (4th or 3rd cent.), contribution-list. The sums of money, varying from 65 to 20 dr., are expressed in the Attic fashion, the signs employed being  $\text{P} \Delta \text{P} \text{I}$ . The sum  $\Delta \Delta \Delta \text{P} \text{II}$  (c l. 11) is strange, but should almost certainly be taken as 35 dr. 2 obols. In a decree, *B.C.H.* ii. 96 No. 3 the sign  $\text{P}$  is used (l. 8).

16. OROPUS. For the traces of a local system in which  $\text{S} = \frac{1}{2}$  dr. i.e. 3 obols,  $- =$  obol,  $\text{X} = \chiαλκοῦς$  see B. Keil, *Hermes*, xxv. 608 ff.

(a) In a series of Attic decrees inscribed at the Amphiaraus sanctuary we find, as we should naturally expect, the Attic system in use.

<i>I.G.</i> vii. 3499 (333 B.C.) = Ditt. <i>Syll.</i> <sup>2</sup> 580 = <i>I.G.</i> ii. 5. 169 b	$\text{X} \Delta$	occur.
4252 (332 B.C.)	$\text{X} \Delta$	„
4253 (332 B.C.) = Ditt. <i>Syll.</i> <sup>2</sup> 638	$\text{X} \Delta$	„
4254 (329 B.C.) = Ditt. <i>Syll.</i> <sup>2</sup> 639 = Michel 108	$\text{XH} \Delta$	„

(b) A. Joubin, *B.C.H.* xv. 490 ff. (3rd cent.), donation-list, the amounts of which range between  $\text{HIII}$  and  $\text{II}$ . The signs  $\text{H} \text{I} \text{C} \text{D}$  are used, with their Attic values. See B. Keil, *Hermes*, xxvii. 643 ff.

(c) *I.G.* vii. 303 = Michel, *Recueil* 827 (ca. 240 B.C.),<sup>2</sup> repair of votive objects. Here too the Attic system is employed, the signs used being  $\text{P} \text{H} \text{P} \Delta \text{P} \text{I}$ .

17. TANAGRA. *Rev. Ét. Gr.* xii. 53 ff. (ca. 230 B.C.), a subscription-list. In A ll. 44-76 ninety-eight subscriptions are recorded, ninety-two of  $\text{P}$  (5 drachmas), the others of  $\text{H}$ ,  $\text{H}$  and  $\text{I}$  (3, 2 and 1 dr.).

18. THEBES.

(a) *I.G.* vii. 2420 a, a small fragment containing a few letters. Dittenberger's comment is, 'Numerorum notae Bocoticae facile agnoscuntur; unde

<sup>1</sup> The only alternative, so far as I can see, is to regard it as a mark of punctuation, dividing the three separate amounts—1 m. 10 st., 10 st. and 5 st.—set against Hagion's name.

<sup>2</sup> Boeckh (*C.I.G.* 1570) dated this text ca. 71 B.C.: but see B. Keil, *Hermes*, xxv. 614.

apparet hoc frustulum ad tabulas quasdam rationum publicarum pertinuisse.<sup>7</sup>  
To me the matter appears less certain.

(b) *I.G.* vii. 2426 = Michel, *Recueil* 588 (150-100 B.C.), accounts of a hipparch. For the numerals used see Fig. 3.

VALUE	THEBES No. 18b	THESPIAE		ORCHOMENUS No. 20
		No. 19a	No. 19b	
10,000			M	M
5000		Ϝ ?		Ϝ
1000	X	Υ	Υ	Υ
500	Ϟ	ΠΕ	ΠΕ	ΠΕ
300	No sign	ΤΕ	ΤΕ	
100	H	Η	Η	Η
50	Ϟ	ΠΕ ΠΕ ΠΕ	ΠΕ	ΠΕ
30	No sign	Ρ Β Β		Ρ
10	Δ	Θ	Δ	▷
5	Ϟ	?	Π	
1			Ι	
1 stater		Σ		
1 drachma	Ϟ	▷ ▷	†	Ι
3 obols	Ι	Τ		
1 obol		Ι	Ι	Ο
$\frac{1}{2}$		H <		H*

FIG. 3.—TABLE OF SIGNS USED AT THEBES, THESPIAE, AND ORCHOMENUS.

19. THESPIAE. The Thespian inscriptions merit special attention.

(a) *I.G.* vii. 1737 (ca. 225-220 B.C.), public accounts. The same system is illustrated by *I.G.* vii. 1738, 1740-42 and G. Colin, *B.C.H.* xxi. 553 ff. No. 2 (225-200 B.C.), the record of the renewal of leases of state-pastures. All these documents use the stater as the unit of money.

(b) P. Jamot, *B.C.H.* xix. 379 ff., corrected and restored by M. Holleaux, *Rev. Ét. Gr.* x. 26 ff. (222-205 B.C.), relating to a grant of land made to

Thespieae by Ptolemy IV Philopator. Here the unit of account is the drachma and some of the signs used are less archaic in appearance.

(c) *I.G.* vii. 1743 (2nd cent.) contains the numbers  $\text{H}$ ,  $\Delta$  and  $\text{I}$ .

(d) *Ibid.* 1744 (1st. cent. B.C.), a subscription-list, contains four times the sum  $\text{H}$ .

I have discussed the systems (a) and (b) in an article in *J.H.S.* xxxiii. 31 ff. and need not repeat what I have said there. A summary of the conclusions reached will be found in Fig. 3.

20. ORCHOMENUS. *I.G.* vii. 3171 (250–200 B.C.), record of the repayment of a loan made to the state. The Orchomenian system closely resembles that in use at Thespieae: a table of the numeral signs will be found in Fig. 3. Dittenberger, presumably interpreting  $\text{I}$  as an obol, sees in  $\text{O}$  the sign for  $\frac{1}{2}$  obol, in which case  $\text{H}$  must represent a smaller fraction (*Syll.*<sup>2</sup> 566 note 14); but this seems to me highly improbable in itself and inconsistent with l. 52, where  $\Delta\text{P}\text{A}\text{III} = \delta\rho\alpha(\chi\mu\acute{\alpha}\varsigma)\text{ III}$ . We may assume, I think, the existence of a sign for 300, probably in the same form as at Thespieae.

For the regions lying to the west and the north-west of Boeotia the evidence is not inconsiderable.

21. ELATEA. *I.G.* ix. 1. 110 = Ditt. *Syll.*<sup>2</sup> 141 = Michel, *Recueil* 592 (soon after 338 B.C.), the record of the payment by the Phocians of an instalment of the fine imposed on them at the close of the Sacred War, has  $\text{A}\text{A}\text{A} = 30$  talents (l. 2), while *I.G.* ix. 1. 112 = Ditt. *Syll.*<sup>2</sup> 143 (late 4th or early 3rd cent.), which records a later payment, has been restored in l. 6 [ $\Delta\Delta\Delta$   $\tau\acute{\alpha}\lambda\alpha$ ]ντα, but should probably be read [ $\delta\acute{\epsilon}\kappa\alpha$   $\tau\acute{\alpha}\lambda\alpha$ ]ντα. See H. Pomtow *ap.* Pauly-Wissowa, iv. 2612.

22. DELPHI. As a rule the sums of money mentioned in Delphian texts, even in state accounts, are written out in full.<sup>1</sup> Occasionally, however, figures are employed.

(a) E. Bourguet, *B.C.H.* xxiv. 464 (331–30 B.C.), public accounts. In l. 6 we have  $\text{O}\Lambda . . . . \Delta\text{I}$ , restored by the editor  $\delta\lambda[\kappa\acute{\alpha}\text{ HH}^{\text{H}}]\Delta\text{I}$ , by B. Keil  $\delta\lambda[\kappa\eta\ \chi\rho.\text{HH}]\Delta\text{I}$  or  $\acute{\omicron}\lambda. [\sigma\tau\alpha.\text{HH}]\Delta\text{I}$  (*Hermes*, xxxvii. 511 f.).

<sup>1</sup> For examples see *B.C.H.* xxiv. 463 ff., xxv. 107 ff., xxvi. 5 ff., xxvii. 5 ff., etc.

(b) T. Homolle, *B.C.H.* xxiii. 564 ff. (258 B.C.), account of work carried out in the gymnasium, stadium and hippodrome. The pure numbers used  $\text{ΠΗΠΔΠ}$ , are, with the exception of the sign for 50, the same as those current in Attica: for money values we have the signs shown in Fig. 2 (p. 107).

(c) Figures are occasionally used in the Delphian manumission-records, nearly always preceded by *τιμᾶς ἀργυρίου*.

<i>S.G.D.I.</i> 1770	$\overline{\text{M}}$	173 B.C. <sup>1</sup>
1919	MMM	170 B.C.
1818	$\overline{\text{M}}\text{M}$	165 B.C.
H. Pomtow, <i>Philologus</i> , lviii. 64	MMMM	160 B.C.
1955	$\overline{\text{M}}\text{MMM}$	ca. 153 B.C.
<i>S.G.D.I.</i> 1840	MMM	ca. 151 B.C.
2022	ΣΣΣ	ca. 150 B.C.
<i>Fouilles de Delphes</i> , iii. I. 310	MM	ca. 90 B.C.

Here

$\overline{\text{M}}$  = 5 minas.  
 M, M = 1 mina.  
 Σ = 1 stater.

23. PHYSCUS (Locris Ozolis). *I.G.* ix. I. 349, 350 (ca. 170 B.C.), manumission-records.

349 l. 5    MMMM    i.e. 4 minas.  
 350 l. 5     $\overline{\text{M}}\text{MMM}$     i.e. 8 minas.

So also *B.C.H.* xxii. 357, manumission-record,  $\overline{\text{M}}\text{M}$  i.e. 6 minas.

24. NAUPACTUS. At Naupactus and at the neighbouring temple of Asclepius ἐν Κροννοῖς a number of manumission-records have been found, in which the price paid for liberty is expressed in minas, almost always preceded by the words *τιμᾶς ἀργυρίου*. The texts are edited in *I.G.* ix. I. 359–388 and E. Nachmanson, *Ath. Mitt.* xxxii. 1 ff.<sup>2</sup> Most of them can be dated between 170 and 146 B.C. For the forms used see Fig. 2 (p. 107).

<sup>1</sup> For the dates of the Delphian archons see H. Pomtow, Pauly-Wissowa, iv. 2589 ff. The stroke over the M is uncertain in *S.G.D.I.* 1770, while in 1818 the first sign may well be a combination of Π and M (see Wescher-Foucart, No. 153).

<sup>2</sup> The readings of *I.G.* ix. I. 379–384 must be corrected by *Ath. Mitt.* loc. cit. Nos. 4, 6, 7, 11, 12, 14.

In *I.G.* ix. 1. 375, where we have a mention of  $\mu\nu\hat{\alpha}\nu \Delta\Delta\Delta\Delta^{\text{M}}$ , I would regard the last sign as an error of the engraver or the copyist for  $\text{M}$ . Nachmanson (No. 21) interprets  $\mu(\nu\hat{\alpha}\nu) \Gamma^{\text{I}}$  as 5 minas 1 stater,<sup>1</sup> while for the  $\Delta\Delta\Pi$  of A. Nikitsky's copy he would substitute  $\text{M}$  (No. 29).

25. PHISTYUM (Aetolia). *I.G.* ix. 1. 417 (middle or late 2nd cent.), manumission-record. L. 6 f. gives us the price of ransom,  $\tau\iota\mu\hat{\alpha}\varsigma \acute{\alpha}\rho\gamma[\nu\rho\acute{\iota}]ο\upsilon$  MMMM( $\Delta$ ) *i.e.* 4 minas 10 staters.

26. ACARNANIA.

(a) Stratus. *I.G.* ix. 1. 446 (3rd cent.), a subscription-list.  $\Delta^{\text{M}}$  occurs in ll. 7, 10, 13,  $\text{M}^{\text{M}}\Delta^{\text{M}}$  in l. 6.

(b) Thyrrheum. *I.G.* ix. 1. 488. On a stone broken on the right hand side six letters only survive  $\text{M}^{\text{M}}\text{X}^{\text{M}}\text{H}^{\text{M}}$  - - -. Dittenberger in *I.G.*, following G. Cousin, the discoverer of the inscription, thought that we have here a fragment of the accounts of the state, and that the whole sum was 16,666 dr. 4 ob. *i.e.* one-third of 50,000 dr. To me it seems far more probable that the stone was a counting-board and that the letters stood at the column-heads. Cf. Nos. 35, 36.

27. CORCYRA.

(a) *I.G.* ix. 1. 691 (early 3rd cent.), building-record. The forms used are tabulated in Fig. 4. The sign for 50 dr. is accidentally absent.

(b) *I.G.* ix. 1. 858, a bronze weight, bears the inscription  $\text{N}\text{D}\text{D}\text{D}\Gamma$  *i.e.* 75 dr.

(c) *I.G.* ix. 1. 857, a bronze weight, is inscribed  $\acute{\alpha}\gammaο\rho\rho\nu\acute{\omicron}\mu\omega\nu$  M, probably one mina.

(d) *I.G.* ix. 1. 859, a leaden weight, bears the signs  $\text{IIII}$ , the meaning of which is uncertain.

28. COROPE (Magnesia). *I.G.* ix. 2. 1109 (2nd cent.), decree of the Magnesians. As there is some doubt regarding the readings of the three passages in which numerals occur, I give side by side those of the *I.G.*, of Ditt. *Syll.*<sup>2</sup> 790, where the text is referred to the 1st cent. B.C., of Michel,

<sup>1</sup> I myself believe that it stands for six minas.



*Recueil* 842, where it is attributed to the first half of the 2nd cent., and of A. Wilhelm, *Hermes*, xlv. 41 ff., who dates it (*Wien. Stud.* xxxiv. 411 ff.) ca. 116 B.C.

	I.G. TEXT.	I.G. TRANSCRIPT.	DITT. Syll. <sup>2</sup>	MICHEL.	WILHELM.
L. 28.	ΔΡΑΧΜΗΝΑ	δραχμη<ν> a'	δραχμη μ[ι]a	δραχμη μ[ι]a	—
29.	ΔΡΑΧΜΑΣ Ι//	δραχμας γ'	δραχμας [α]	δραχμας [α]	δραχμας [α]
83.	ΔΡΑΧΜΑΣ Π	δραχμας [β]	δραχμας [β]	δραχμας [β]	δραχμας [β]

From the Greek mainland we pass eastwards to the islands which stud the Aegean Sea.

VALUE	CORCYRA No. 27a	CARYSTUS No. 29a	NAXOS No. 35	THERA No. 37	COS No. 41a
1 talent		Τ			
5000 dr.					[x]
1000 dr.		X	+		X
500 .		Ϝ	Ϝ		Ϝ
100 .	H	Γ	H	H	H
50 .		Ζ	Π	[α] [α]	[α]
10 .	↑	Ι	Δ	Δ	Δ
5 .	Ϝ	Ϝ	Γ	Γ	No sign
1 .	Α	Ι	Τ	I ?	Τ
3 ob.			Τ		
1 .	Ι	Ο	Ι		Ι
½ .	Ι		Γ		
¼ .	Τ				
1 χαλκοῦς	C				

FIG. 4.—TABLE OF SIGNS USED AT CORCYRA, CARYSTUS, NAXOS, THERA, AND COS.

29. EUBOEIA.

(a) Carystus. Ἐφημ. Ἀρχ. 1905, 1 ff. (400-357 B.C.), account of interest paid on a state loan. The signs used are shown in Fig. 4 above, but the Δ of l. 4, ΔXXXXϜΓΓΓΓ is not explained by the editor. It can

hardly represent anything but 10 talents: whether this was its normal form or whether the vertical stroke of  $\Delta$  has been omitted by engraver or editor, I must leave undecided.

(b) Carystus. Ditt. *Syll.*<sup>2</sup> 509 = Michel, *Recueil* 658 (3rd cent. B.C.), republished by Γ. Α. Παπαβασιλείου, *Περὶ τῶν ἐν Εὐβοίᾳ ἀρχαίων τάφων*, p. 103 No. 30. The number of days in the year is given as 384, ΗΗΗ<sup>Π</sup>ΔΔΔΙΙΙΙ.

(c) Eretria. Ἄρχ. Ἐφημ. 1911, 1 ff. No. 1 (ca. 300 B.C.), regulations for the conduct of certain public festivals. In l. 22 ΗΗΗΗ and ΗΗΗ appear.

30. CEOS. There is abundant evidence from Ceos for the use of the Attic system in that island during three centuries at least. I need do no more than append a list of the inscriptions together with the numerals which occur in them:

<i>I.G.</i> xii. 5. 568 <sup>1</sup>	late 5th or early 4th cent.	Δ
1075 <sup>2</sup>	late 4th cent.	Η
544	4th or 3rd cent.	ΜΧ <sup>Π</sup> Η <sup>Π</sup> Δ <sup>Π</sup> Γ <sup>Π</sup> Ι
1076	late 4th or early 3rd cent.	Η <sup>Π</sup> Δ <sup>Π</sup> Γ <sup>Π</sup>
647 <sup>4</sup>	early 3rd cent.	Η <sup>Π</sup> Δ <sup>Π</sup> Γ <sup>Π</sup> Ι <sup>5</sup>
610 <sup>6</sup>	late 3rd cent.	Η <sup>Π</sup> Δ <sup>Π</sup> Γ <sup>Π</sup> Ι
595	3rd or early 2nd cent.	Η <sup>Π</sup> Δ <sup>Π</sup> Γ <sup>Π</sup> Ι
1077	2nd cent.	Η (restored)
1078	2nd "	Η

31. PAROS. Here also the Attic system alone is found. *I.G.* xii. 5. 112 uses the signs Τ Χ Η <sup>Π</sup> Δ, 134 uses Δ Γ Ι Ι C. In the Parian marble, *I.G.* xii. 5. 444 (263 B.C.), only simple numerals are used for the purposes of chronology: Χ <sup>Π</sup> Η <sup>Π</sup> Δ Γ Ι.

32. IOS. *I.G.* xii. 5. 1004 (end of the 4th cent.?). L. 11, ἀπὸ δραχμῶν : <sup>Π</sup> :

33. MYCONUS. Ditt. *Syll.*<sup>2</sup> 817 = Michel, *Recueil* 1350 = *S.G.D.I.* 5417 (3rd cent.), list of dowries. The sums of money are expressed in words except ΧΧ in l. 34.

<sup>1</sup> Michel 1352.

<sup>2</sup> Once <sup>Π</sup>.

<sup>5</sup> In l. 13 ΜΜ = 2 minas.

<sup>2</sup> Michel 834.

<sup>4</sup> Michel 402.

<sup>6</sup> Michel 1341.

34. DELOS. Our material is abundant, thanks to the large number of financial records and inventories discovered by the French excavators of the island. These documents fall into three well-marked periods.

(i) From 434 B.C., the year of the first appointment of a board of Athenian Ἀμφικτύονες to administer the finances of the Delian sanctuary, to 315 B.C. Some of the Amphictyonic records have come to light at Athens (*e.g.* Hicks-Hill, 50), others at Delos.<sup>1</sup> From an examination of the latter class it seems that, as we should expect, the Attic numeral system was employed, the signs used being Ϝ Ϟ Ϡ ϡ Ϣ ϣ or Ϟ Δ Ϟ Ϝ Ϟ Ϟ Ϟ. The sign Ϝ is sometimes prefixed to a sum of money in *B.C.H.* xxxii. 5 ff. No. 1 (350-40 B.C.), but not elsewhere, and the form Ϟ appears but thrice<sup>2</sup> (*B.C.H.* x. 461 ff. ll. 27, 38, 55 : 364 B.C.). Further the drachma sign if repeated is never ligatured.

(ii) From 315 to 166 B.C., the period of Delian independence. The 'tabulae archontum' for this period and the 'tabulae hieropoeorum' for the years 315 to 250 were fully published in 1912 (*I.G.* xi. 2). For the records from 250-166 I have examined the thirty-five published texts which seem to me to be of greatest importance. Soon after gaining their freedom the Delians abandoned the Attic custom of reckoning money in talents and drachmas and used only the latter unit.<sup>3</sup> The talent appears only in two records of this period, *I.G.* xi. 135, 144 (where Ϟ or ΑϜ = 1 tal., Ϟ = 5 tal.), and by 302 (*I.G.* xi. 145) Ϟ is used for 10,000 dr. Most of the signs employed in this series of texts call for no remark, — Ϟ Ϟ Ϟ Ϟ Ϟ Ϟ (ϞϞ in *I.G.* xi. 128 : 200 B.C.) Η Δ Ϝ Ϟ Ϟ (< in *B.C.H.* xxxii. 83 No. 21 : 207 B.C.) Ϟ being used with the same values as in Attica. The sign for 50 takes three forms Ϟ Ϟ and Ϟ : the first and second only are used at first, the third appears in 267 (*I.G.* xi. 205) and for some years is supreme (the only exceptions are *I.G.* xi. 212, 249), but about 253 (*I.G.* xi. 268, 269) the other two forms reappear and it suffers a temporary eclipse (*I.G.*

<sup>1</sup> The material is not yet fully published: I base my judgment on twenty-four texts, *B.C.H.*, viii. 283 ff., x. 461 ff., xxix. 418 ff., xxxii. 5 ff., xxxv. 5 ff. The earliest member of the group is Hicks-Hill 76.

<sup>2</sup> I cannot but wonder if the published text is accurate in this respect. The 'Sandwich Marble' (*I.G.* ii. 814; Ditt. *Syll.*<sup>2</sup> 86: 377-4 B.C.), discovered at Athens, uses Ϟ (not ϞϞϞϞ) to express 10,000 dr. seven times in ll. 136-9.

<sup>3</sup> The talent and the mina were, however, still employed occasionally as units of weight, *e.g.* in *I.G.* xi. 162 B, *B.C.H.* xxxv. 260 No. 51 (*ca.* 190 B.C.), vi. 6 (180 B.C.), xxxiv. 143 (*ca.* 180 B.C.), 173 No. 40 (170 B.C.), where the talent is represented by Ϟ, Ϟ, Α, Ϟ and Ϟ respectively.

xi. 275-289, except three times in 287). Later  $\text{𐀀}$  and  $\text{𐀁}$  are used side by side, but from about 188 B.C. only the former is found. The sign for 5 dr. is usually  $\text{𐀂}$ , though  $\text{𐀃}$  is frequently used and the two forms often occur in the same text: for the number five  $\text{𐀃}$  is, of course, the only equivalent. In all the earlier documents the drachma-signs stand separately, but later it became usual to join them in ligature, so that  $\text{𐀂𐀂𐀂}$  became  $\text{𐀄𐀅}$  or  $\text{𐀆}$ ; this practice appears once in 269 B.C. (*I.G.* xi. 203 D 73), is sporadic from 260,<sup>1</sup> and almost universal from 250 to 166 B.C. In an inscription of 207 the  $\Delta$ 's are similarly joined together (*B.C.H.* xxxii. 83 No. 21). A special sign for 5 obols,  $\text{𐀇}$ , appears in 258 (*I.G.* xi. 224 A 10) and recurs at the end of the third and in the second century (*B.C.H.* xxxii. 481 No. 22, 493 No. 24; xxxv. 243 No. 48, vi. 6, etc.), and a form  $\text{𐀈}$  representing  $5/4$  obol, *i.e.*  $\text{𐀉}$ , is found in *B.C.H.* vi. 6 ff. l. 207. The sign for the  $\chi\alpha\lambda\kappa\omicron\upsilon\varsigma$ ,  $\frac{1}{2}$  obol, is occasionally X, but more often <sup>2</sup> / or \, rarely —. Where weights are expressed in minas and drachmas, the transition to the lower denomination is frequently marked by the insertion of  $\text{𐀂}$ : *e.g.*  $\mu\nu\alpha\hat{\iota}$   $\text{𐀃𐀄}\Delta\Delta\text{IIII} = 5$  minas 20 dr. 4 ob. (*B.C.H.* xxix. 501 No. 167). Hence arose a practice, common from about 190 to about 175 B.C.,<sup>3</sup> of prefixing  $\text{𐀂}$  to sums of money expressed in drachmas.

(iii) For the second Athenian domination, 166 B.C. onwards, our materials are far more meagre. The most important document is *B.C.H.* xxix. 532 No. 182 (*ca.* 150 B.C.), which we may supplement by *B.C.H.* xxviii. 166 No. 57, xxxiv. 180 No. 45, xxxv. 286 No. 77 and *C.I.G.* 2860, wrongly attributed by Boeckh to Didyma. The reckoning in talents is reintroduced, 50 always has the form  $\text{𐀀}$ , 5 dr. appears only as  $\text{𐀃}$ , the  $\chi\alpha\lambda\kappa\omicron\upsilon\varsigma$  as X; but the custom of joining two to four drachmas in ligature is maintained and we twice find  $\text{𐀂}$  prefixed to numbers of drachmas (*B.C.H.* xxix. 532 No. 182 A col. ii *b*, *c* l. 3, B col. i *a* l. 27).

35. NAXOS. *I.G.* xii. 5. 99 (5th or 4th cent.), a counting-table, now in the Athens Museum. Along the top margin are engraved the signs shown in Fig. 4 (p. 113). Plainly these signs represent sums of money arranged in descending order of value. The first seven will stand for 1000, 500, 100,

<sup>1</sup> *I.G.* xi. 220, 221, 224, 225, and ten other texts.

<sup>2</sup> In *B.C.H.* xxxii. 493 No. 24, it apparently takes the form |.

<sup>3</sup> The earliest cases, with the exception of a solitary example *ca.* 260 B.C. (*I.G.* xi. 214), are *B.C.H.* xxxv. 243 No. 48 (189 B.C.), 260 No. 51 (*ca.* 190 B.C.)

50, 10, 5 and 1 dr. respectively, and the last three have been interpreted, no doubt rightly, as representing 3 obols (*Τριώβολον*), 1 obol and  $\frac{1}{2}$  obol.

36. AMORGOS. *I.G.* xii. 7. 14 has [*δρα*]χμὰς ΔΔΔ (l. 4); *I.G.* xii. 7. 56 has *δραχμὰς* ΧΧΧΧ (l. 7). On *I.G.* xii. 7. 282, two fragments of a counting-table, we find Χ Π Η and † Ι C.

37. THERA. *I.G.* xii. 3. 335 and 1301 (about the beginning of the 2nd cent.), a catalogue of names followed by numbers: once -HH<sup>Π</sup>ΔΔΔΔ (1301 l. 7), once HH<sup>Π</sup>Π (l. 6), once H<sup>Π</sup> (335 l. 4), once -HΔΔ, once ΗΔ, twice a number ending in -Δ, nine (or ten) times ΗΙ. The letters, which are slightly apicated, take the forms shown in Fig. 4 (p. 113). The numbers are interpreted in the *I.G.* as denoting drachmas; but it is strange if here, in a system plainly borrowed from that of Athens, Ι should = 1 dr. rather than 1 obol.

38. GORTYN. *S.G.D.I.* 5019, poor copy of a decree of Gortyn and Phaestus. In ll. 6, 7 we have ἀρ<αρ>γύρω ΧΧ στατηήραυς.

39. CARPATHUS (Brycus). *I.G.* xii. 1. 993 (certainly not much earlier than the 1st cent. B.C.), a subscription-list. We find ΔΔΔ once, ΔΔ seven times and Δ once.

#### 40. RHODES.

(a) Rhodes. *I.G.* xii. 1. 1442 (considerably earlier than the 1st cent.), subscription-list. The system is the same as that of Athens: only Χ Π Δ occur. In *I.G.* xii. 1. 9, also a list of contributions, Δ is once found.

(b) Lindus. *I.G.* xii. 1. 886  $\overline{\text{HH}\Delta^{\Delta}}$  is enigmatic. In *I.G.* xii. 1. 915 are united several inscriptions scratched on the walls of a cave beside the ancient quarries. Amongst these we may note:

(b) ΔΔΔΗΗΗΗΗΗΗΗΗΗ ΗΧΗΗΗΖ

(c) ΗΔ

(d) Α Η—Η

(e) groups of simple vertical strokes numbering 4, 7, 9, 20 and 24 respectively.

41. COS.<sup>1</sup>

(a) *S.G.D.I.* 3624 (3rd cent.), a subscription-list, now in the British Museum.<sup>2</sup> The text is reprinted in Paton and Hicks, *Inscriptions of Cos*, No. 10, where two fragments of a duplicate copy are given. The forms used throughout the inscription are shown in Fig. 4 (p. 113). Amongst the sums mentioned we may note especially *d* l. 75  $\square\Delta\Delta\Delta\Delta\text{TTTTTTTTTTTIIII}$ <sup>3</sup> and *d* l. 78  $\text{HH}\square\Delta\text{TTTTTTTIIII}$ , which show that the system possessed no single sign for 5 dr.  $\square$  does, it is true, occur in the accepted reading of *a* l. 53, but the traces of the letter on the stone are very faint, and in any case we must restore  $\square$  (as in *S.G.D.I.*) or  $\square$  (as Paton-Hicks).

(b) Paton-Hicks No. 11 gives part of a similar and almost contemporary list: the only surviving number, however,  $\Delta\Delta\square$  (l. 2), shows that here  $\square$  is used to represent 5 dr.

(c) Paton-Hicks 384 = *S.G.D.I.* 3720 has  $\Delta$  in l. 14,  $\psi\hat{\alpha}\phi\omicron\upsilon \dots [\text{HH}]\Delta \dots$  in l. 19.

(d) Paton-Hicks 404 = *S.G.D.I.* 3735, a subscription-list containing 42 names, each followed by the sum  $\Delta\Delta\text{TTTT}$ .

42. SAMOS. *S.G.D.I.* 5702 = Michel, *Recueil* 832 (345 B.C.), an inventory drawn up by Attic cleruchs. The numbers  $\Delta\Delta\Delta\text{TTTT}$  (l. 31),  $\Delta\Delta\Delta\text{TTTT}$  (l. 32),  $\Delta\text{II}$  (l. 41) occur, and in ll. 64-77 various weights are inscribed, in which the signs  $\square \text{H} \square \Delta \square \text{T} \text{I}$  are used. *Inchriften von Priene*, No. 150, containing the number  $\Delta\Delta\Delta\Delta$  (l. 2), probably comes from Samos.

43. CHIOS. 'Αθηνῶς xx. 200 ff. No. 7 gives us a subscription-list, in which no word or sign is used to denote the monetary unit, probably the gold stater. The only numerals which occur are

$$\text{E} = 100; \quad \square = 50; \quad \Delta = 10.$$

*Ibid.* 212 f. No. 11 appears to me to be part of the same or of a similar list, though not so interpreted by its editor.

<sup>1</sup> The reading  $\pi\delta\delta\alpha\varsigma \square$  in *J.H.S.* vi. 255 No. 11, was corrected by Paton and Hicks to  $\pi\delta\delta\alpha\varsigma \text{id}'$  (*Cos*, No. 152). The  $\Delta\Delta$  restored by R. Herzog in *Berl. Sitzungsber.* 1901, p. 473 l. 19, was subsequently altered by the editor to N (*Beiträge zur alten Geschichte*, ii. 321).

<sup>2</sup> *Anc. Inscr. in the Brit. Mus.* ccclxiii; Michel 642.

<sup>3</sup> The *S.G.D.I.* omits in error one of the four  $\Delta$ 's.

44. NESUS. *I.G.* xii. 2. 646, accounts of the curators of the Asclepius temple. I have examined the numeral system employed here in *J.H.S.* xxxiii. 29 ff., and need do no more here than recapitulate my conclusions, some of which are far from being certain.

<p>Ε = 100                  Ϟ = 50                  Δ = 10                  Π = 5</p>	<p>ς → Ο = 1 gold stater                  ∟ = ½ " "                  ϕ = 1 didrachma (?)                  ι Ϛ = 1 drachma</p>
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45. MYTILENE. *I.G.* xii. 2. 74<sup>1</sup> (3rd cent.). Small numbers are written in words; in *b* we have ϞΔΔ (l. 8), XXXXEEEE (l. 18), X (l. 20). The writing of 81 is very similar: here the number Ε occurs three times, twice at least (ll. 1, 6) preceded by στά(τηρες). In 82 we have eleven numbers, e.g. ΕΔΔΔοοοο (l. 14), ΕϞΠοοοο (l. 16), in each case preceded by ΧΡ, i.e. χρύσειοι στάτηρες. The system, so far as we know it, is this:

X = 1000 (st.)	Δ = 10 (st.)
Ε = 100 "	Π = 5 "
Ϟ = 50 "	ο = 1 st.

46. LEMNOS. *I.G.* xii. 8. 18, 19, 21, 22 (21 = Michel, *Recueil* 1375), four mortgage stones from Hephæstia, engraved in 314–300 B.C., bear numerals — X Ϟ Η — on the Attic system. In two cases (18, 22) the mortgagee is an Athenian cleruch.

47. IMBROS.

(a) *I.G.* xii. 8. 61. In l. 1 only Μ Ϟ Χ Ϟ Η survives, in l. 2 Μ Ϟ / Ϟ. Fredrich interprets the stone as a mortgage-pillar.

(b) *I.G.* xii. 8. 62. The stone contains only the letters:

Χ Ϟ Η Ϟ Δ Π Η  
 ΙΙΙ Ϛ Ρ

(c) *I.G.* xii. 8. 51<sup>2</sup> (200–166 B.C.), an inventory of the possessions of Athenæ. The numerals here used are the following:

Ϟ Χ Ϟ Η Ϟ Ϟ Ϟ Δ Π Π Ι Ι Τ

<sup>1</sup> Michel 593.

<sup>2</sup> Michel 831.

(d) *I.G.* xii. 8. 83 (2nd cent.), subscription-list.  $\Delta$  appears twelve times (ll. 4-15) as the sum contributed.

From the islands we pass to the mainland of Asia Minor, starting with Chalcedon and proceeding thence westwards and then southwards.

48. CHALCEDON. Ditt. *Syll.*<sup>2</sup> 596 = Michel, *Recueil* 733<sup>1</sup> = *S.G.D.I.* 3052 a (2nd cent.), conditions regulating the tenure of a priesthood and record of its purchase. The numerals here employed are:

M = 10,000 dr.	$\Pi$ = 5 dr.
$\text{P}$ = 5,000 "	C = 1 "
X = 1,000 "	T = 3 ob.
H = 100 "	I = 1 "
$\Psi$ = 50 "	:: = $\frac{1}{3}$ " (4 <i>χαλκοῖ</i> ).

The absence from this inscription of signs for 500 and 10 dr. is accidental. Doubtless a number of *χαλκοῖ* lower than four would be indicated by a corresponding number of dots. According to the received view  $\Psi$  = 10 dr. and :: =  $\frac{1}{2}$  obol: I have given my reasons for dissenting from this interpretation in *J.H.S.* xxxiii. 27 ff.

49. CYZICUS. T. Wiegand, *Ath. Mitt.* xxix. 277, Hellenistic boundary inscription at *Porta*, to the west of the lower Aescopus. The first two signs are "Ορ(ος) Κυ(ζικηνῶν); the rest is unintelligible, but it seems to me that it may contain, *inter alia*, a number expressed in the acrophonic system. Cf. Nos. 51 and 55.

50. PERGAMUM. Ditt. *Syll.*<sup>2</sup> 566 = Michel, *Recueil* 730 (2nd cent.), sacrificial regulations. In l. 15 we read *τετράβολον καὶ . . . . .* = O, in l. 25 *ὕδς μὲν* = *προβάτου* δὲ *ἡμωβέλιον*, in l. 27 Σ twice has a monetary value. Probably - = 1 obol, O and Σ are fractions of an obol. In a dedicatory inscription (*Ath. Mitt.* xxvii. 93) mention is made of τὰ  $\text{ΠΙ}$  *διάστυλα*: see below, p. 132.

51. AEGAE. J. Keil und A. von Premerstein, *Bericht über eine Reise in Lydien u. der südlichen Aiolis*, publish (in minuscules only) two boundary stones, engraved in 'letters of the late Hellenistic period':

<sup>1</sup> Michel has turned all the Chalcedonian into the corresponding Attic numerals.



Όροι | Αἰγαέων. δ. (No. 204) and "Όροι | Αἰγαέων. | π'. (No. 205). These numerals I regard as probably belonging to the acrophonic rather than to the alphabetic system : see below, No. 55.

52. SMYRNA. *S.G.D.I.* 5616 (early in the 3rd cent.), subscription-list. The signs used are

$$\begin{array}{ll} \text{𐀀} = 50 \text{ staters.} & \text{𐀁} = 5 \text{ st.} \\ \Delta = 10 \quad ,, & \Sigma = 1 \quad ,, \end{array}$$

The numbers are always preceded by the word *στατήρας*, written out in full.

53. ERVTHRAE. Ditt. *Syll.*<sup>2</sup> 600 = Michel, *Recueil* 839 = *S.G.D.I.* 5692 (ca. 278 B.C.), record of the sale of various priesthoods. The Attic system is employed, the following numerals being used : Χ 𐀀 Η 𐀁 Δ Π 𐀂.

54. TEOS. *S.G.D.I.* 5636 = Le Bas-Waddington 1557, a building-record, ends with the words (ll. 10, 11) *ἐδαπανήθησαν δραχμαὶ ΧΧΧ* [H]HHΔΔ(𐀂)𐀁 *καὶ Ἀλεξ(άνδρειαι) δραχ(μαὶ)*<sup>1</sup> ΔΔΔΠ(𐀂)III: in each of these sums 𐀂 has been restored by Waddington in place of the Η of Hamilton's copy. A similar inscription, *Μουσεῖον καὶ Βιβλιοθήκη*, No. σμβ', ends with *ἐδαπανήθησα*[ν δρα]χμαὶ 𐀁Δ, and a numeral, now lost, concluded the companion document, No. σμγ'. The only point which is specially noteworthy is the use of 𐀁 for 5 obols.

55. PRIENE. F. Hiller von Gaertringen, *Inscripfen von Priene*, Nos. 153 and 155, gives us two boundary-stones, inscribed ὄρ(ος) ΔI and ὄρος ΔΠ respectively. The editor regards the numerals here as alphabetic, *i.e.* 14 and 84: in my judgment they are acrophonic and represent 11 and 15, for (1) it is antecedently improbable that there should be as many as 84 boundary-stones in the same series; (2) if the numbers were alphabetic, we should almost, though not quite, certainly have *ιδ'* and *πδ'*; (3) it would be a curious coincidence if these two stones, like those at Aegae (see No. 51) had preserved those elements of the alphabetic system which happen also to be used in the acrophonic. It is true that we possess two Prienian boundary-stones (*op. cit.* 151, 154) which certainly use

<sup>1</sup> So Waddington: possibly we should read *δρα(χμαὶ) ΧΔΔΔΠ𐀂III*. In *S.G.D.I.* the letters ΔΡΑΧ are omitted in error.

the alphabetic numeration— $\acute{\alpha}\rho(\sigma)$   $\alpha'$  and  $\acute{\omicron}\rho(\sigma)$   $\theta'$ —but there the numbers are low and they may well belong to a different series of frontier marks. There can be no doubt, at least, that Nos. 151 and 153 were not engraved by the same hand.

56. TRALLES. Ditt. *Syll.*<sup>2</sup> 573 = Michel, *Recueil* 804. This asylum-inscription, engraved not earlier than the first century after Christ, but perhaps copied from an older document, is dated  $\acute{\epsilon}\tau\epsilon\omicron\varsigma$  IIIIII. Dittenberger, though maintaining its authenticity against E. Meyer and others, points out the historical difficulties involved in the reading and regards the numeral as 'per se mira et incredibilis.' He inclines to adopt Ottfried Müller's suggestion, that the original stone had  $\Pi$ IIII and that this was misread by the later copyist.

57. HALICARNASSUS. Ditt. *Syll.*<sup>2</sup> 11 = Michel, *Recueil* 835 = *S.G.D.I.* 5727 (towards the end of the 5th cent.), a sale-list inscribed on all four surfaces of the stele. On the front ( $\alpha$ ) and in three passages on the right hand side ( $\zeta$  ll. 74, 82, 85) the sums of money are reckoned in silver drachmas of the Phoenician standard (see B. Keil, *Hermes*, xxix. 249 ff.) and expressed according to the Attic system, by the signs  $\text{T X}^{\text{P}} \text{H}^{\text{P}} \Delta \text{P} \text{I}$ , save that once  $\text{X}^{\text{P}}\text{HHH}$  is written where the Athenians would have used  $\text{T}^{\text{P}}\text{HHH}$  ( $\alpha$  l. 9). Elsewhere a totally different system is followed, with the Babylonian stater as unit (Keil, *loc. cit.*): the number of staters is expressed by alphabetic numerals, the drachma by  $\square$ , the obol by  $\text{I}$ , the quarter-obol by  $-$ , so that, e.g.,  $\text{AIIII} \equiv$  represents 1 stater  $\frac{5}{4}$  obols.

58. PHOENIX (Rhodian Peraea). *S.G.D.I.* 4262 (3rd cent.), subscription-list. The system in use here is Attic; the only numerals found are  $\text{H}^{\text{P}} \Delta \text{P}$ .

59. CANYGELLES (Western Cilicia). *J.H.S.* xii. 227 No. 3 = Le Bas-Waddington 1457 (very imperfect copy), votive inscription. In l. 5 the last letters seem to refer to a fine of 4000 drachmas— $\Delta\text{P}\text{A}\text{X}\text{M}\text{A}\Sigma\text{X}\text{X}\text{X}\text{X}$ .

From the basin of the Aegean we pass to that of the Euxine, which yields evidence of the employment of two systems of this type.

60. TOMI. *Μουσείον καὶ Βιβλιοθήκη, περίοδος 5* No. *vi'*. In this fragment, which, to judge from the occurrence of the name  $\text{O}\acute{\upsilon}\lambda\pi(\iota\omicron\varsigma)$ ,

probably belongs to the second century of our era, we have what appear to be numerals of the acrophonic type, though I am unable to interpret them. In l. 2 we read - - - ΔΙΩΝΡΗΓ οἱ ὑπο - - - and in l. 4 ἐκατὸν ΧΡΗΔ - -. In ll. 5-8, however,  $\alpha$  and  $\beta$  are used for 1 and 2 respectively. In *Arch.-Epigr. Mitt.* xiv. 37 No. 95 (= *I.G. Rom.* i. 601), a grave-stone found at Stratonicis, between Tomi and Callatis, the phrase *ἱερατε[ύ]σαντα . . . ἔτη · Π ·* occurs: the editors hesitatingly interpret the Π as 5 rather than 80.

61. CHERSONESUS TAURICA. B. Latyshev, *Inscr. Ant. Orae Septentrionalis Ponti Euxini*, iv. No. 80 (ca. 200 B.C.), a fragmentary record of the sale of estates.<sup>1</sup> In his commentary upon this inscription the editor gives a fuller and more accurate copy of a fragment of the same nature, previously published, *ibid.* i. No. 226. The system, as interpreted by Latyshev, is as follows:

Δο = 100,000 dr. or 10 tal.	† = 100 dr.
Ϝ = 50,000 " " 5 "	Ψ = 50 "
Ο = 10,000 " " 1 "	Δ = 10 "
ϝ = 5,000 " " ½ "	Ϝ = 5 "
X = 1,000 "	Ϟ = 1 "

For the signs from X to Ϟ I accept this explanation, merely adding that Ψ sometimes appears in the form Υ (No. 80 A l. 2; No. 226 A l. 5, B l. 2). Latyshev's interpretation of the sign Ο with its half and its multiples, however, causes grave difficulty, partly because the values thus reached are so large, partly owing to the lack of any analogy for the use of Ο as representing either 10,000 dr. or a talent. Latyshev has drawn attention to the affinity existing between this system and that of Chalcedon (No. 48, *q.v.*), and there (as elsewhere throughout the Greek world) 10,000 is denoted by Μ. If, therefore, we were bound to accept one or other of these interpretations, I should prefer the latter. But a third course is, I think, open to us, a course which appears to me much more satisfactory. In Nesus (44) and Mytilene (45) Ο represents the gold stater, and so I would explain it here: then ϝ = ½ gold stater, Ϝ and Δ = 5 and

<sup>1</sup> In A l. 2 Ϝ should plainly be Ϝ; in l. 3 what appears as Ϟ must be a X and is so rendered in the transcription. The meaning of the term *ἐκατόφυγος* (B ll. 5 f., 15 f.) is discussed by B. Keil, *Hermes*, xxxviii. 140 ff.

10 gold staters.<sup>1</sup> We are dealing, we must suppose, with payments made partly in gold, partly in silver, and the former always precede the latter: thus, e.g.,  $\Delta\circ\Gamma$  (No. 80 B l. 8) I take to be 11 gold staters 100 drachmas. In B l. 11 occurs the sum  $\text{E}\Delta\circ\circ\circ\Gamma\Lambda\text{CC}$ : I cannot determine the value of  $\Lambda$ , occurring in a position where we should expect C or CC,<sup>2</sup> but the E must surely be the sign of 100 (gold staters) found in the systems above quoted (44, 45: cf. 43). We then get the following table of values:

Gold.	Silver.
$\text{E} = 100$ (st.)	$\text{X} = 1000$ (dr.)
$\Delta = 10$ (st.)	$\Gamma = 100$ "
$\Gamma = 5$ st.	$\Psi = 50$ "
$\circ = 1$ "	$\Delta = 10$ "
$\text{)} = \frac{1}{2}$ "	$\Gamma = 5$ "
	$\text{C} = 1$ dr.

62. THE 'DARIUS VASE.' Furtwängler u. Reichhold, *Griech. Vasenmalerei*, Text. ii. 142 ff. (late 4th cent.), found in a tomb at Canosa (Canusium) in 1851, now in the Museum at Naples. The vase was painted in some Greek city of southern Italy, generally thought to be Tarentum. It shows a treasurer sitting at a counting board, on which are written the figures

$\text{M}\Psi\text{H}\Gamma\circ\text{K}\Gamma$ ,

while in his hand is a tablet inscribed

$\text{T}\Lambda\Lambda\text{A}\text{N}\text{T}\Lambda : \text{H}$ :

Bocckh (*Kl. Schr.* vi. 453), Woisin (p. 4) and Keil (*Hermes*, xxix. 262 f.) point out that  $\Gamma$  as a sign for 5 is out of place in a system which is without signs for 50, 500 and 5000, and that the absence of the drachma-sign is unaccountable in this series. They therefore take  $\Gamma$  to represent the drachma and reach the following scale of values:

10,000, 1000, 100, 10, 1 dr; obol,  $\frac{1}{2}$  ob.,  $\frac{1}{4}$  ob.

In addition to the evidence just cited there are a few other examples in which the notation may be of this type. Three of the mason's marks

<sup>1</sup> It is surely impossible to take  $\Delta\circ$  as a compound sign: true,  $\Delta$  is also used for 10 silver drachmas, but in each case the context determines the value.

<sup>2</sup> The engraver may have written  $\Gamma\Delta\text{CC}$  in place of  $\Delta\Gamma\text{CC}$ , or we might conjecture  $\text{E}\Delta\text{CC}$ .

on stones from the theatre at Thessalonica which seem to contain numbers (M. G. Demitsas, *Μακεδονία*, p. 518 Nos. 6, 17, 22), and the unexplained signs (*I.G.* xiv. 17) from the fort Euryalus at Syracuse may perhaps be interpreted in the same way. A crater discovered at Camarina bears the inscription  $\text{†††|HVΔΙΑΙ}$ , read by P. Orsi, though doubtfully, *ὕδρ(ί)αι [τιμῆ] †††* (*Mon. Ant.* xiv. 898). A manumission-list from Melitea (*I.G.* ix. 2. 206) shows a curious lapse into the acrophonic system in a document which otherwise has only alphabetic numerals: in 1 b l. 15 the manumission-tax, elsewhere expressed as *στα. ιε'* or *δ. κβ<* (15 staters =  $22\frac{1}{2}$  denarii), appears as *στατήρας ΔΠ*.

I have not, save in a few exceptional cases, recorded inscriptions upon weights, such as the *Μ* upon an Aetolian mina (*Ἐφ. Ἀρχ.* 1905, 81), nor again have I attempted to collect the numismatic evidence. For in many cases the restricted area of weight or coin made necessary a greater compression in the legend than in documents on stone or marble, and it is often difficult if not impossible to determine whether we are dealing with a simple abbreviation, like the *Τ* on Tegean or the *Μ* (or *Ξ*) on Sicyonian coins, or with a genuine numeral. On silver coins of Sicyon, *e.g.*, dating from the second half of the fifth century, we find *Μ* and *Δ* (*δραχμή*), *Ξ* and *Τ* (*τριώβολον*), *Ξ* and *Ο* (*ὀβολός*), *Ξ* and *Η* (*ἡμιώβολιον*), and here there can be little doubt that the second letter of each pair is, like the first, an abbreviation. On the other hand, I am convinced that some coin-legends give us true examples of the numeral system we have discussed: amongst these may be ranked the *ΤΤΤ* (= *τριτεταρτημόριον*) found on coins of Cranii (Cephalenia), Argos and Mantinea, the *ΧΑΛΚ ΙΙΙ* on a bronze coin of Apollonia on the Rhyndacus belonging to the fourth century, the *ΕΕΕ* upon *τριημιωβόλια* of Heraea and Tegea,<sup>1</sup> and the *Ϟ* (*πέντε χαλκοῖ*) on an Argive coin.<sup>2</sup>

### III.—NAME AND HISTORY OF THE SYSTEM.

There is as yet no general agreement among scholars regarding the name which is best applied to the type of numeral system we are now examining. The description 'the older Greek system,' given to it by a number of writers,<sup>3</sup> is unsatisfactory because it assumes without proof that

<sup>1</sup> B. V. Head, *Historia Numorum* (1st ed.), Index iii.

<sup>2</sup> Imhoof-Blumer, *Griech. Münzen*, 9.

<sup>3</sup> *E.g.* by G. Gundermann, *Die Zahlzeichen*, p. 23.

it was used in the Greek world before the alphabetic system which ultimately prevailed. The term Herodianic<sup>1</sup> is not much better. It is true that modern scholars first became acquainted with the Attic numeral signs through the account given of them in the chapter *περὶ ἀριθμῶν* which has come down to us<sup>2</sup> under the name of Herodian, a famous grammarian of the second century after Christ: but that fact is too accidental, too extraneous to the system itself, to serve as a description of it, and the term is rightly becoming discarded. B. Keil advocates the use of the name acrophonic or initial system,<sup>3</sup> upon the ground that the characteristic which differentiates it from all others is its use of the initial letters of the words *πέντε*, *δέκα* and so on to represent those numbers. It was this feature which attracted the attention of Priscian, who writes<sup>4</sup>: 'Sciendum quod Attici solebant principalem nominis numeri litteram ponere et significare numerum,' and almost all scholars of the present day accept this account of Π, Δ, Η, Χ and Μ.<sup>5</sup> It is true that Priscian goes too far in the statement which follows that which has just been quoted: 'ἴα ergo pro μία dicentes | scribebant.' The desire for consistency has here led him astray, for the sign | is not an *ἰῶτα*, as he thought and as was believed by the author of the mnemonic verses which he quotes<sup>6</sup> and even by Herodian,<sup>7</sup> but a conventional sign found in use amongst many nations to denote the unit.

W. Larfeld, on the other hand, prefers the term 'decimal' to describe this type of numeral system and criticizes the choice of Keil upon three grounds.<sup>8</sup>

- (1) The sign | is admittedly conventional and not acrophonic.
- (2) The signs Π and Γ are not purely acrophonic, although Π and Γ (ΠεντακισΧίλιοι and ΠεντακισΜύριοι) may be regarded as such. Π and Γ are formed not on the acrophonic but on the multiplicative principle.

<sup>1</sup> Used by J. Woisin, *De Graec. not. num.*, and others.

<sup>2</sup> See the Appendix to the Didot edition of Stephanus' *Thesaurus*, viii. p. 345.

<sup>3</sup> *Hermes*, xlix. 253, note.

<sup>4</sup> *Commentatio de figuris numerorum*, i. 5, in H. Keil, *Grammatici Latini*, iii. 406.

<sup>5</sup> The only exception known to me is G. Gundermann, *op. cit.* 23 ff., who argues that the similarity between the numerals and the Greek letters Π, Δ, etc. is accidental.

<sup>6</sup> *ἰῶτα ἐν ἐστίν*. See Appendix to Stephanus' *Thesaurus*, ed. Didot, viii. p. 344.

<sup>7</sup> *Loc. cit.* τὸν μὲν οὖν ἕνα ἀριθμὸν ἐν ἰῶτα σημαίνει.

<sup>8</sup> *Griech. Epigr.* 542, *Handbuch*, i. 416, and especially Bursian's *Jahresbericht*, lxxxvii. 145 ff.

- (3) Outside the Attic and the analogous Boeotian system, we find a free use of non-acrophonic elements, such as  $\cdot$  (= 1) and  $\odot$  (= 10) at Argos,<sup>1</sup>  $\zeta$  (= 1) and  $\varkappa$  (= 10) at Troezen.<sup>2</sup>

The common principle of all these systems, Larfeld continues, is that 10, its factors 1 and 5, powers of 10 and these same powers multiplied by 5 receive special signs; other numbers are formed by way of addition. "The base of all these systems is the number 10, and to be precise we must describe them as decimal-multiplicative-additive. For the sake of brevity—a potiori fit denominatio—I have called them decimal."

I have little hesitation in ranging myself on Keil's side in this dispute. We are in search of a convenient title, not of a logical definition of the type in question. There is no common principle running consistently through all these systems and determining every sign comprised in each. We shall see that one has signs only for 1, 10 and higher powers of 10, that another lacks a sign for 5, another that for 500. Again, in two Boeotian systems there are signs for 30 and 300; yet we may guess that Larfeld would not on that ground have excluded them from his decimal class.<sup>3</sup> Moreover, so far as the elements  $\square$  and  $\Gamma$  are concerned, Larfeld himself supplies the answer in the passage<sup>4</sup> where he defends the choice of the term 'decimal' on the ground that "obviously the number 5 and the products of 5 and 10 or powers of 10 receive special signs only to prevent the too frequent repetition of one and the same sign." Set aside in this way the signs for 5, 50, 500, etc. and we are left with a series only one of which, viz. 1, is not acrophonic: nay, we need not set aside  $\Gamma$ , since that is plainly the initial letter of *πέντε*. Finally, the term decimal is too wide, including such systems as the Minoan hieroglyphic notation, with its signs for 1, 10, 100 and 1,000, used exactly as the Greek numerals,<sup>5</sup> and the Egyptian hieroglyphic system, which has signs for 1, 10, 100, 1,000, 10,000 and 100,000.<sup>6</sup> The Greeks alone, so far as our knowledge goes, used not conventional signs for these values, but letters, those letters which would

<sup>1</sup> No. 3 b (above). It should be noted, however, that though  $\cdot$  denotes 1 dr., the sign for the pure number 1 may well have been  $\downarrow$ , as at Epidaurus (No. 7 b).

<sup>2</sup> No. 8 a.

<sup>3</sup> He definitely includes them within it (*Handbuch*, i. 417), but appears to have overlooked their peculiarity.

<sup>4</sup> *Griech. Epigr.* 542, *Handbuch*, i. 416.

<sup>5</sup> A. J. Evans, *Scripta Minoa*, i. 256 ff.

<sup>6</sup> Gundermann, *op. cit.* 18.

most readily suggest the names of the several numbers, and the term chosen to designate the type should, I think, for purposes of practical convenience, refer to this peculiarity.

It is usually asserted that numerals of this class always represent cardinal numbers, while alphabetic numerals are used for cardinals and ordinals and occasionally also for numeral adverbs. This statement is true for all practical purposes, though acrophonic numerals sometimes appear with what is really an ordinal value in Asia Minor, if my interpretation of four boundary-stones of Cyzicus, Aegae and Priene is correct (Nos. 49, 51, 55). On the other hand, the rule that numbers are arranged in descending order of value has, I believe, no exceptions, for in *I.G.* i. Suppl. 188 l. 5, where  $\Delta$  precedes  $\Gamma$ , we have clearly to do with an engraver's error.<sup>1</sup> The largest number represented by these numerals is, so far as I know, 460,100, which appears as  $\Delta\Delta\Delta\Delta\Gamma\text{MH}$  in a Delian inscription of 269 B.C. (*I.G.* xi. 2. 203 B 101).

We are unable to determine the period at which the first system of this type came into being. The earliest extant examples are those from *Koutsopodi*, near Argos, belonging probably to about the middle of the 5th century (No. 4) and those on the first of the Attic quota-lists (*I.G.* i. 226), dating from 454 B.C., while the same century is also represented in Aegina, Ceos (?), Delos, Naxos (?) and Halicarnassus. But since by 454 the Attic system is fully developed and possesses its entire complement of signs, we can scarcely be wrong in assigning its origin to a much earlier date. Nor can we ignore Herodian's statement that he had seen in Solon's laws numerals of this type used to denote the fines which might be inflicted for certain offences. To my mind it is not improbable that in Attica some form of acrophonic system was known at least as early as the seventh century B.C. For the fourth, third and second centuries abundant evidence is collected in the foregoing pages, but the alphabetic system was, meanwhile, especially from about the middle of the third century, gaining ground, and in the first century B.C. we have but few examples of the acrophonic type. In Attica its latest certain appearance is about 95-90 B.C.<sup>2</sup> Tsountas, however, published in *Ἐφημ. Ἀρχ.* 1884, 167 ff. an inscription which must belong at the earliest to the time of Pompey the Great, if he

<sup>1</sup> B. Keil, *Hermes*, xxvii. 645.

<sup>2</sup> *I.G.* ii. 935. See Larfeld, *Handbuch*, i. 417, ii. 543 f.; B. Keil, *Hermes*, xxv. 319 f., who confidently asserts that the introduction into Athens of the alphabetic system falls 'some time before 50 B.C.'



was right in seeing a reference to him in its mention (l. 47) of *δίγματος τοῦ ἀνατεθέντος ὑπὸ Μάγνου*. The editor attributed the document to the period between Pompey and Hadrian, but W. Gurlitt (*Über Pausanias*, 239 f.) identifies the archon [Lyc]omedes mentioned in it with the archon of that name who is known from *I.G.* iii. 746 to have held office between 138 and 171 A.D.<sup>1</sup> B. Keil, however, appeals to the character of the numerals employed in ll. 3, 4 to prove that the inscription cannot be later than Strabo, and to the content of the document to prove that it must be earlier than Strabo, and, apparently, than Sulla's destruction of the Peiraeus in 86 B.C.<sup>2</sup> For my own part, I should prefer to attribute the inscription to the later date and to regard the employment of acrophonic numerals in it as but one more illustration of the well-attested and widespread archaism of the period of Hadrian and the Antonines.

Other Greek states also afford examples of the use of acrophonic numerals in the first century B.C. A Thespian subscription-list (No. 19 d) almost certainly belongs to that century and we have a Delphian example of about 90 B.C. (22 c); one from Carpathus (39) and another from Canygelles (59) belong probably to about the same period. Even later is the Melitean example (p. 125), dated by the name of the Thessalian *στρατηγός* Eurydamas, who held office *ca.* 50 B.C. (*I.G.* ix. 2. p. xxiv). The editor of the Messenian inscription No. 13 leaves it uncertain whether it belongs to the first century before or after Christ, while the presence of the name *Οὔλπ(ιος)* in the fragment from Tomi (60) justifies us, I think, in attributing it to the second century of our era. Other examples which cannot be much, if at all, earlier than 1 B.C. are the Π of an epitaph found near Callatis (No. 60), if this is to be read as 5 rather than as 80, and the III of a Pergamene dedication (No. 50). This latter awakens suspicion, both on account of its late date and because it is the sole instance of an acrophonic numeral distinguished by a horizontal line drawn over it.<sup>3</sup> Can the true reading, corrupted by the ancient engraver or the modern copyist, be IH? In *Sparta Museum Catalogue* 253 l. 5 IH stands on the stone where even so great an authority as Foucart copied III. (See p. 132 *Add.*)

For purposes of stichometry the acrophonic numerals were retained

<sup>1</sup> This view is defended in *Berl. Phil. Woch.* x. 842 ff., and was adopted by C. Wachsmuth (*Stadt Athen*, ii. 12, note 1). Lolling placed it later than 14 A.D., Toepffer (*Quaest. Pisistr.* 21) at or after the close of the Roman republic.

<sup>2</sup> *Hermes*, xxv. 317 ff.; *Berl. Phil. Woch.* x. 1258 f.

<sup>3</sup> With the possible exceptions of *S.G.D.I.* 1770, 1818 (see No. 22c).

for centuries after their abandonment in inscriptions. Keil draws attention to the fact that even the books of Iamblichus have the number of lines recorded in this system (Vitelli, *Museo Italiano*, i. p. 4), but adds that 'this custom in subscriptiones is quite an isolated phenomenon and has no significance for any other branch of ancient life.'<sup>1</sup>

The most primitive method, perhaps, of denoting a number is to repeat the unit-sign (usually a vertical stroke, less frequently a dot or a horizontal stroke) a corresponding number of times. Examples of this method are the groups of vertical strokes—4, 7, 9, 20 and 24 in number—scratched on the wall of a cave near Lindus (40 b). But the advance of civilization and the consequent need of a more convenient system led to the creation of special signs for 10 and powers of 10—as in the Egyptian and Cretan hieroglyphic systems—to save the repetition of the same sign more than nine times and to facilitate the expression of large numbers. "The oldest known writings of the Egyptians and Phoenicians," writes Gow,<sup>2</sup> "have such signs, but have no intermediate signs (*e.g.* for 50 or 500). They repeat the unit-strokes up to 9; they repeat the signs for 10 and 100 up to nine times. The ancient Greeks, according to Iamblichus (*In Nicom. Arithm.* ed. Tennulius, p. 80), did the same. It is probable enough that such was the case . . . but . . . we can hardly expect to find evidence in support of Iamblichus' statement." Such support, however, is not wholly lacking, and it may be of interest to summarize it here.

The building-accounts, belonging to the early part of the 4th century, of the temple of Asclepius at Epidaurus survive (No. 7 a). These show that at that time the Epidaurians used no signs for 5, 50, 500 and 5000: 9800 is written XXXXXXXXXXXBBBBBBBBB, 9 drachmas is expressed by :::: or by ::::, and so on. Later building-records of the same century give us a glimpse of the gradual introduction of the auxiliary signs; that, for example, of the Tholos (7 b) sometimes has a special sign for 50, at others uses the 10-sign repeated five times, = = -, while 5 dr. is denoted in the earlier part of the record by ::, in the later by  $\Gamma$ . The *Koutsopodi* fragment (4) may represent the same stage as the earliest Epidaurian account; plainly it has no single sign for 500, nor is there evidence for the existence of signs for 50 and 5, since  $\Gamma$  here seems to denote the *πλέθρον*.<sup>3</sup>

<sup>1</sup> *Hermes*, xxv. 320, note. Cf. Ritschl, *Die Alexandrin. Bibliotheken* 99, 100, 123, note.

<sup>2</sup> *Short Hist. of Gk. Maths.* 40. Cf. *Journ. Phil.* xii. 278.

<sup>3</sup> The Darius-vase (No. 62) may very well represent the same stage of development.

A curious fact is this, that a 5-sign was apparently regarded as least necessary and is sometimes lacking even where signs exist for 50 and 500. Two fourth-century Argive inscriptions (3 a, b) use  $\Gamma$  for 50 and have presumably some sign for 500, though it does not actually occur in either: but for 5 there is no symbol, at least there is none for 5 drachmas, and the same is true also of the cognate Nemean system (6), where, however,  $\square$  is used to represent 50. We may compare also the use of  $\Gamma\Gamma\Gamma\Gamma\Gamma$  for 5  $\pi\lambda\acute{\epsilon}\theta\rho\alpha$  in No. 5 a; as  $\Gamma$  stands also for 50 in this inscription we may confidently assume that the system had no special sign for 5. The famous Tralles inscription (56) may represent a similar system, though it is now generally believed that the engraver wrote  $\text{IIIIIIII}$  in error for  $\square\text{IIII}$ . Finally, as late as the third century the Coans still dispensed with a 5-sign and wrote  $\text{TTTTTTTTT}$  for 9 drachmas (41 a).

With these exceptions, however, all the known systems of Greece had their full complement of signs. This was the Greek solution of the difficulty of counting, rapidly and yet accurately, more than three or four similar objects,—a difficulty which the Phoenicians and Aramaeans attempted to meet by writing the unit signs (normally, though not invariably) in groups of three (*e.g.*,  $\text{I III III} = 7$ ,  $\text{III III III} = 9$ ), the Egyptians in their hieroglyphic system by writing them in superposed groups of not more than four (*e.g.*  $\begin{array}{c} \text{IIII} \\ \text{III} \end{array} = 7$ ,  $\begin{array}{c} \text{III} \\ \text{III} \end{array} = 9$ ). In two Boeotian cities a still further step was taken (19 a, b, 20). The creation of signs for 5, 50, 500, etc. avoids the five-fold repetition of any sign; if, now, we make separate signs for 3, 30, 300, etc., we shall avoid the occurrence of any element more than twice in the same number. The experiment was not carried through consistently, for no sign for 3 was ever used, so far as we can tell, but 30, 300 and, doubtless, 3000 received special signs (see Fig. 3, p. 109). But it was found that the multiplication of numeral signs more than counter-balanced the advantages of greater brevity and lessened repetition, and the experiment was seemingly confined to Thespieae and Orchomenus.

One word of caution should perhaps be added in conclusion. The diversity of the systems we have discussed is due in large measure to the various modifications introduced into the pure numbers to make them express money, weights and measures. Many of the inscriptions which afford our sole evidence for those systems contain only sums of money or weights and not pure numbers, and we are often unable to infer the latter

from the former with certainty. In the higher numbers, indeed, no change is made when they are used to express drachmas (or, sometimes, other units of reckoning), but for the lower numbers this is not always the case. Five drachmas, for example, is denoted by  $\Pi$  or  $\text{F}$  (34) or by  $\Pi$  with a  $\cdot$  (7 b, c), a short vertical stroke (7 c), a  $\text{C}$  (8 a), or a  $<$  (10 a) inserted, 5 silver staters by  $\Pi$  with  $\xi$  either within (22 b, 52) or below it (14), 5 gold staters by  $\Pi$  with  $\circ$  inserted (61), 5 minas by  $\Pi$  with inserted  $\text{M}$  or by the curious Messenian sign of which the  $\Pi$  alone is clear (13), 5 talents by  $\Pi$  with inserted (or, in 34, attached)  $\text{T}$ , 5 obols sometimes by  $\text{P}$  (34) or  $\Pi$  with inserted  $\circ$  (54), 5 quarter-obols by  $\text{P}$  (34), 5 chalci by  $\Pi$  (7) or  $\text{P}$  (p. 125): yet in all probability the sign for 5 in all these various states was  $\text{P}$ .<sup>1</sup> So too with 10. The signs for 10 talents, 10 minas and 10 staters are compounds of  $\Delta$  with  $\text{T}$ ,  $\text{M}$  and  $\xi$  respectively (except in 13, 14): for 10 dr. we find  $\text{O}$  (3 a),  $\text{O}$  (3 b, 5 a),  $-$  (5 b, 7, 29 a),  $\Lambda$  (9 b),  $\uparrow$  (27),  $\text{z}$  (8 a) and  $\text{X}$  (8 a) as well as  $\Delta$ ,  $\text{D}$  and  $\text{D}$  (19 a): yet the only evidence that any other sign than one of these last three was used for 10 comes from 7 b (*I.G.* iv. 1485 l. 67),<sup>2</sup> which shows that at Epidaurus — represented 10. Finally, though the unit-sign varies widely according to the value, weight or measure represented— $\text{T}$ ,  $\text{M}$ ,  $\xi$ ,  $\text{O}$ ,  $\text{F}$ ,  $\text{C}$ ,  $<$ ,  $\cdot$ , etc.—there is, so far as I know, no evidence to shake our belief that always and everywhere throughout the Greek world the sign for the unit as such was the vertical stroke.

MARCUS NIEBUHR TOD.

<sup>1</sup> In this paragraph I do not take into account the variant forms of the same letter.

<sup>2</sup> See B. Keil, *Ath. Mitt.* xx. 64, note.

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ADDENDA.—Two publications which have come into my hands since the foregoing article was written lead me to add the following notes.

P. 106. A fragmentary account from Tegea (*B. C. H.* xxv. 274) has been more fully deciphered by K. A. Rhomaïos (*ib.* xxxvi. 358 ff.), who shows that the number  $\text{III}$  occurs in it thrice, and also the sum  $\text{B}\Delta\Delta$ , probably 120 drachmas.

P. 129. In view of the similar Ephesian inscriptions (R. Heberdey, *Forsch. in Ephesos*, ii. Nos. 76–82), I withdraw the suggestion that  $\overline{\text{III}}$  may be an error for  $\overline{\text{IH}}$ . The number 3 is more probable than 18, and the horizontal stroke is probably due to the custom of placing a line over alphabetic numerals.

## INSCRIPTIONS FROM BEROEA IN MACEDONIA.

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THE following inscriptions were copied by Mr. A. J. B. Wace at Verria (Beroea) in the course of his travels in Macedonia in 1911 and 1912. Thirty-four seem hitherto unknown, and are here published, followed by ten which have been published with varying degrees of accuracy, mostly in the comprehensive collection of Macedonian inscriptions, and archaeological and topographical notes of Demitsas.<sup>1</sup> References to this work are numerous in the following pages, for it is the only publication which approximates to a *Corpus* of Macedonian Inscriptions. Of the newly published stones twenty-three are grave-stones, and of the remainder two (Nos. 10, 11) are so fragmentary that it is impossible to class them; four are statue-bases of the Imperial Age (Nos. 5-8); No. 1 is a copy of three letters written by Demetrios II while acting as regent for his father Antigonos Gonatas; and the remainder (Nos. 2, 3, 4, 9) are votive inscriptions of various sorts. No. 2 is a dedication of a manumitted female slave, accompanied by a commendatory letter from the brothers of the dedicatrix; No. 3 records the dedication in the 2nd century B.C. to the Healing Divinities of a stone-built dormitory and exedra, no doubt in connexion with the custom of incubation; No. 4 is the base of a votive statue to Hermes erected by the board of *ἀγορανόμοι*, and almost contemporary with No. 3; and No. 9 is a mutilated dedication accompanied by reliefs of the soles of two human feet, which it is natural to interpret in connexion with the cult of the Healing Divinities.

Of the grave-stones, Nos. 12 and 13 cannot be later than the 2nd century B.C.; and of the remainder No. 30, the epitaph of a gladiator,

<sup>1</sup> Ἡ Μακεδονία ἐν λίθοις φθεγγόμενοις καὶ μνημείοις σωζομένοις κ.τ.λ. [Athens, 1896]. This work is indispensable in spite of numerous inaccuracies of all sorts, in scholarship as well as printing; it is cited below as Demitsas or Dem.

is far the most interesting. Several are accompanied by reliefs (Nos. 18, 19, 20, 21, 23, 26, 27, 28, 29, 30, 31, 32, 34) of varying interest and no artistic value.

A.—OFFICIAL INSCRIPTIONS.

1. In the house of a Jew butcher in the Ghetto. Flat-topped marble stele. H. '85; br. '54; th. '08. Letters, in ll. 1-3, *ca.* '008; in ll. 4-16, *ca.* '012.  $\odot\Omega$  smaller than the rest. The surface is very much worn in the lower half of the inscription. The reproduction is made from two squeezes of the whole inscription supplemented by additional squeezes of separate portions. Mr. Wace's copy gives a few letters which I cannot decipher on any of the impressions. Prolonged study of the stone in a favourable light might recover a few more letters, and perhaps correct one or two of those which I seem to see on the squeezes.

ΒΑΣΙΛΕΥΟΝΤΟΣ ΑΝΤΙΓΟΝΟΥ ΕΤΟΥΣ Ε' ΚΑΙ Λ', ΕΝΤΥΧΟΝΤΩΝ  
 ΔΗΜΗΤΡΙΩΙ ΤΩΝ ΚΥΝΗΓΩΝ ΧΑΡΤΑ ΤΟΥ ΝΙΚΑΝΟΡΟΣ ΑΤΤΥΛΟΥ ΤΟΥ  
 ΝΙΚΑΝΟΡΟΣ ΕΙΣ ΤΙΣ ΔΑΝΑΙΕ ΠΙΣΤΟΛΑΙ  
 ΔΗΜΗΤΡΙΩΣ ΑΡΓΑΛΩΙ ΧΑΙΡΕΙΝ ΟΙ ΙΕΡΕΙΣ ΟΙ ΤΟΥ  
 ΗΡΑΚΛΕΩΣ ΦΑΣΙΝ ΤΩΝ ΠΡΟΣΟΔΩΝ ΟΔΩΝ ΤΙΝΑΣ ΕΙΣ ΤΩΝ  
 ΤΟΥ ΘΕΟΥ ΕΙΣ ΤΑΣ ΠΟΛΙΤΙΚΑΣ ΚΑΤΑΤΕΤΑΧΘΑΙ  
 ΣΙΝ ΤΩΝ ΔΙΟΧΟΙΟΥΝΤΩΝ ΑΠΟΚΑΤΑΣΤΑΣΙΝ  
 ΠΑΛΙΝ ΤΩ ΙΟΕΩΙ ΕΡΡΩΣΟ  
 ΔΗΜΗΤΡΙΩΣ ΑΡΓΑΛΩΙ ΧΑΙΡΕΙΝ  
 ΤΩΝ ΕΥΤΕΡΟΝ ΦΑΙΝΟΝΤ  
 ΡΟΙ ΕΡΡΩΣΟ  
 ΕΙΣ ΤΗΝ ΓΟΙ  
 ΤΩΝ ΑΛΛΩΝ  
 ΔΗΜΗΤΡΙΩΣ ΑΡΓΑ  
 ΓΑΡ ΟΥΣ  
 ΑΝΙΑΝΙ  
 ΟΥΣ ΕΡΡΩ  
 ΟΡΙ  
 ΠΙΟΝ... ΩΣ ΟΥ ΤΟΥΣ

Βασιλεύοντος Ἀντιγόνου, ἔτους ε' καὶ λ', ἐντυχόντων  
 Δημητρίωι τῶν κυνηγῶν Χάρτ[α] τοῦ Νικάνορος, Ἀττύλου τοῦ  
 Νικάνορος ἐδόθησαν αἱ ἐπισ[το]λαί·  
 5 Δημήτριος Ἀργάλωι χαίρειν· οἱ ἱερεῖς οἱ τοῦ  
 Ἡρακλέως .. φασιν τῶν προσόδων τινὰς τῶν  
 τοῦ [θ]εοῦ εἰς τὰς πολιτικὰς κατατετάχθαι,

- ἐ[π]ιμελήθηθι οὖν ὄπως ἀποκατασταθῶσιν  
 πάλιν τῶι θεῶι· ἔρρωσο.  
 Δημήτριος Ἄρπάλωι χαίρειν· - - -  
 10 [με]ν[οι] πρ[ό]τερον φαίνοντ[αι] - - -  
 . . . . ρό[τε]ρρον ἔπε - - - [τὴν λα ?] -  
 [τ]ρείαν τὴν τοῦ [θεοῦ?] - - - αν ἀντι . .  
 τῶν φιλαλῶν - - - - οὐς· ἔρρω[σο].  
 Δημήτρ[ριος] Ἄρπ[ά]λωι χαίρειν] - - - ι π[α ?] -  
 15 ρακ[αλ]οῦσ[ιν ?] - - - - ον . . .  
 - - - [Ὀλύ?]νπιον· [ἔρρ]ωσο· ἔτους [ς' καὶ λ'].

The general purport of the document is clear. It is a copy of three letters written by Demetrios to Harpalos, who was presumably governor of Beroea, giving instructions for the settlement of grievances which had been referred to him, apparently while acting on behalf of his father Antigonos. The date is the 36th year of the reign of Antigonos (Gonatas).

L. I. The date raises an interesting problem.<sup>1</sup> In the first place this is the only inscription known which is dated by a year in the reign of Antigonos. But from what year is this reckoned? If we follow Beloch,<sup>2</sup> he dated his reign from the death of his father Demetrios Poliorketes in 284/3, which would give us 249/8 as the date of our inscription. On the other hand there is the probable assumption that a Macedonian document would be dated from the year of his accession to the throne of Macedon (277/6).<sup>3</sup> In either case, according to Beloch, the actual year seems to have been reckoned as beginning with 1 Dios (October–November). But there is considerable difficulty in believing that Antigonos would have used the Macedonian year while he was merely a king without a capital, in a divided and restless country as Greece then was. This leads me to prefer the later date, for Beloch's evidence does not seem to support his conclusion. Our own inscription does not

<sup>1</sup> Mr. W. W. Tarn has given me invaluable assistance towards understanding the chronological problems here involved, which are fully treated in his recent work, *Antigonos Gonatas*, pp. 112, note 3, 434, note 6.

<sup>2</sup> *Griechische Geschichte*, iii 2, p. 81 (par. 28). Ferguson, *Hellenistic Athens*, p. 150, states that Antigonos assumed the regal title in 287, clearly accepting the tradition that he reigned ten years in Greece; but he did not call himself βασιλεύς while his father was alive.

<sup>3</sup> For the circumstances, cf. Ferguson, *op. cit.* p. 159; Tarn, *op. cit.* pp. 163 ff. A third tradition, according to which Antigonos reigned in Macedon from 279/8, cannot be ignored. See Tarn, *loc. cit.*, especially note 94, and *addenda*, p. 478. The article by A. Mayer in *Philologus*, lxxi (1912), pp. 224 ff. I have unfortunately been unable to consult in time for this paper.

give us further chronological evidence, except the indication that Demetrios was at home at Pella, acting as regent for Antigonos who was presumably away somewhere. Where he was in 249/8 is not certain, but it would be possible to explain his absence in 242/1 if, with Ferguson, we date the battle of Andros to this year.<sup>1</sup> Another possible piece of evidence might also incline us towards rejecting the earlier date, namely the episodes at Corinth, comprising the courtship of Nikaia by Demetrios and their abortive betrothal. If with Tarn we date Antigonos' recovery of Corinth to the year 248/7,<sup>2</sup> Demetrios might have been already with him, or at least have started when sent for by his father to be married to Nikaia; in this case he could not have been on the spot at Pella to write the letters here preserved. We can only regret that the datable evidence for the period is so scanty that absolute certainty is impossible.

There is nothing unusual in the fact that Demetrios acted as regent in Macedonia during his father's absence.<sup>3</sup> The lack of any form of title is interesting, and furnishes a parallel to the untitled position of his father in Greece in 287-284, while Demetrios Poliorketes was fighting in Asia Minor.<sup>4</sup>

Ἐντυχόντων probably bears here its technical sense, of petitioning.<sup>5</sup> It is not impossible, however, and would certainly add to the picturesque aspect of the situation to interpret it literally, of an accidental encounter whilst hunting, between Demetrios and the two κυνηγοί.<sup>6</sup> Who these latter were it is impossible to say. Whether they belonged to the royal *entourage* or not,<sup>7</sup> we must presume that they came from Beroea, and

<sup>1</sup> *J.H.S.* xxx (1910), pp. 198 ff.; *Hellenistic Athens*, p. 198; but see Tarn, *op. cit.* pp. 378, 461 ff.

<sup>2</sup> *J.H.S.* xxix (1909), p. 213; xxx (1910), p. 223; *Antigonos Gonatas*, pp. 370 ff.

<sup>3</sup> Cf. Ferguson, *J.H.S.* xxx. p. 208, and note 76; it was presumably the case whenever Antigonos was away fighting in the latter part of his reign. Cf. Tarn, *op. cit.* pp. 383, 433 ff.

<sup>4</sup> Ferguson, *Hellenistic Athens*, p. 150, seems wrong in giving him the title βασιλεύς from 287 onwards: see above, p. 135 note 2, and Tarn, *op. cit.* pp. 20, 37, 92, and especially 112, note 3.

<sup>5</sup> The earliest example given in Dittenb. *Syll.*<sup>2</sup> (918, l. 4) belongs to 295 B.C.; instances are much more frequent in the next century; cf. *op. cit.* 240, l. 5; 254, l. 9; 270, l. 8; 276, ll. 16, 36, 70; 284, l. 12; 285, l. 6; 287, l. 3; 303, l. 21, which are all from the period 200-160 B.C.: it is common throughout the following periods. Cf. ἔντευξις (= a petition), *L. & S. s.v.*; in papyri, G. Milligan, *Greek Papyri*, No. 5, l. 5 (163-2 B.C.).

<sup>6</sup> This might be possibly assumed on the ground of the brevity of the communications; but this cannot be taken as proof.

<sup>7</sup> There is no evidence for the position of court-huntsmen in Macedonia analogous to those in Egypt, where the ἀρχικύνητος under the Ptolemies was clearly of considerable eminence. Cf. Dittenb. *O. G. I.* 99, l. 2; 143, l. 3; and Egyptian κυνηγέ(ται) in Cyprus, *ibid.* 20, l. 3. Perhaps the word κυνηγός came to be used in a technical sense meaning a messenger: then the Ptolemaic ἀρχικύνητος would have been chief of the king's messengers, and the two κυνηγοί have been messengers on the staff of Harpalos.



brought back Demetrios' letters there. Their names tell us nothing. *Χάρτα* seems certain, for, though the stone is damaged the horizontal stroke of the T has escaped injury, and enough is visible of the vertical stroke to show that the letter could not have been E. I cannot find the name elsewhere. *Νικάνωρ* is a common Macedonian name.<sup>1</sup> *Ἀττύλος* is known in Thessaly, as is also the feminine name *Ἀττύλα*.<sup>2</sup>

L. 4. *Ἄρπαλος* is not identifiable elsewhere, but it is not impossible that he was the grandfather of *Ἄρπαλος Πολεμαίου*, of Beroea, who was a general and ambassador of King Perseus and one of his Hieromnemes at Delphi in 178/7.<sup>3</sup> We may assume that he was governor of Beroea, though his status is not mentioned, as it would clearly be the duty of the chief authority on the spot to deal with the financial matter with which the first of the present letters is concerned. His official title is uncertain, for there are no exact parallels at this period in Macedonia proper. Polybius<sup>4</sup> however alludes to *ἐπιστάται* in Macedonia, and a Delian inscription of the end of the 3rd century B.C. mentions *ὑπεπιστάται* at Thessalonika.<sup>5</sup> For *ἐπιστάται* in other Hellenistic kingdoms there is plentiful evidence (Ferguson, *op. cit.* p. 47, note 3).

L. 5. Two letters are illegible after *Ἡρακλέως*, which do not admit of obvious restoration. Of compound forms of the verb *φημί*, *ἔκφημι* is not very satisfactory.<sup>6</sup> There does not seem to be space for the obvious *σύμφασιν* and it is scarcely justifiable to suggest that a letter has been omitted by the engraver (*e.g.* *σύφασιν*, or the *sigma* omitted owing to the previous word ending with that letter). For the worship of Herakles in the cities of Macedonia the evidence collected by Gruppe is invaluable.<sup>7</sup>

The contrast between secular and sacred funds is known elsewhere under the successors of Alexander, though I know of no epigraphical evidence from Macedonia. The mention of *πολιτικαὶ πρόσοδοι* shews

<sup>1</sup> *E.g.* Dittenb. *Syll.*<sup>2</sup> 192, l. 107; 312, l. 1; cf. Phocion's friend (the son-in-law of Aristotle), Plutarch, *Phocion* c. 31 ff.; and the general of Philip V, Polybius, xvi. 27.

<sup>2</sup> *J.G.* ix 2, 515, l. 1; cf. Nos. 285, 457.

<sup>3</sup> Cf. Pauly-Wissowa, *s.n.* Harpalos 3; Dittenb. *Syll.*<sup>2</sup> 293, l. 5. The well-known general of Alexander the Great may possibly have been a member of the same family, but there is no indication.

<sup>4</sup> v. 26, 5.

<sup>5</sup> Demitsas, 671 (= Michel, *Recueil*, 322). I am indebted to Mr. Tarn for these references; cf. his *Antigonos Gonatas*, pp. 195 f. note 97, and *addenda*.

<sup>6</sup> The word appears to be rare except in poetry. Cf. L. & S. *s.v.*

<sup>7</sup> *Gr. Mythologie*, pp. 208 ff., cf. the votive inscriptions in Demitsas, *op. cit.* Nos. 18, 207, 284, 291, 335, 1064, 1085.

that Beroea had its own revenues; and this may be taken as a proof that it was in the fullest sense a πόλις, and thus justifies our assuming the same of Pella, for which this was hitherto a doubtful point (Tarn, *op. cit.*, p. 184, note 54). Interesting material for the study of temple funds is furnished by the long inscription recently discovered at Sardes,<sup>1</sup> and there are a few allusions in other stones from Asia Minor,<sup>2</sup> and an instance from Egypt in the bilingual Canopus inscription of Ptolemy III.<sup>3</sup> Κατατάπτειν is the regular word for to assign moneys to a fund.<sup>4</sup> Ἀποκαθίστημι is the ordinary word for 'restore': it seems to be used both of abstract and concrete, of persons and things.<sup>5</sup> The form ἐπιμελήθηθι seems alone to suit the letters wholly or partly visible on the stone. There is a flaw affecting the upper part of the last letter, which makes it appear to have a horizontal stroke above, but there is not sufficient space for Ι, Ρ or Τ, apart from the impossibility of restoring a word so formed.<sup>6</sup> For the repeated ⊙ we have no exact parallel in an imperative form, but instances are far from rare.<sup>7</sup> We can scarcely claim to see in it an example of Demetrios' own pronunciation of Greek, though it is fairly likely that he wrote the word (if his letter was an autograph) as it is spelt in our copy.

Ll. 9 ff. The contents of the second and third letters are beyond recovery, as the surface of the marble is badly worn away, and in places damaged. From l. 10 we may see that No. 2 deals with some point previously known to writer or recipient (or both), and the restoration of l. 12 points to some detail in connexion with the cult of (perhaps) Herakles. In l. 12 the fourth letter was perhaps Π but I cannot decipher

<sup>1</sup> *A.J.A.* xvi (1912), p. 59; the commentary by Messrs. Buckler and Robinson is on an ample scale.

<sup>2</sup> Dittenb. *O.G.I.* 332, l. 41 [ἱεραὶ καὶ πολιτικά] πρόσοδοι at Elaea; *ibid.* 267, l. 6 [κοινὰ τῆς πόλεως καὶ αἱ ἱεραὶ πρόσοδοι, at Pergamon; cf. δ ἐπὶ τῶν ἱερῶν προσόδων, *op. cit.* 483, l. 166, from the same place; and see below, note 6.

<sup>3</sup> ἱεραὶ πρόσοδοι, *op. cit.* 56, l. 71.

<sup>4</sup> Cf. Κατατάσσειν εἰς τὰς ἱεράς προσόδους, Dittenb. *Syll.*<sup>2</sup> 566, l. 28, at Pergamon; *op. cit.* 575, l. 8 (= *C.I.G.* 3156) relating to the temple of Aphrodite at Stratonicea.

<sup>5</sup> Cf. L. & S. *s.v.*; Dittenb. *Syll.*<sup>2</sup> Index vi, *s.v.*; a parallel from Magnesia ad Maeandrum is perhaps worth quoting: ὥστε . . . ἀποκατασταθῆναι αὐτῶι πάντα τὰ π[ροχορηγηθ]ησόμ(ε)να, *Syll.*<sup>2</sup> 928, l. 32.

<sup>6</sup> Moreover we require ὄν, as the sentence would otherwise be very abrupt.

<sup>7</sup> Cf. ἐνθαῦθα in the inscription of the Demotionidae, Dittenb. *Syll.*<sup>2</sup> 439, l. 60; ἐνθαυθοῖ, ἀνεθέθη, *op. cit.* 20, ll. 13, 44; and in general for the 'metathesis of aspiration,' Meisterhans-Schwyzler, *Grammatik der attischen Inschriften*,<sup>3</sup> pp. 102 ff., and authorities cited there; Mayser, *Grammatik der gr. Papyri aus der Ptolemäerzeit*, pp. 3, 183 ff.

it, and possibly the word was some other comparative. Φιλαδῶν in l. 13 alone seems to suit the letters and indications visible on the squeezes.

In ll. 14 ff. after the opening formula nothing is certain as to the contents, until we reach the middle of l. 16. Παρακαλοῦσιν (or some form of the feminine participle) seems to suit best the indications in l. 15, and [Ὀλύ]μπιον those in l. 16. Whether this was some instruction relating to the cult of Ζεὺς Ὀλύμπιος, or conceivably a royal oath, must remain uncertain. After the letter came the date; nothing is certain after ἔτους, for the Λ visible towards the edge of the stone may be accidental: but in either case the year may be taken as the same as in l. 1.

2. Tall gable-topped stele of grey marble built into upper part of W. end of Church of H. Kerykos. The lower portion of the stone has suffered from weathering more severely than the upper. H. '92; br. '29. Letters '008-010 high, except in ll. 1-7 where they decrease gradually from αα. '015 to '01. (See p. 140)

In spite of an illegible passage in ll. 20 ff. the general purport of this interesting document is clear. Ariagne daughter of Bastos, dedicates to Artemis Agrotera a slave-girl reared in the house (θρεπτάριον, see below), and attaches to the record of dedication a letter from her two brothers Herakleides and Syros approving of her act on the score that it is her own affair, and in spite of the fact that she being now advanced in years is parting with a maid who might be a support to her old age. Appended are the names of three witnesses of the dedication, and the date, 2nd of Panemos, 212 of the Era of Augustus, = A.D. 182.

There is nothing unusual in the act of religious manumission,<sup>1</sup> if we may so call it, here recorded, though this seems to be the first known instance in which Artemis is recipient under her title of Agrotera. What is more interesting is the personal element of the whole document, not the least striking part of it being that the brothers who address Ariagne (in a mixture of official and somewhat high-flown language) admit themselves unable to write. For this personal aspect of the act of manumission we may advantageously compare the *Edmondstone Papyrus* [A.D. 354],<sup>2</sup> a letter from a mistress to two slaves on the occasion of their manumission,

<sup>1</sup> The fullest account of manumission is that of Calderini, *La Manomissione e la Condizione dei Liberti in Grecia* [Milan, 1908]: for the present type see pp. 94, 96 ff. ('Religiosa,' a.); and cf. a few characteristic instances in Rouse, *Greek Votive Offerings*, pp. 335 ff.

<sup>2</sup> Reprinted most accessibly in a note on *Oxyrh. Papyri* iv, 722.

Ἀριάγνη Βάστου τὴν ὑ-  
 πάρχουσαν αὐτῇ παιδί-  
 σκην ὀνόματι Ἑλπίδα  
 δῶρον ἔδωκεν θεᾷ  
 5 Ἄγροτέρα Ἀρτέμιδι, μὴ  
 μηθενὸς ἑτέρου αὐτῆς ἔ-  
 ξουσίαν ἔχοντος μ(ή)τε ὑρ-  
 χόντων μήτε βουλευτῶν, ὑ-  
 πέταξεν δὲ καὶ τὴν ἐπιστολὴν  
 10 τὴν δεδομένην αὐτῇ ὑπὸ τῶ[ν]  
 ἀδελφῶν Ἑρακλείδης Βά-  
 στου καὶ Σύρος Βάστου Ἀριάγν[η]  
 Βάστου τῇ κυρίᾳ ἀδελφῇ χαίρ(ε)ιψ·  
 ἡμεῖς, κυρία ἀδελφή, ἐν πολλοῖ[ς]  
 15 σοι [χ]άριν οἶδαμεν καὶ νῦν βουλο-  
 μένης σου τινα σῶν ἰδίων θρε-  
 πταρίων ἐλευθερώσαι συνευαρε-  
 στοῦμεν καὶ συνκατατιθέμεθα· σὺ  
 γὰρ τῶν ἰδίων ἔξουσίαν ἔχεις [καὶ ?]  
 20 παρ' αὐτῇ αὐτὰ κοπιῶ[σ]ασα (?) .....  
 οὐ παρα ..... ω... λα... ε.....  
 καὶ ὡς πρεσβυτέρα νῦν ἠβούλου δα-  
 νίσασθαι καὶ ὑποθέσθαι τι ..... νις (?)  
 παιδί[ο]ν ἀρωγὴν τοῦ γήρωσ καὶ ὄν, το[ύ]-  
 25 τοις συνευαρεστοῦμεν, κυρία, μηδενὶ  
 τηλικούτῳ παρεχόμενοι σοι, ὡς γὰρ (ὥσπερ ?)  
 προείπαμεν καὶ σὰ ἔστιν καὶ εὐ αὐτὰ  
 κεκοπιάκας· ἐγράψαμεν τὴν ἐπιστο-  
 λὴν σοι ἐν Βεροία ἔτους β'ί'ς' Σε-  
 30 βαστοῦ τοῦ καὶ ἡ'κ'τ', Περειτίου  
 τετράδι, διὰ χειρὸς Φλαίου Δ  
 ... ον διὰ τὸ μὴ αὐτοὺς ἡμᾶς ἐπίστα-  
 [σ]θαι γράμματα· ἔρ(ρ)ωσθαί σε εὐχόμε-  
 θα. Μάρτυρες· Πίος Αἴλιος Ἐπίκτη-  
 35 τος, Λούκιος Μάγμιος Οὐαλεριανό-  
 [ς], Σέξτος Ποπίλλιος Λυκῖνος  
 ἐγράψαμεν ταῦθ' ἔτους β'ί'ς' Σεβαστοῦ  
 Πανήμου δευτέρ[α].

ΑΡΙΑΓΝΗ ΒΑΣΤΟΥ ΤΗΝ Υ  
 ΠΑΡΧΟΥΣΑΝ ΑΥΤΗ ΠΑΙΔΙ  
 ΣΚΗΝ ΟΝΟΜΑΤΙ ΕΛΠΙΔ-  
 ΔΩΡΟΝ ΕΔΩΚΕΝ ΘΕΑ  
 ΑΓΡΟΤΕΡΑ ΑΡΤΕΜΙΔΙ ΜΗ  
 ΜΗΘΕΝΟΣ ΕΤΕΡΟΥ ΑΥΤΗΣ Ε  
 ΞΟΥΣΙΑΝ ΕΧΟΝΤΟΣ Μ(Η)ΤΕ ΕΑΡ  
 ΧΟΝΤΩΝ ΜΗΤΕ ΒΟΥΛΕΥΤΩΝ Υ  
 ΠΕΤΑΞΕΝ ΔΕ ΚΑΙ ΤΗΝ ΕΠΙΣΤΟΛΗΝ  
 ΤΗΝ ΔΕΔΟΜΕΝΗΝ ΑΥΤΗ ΥΠΟ ΤΩ  
 ΑΔΕΛΦΩΝ ΚΣΗΡΑΚΛΕΙΔΗΣ Β/  
 ΣΤΟΥ ΚΑΙ ΣΥΡΟΣ ΒΑΣΤΟΥ ΑΡΙΑΓΝ  
 ΒΑΣΤΟΥ ΤΗ ΚΥΡΙΑ ΑΔΕΛΦΗ ΧΑΙΡΙΨ  
 ΗΜΕΙΣ ΚΥΡΙΑ ΑΔΕΛΦΗ ΕΝ ΠΟΛΛΟΙΣ  
 ΣΟΙ ΑΡΙΝΟΙ ΔΑΜΕΝ ΚΑΙ ΝΥΝ ΒΟΥΛΟ  
 ΜΕΝΗΣ ΣΟΥ ΤΙΝΑΣ ΩΝ ΙΔΙΩΝ ΘΡΕ  
 ΠΤΑΡΙΩΝ ΕΛΕΥΘΕΡΩΘΕΡΩΣ ΚΣΙΝ ΕΥΑΡΕ  
 ΣΤΟΥΜΕΝ ΚΑΙ ΣΥΝΚΑΤΑΤΙΘΕΜΕΘΑ ΣΥ  
 ΓΑΡ ΤΩΝ ΙΔΙΩΝ ΕΞΟΥΣΙΑΝ ΕΧΕΙΣ ΚΑΙ  
 ΓΑΡ ΤΩΝ ΙΔΙΩΝ ΕΞΟΥΣΙΑΝ ΕΧΕΙΣ ΚΑΙ  
 ΟΥ ΠΑΡΑ ..... Ω... ΛΑ... Ε.....  
 ΚΑΙ ΩΣ ΠΡΕΣΒΥΤΕΡΑ ΝΥΝ ΗΒΟΥΛΟΥ ΔΑ  
 ΝΙΣΑΣΘΑΙ ΚΑΙ ΥΠΟΘΕΣΘΑΙ ΤΙ ..... ΝΙΣ (?)  
 ΠΑΙΔΙΟΝ ΑΡΩΓΗΝ ΤΟΥ ΓΗΡΩΣ ΚΑΙ ΟΝ, ΤΟΥ-  
 25 ΤΟΙΣ ΣΥΝΕΥΑΡΕΣΤΟΙΣ ΣΟΙ, ΩΣ ΓΑΡ (ΩΣΠΕΡ ?)  
 ΠΡΟΕΙΠΑΜΕΝ ΚΑΙ ΣΑ ΕΣΤΙΝ ΚΑΙ ΕΥ ΑΥΤΑ  
 ΚΕΚΟΠΙΑΚΑΣ· ΕΓΡΑΨΑΜΕΝ ΤΗΝ ΕΠΙΣΤΟ  
 ΛΗΝ ΣΟΙ ΕΝ ΒΕΡΟΙΑ ΕΤΟΥΣ Β'Ι'Σ' ΣΕ-  
 30 ΒΑΣΤΟΥ ΤΟΥ ΚΑΙ Η'Κ'Τ', ΠΕΡΕΙΤΙΟΥ  
 ΤΕΤΡΑΔΙ, ΔΙΑ ΧΕΙΡΟΣ ΦΛΑΙΟΥ Δ  
 ... ΟΝ ΔΙΑ ΤΟ ΜΗ ΑΥΤΟΥΣ ΗΜΑΣ ΕΠΙΣΤΑ-  
 [Σ]ΘΑΙ ΓΡΑΜΜΑΤΑ· ΕΡ(Ρ)ΩΣΘΑΙ ΣΕ ΕΥΧΟΜΕ-  
 ΘΑ. ΜΑΡΤΥΡΕΣ· ΠΙΟΣ ΑΙΛΙΟΣ ΕΠΙΚΤΗ-  
 35 ΤΟΣ, ΛΟΥΚΙΟΣ ΜΑΓΜΙΟΣ ΟΥΑΛΕΡΙΑΝΟ  
 [Σ], ΣΕΞΤΟΣ ΠΟΠΙΛΛΙΟΣ ΛΥΚΙΝΟΣ  
 ΕΓΡΑΨΑΜΕΝ ΤΑΥΤΑ ΕΤΟΥΣ Β'Ι'Σ' ΣΕΒΑΣΤΟΥ  
 ΠΑΝΗΜΟΥ ΔΕΥΤΕΡ[Α].

as furnishing a more human document than any inscription bearing on this subject.

L. 1. The name Ἀριάγνη is a rare variant for Ἀριάδνη, which seems to have been borne also by the wife of the Emperor Zeno.<sup>1</sup> The name Βάστος is not known to me elsewhere than here and (emended) in No. 38, below.<sup>2</sup>

Ll. 2, 3. The word παιδίσκη is frequently found in a similar context.<sup>3</sup> Ἐλπὶς is not a rare name, either among free-born women or slaves.<sup>4</sup>

L. 5. Ἀρτεμις Ἀγροτέρα is not known elsewhere as the recipient of such a dedication.<sup>5</sup> We have here the first evidence of her worship at Beroea (and see below, No. 6), but not very far away, at Skudra, she was worshipped under the same title coupled with those of Γαζωρ(ε)ῖτις and Βλουρ(ε)ῖτις.<sup>6</sup>

Ll. 6–8. The conditions of dedication do not occur in these same words elsewhere. There must have been some special reason for the mention of the ἄρχοντες and βουλευταί as having no authority over the person manumitted and dedicated. We may compare a negative formula from Amphissa, ἐλευθέρα κα[ὶ ἀνέφαπτος μη]δενὶ ποθήκουσα μηδὲν κατὰ μηδένα [τρόπον].<sup>7</sup> A common formula at Delphi is, ἐφ' ὧν τε ἐλεύθερός (-α) εἶμεν καὶ ἀνέφαπτος ἀπὸ πάντων τὸμ πάντα βίον.<sup>8</sup>

Ll. 9–11. Ὑποτάττειν here bears its regular epigraphical sense, of appending one document to another.<sup>9</sup>

Ll. 13, 14. Κυρία ἀδελφῆ (and cf. κυρία in l. 25) is a usage common in epistolary Greek from Hellenistic times onwards. Though I can find

<sup>1</sup> See Pauly-Wissowa, s.v. Ἀριάδνη, and C.I.L. iii, Suppl. (3), 12033<sup>2</sup> and note *ad loc.*

<sup>2</sup> It seems much more likely to be of Macedonian origin (and presumably akin to the tribal name Bastarnae) than Roman, for as a Greek form of either Bassus or Vastus it seems highly unlikely; moreover the names of his children are not Roman.

<sup>3</sup> E.g. Dittenb. *Syll.*<sup>2</sup>, 846, 848 (παιδίσκη dedicated to Apollo Pythios by process of sale); to Ma, *R.E.G.* xii (1899), p. 172, No. 7; cf. *ibid.* Nos. 4 and 8, and Calderini, *op. cit.* p. 77.

<sup>4</sup> E.g. *Syll.*<sup>2</sup>, 865, an ἀπελευθέρα in Kalymnos; there is no need to multiply instances.

<sup>5</sup> For the list of known recipients see Calderini, *op. cit.* pp. 108 ff.

<sup>6</sup> For the distribution of the cult of Artemis, Farnell, *Cults* ii, pp. 437, 562 f.; Gruppe (in Iwan-Müller), p. 1283, note 1; for her cult at Skudra, Demitsas, Ἡ Μακεδονία, Nos. 125, 126 (1) [note that he numbers two inscriptions as 126]: the latter, recording the dedication of a θρεπτάριον to Artemis Gazoria, is thus the best Macedonian parallel for the contents of our present stone.

<sup>7</sup> Dittenb. *Syll.*<sup>2</sup> 844, ll. 12–14. In the present inscription we should have expected μη ἔχοντος μηθενός, κ.τ.λ.: perhaps the length of the phrase accounts for the participle being placed so late.

<sup>8</sup> *Ibid.* 856 ff. (*passim*).

<sup>9</sup> *Ibid.* 514, l. 46; 722, l. 51; 738, l. 9.

no parallel example of it in inscriptions except in Imperial titles, and in the plain vocative, *κύριε*, there are plenty in papyri.<sup>1</sup>

L. 16. I seem to see *σῶν*, though *τῶν*, which would be more natural in this context, is not absolutely impossible. The word *θρεπτάριον* is a rare form of the diminutive of *θρεπτός*, and appears to be unknown before the Imperial Age. In inscriptions it occurs, to my knowledge, once already in Macedonia,<sup>2</sup> and twice in Lycia.<sup>3</sup>

Ll. 17, 18. The formal expression of approval couples two common words which do not as a rule appear together. The former is very common at Delphi,<sup>4</sup> the latter, used by Attic authors from Plato onwards, is rarer in inscriptions.<sup>5</sup> Other alternatives are *συννεδοκεῖν* and *συνεπαινεῖν*.

L. 20. The end of this line and the whole of the next are irrecoverable from the squeeze, and the copy gives no help. I cannot see the first C of *κοπιάσασα* on the impression, and if inserted at all it must have been small and cramped, as is, e.g. the same letter in *ἐπιστολήν* in l. 28. The general sense seems to be: (1) 'We approve of your act of manumission (*ἐλευθερῶσαι*, l. 17) for the girl is your own property, to do what you like with. (2) If you choose to lend and pledge<sup>6</sup> (to the Goddess) one who might have been a comfort to your old age, that too is your affair and we will approve of your acting as you wish.' *Κοπιάσασα* (cf. l. 28, *κεκοπίακας*) as an equivalent to *ποιήσασα* is a usage with which we are familiar in New Testament Greek<sup>7</sup>; in inscriptions *κοπιᾶν* is found occasionally as equivalent to *τελευτᾶν*<sup>8</sup>; but I know no epigraphical parallel for its present sense.

L. 22. The reduplicated augment in *ἡβούλου* is natural. No instances

<sup>1</sup> Cf. *κύριέ μου ἀδελφέ*, *Brit. Mus. Pap.* ii, No. 417, l. 16 (= Milligan, *Greek Papyri*, No. 51); *κυρία μήτηρ* . . . *κυρία ἀδελφή*, *Gr. Urkunden der Papyrussammlung zu Leipzig* (ed. Mitteis), i, No. 110, l. 24 f. In literature cf. *κυρία τῆ μητρὶ* (1 Greg. Nazianz. *Epist.* 4), and the *Thesaurus s.v. κύριος*. *Κύριε* (-*ια*) as a vocative is generally coupled with the name of the relation addressed, or with a proper name. For an instance without either cf. Dio Cassius, xlviii, c. 44, where Livia is addressed as *κυρία* (= Latin *domina*), and of course *Κύριε*, of our Lord, in *N.T.* In inscriptions, *Syll.*<sup>2</sup> 655, ll. 3, 13 where a proconsul is addressed as *κύριε*.

<sup>2</sup> Dem. 126 (1).

<sup>3</sup> *C.I.G.* 4299, cf. *addenda*, at Antiphellus; *add.* 4303<sup>h</sup> at Tristoma near Cyaneae. In a papyrus in the Louvre *Papiers du Louvre*, ed. Letronne, p. 422, No. 18, cf. Herwerden, *Lexicon*<sup>2</sup>, s.v. *ἀβάσκαντος*. This list does not claim to be exhaustive.

<sup>4</sup> *E.g.* *B.C.H.* xvii (1893) [Herwerden, *op. cit.* s.v. wrongly says 1894] pp. 384 ff., Nos. 81 ff., supplies 15 examples.

<sup>5</sup> *E.g.* Dittenb. *Syll.*<sup>2</sup> 329, l. 52.

<sup>6</sup> This involves our translating *δανείζεσθαι* as though it were *δανείζειν*; *ὑποθέσθαι* is used more than once instead of the active form, e.g. Plut. *Cato Minor*, c. 6.

<sup>7</sup> *Ev. Matth.* 6, 28; 1 *Tim.* 4, 10, etc.

<sup>8</sup> *C.I.G.* 6509.

of its use in inscriptions seem earlier than the 3rd century B.C. and the same is true of non-literary papyri.<sup>1</sup> In the Imperial Age no system seems to have been followed.

L. 23. A flaw in the stone makes the last few letters very uncertain. From both the copy and the squeeze the last three seem to have been ΝΙC.

L. 24. Ἀρωγὴν τοῦ γήρωσ seems certain, though the ΡΩ are hardly recognizable as such on the squeeze. I do not feel confident about καὶ ὄν τορ[ύ]τοις, though the first six letters seem certain.

L. 25. Κυρία, as a vocative, is noteworthy.<sup>2</sup> The sense of the next phrase is obscure, and it is perhaps ungrammatical as well, or possibly contains a fault of engraving. If we had μηδέν(α) the sense might be 'though we have nobody of such an age (as your slave) to offer you (to replace her)'; but μηδενί (which is the reading both from copy and squeeze) seems untranslatable if, as seems natural, we make σοι dative of the recipient after παρεχόμενοι.

Ll. 29–31. The date is clear, though the ligatured ΗΚΤ was not easy to recognize. It is 212 of the Actian Era, 328 of that of Macedon (*i.e.* A.D. 182). The month Peritios (for the ει is for ι) corresponds to the Attic Gamelion, roughly our January. We may note that Ariagne's brothers wrote their letter in the fourth month of the Macedonian year, but that the official record of the manumission is dated to the second of Panemos, the ninth month of the same year (= A.D. 182).

Ll. 31–33. I cannot restore the name of the writer of the letter. Allusions to illiteracy in inscriptions are rare and interesting,<sup>3</sup> but here again our most instructive parallels are to be found in papyri.<sup>4</sup> Γράμματα ἐπίστασθαι has a literary flavour.<sup>5</sup>

<sup>1</sup> Cf. Meisterhans-Schwyzler, *Grammatik der attischen Inschriften*<sup>3</sup>, p. 169, 3, and note 1416; E. Mayser, *Grammatik der gr. Papyri aus der Ptolemäerzeit*, p. 330, 2, and note 2; representative examples both of βούλωμαι and δύναμαι, Dittenb. *Syll.*<sup>2</sup> 197, l. 25; 213, l. 42; 226, l. 168; 263, l. 8; 356, l. 20; 918, l. 2; 928, l. 66 (ἡδυνήθησαν); 928, l. 84; 929, l. 32; eight of the nine are the imperfect tense, and none later than 100 B.C. <sup>2</sup> See note on ll. 13, 14 above.

<sup>3</sup> Two examples, though not worded like the present stone, relate to illiterate women who manumit slaves at Amphissa in the Imperial Era. They run thus: χειρόγραφον [τοῦ δεινός] ὑπὲρ (τὴν δείνα) . . . παρούσαν καὶ κελεύουσαν γράφειν ὑπὲρ αὐτάν, ἐπεὶ ἔλεγεν αὐτὰ γράμματα μὴ εἰδέναι (*I.G.* ix 1, 318) and the same formula, except that it has ὑπὲρ αὐτὰν γράψαι, in *I.G.* ix 1, 1066 (= Dittenb. *Syll.*<sup>2</sup> 844). They are engraved on the back and front of the same stele, though in different years. Dittenberger says, note 3 *ad loc.*, 'Alibi me nihil eiusmodi legere memini.' Clearly he was not thinking of the evidence from papyri.

<sup>4</sup> Not to multiply instances, cf. ὁ δείνα ἔγραψα ὑπὲρ αὐτοῦ μὴ (εἰδότης) γράμματα, *Oxyrh. Papyri* 275, ll. 42, 3 (= Milligan, *Greek Papyri*, No. 20). Εἰδέναι seems the usual verb.

<sup>5</sup> Cf. Plato, *Legg.* 689 D.

Ll. 34–36. Of the witnesses' names little need be said. Ἐπίκτητος is known at Dium, as is the graecized Valerianus.<sup>1</sup> Λυκῖνος is not found among Demitsas' Macedonian inscriptions.<sup>2</sup> Μάγνιος is new, unless a mis-spelt form of Μαίνιος (= Maenius).<sup>3</sup>

L. 37. The last letter of the word τὰδ. is uncertain. It might possibly be Ε, for though the stone has Ε hitherto, ἔτους clearly begins with Ε, but the space is narrow, and I fail to see any trace of upper or lower cross-bars. Or it might be a ligatured Η, though τὰδη is not attractive. I incline to think it Ι followed by a mark of punctuation, and so write τὰδί.

3. Outside the church of H. Antonios. Marble base. H. .25 ; br. .65 ; th. ca. .55. Letters .02—'03 high.

The date 18 is that of the Macedonian era, *i.e.* 128 B.C. The chief interest of this inscription is the evidence it affords for the worship of the healing divinities at Beroea ; for the ἐνκοιμητήριον dedicated, with the ἐξέδρα, by Marsyas, son of Demetrios, is no doubt a building devoted to the use of the patients hoping for a cure by incubation. We have most probably further evidence of this practice at the same shrine in the votive slab published below (No. 9).

<sup>1</sup> Dem. 170, Ἐπίκτητος (a common name), 178, Οὐαλεριανός.

<sup>2</sup> Examples in Dittenb. *Syll.*<sup>2</sup> (Index I) from Lilaia, Delphi, Athens, and Megalopolis show its wide distribution.

<sup>3</sup> For γ for ι in such syllables cf. κλάγω (= κλαίω), *Paris Papyri* (*Notices et Extraits*, xviii, ii, ed. Brunet de Presle, 1865), No. 51 (= Milligan, *op. cit.* No. 6, l. 15). For γ inserted, cf. Μναγαῖον (= μνααῖον), *Oxyrh. Papyri*, 905 (= Milligan, No. 34), l. 6, and in general, Maysen, *Gramm. der gr. Papyri*, p. 167 f. § 34. In inscriptions, Τραγιανού, Dittenb. *Syll.*<sup>2</sup> 843, l. 8. For the omission of γ, in Attic inscriptions, Meisterhans, *op. cit.* p. 75, 4 ; in papyri, Maysen, *op. cit.* pp. 163 ff. § 33.



ΕΓΓΟΥΣ Η ΚΑΙ  
 ΜΑΡΣΥΑΣ ΔΗΜΗΤΡΙΟΥ  
 ΑΠΟΛΛΩΝΙΑΣ ΚΛΗΠΙΩΝΙΥΓΙΕΙΑΙ  
 ΤΟΞΝΚΟΙΜΗΤΗΡΙΟΝ ΛΙΘΙΝΟΝ  
 ΚΑΙ ΤΗΝ ΠΡΟΤΟΥ ΕΞ ΕΔΡΑΝ  
 ΚΑΤΕΣΚΕΥΑΣΕΝ ΕΚ ΤΟΥ ΙΔΙΟΥ

*Ἔτους η' καὶ ε.*

*Μαρσύας Δημητρίου*

*Ἀπόλλωνι Ἀσεληπιῶι Ἑγείαι*

*τὸ ἐγκοιμητήριον λίθινον*

5 *καὶ τὴν πρὸ τούτου ἐξέδραν*

*κατεσκεύασεν ἐκ τοῦ ἰδί[ου].*

The coupling of Apollo with Asklepios and Hygieia need not surprise us, for the well-known stele from Epidaurus recording a list of cures is headed Θεός. Τύχα [ἀγ]αθά. | [Ἰά]ματα τοῦ Ἀπόλλωνος καὶ τοῦ Ἀσκληπιού.<sup>1</sup> Obvious parallels are furnished by Kalamis' statue of Apollo Ἀλεξίκακος,<sup>2</sup> the temple of Apollo Ἐπικούριος at Bassae, and the legend which makes Asklepios son of Apollo.<sup>3</sup>

For the dedication of buildings in general we have plenty of epigraphical evidence.<sup>4</sup> I can find no other example of ἐγ(ν)κοιμητήριον in an inscription,<sup>5</sup> but the verb ἐγκοιμᾶσθαι frequently denotes incubation. The dedication of ἐξέδραι is common,<sup>6</sup> and would be especially appreciated at a 'Kur-anstalt.' For the practice of incubation in Ancient Greece the evidence is too extensive to quote here.<sup>7</sup> The cult of Asklepios in the northern part of the Greek world is of particular interest in connexion with the legend that it originated at Tricca in Thessaly;<sup>8</sup> in Macedonia it is illustrated by two inscriptions published by Demitsas (No. 257, from Deuriopos, is a dedication of a relief, in honour of Ἀσκληπιὸς Ἰητήρ; 848, from Amphipolis, alludes to a priesthood of Asklepios), and there are several instances in Thasos.<sup>9</sup>

4. Statue-base of marble, found in a tower, now destroyed, near the Konak. H. '21; br. '42; th. '47. In the upper surface is a sinking which measures '22 x '23, and '04 in depth. Letters well-cut and regular, resembling those of No. 3, except that here *alpha* is Α. (See Postscript on p. 165).

<sup>1</sup> Dittenb. *Syll.*<sup>2</sup> 802; cf. his list of previous publications and commentary.

<sup>2</sup> Pausanias i. 3, 4.

<sup>3</sup> *Hymn. Hom.* 15; and, in general, cf. the references collected by Rouse, *Greek Votive Offerings*, pp. 189 ff.; Farnell, *Cults*, iv, 239 ff.

<sup>4</sup> Rouse, *op. cit.* p. 273; for a recently found Thessalian example, *Annals of Archaeology and Anthropology* (Liverpool), iii, p. 159, No. 14.

<sup>5</sup> It is to be distinguished from ἐγκοιμητρον meaning a sheet or counterpane (L. & S. *s.v.*) and its adjective ἐγκοιμητήριος (cf. ἐγκοιμητήριον ὀθόνιον, *Paris Papyri* No. 53, l. 8, Mayser, *op. cit.* p. 450).

<sup>6</sup> Cf. *C.I.G.* 2430; *I.G.* vii, 96; Dittenb. *Syll.*<sup>2</sup> 392.

<sup>7</sup> See Mary Hamilton, *Incubation* [St. Andrews, 1905]; cf. Gruppe, *op. cit.* p. 932, note 6.

<sup>8</sup> Strabo, p. 437; Rouse, *op. cit.* pp. 192 ff.; Farnell, *Cults*, iv, 239.

<sup>9</sup> *I.G.* xii 8, p. 2c8.

Μαρσύας Δημητρίου  
 Λυσανίας Λυσανίου  
 Ἀριστόνους Διονυσίου  
 ἀγορανομήσαντες Ἑρμῆ  
 5 καὶ ὁ γραμματεὺς Λάαν-  
 δρος Ὀλυμπιοδώρου.

The senior dedicator here is no doubt the man who is the donor in the preceding inscription.<sup>1</sup> Ἀριστόνους, though a common name in Thessaly and Thasos, is not to be found to my knowledge in Macedonia. Λάανδρος occurs in Thasos.

This inscription adds yet another to the list of cults known at Beroea.<sup>2</sup> The spelling of the dative with *ει* is not unusual at this date: indeed in Attic inscriptions of the 2nd century B.C. *ει* is commoner than *ηι* in such forms.<sup>3</sup>

5. Outside the mosque of Orta Mekteb Jamisi. Marble base. H. .82; br. .58; th. more than .25. Letters .04.

ΒΣΡΟΙΑΙΟΙ	Βεροιαῖοι
ΔΟΜΙΤΙΑΝΙΟΥ	Δομτίαν Ἰου-
ΛΙΑΝΤΦΛΑΟΥ	λίαν Τ. Φλαου-
ΙΟΥΚΑΙΣΣΕΝΝΙΑ	ίου Κα(σ)εννια-
5 ΝΟΥΣΥΛΑΙΟΥΣ	νοῦ Εὐλαίου
ΓΥΝΑΙΚΑ	γυναῖκα
ΔΙΨΕΠΙΜΕΛΗΤΟΥ	δι' ἐπιμελητοῦ
ΤΙ·ΚΛΑΥΔΙΟΥ	Τι. Κλαυδίου
ΕΥΛΑΙΟΥ	Εὐλαίου.

The irregularity in the lettering is noteworthy, not only A and Α occurring even in the same line, but ζ used for Ε: in l. 4 it is once clearly a mistake for Σ. The evidence of the lady's names shows that this cannot be dated earlier than the Flavian era. Neither *Καισεννιανός* nor *Εὐλαίος*

<sup>1</sup> Though not a very rare name *Μαρσύας* is not common in Macedonia in spite of its local connexions, cf. Hoffmann, *Die Makedonier*, p. 210.

<sup>2</sup> The cult of Hermes in Macedonia is not known to us from any Greek inscription given by Demitsas: that of Mercury is found in Latin inscriptions from Amphipolis, Dem. 895 (if correctly interpreted?), and from Philippi, Dem. 934 (= *C.I.L.* iii, Nos. 633, 14204).

<sup>3</sup> Cf. Meisterhans, *op. cit.* p. 39, § 10.

occurs elsewhere in Macedonia. For the Roman 'gentile' name Caesennius we have plentiful evidence.<sup>1</sup>

6. Outside the Greek girls' school. Statue-base, with remains of lead filling in cuttings on upper surface. H. 1'30; br. 46; th. 50. Letters 03.

ΑΓΑΘΗ ΤΥΧΗ,  
 ΗΣΕΜΝΟΤΑΤΗ ΜΗΤΡΟΠΟΛΙΣ ΗΜΑ  
 ΚΕΔΟΝΙΑΣ ΚΑΙ ΔΙΣΝΕΩΚΟΡΟΣ  
 ΒΕΡΟΙΑ  
 Η ΠΑΤΡΙΣ ΛΟΥΚΙΑΝ  
 ΑΥΡΗΛΙΑΝΗΝ ΑΛΕ  
 ΞΑΝΔΡΑΝ ΘΥΓΑΤΕΡΑ  
 ΛΟΥΚΙΟΥ ΣΑΥΡΗΛΙΑΝΟΥ  
 ΣΩΤΗΡΙΧΟΥ ΑΡΧΙΕΡΑΣΑΜΕ  
 ΝΟΥ ΚΑΙ ΑΡΞΑΝΤΟΣ ΕΝ ΤΩ  
 ΕΤ(Ε)Ι ΤΩ Γ' Ο' Τ' ΙΕΡΑΣΑΜΕΝΗΝ  
 ΘΕΑΣ ΑΡΤΕΜΙΔΟΣ ΑΓΡΟΤΕ  
 ΡΑΣ ΕΝ ΤΩ Ζ' Ο' Τ' ΕΤ(Ε), ΚΑΙ  
 ΠΑΝΤΑ ΤΑ ΚΑΘΑΚΑ ΠΟΙ  
 ΗΣΑΝ ΘΕΟΙΣ ΤΕ ΚΑΙ ΑΝΘΡΩ  
 ΠΟΙΣ ΠΑΡΑ ΤΟΝ ΤΗΣ ΙΕΡΩ  
 ΣΥΝΗΣ ΧΡΟΝΟΝ ΕΥΤΥΧΕΙΤΕ

'Αγαθή Τύχη  
 Ἡ σεμνοτάτη Μητρόπολις τῆς Μα  
 κεδονίας καὶ δις νεωκόρος  
 Βέροια  
 ἡ πατρίς Λουκίαν  
 Αὐρηλιανὴν Ἀλε  
 ξάνδραν θυγατέρα  
 Λουκίου Αὐρηλιανοῦ  
 Σωτηρίχου ἀρχιερασαμέ  
 νου καὶ ἀρξάντος ἐν τῷ  
 ἔτ(ε)ί τῷ γ' Ο' τ' ἱερασαμένην  
 θεᾶς Ἀρτέμιδος Ἀγροτέ  
 ρας ἐν τῷ ζ' Ο' τ' ἔτ(ε), καὶ  
 πάντα τὰ κάθακα ποι  
 ἠσάν θεοῖς τε καὶ ἀνθρώ  
 ποῖς παρὰ τὸν τῆς ἱερω  
 σύνης χρόνον εὐτυχεῖτε.

From this inscription and the following we have new evidence in confirmation of its coins that Beroea styled itself *νεωκόρος* before the middle of the the 3rd century of our era.<sup>2</sup>

The high-priesthood and archonship of Soterichos fall in the year 393 (= A.D. 247), the priesthood of his daughter in 397 (= A.D. 251). For the cult of Artemis Agrotera at Beroea see No. 2, above.

For the curious phrase πάντα τὰ κάθακα ποιεῖν, in ll. 14, 15 we may compare πάντα τὰ καθήκοντα and other forms of this participle. Indeed it seems that κάθακα is an irregular and illiterate form of the neuter plural, formed on the assumption that καθήκον is a noun of the 2nd declension.

7. *Ibid.* Similar base. H. 1'47; br. and th. 50. Letters 02, of similar form to those of No. 6, but with fewer ligatures.

<sup>1</sup> Cicero, *Phil.* xii. 9, 23; Tac. *Ann.* xv. 6 ff.; cf. *Prosop. Imp. Rom.* s.v.

<sup>2</sup> Beroea is called δις νεωκόρος on coins struck for the first celebration of the Ὀλύμπια in 242 A.D. during the reign of Gordian. Similar coins were struck in 244 and 246. The coins are dated by the Actian era, Head, *Hist. Num.*<sup>2</sup> p. 243.

Κατὰ τὸ δόξαν τῆ κρ(ατίστη)  
 βουλῆ καὶ τῷ ἱερωτάτῳ  
 δήμῳ τῆς λαμπρ(οτάτης) Βεροί-  
 αίων Μητροπόλεως  
 5 καὶ β' νεωκόρου, Βετουλη-  
 νὸν Νεικομήδην πρε-  
 σβεύσαντα καὶ σειτω-  
 νήσαντα καὶ εἰρηναρ-  
 χήσαντα Βετουληνὸς  
 10 Νεικομήδης ὁ γραμ-  
 ματοφύλαξ τὸν υἱὸν  
 ἠθῶν τε ἔνεκα καὶ τῆς  
 περὶ τὴν πατρίδα σπου-  
 δῆς τε καὶ εὐνοίας.

Ligatures : l. 2,  $\text{X}$  ; l. 3,  $\text{H}$  ; l. 5, νεωκόρ $\text{X}$  ; l. 9, Βετ $\text{X}$ λην ; l. 12,  $\text{H}$  ;  
 l. 13,  $\text{X}$ .

Another example of the name Vetulenus occurs in a Greek inscription from Olympia,<sup>1</sup> where however the second letter of the name is *iota*. It is interesting to notice that the son of the dedicator had served his city in three several capacities while his father was still alive, and possibly while comparatively young himself. For the provision of corn (*σιτωνία*) there is a large mass of epigraphical evidence,<sup>2</sup> collected in more than one treatise, and noticeably more plentiful from Asia Minor than from the Greek mainland.

For the office of *εἰρηνάρχης* in the eastern part of the Roman Empire see the references given below.<sup>3</sup> This post and that of *γραμματοφύλαξ* are not hitherto known at Beroea.

8. In the church of H. Prokopios. Base. H. ca. '30; br. '80; th. '18. Letters '04, rather worn in first two lines : forms,  $\text{A}\text{X}\text{E}\text{I}$ .

<sup>1</sup> *Olympia v* (*Inchriften*), No. 55, cf. Dittenberger's stemma of the family, *ibid.* p. 525.

<sup>2</sup> See especially Francoise, *Le pain à bon marché et le pain gratuit dans les cités grecques* (*Mélanges Nicole*, 1905); for Athens in the 5th century, cf. Zimmern, *The Greek Commonwealth*, pp. 353 ff. and authorities cited in his notes.

<sup>3</sup> J. Marquardt, *Staatsverwaltung*, i<sup>2</sup>, p. 213; Liebenam, *Städteverwaltung im röm. Kaiserreiche*, p. 358.

Τ[ι]. Κλαύδιος Ἀμιλία[νός]  
καὶ [Κ]λανδία Οὐάκευα τὴν  
θυγατριδὴν ἱερητεύντος  
Γ. Κανολητοῦ Ἀπερος.

Perhaps the *cognomen* in l. 1 should be Α(ι)μιλιανός. The division of the letters in l. 2 seems obvious, but it leaves us without a name for the θυγατριδῆ. For this transliteration of the rare Roman name Vacua there seems to be no parallel, nor can I find another example of -εύντος for -εύοντος in a participle.<sup>1</sup> There is another example, from N.W. Macedonia, of Ἀπερος as genitive of Ἀπερ.<sup>2</sup>

9. In a private house. Marble slab, incomplete on l., with outlines of the soles of two right feet below the inscription. H. 40; br. 30; th. 085. Letters 015, much worn.

ΑΝΤΙΣΤΗΝ  
ΤΗΡΙΑΚΑ  
ΠΙΤΑΓΗΝ

ανε . . . . . ν .  
[? ἐπὶ σω]τηρίαί κα-  
[τ' ἐπ]ιταγήν.



<sup>1</sup> In a Paris papyrus, *op. cit.* No. 50, l. (cf. Mayser, *op. cit.* p. 148) we find πορεύμενον, where an accented *omikron* is lost; in our inscription it is unaccented.

<sup>2</sup> Dem. 218.



## B.—FUNERARY INSCRIPTIONS.

[Anyone who studies the funerary inscriptions of Beroea cannot fail to notice one curious fact. The great majority of them, including of course those published by Demitsas as well as the few here published, are not the grave-reliefs or stelai which are almost universal throughout the countries affected by Hellenic culture, but rather, grave-monuments. These are great bases square in section, about half a metre thick, and often more than a metre high. There is a moulding at the top and bottom and they appear more like the bases for honorary statues<sup>1</sup> than grave-reliefs. Since, so far as we know, this type of monument is not found elsewhere it is probably of local (Macedonian) origin, and in any case does not seem to be Greek. Of the following inscriptions Nos. 12, 13, 18–23, 27, 28, 30, 31 are grave-reliefs and Nos. 14–16, 24–26, 32, 39–44 grave-monuments of this peculiar Beroean type, as also are most of those published by Demitsas, especially those lying in the Jewish cemetery to the south of the town.—A. J. B. W.]

12. In the church of H. Nikolaos. Gable-topped marble grave-stele. H. '70; br. '46: gable and acroteria '17 high. Letters '02.

Σ Ε Υ Θ Η Σ / Ι Κ Ν Υ Σ Ι Ο Υ Σεύθης Διονυσίου  
 Η Θ Ο Σ Σ Ι Τ Α Λ Κ Ο Υ 'Ηθος Σιτάλκου.

Dates apparently from the 2nd century B.C.

It is interesting to find the Thracian names Σεύθης and Σιτάλκης at Beroea. For 'Ηθος compare 'Ηθαρος, Hoffmann, *op. cit.* p. 149.

13. In a private house. Grave-stele, which it was forbidden to copy or measure. Version from memory. Letters of 2nd century B.C. about '02.

ΙΩΙΛΟΣΑΛΕΞΑΝΔΡΟΥ	Ζώϊλος 'Αλεξάνδρου·
ΓΛΑΥΚΙΝΝΩΓΛΥΚΙΝΝΩ	Γλαυκίννω Γλ(α?)υκίννω
ΙΠΠΟΚΡΑΤΟΥΣΑΛΕΞΑΝΔΡΟΥ	'Ιπποκράτους· 'Αλεξάνδρου.

Presumably the names in lines 2 and 3 are to be read downwards and not across. Γλαυκίννω and Γλυκίννω are both possible names.<sup>2</sup>

<sup>1</sup> *E.g.* *B.S.A.* xv, p. 88, Fig. 1.

<sup>2</sup> Γλαύκινα is known, but not Γλαυκίννω, and for Γλυκίννω cf. the feminine name Γλύκινα from near Thessalonica, Dem. 689 (2nd century B.C.); at Larissa, *I.G.* ix 2, 1347, cf. Bechtel-Fick, *Personennamen*, p. 86.



14. From the Byzantine wall to the E. of the town. Grave-monument of rough local limestone. H. '90; br. '47; th. '50. Letters, slightly apicated, '03.

ΠΟ ΗΛΙΟΣΚΑΙ	Πό(πλιος)"Ηλιος και
ΔΑΦΝΙΣΤΟΝΥΙ	Δάφνις τὸν υί-
ΟΝΚΑΙΠΟ ΗΛΙ	ὸν και Πό(πλιος)"Ηλι-
ΟΣΤΟΝΑΔΕΛ	ος τὸν ἀδελ-
5 ΦΟΝ.	φόν.

The name "Ηλιος is found at Thessalonica.<sup>1</sup> Δάφνις is not rare.<sup>2</sup>

15. In a Tekke. Grave-monument. H. 1'05; br. '41; th. '22.

ΕΛΕΝΟΣ	"Ελενος
ΤΗΕΙΔΙΑΘΥ	τῇ εἰδίᾳ θυ-
ΓΑΤΡΙΦΙΛΩ	γατρὶ Φιλω-
ΤΣΡΑΜΝΙΑΣ	τέρᾳ μνίας
5 ΧΑΡΙΝ	χάριν.

"Ελενος is not apparently found elsewhere in Macedonia, though not a rare name.<sup>3</sup> Φιλωτέρα is found frequently. The spelling of εἰδίᾳ for ἰδίᾳ, and μνίας, is a good double example of the interchange of ι and ει, which prevailed throughout the Imperial Age.

16. In the house of a Cadi. Grave-monument. H. 1'25; br. '60; th. '56. Letters, '035.

ΛΟΠΕΙΝΑΛΟΥΠΕΡΚΩ	Λοπεῖνα Λουπέρκω
ΜΝΕΙΑΣ ΧΑΡΙΝ	μνείας χάριν.

The first name, in which the Π is certain, must stand for the Latin Lupina, unless we take it to be a mason's error for ΓΓ (*i.e.* Longina).

17. At a spring beside the cotton-mill on a hill behind the town: found over a grave containing two skeletons. Long stone slab, which has

<sup>1</sup> Dem. 374, l. 9 *ad fin.*

<sup>2</sup> *E.g.* Kaibel, *Epigr. Gr.* 557.

<sup>3</sup> *E.g.* Dittenb. *O.G.I.* 148, 181 (referring to the same man, at Alexandria); in Boeotia, *I.G.* vii, 1777, col. ii, l. 22; at Athens in the Imperial Age, 13 times, cf. *I.G.* iii, 2, Index.

been cut away on r. or else was originally joined to another slab; possibly once part of a sarcophagus. H. '80; br. 1'33; th. '18. Letters '10, beginning '50 from l. edge, apicated and rather elaborate.

ΠΟΤΑΜΩ	Ποτάμω[ν - -
ΝΟΥ ΚΑΙ	νου καὶ - - -
ΣΙΔΩΝΙΟΥ	Σιδωνίου [ἐαυτοῖς]
ΖΩ	ζῶ[ντες.]

The name Ποτάμων is found once in Demitsas' Macedonian inscriptions<sup>1</sup>; Σιδώνιος apparently does not occur in this region.

18. In a Turkish house. Grave-altar, once containing two busts in a frame, of which that to r. is alone preserved.<sup>2</sup> H. '54; br. '58; max. thickness '16. Letters '03.

ΛΥΚΚΗΙΑ ///	Λυκκία [τὸν δεῖνα]
Η ///	ἦ[ρωα (?).]

No letters are lost on the left. Restoration quite uncertain.

19. In a Turkish house. Gable-topped grave-relief ['late and bad,' A. J. B. W.]. H. '97; br. '58; th. '07. Letters '015.

*In Pediment.*

Horse. Altar and  
Snake.

Man. Woman. Man.  
All standing.

First line of inscription ΦΙΛΑΚΑΙΙΑΡΟCΘΑΝΗΡΑΥΤΗCΑΝΘΟΝΤΟΝΕΑΥΤΗC

Boy. Man. Man. Woman  
All standing. seated.

Second line of inscription ΑΔΕΛΦΟΝΘΗΡΩΑ

Φίλα καὶ Ἰλαρος ὁ ἀνὴρ αὐτῆς Ἄνθον τὸν ἐαυτῆς | ἀδελφὸν ἦρωα.

None of these names is rare. Ἄνθος occurs in Thasos,<sup>3</sup> though not apparently in Macedonia.

<sup>1</sup> Dem. 53 (= 216); it is common elsewhere.

<sup>2</sup> ['Female bust of fair style, and of Neronian or Flavian date. It is a fragment of a typically Roman monument like Altmann, *Röm. Grabaltäre*, p. 201, Figs. 159, 160. Cf. No. 29 below.—A. J. B. W.]

<sup>3</sup> Dem. 1245 (1275 is the same stone, republished).

20. In a Turkish house. Gable-topped marble grave-relief.<sup>1</sup> H. '64 ; br. '74. Letters '03.

Hand.	Lady seated, to r.	Boy standing.	Man, holding sickle and stick, standing.	Hand.
			Tree.	

ΔΗΜΗΤΡΙΑΑΜΜΙΑΝΩΤΩΙΔΙ  
 ΨΑΝΔΡΕΙ ΜΝΕΙ ΑC ΧΑ ΠΙΝ

Δημητρία Ἀμμιανῶ τῶ ἰδί-  
 ω ἀνδρὲι μνείας χάριν.

The chief feature of interest is the raised and outstretched hands at the top of the plain *antae* at each side of the relief, which also occur in No. 30 below. The number of grave-stones so decorated is not very numerous,<sup>2</sup> and none seem to be known hitherto from Macedonia.

21. In the same house. Grave-relief, with female (?) figure *en face*, much worn and damaged. H. '38 ; br. '33. Letters '03.

ΦΙΛΑ//////////

Φίλα - - -

The inscription is cut in the field of the relief, to each side of the figure, but nothing is legible after the first four letters.

22. In the house of a Greek watchmaker. Gable-topped stele. H. '52 ; br. '77. Letters '05, large and clumsy.

5     
 

Δ	Α	Ι	Λ	Ι	Ω
Ο	Ρ	Ε	Σ	Τ	
Δ	Η	Σ	Υ	Ν	Θ
Ε	Ι	Α			
Δ	Τ	Ω	Ν	Ο	Ν
Ω	Ν				
Μ	Ν	Ι	Α	Ι	Σ
Χ	Α	Ρ	Ι	Ν	

Αἰλίῳ  
 Ὀρέστῃ  
 ἢ συνήθεια  
 τῶν ὄνων  
 μνίας χάριν.

I know of no exact parallel to the 'asses' (or dunces'?) club,<sup>3</sup> for this must be the meaning of the phrase in ll. 3, 4. It might be a familiar abbreviation for a guild of donkey drivers, *ὀνηλάται*.<sup>3</sup> *Συνήθεια* occurs at Thessalonika in the sense of guild.<sup>4</sup>

<sup>1</sup> [Late and bad, 3rd cent. after Christ.—A. J. B. W.]

<sup>2</sup> See the lists given by Wilhelm, *Jahreshefte*, iv, *Beiblatt*, pp. 16 f.; *Beiträge zur gr. Inschriftenkunde*, pp. 200 f., 320.

<sup>3</sup> Poland, *Gr. Vereinswesen*, p. 120.

<sup>4</sup> Poland, *op. cit.* p. 52.

23. In a Greek house near the church of H. Kerykos. Gable-topped marble grave-relief, much worn. H. '54; br. '58. Letters '02.

Woman (?) Man. Man. Boy. Man. Woman. Woman.  
seated to r. All standing.

ΟΤΟΤΡΙΟΣΞΕΝΥΛΛΗΤΗΔΙΔΙΛΓΥΝ 'Ο(σ?)τότριος Ξενύλλη τῇ ἰδίᾳ γυν-  
//////////ΛΕΧΑΡΙΝ [αὐκὴ μνεῖ]ας χάριν.

As 'Οτότριος seems perhaps a more likely name than 'Οστότριος, we must suppose the apparent ligature to be a mistake for Τ. For Macedonian names beginning thus there are parallels to be found.<sup>1</sup> For the name Ξενύλλα cf. Ξένυλλος at Athens<sup>2</sup> and Ξενυλλίς in Boeotia.<sup>3</sup>

24. In a Vlach house. Grave-monument, broken on l. H. '71; br. '55; Letters '04, but in last line '025.

ΚΚΕΥΗ	- - Παρα]σκευή
ΝΚΑΙΤΟΣ	- - - ον καὶ το
ΙΑΡΤΕΜΙΔΩΡΑΝ	- - 'Αρτεμιδώραν
ΣΕΝΕΚΤΩΝΙΔΙΩΝ	[ἐποίη]σεν ἐκ τῶν ἰδίων
5 ΑΙΠΑΡΑΣΚΕΥΗΧΑΙΡΕΚΑΙΣΥ	[κ]αὶ Παρασκευή, χαίρε καὶ σύ.

Paraskeue clearly erected this stone to several deceased relatives, and on her own death l. 5 was added in smaller letters by another hand.

25. *Ibid.* Grave-monument. H. 1'02; br. '45; th. '46. Letters '05, slightly damaged in a few places.

ΤΙΦΛΑΒΙ	Τί. Φλάβι-
ΟCΟΝΗCΙ	ος 'Ονήσι-
ΜΟCΚΑΛ	μος Καλ-
ΛΕΑΝΤΟΝ	λέαν τὸν
5 ΦΙΛΟΝΜ	φίλον μ-
ΝΗΜΗC	νήμηc
ΧΑΡΙΝ	χάριν
ΗΡΩΑ	ἥρωα.

<sup>1</sup> *E.g.* 'Ορευδανός, a title of Apollo in the neighbourhood of Derriopos, Dem. 277; he compares (*l. c.*) (Γ)οιττόσυρος the Scythian title of Apollo, Hdt. iv. 59, *C.I.G.* 6013 (Hesychius is the authority for the spelling with a *gamma*, Hdt. and the inscription spell it without).

<sup>2</sup> *I.G.* i, 433 (= Dittenb. *Syll.*<sup>2</sup> 9), l. 60.

<sup>3</sup> *I.G.* vii, 1285.

**Καλλέας**, though not a rare name,<sup>1</sup> apparently is not found elsewhere in Macedonian inscriptions.

26. Found in tower by Konak (with No. 4 above). Grave-monument with scene in relief. H. '97; br. '35; th. '35. Letters '02.

ΜΕΛΑΝΙΠΩΤΩΚΕΚΑΥ  
ΜΑΤΙΑΛΕΞΑΝΔΡΑ

Man, in 'bathing- Woman  
drawers' and hold- seated l.  
ing spear in both on throne.  
hands, advancing  
to r.

Μελανίπ(π)ῶ τῷ κὲ Καύ-  
ματι Ἀλεξάνδρα,

ΕΤΩΝ ΙΗ

ἑτῶν ἰη' (= 18).

The name *Μελάνιππος* occurs frequently,<sup>2</sup> though not in Macedonian inscriptions. If *Καύμα* is a name, no other instance of it seems to be known in Greece or Macedonia.

27. In the church of H. Georgios. Gable-topped grave-relief. H '52; br. '38. Letters '02.

Man. Girl. Boy. Woman,  
All standing. seated to l.

ΛΟΓΙ ΝΟΣΛΟΓΙ  
ΤΩ ΤΕΚΝΩ  
ΜΝΕΙΑΣ ΧΑΡΙΝ

Λογίνος Λογί[νῶ ?]  
τῷ τέκνῳ  
μνείας χάριν.

This seems the simplest possible form of writing Longinus in Greek. Perhaps the letters **ΝΩ** were omitted by an oversight of the engraver. Mr. Wace points out that the stele is apparently complete, and the style 'very late and bad.'

28. Over a spring near the church of H. Photine. Grave-relief. H. ca. '20; br. *ditto*. Letters '02.

Rider to r.  
Boar.

ΠΑΡΑΜΟΝΑ

Παραμόνα.

<sup>1</sup> It is of course not nearly so common as *Καλλίας*: e.g. in Dittenb. *Syll.*<sup>2</sup> Index i, it occurs twice, to about forty examples of the other.

<sup>2</sup> At Nicaea, *C.I.G.* 3765 (= Kaibel, *Epigr. Gr.* 350); in Boeotia, *I.G.* vii, 376, 1745, 1749.

The name of the deceased is presumably missing, *Παραμόνα* being the creator of the stele. A somewhat similar relief from Edessa is described by Demitsas,<sup>1</sup> but the type is common.

29. In a Turkish house. Grave-altar,<sup>2</sup> of four busts in a row, alternately (from l.) male and female. H. '50; br. '62. Letters '02, cut on upper frame of relief, which is broken on r.

ΛΑΜΙΣΦΞΙΚΕΙ////////

Λάμις Νεικει - - -

Λάμις is presumably for the rare name Λάμιος, which is known in Aetolia.<sup>3</sup> The next sign is an ornamental stop, and the next name, a feminine one, is uncertain.

30. In the floor of the church of Panagia Chaviara.<sup>4</sup> Gable-topped grave-stele. In the pediment are two hands, as in No. 20 above. On the *antae* enclosing the inscribed panel are to l. a torch (or five-pronged fork with a long handle(?)), to r. a trident.

Φ ΛΑΜΜΕΑΤΗ Ο Τ Ο Π Ρ Ι Ν Ζ Ω Ε Ι  
 Μ ° Ε Π Ρ Ω Τ Ο Ε Π Α Λ Ο Ο Ρ Η Τ Ι Α Ρ Ι Ω Ν  
 Π Κ Ε Κ Π Α Ι Δ Ο Σ Α Λ Ι Π Τ Ο Ε Ν Θ Α  
 Δ Ε Κ Ε Ι Μ Ε Π Α Ρ Ο Δ Ε Ι Τ Α Θ Η Σ Κ Ω Ο Υ  
 5 Χ Υ Π Ο Λ Ν Τ Ι Π Α Λ Ο Υ Α Λ Λ Α Υ Π Ο Β Ι Α  
 Ε Π Τ Α Σ Τ Ε Φ Λ Ν Ω Θ Ε Ι Σ Η Τ Τ Ω Μ Ε  
 Ο Υ Χ Υ Π Ο Α Ν Τ Ι Δ Ι Κ Ο Υ Α Λ Λ Α Υ Π Ο Β Ι Α Σ  
 Ε Ρ Μ Ι Ο Ν Η Φ Λ Μ Μ Ε Α Τ Η Τ Ω Π Ρ Ι Ν  
 Ζ Ω Ε Ι Μ Ω Α Ν Δ Ρ Ι Ε Κ Τ Ω Ν Α Υ Τ Ε  
 10 Μ Ν Ι Α Σ Χ Α Ρ Ι Ν Ε Α Ν Δ Ε Τ Ι Σ Τ Α Υ  
 Τ Η Ν Τ Η Ν Ε Θ Η Λ Ι Δ Λ Κ Α Τ Α  
 Ε Τ Ρ Ε Ψ Η Η Κ Α Κ Ο Ν Τ Ι Π Ο Ι Η Σ Η  
 Δ Ω Ε Ι Ε Ι Σ Τ Ο Τ Α Μ Ι Ο Ν \* Β Φ

Φλαμμεάτης ὁ τὸ πρὶν Ζώσι-  
 μος πρῶτος πάλος ρητταρίων  
 π κ ἐκ παιδὸς ἄλιπτος ἐνθά-  
 δε κείμε παροδεῖτα· θνήσκω οὐ-  
 5 χ ὑπὸ ἀντιπάλου ἀλλὰ ὑπὸ βία[s, ?]  
 ἐπτα στεφανωθείς ἠττώμε  
 οὐχ ὑπὸ ἀντιδίκου ἀλλὰ ὑπὸ βίας.  
 Ἐρμιόνη Φλαμμεάτη τῷ πρὶν  
 Ζωσίμῳ ἀνδρὶ ἐκ τῶν ἐαυτῆς  
 10 μνίας χάριν, ἐὰν δέ τις ταύ-  
 την τὴν στηλίδα κατα-  
 στρέψῃ ἢ κακὸν τι ποιήσῃ  
 δώσει εἰς τὸ ταμίον (δην.) βφ' (2500)

This ranks in interest with the two well-known gladiators' epitaphs from Nicaea.<sup>5</sup> Such memorials are far from rare, and are frequently

<sup>1</sup> No. 9, the rider is accompanied by a dog which attacks a bear or wild boar, near the latter is a snake. By a coincidence one of the dedicators of this grave-relief also is called *Παραμόνα*.

<sup>2</sup> A monument like No. 18, *q.v.*; found together with Nos. 4, 26, and 34.

<sup>3</sup> Dittenb. *O. G. I.* 234, *Syll.* 2 924.

<sup>4</sup> The church is so called because of the following local legend. Once upon a time a local merchant in Lent brought to Beroea a large quantity of caviare. Coarse red caviare is a common Lenten food amongst members of the Orthodox church. To his surprise he could sell none and was faced with ruin. In his despair he prayed to the Virgin and vowed to build her a church if he sold all his stock of caviare. He sold it and built the church which in memory of the vow is called 'Our Lady of Caviare.'

<sup>5</sup> *Epigr. Gr.* 350, 351.

metrical.<sup>1</sup> From Macedonia we have the curiously faulty epigram of Victor Skeuas,<sup>2</sup> and in addition a dedication to a Spartan *Secutor*<sup>3</sup>; perhaps an inscription from Edessa<sup>4</sup> relates to some branch of the same occupation.

The sentiment in ll. 4-7 is obvious and much favoured in stones of this class; the double antithesis seems laboured and ineffective, especially if the second part of it bears with it the metaphor from the law-courts. 'I am slain not by a rival in the arena but by Fate; I am beaten not by a rival in the law-court but by Fate,' strikes us as a woeful anti-climax.

L. 1. For gladiators adopting a fighting name several of the inscriptions mentioned afford parallels; *Φλαμμεάτης* seems hitherto unknown.<sup>5</sup>

L. 2. For *πρῶτος πάλος ῥητιαρίων*, 'first string Retiarius,' cf. *ῥητιάρην δεύτερον πάλον* in *Epigr. Gr.* 350.

L. 3. *Ἀλιπτος* is for *ἄλειπτος*, a favourite word with athletes.<sup>6</sup> The significance of ΠΚ at the beginning of the line is not clear.

L. 8. The name *Ἐρμόνη* is found in another inscription of Beroea,<sup>7</sup> also at Dium,<sup>8</sup> and see No. 34.

L. 11. *Στηλῆς* is a rare variant for *στηλή* in inscriptions.<sup>9</sup>

L. 13. The fine for violation is not unusually high for Macedonian grave inscriptions.<sup>10</sup>

<sup>1</sup> *Op. cit.* 290, 291 (from Tralles).

<sup>2</sup> *Op. cit.* 529 (= Dem. 512), beginning *Βίκτωρ Σκευᾶς ἐνθάδε κείμει, πατρὶς δέ μου Θεσσαλονίκη.*

<sup>3</sup> Dem. 536, though his copy is very unsatisfactory.

<sup>4</sup> Dem. 16, where the deceased describes himself as *πυκτεύσας*, but is figured on a relief holding a spear. In another Greek epitaph of a *retiarius*, from Amasia in Cappadocia, *I.G. ad res Rom. perl.* iii, 1,438, we have *πυκτεύσας ἑλ[η]πτος*. In ll. 8, 9, the editors, following Cumont who first published it (*Festschrift zu Otto Hirschfeld*, 1903, p. 273), read *Δουμασκιῶν ἰδίων*. This should surely be *Δόμνα (ΕΚΤΩΝ) ἐκ τῶν ἰδίων*.

<sup>5</sup> It is evidently of Roman origin, cf. Flamma, etc.

<sup>6</sup> Cf. *C.I.G.* 5909, 5912-15, 6883, 6884.

<sup>7</sup> *Epigr. Gr.* 526 (= Dem. 74). <sup>8</sup> Dem. 183.

<sup>9</sup> It occurs in *Epigr. Gr.* 425, and *I.G.* ix 2, 924.

<sup>10</sup> 12,000 denarii is the fine on two inscriptions, *Epigr. Gr.* 520 (= Dem. 401) at Thessalonica, and Dem. 740 at Socha (= Ossa?) between Thessalonica and the Strymon. 5,500 at the former place, Dem. 417; 5,000, frequently (Dem. 409, 410, 419, 420, 447, 475, 476). Of similar formulæ from Beroea none is preserved in full. Dem. 83 has *χίλια πεντακόσια* (? 2,500 or 1,500), in Dem. 89 the sum is lost, in Dem. 103 *ΧΙΛΙΑC* (1,000 or more?). In general cf. Reinach, *Traité*, pp. 429 ff.; Hirschfeld's essay on this subject in *Königsberger Hist.-Phil. Studien*, i, 1887, I have been unfortunately unable to consult. Arkwright, *Penalties in Lycian Epitaphs. J.H.S.* xxxi (1911), pp. 269 ff. is illuminating, not merely for local examples.

31. In a Jewish house. Gable of a grave-stele. H. '18; br. '28. Letters '02. The pediment is filled with a relief representing a horse to l. with a dog below; on the moulding below is

HPWA

"Hρωα.

32. Outside the church of H. Antonios. Lower half of a grave-monument originally made in two blocks. H. '64; br. '65; th. '40. Letters '04.

Woman standing.	Altar.	Youth riding l.	Woman seated l.
--------------------	--------	--------------------	--------------------

ΜΙΟΝΕΑΥΤΩΝΗΡΩΑ

[Οί δείνα τὸν δείνα]

[? τὸν] υἱὸν ἑαυτῶν ἤρωα.

Injury to the stone somewhat spoils the effect of this careful but florid lettering. A as well as H seems to have had a curly cross-bar, and the curved upright stroke of the latter seems intentional.

33. In the foundations of a tower in the Byzantine wall beside the Konak. Grave-monument. Letters '07.

Ἄγιος Τρα-  
τανὸς Αὐρη-  
λία Ζωσίμη  
τῇ ἑαυτοῦ  
5 γυναικί.

In l. 3 MH.

34. In the foundations of the ruined tower, where Nos. 4, 26, and 29 were found. Grave-monument, with two reliefs, of which the upper represents a woman and child, the lower two children. Letters '015-'02 Damaged on left. (See also the Postscript, p. 165.)

ΕΩΝΤΟΝΙΛΥΚΖ  
ΜΙΟΝΗΤΗΓΛΥΚΥΤΑΤΗ  
ΝΒΙΩΜΝΙΑΣΧΑΡΙΝ

??

[Ἐρ]μίονη τῇ γλυκυτάτῃ  
[συ]νβίω μνίας χάριν.



Apparently only two letters are missing on the left. I can make nothing of l. 1, unless it were conceivably [M. 'A]γτόνις (= 'Αντώνιος) Λυκά[ς]. 'Ερμόνη is a name known already at Beroea.<sup>1</sup>

## C.—INSCRIPTIONS PREVIOUSLY PUBLISHED.

The following ten inscriptions were recopied, and in several cases the texts have been materially improved.

35 (= Dem. 56). In the church of H. Photida, in the pavement. In spite of Mr. Wace's deciphering a few more words and several letters in this long and much worn inscription, it seems hardly worth while to transcribe the text in full. The chief additions and improvements are :

- L. 1 (above l. 1 of Dem.), *ad fin.*, !ΛΓΛΙΟΣ.  
 Ll. 3, 4, read 'Αναξήμ(?ν)ωρ Θεοδώρου Λαοδικεύς | [πα]ίδας δόλιχον.  
 L. 6, [ἄνδρ]ας δόλιχον.  
 L. 8, [παίδ]ας [στάδιον ?].  
 Ll. 9, 10, - ρατο - - αο - - ΙΛΞ · ΣΤΗΣ | - - ιπ · π · η - - .  
 Ll. 11, 12, - ΛΟ - - αβ · λογουν · ηραν · τ - - | - σ · ι · ι · αρ · τας.  
 L. 13, Πο · ε - - νωνος 'Α[λεξαν]δρεύ[ς].  
 Ll. 15, 16, Κοπρ - - ηωνος - - - | [παί]δας - - .  
 Ll. 17, 18, Ποσιδώ[νιος] - - ενου 'Αλεξανδρεύ[ς] | παί[δ]α[ς] πυγ[μήν].  
 L. 19, Λάκων [Κασ]σ[ά]νδρου (or ['Αλε]ξ[ά]νδρου) Διωπ(or ν ?)ωρεύς.  
 L. 21, - - ΛΛ - - ιου - 'Α[β]νδηνός.  
 L. 23, *ad fin.* εύς.  
 L. 25, Διων - - - α - - .  
 L. 27, - π - - - ['Α]λεξ[αν]δ[ρ]εύς.  
 L. 31, 'Αγ - - - .  
 L. 33, - νι - - - .  
 L. 36, *ad fin.* ρπ · λο.  
 L. 39, *ad fin.* δα . .  
 L. 40, towards the end, ι.  
 L. 43, *ad fin.* ρεύς.  
 L. 44, *ad fin.* ρεύς.  
 L. 45, *ad fin.* εύς.  
 L. 47, Ξαν - - .  
 L. 48, *ad init.* · ΑΙΙ.

<sup>1</sup> See above, No. 30, l. 8. A different version of l. 1 is given below in the Postscript.

- L. 50, A - - - δρρ - - [Α]λεξαν[δ]ρεὺς ΑΓΓΕΝΗΡ ((?) ἀγενείους *vel sim.*).  
 L. 51, Ἄπ - - - πτολεμ].  
 L. 53, *ad fin.* βοσασ . . β.  
 L. 54, Ἄλ - - - πανκρατιαστίας.  
 L. 55, Πολ . λω - - ν - [Ἄλεξα]νδ[ρεὺ]ς<sup>1</sup> Λεωνίδ[ας(?)].  
 L. 56, Δ - - - ενη . . Στράτων - - .  
 L. 57, - - - εσ - - ασεριλ - - . (Dem. εσσ . μας Ἔρμυδος).  
 L. 58, Ἄλεξανδρεὺς - - - [Θ]εσσα[λ]ονικεὺς. (Dem. Ἄλεξανδρεὺς  
 [Διο]νυσίου . . Πογυ Θεσσαλονικεὺς.)  
 L. 59, Στράτων [Στράτ]ωνος [Α]λεξανδρεὺς. (Dem. ΝΑΤΩΝ κ.τ.λ.,  
 with no other letters missing.)

In the lines omitted there is either nothing on the stone or nothing to add to Demitsas' copy.

36 (= Dem. 57). In the floor of the Church of Kyra Gianna.

	α.	β.	γ.
	Ολ. Λειβιανός·		
	Ἰούλιος Λεονᾶς·		
	Ἀν[τί]γονος Γαῖου·		
	Διονύ[σι]ος Γαῖου·		
5	Ἀλέξανδρος Λεύκονος·	Πε. Λεον[τᾶς]·	- - ΙΑ - - - -
	Ἀγαθήμερος Ἀλεξάνδρου·	Πε. Ἀκοῦτος·	Ἰού. Ἐπτάχης·(?)
	Ἀλέξανδρος Τραλίου·	Πό. Λεοντόλυκος(?)	Ἰού. Ἐπαφρᾶς·
	Σόσσιος Θεαγένους·	Πό. Πρόσδεκτος·	Ἰού. Λυσίας·
	Ἀίλιανός Ροῦφος·	Πό. Λύκος·	Ἰού. Λύκος·
10	Ξενο[κριτο]ς Ἀρ[τέ?]μωνος·	Πε. Λύκος·	Ἰού. Ἑρμείας·
	Αὐ - - - - - λιος·	Πε. Παρμενίων·	Ἰού. Φαῖδρος·
	Αἴ . - - - - - ος·	Ῥοπίλ. Μάριος·(?)	Ἰού. Εὐτύχος·
	Αἴ . - - - - - γας·	Σύμφορος Εὐκρίου·	Ἰού. Παρμ[ε]νίδη[ς]·
	- - - - - ς·	Σέργιος Δημήτριος·	Ἰού. Ὑγεινός·
15	- - - - -	Φλ. Δρακᾶς·	Ἰού. Κοϊντιανός·
	- - - - -	Φλ. Ἡρακλᾶς·	Ἰού. Ἐπίγονος·
	- - - - - ου·	Τιτιανός Ζώσιμος·	Πε. Ἀσκληπιᾶς·
	- - - - - ου·	Διονύσιος Ἀγοραίου·	Πομ. Φαυστίων·
	- - - - - ου·	Κλο. Τέρπνος·	Πό. Τρύφων·

<sup>1</sup> Perhaps Ποσιδά[νιος - . ενου] as in l. 17.

20	----- ----- ς 'Ιού. Σέπτουμος· 'Ιού. Εύτυχής· 'Ιού. Θησεύς·	Πατέρ. Σεκοῦνδος· Φλ. Λυκαρίων· Λού. Σάτιος(?) Πό. Κλέαρχος· Σωτηρίχου·	Πατ. Ζωίλος· Πό. Λάλος· Αἴλ. Σύμμαχος· Πό. Νείκων· 'Ιού. Κλείτος·
25	'Ιού. Ζωίλος· Κλ. --- ς· 'Ιού. --- Λικί(ννιος) --- ος·	Μόσχος Ζωίλου· Φίλος Ν Φιλοτρᾶς· 'Ιού. Πρωτογένης· Αὔρηλιος Ἴκαρος· Εἴκαρος Φιλώτου· Λυκολέων Ἀλεξάνδρου·	vacat.

It is not worth citing all the points where this copy differs from Demitsas, but the principal alterations are indicated in the note below.<sup>1</sup> Demitsas fails to realize the meaning of the abbreviated *praenomina*. Note also that the alignment of coll. *a* and *b* is not exact, as twenty-six

<sup>1</sup> *a*. l. 1, ΟΛΛΑΚΙΒΙΑΝΩΣ, W. ; l. 2, (?) Δεόν[τ]ας ; ll. 3, 4, Dem. transposes ; l. 5, *ad fin.* ΟΚΣ, W. ; ΟΝ, Dem. ; l. 7, (?) Τρα(ν)ου ; l. 10, Dem. makes nothing certain, except ΑΡΕΜΝΟC where W. has ΑΡΙΜΩΣ perhaps Ἀρ[τρί]μωνος (?).

*b*. (numbering as in col. 1), l. 7, ΛΕΟΝΤΟΛΥΚΩΣ, Dem. which I adopt ; ΛΕΟΝΟΚΚΩΣ, W. ; l. 8, ΤΡΩΣ, Dem. ΤΡΩΣ, W. ; l. 10, ΛΥΧΟC, Dem. ; l. 12, ΡΟΠΙΛΟΜΑΡΝΩΣ, Dem. : Ῥοπίλ(ιος) = Rupilius is almost certain, so W. ; l. 15, ΦΛΥΔΡΑΚΑC, Dem., which he transcribes Ἀνδρακᾶς : the third sign is clearly a stop ; l. 18, νυσι are ligatured ; Dem. has ΝΥΣΟC ; l. 22, ΛΟΥΚΑΤΙΟC, Dem., which he transcribes Λουκάτιος ; W. reads ΛΟΥΚΑΤΙΟC, and presumably ΛΟΥ is a *praenomen* ; l. 25, ΦΙΛΟΣΕΝΦΙΛΟΤΡΑΙ, Dem. ; W. as in text ; I cannot elucidate the ligatured symbol as it stands, but might it be for ΑΕ = ἀπε(λεύθερος) as e.g. Α, etc. in Argive and other inscriptions, Walter, *Jahresh.* xiv, *Beiblatt*, p. 143, No. iv ; Baunack, *Philologus*, lxi, p. 4, 62 ; or for νέος or νεώτερος ; l. 28, Dem. and W. both read ΑΥΡΗΝΟC (ΩΣ, W.), but this must be for Αὔρηλιος ; l. 30, ΛΥΚΟΑCΩΝ, Dem. : ΛΥΚΟΛCΩΝ, W. ; Λυκολέων seems much more likely, especially in view of the almost certain Δεοντόλυκος above, l. 7.

*c*. l. 6, ΕΠΤΑΧΡCΟ, Dem. : ΕΠΤΑΧΙC, W. ; l. 8, ΛΥCΤΑC, Dem., which he transcribes Λύκτας ; l. 13, Dem. represents the Ε above the line ; W. omits ; l. 17, Ἀσκλήτας Dem. not seeing the ΗΠ to be ligatured ; l. 18, ΦΑΥCΠΟΝ, Dem. ; ΦΑΥCΠΩΝ, W. ; clearly a mistake of the engraver's for ΦΑΥCΤΙΩΝ ; l. 22, ΑΙΑΥCΙΜΙΑΧΟC, Dem. ΑΙΑ·CΥΜΜΑΧΟC, W.

The other points of difference are chiefly concerned with simple ligatures.

lines in the latter occupy the space of twenty-four in the former; col. *c* is however aligned with col. *b*. Demitsas gives thirty lines to col. *a*.

37 (= Dem. 58). In l. 1 Dem. reads *Καλπούρνιον*, W. omits the *Υ*; in *Πίσωνα* the *Ξ* is no longer, and the *Ω* only partly, visible. In l. 2 Dem. has *ΒΕΡΟΙΑΟΙ*, W. *ΒΕΡΟΙΑΙΟΙ*. In l. 3 Dem. has *ΕΑΥΤΩΝ*, W. *ΕΑΤΩΝ*. This should surely be attributed not to the L. Calpurnius Piso a contemporary of Augustus and Tiberius, as Demitsas states, but to the proconsul of Macedonia of 57/6 B.C.

38 (= Dem. 60). In l. 1 Dem. reads *ΤΟΝΔΙΛΒΙΟΥ*, which he transcribes *Τὸν Δίλβιον*, instead of *Τὸν διὰ βίου | ἀρχιερέα κ.τ.λ.* His copy resolves the ligatures etc., which are numerous: the most striking is the writing of *Θ* inside the *Ο* in l. 4, in *ἀγωνοθέτην*. In ll. 6 ff. we must read *Κ. Ποπίλλιον | Πύθωνα Βάστος<sup>1</sup> Τάρυς Ἀλέξανδρος κ.τ.λ.*, i.e. three sons of Ἀπολλόδωρος; after *Πύθωνα* is an ornament read by Dem. as *Ξ*, which led him to restore the first name as *Σεβαστός*. C. Popillius Pytho may be a relative of, rather than identical with, the *Κ. Ποπίλλιος Πρόκλος Ἰουμινανὸς Πύθων* of Dem. 51, where he is honoured with a statue as gymnasiarch by *Ἡ βουλὴ καὶ οἱ νέοι*.

The following grave-monuments have been published previously.

39 (= Dem. 95). L. 3, Dem.'s copy omits the *Χ* of *χάρυν*. This is now in a Tekke, with No. 15 above.

40 (= Dem. 97).

41 (= Dem. 98). In l. 3 the *μν* of *μνήμης* are ligatured. Below is a relief of a man on horseback to r., and before him a standing female figure: the whole stone is much weathered.

42 (= Dem. 100).

43 (= Struck, *Ath. Mitt.* xxvi (1902), p. 315, No. 33). L. 1 should read *ΜΑΣΙΜΩΚΜΑΣΙΜΑ*.

44 (= Struck, *op. cit.* No. 34).

ARTHUR M. WOODWARD.

<sup>1</sup> For the name cf. No. 2 above.

## POSTSCRIPT.

I regret that I failed to see, before it was too late for insertion in the proper place, that two (Nos. 4 and 34) of the inscriptions described here as unpublished were already known. They have been published by Hatzfeld, in a recent volume of the *B.C.H.*,<sup>1</sup> but without comment, except on the difficulty of reading the latter stone. Thus this paper contains thirty-two unpublished, and twelve re-published inscriptions.

A. M. W.

<sup>1</sup> *B.C.H.* 1911, pp. 238 f., Nos. 6, 7. In l. 1 of the latter (No. 34 here) Hatzfeld reads, doubtfully, ΝΙΟ . . . Ὀλυμπ . . . Perhaps the name is Ἄν(τ)ώνιον Ὀλύμπ[ιον.]

## INSCRIPTIONS FROM UPPER MACEDONIA.

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UPPER Macedonia<sup>1</sup> is the upland country which lies at the back of Mount Bermius as regards Macedonia properly so-called, which is the Campagna between the hills and the sea at the head of the Gulf of Salonica. Beyond the hills Olympus, Bermius, and their continuation northward, lies Upper Macedonia<sup>2</sup> about the valleys of the Haliakmon and Erigon and round the lakes of Ochrida, Presba and Kastoria. This was the fourth region of Macedonia according to the Roman division after the defeat of Perseus at Pydna in 168.<sup>3</sup> This region according to Livy included Eordaia, Lynkestis, Pelagonia, Stymphalis (sic), Elimiotis and Atintania. The country to-day falls naturally by its geographical features into several divisions and these correspond, as far as our information goes, with the ancient districts. Going westwards from Edessa along the line of the Via Egnatia, near the lakes, of which Lake Ostrovo is the chief, the traveller first reaches some hilly country which forms the watershed between the valleys of the Erigon and Haliakmon. To the north in the valley of the Erigon is a long, narrow plain stretching from Florina past Monastir to just beyond Krushevo and Prilep. The northern part of this plain is itself separated from the rest by a low range of hills about the villages of Tsepik and Topoltsani.

West of Monastir a natural pass leads to Resna and the basin of Lake Presba. Further west again, the road makes its way over rough mountain

<sup>1</sup> The inscriptions here published were found by Mr. Wace during his journeys in Macedonia in 1911 and 1912, on the first of which he was accompanied by Mr. M. S. Thompson. Mr. Wace is responsible for the copies of the inscriptions and the topographical notes, Mr. Woodward for the editing of the inscriptions.

<sup>2</sup> Cf. Strabo, p. 326 *fin.*

<sup>3</sup> Livy, xlv, 29, 30.

country to Lake Ochrida and the sources of the Black Drin. To the south of these two lakes is an extension of the upland plateau around the mere of Malik and including the plains of Kortsha and Biklishta. South-east of the latter town another low range separates the Malik basin, which drains into the Adriatic, from the sources of the Haliakmon. The whole of the upper course of this river may be divided into two parts, one extending from Hrupishta to the monastery of Zabourdo near Diskata, the other reaching from Zabourdo to the defile between Velventos and Verria (Berœa). The basin of the Lake of Kastoria may be considered as attached to the first division, which may be called the Upper Haliakmon proper. This is separated from the second division, or Middle Haliakmon, by the steep limestone chain which is the southern continuation of the Peristeri *massif* between Monastir and Resna. Comparatively few passes cross this range from east to west, one from Florina by Pisoderi to Biklishta and Kastoria, a second from Kailar by Vlaho-Klisura to Kastoria, and a third by Kaliani and Sphiltsi to Grevena. These natural divisions of the country seem to agree, as far as we can tell at present, with the six ancient districts of Upper Macedonia:—Eordaia, Lynkestis, Dassaretia, Orestis, Parauaia with Tymphaia, and Eleimiotis. But the whole of the region is still archaeologically a *terra incognita* and since the existing literary sources give us little information about its geography we must look to archaeology for the solution of some of the existing problems. Now that its political status has been changed only recently it would be premature to attempt here any full discussion of its ancient geography, since we may expect fresh discoveries. Consequently the present paper only contains, in addition to a few unpublished inscriptions, some notes dealing generally with the ancient geography, in the hope that they may be some use to future explorers of this fascinating country.

#### *Eordaia*.<sup>1</sup>

This is apparently the hilly country about Lake Ostrovo, because Strabo<sup>2</sup> in his account of the Via Egnatia states that after passing Lychnidus (Ochrida), Herakleia (Monastir) and Lynkestis it went through Eordaia and then reached Edessa (Vodena). Therefore Eordaia must be the district immediately to the west of Vodena. This also agrees with the

<sup>1</sup> Cf. Pauly-Wissowa, *s.v.*

<sup>2</sup> P. 323.

account given by Livy<sup>1</sup> of the raid of Sulpicius in 200 B.C. After a successful engagement in Dassaretia he followed Philip to Styberra in the Erigon valley, which we know was in Derriopos, and there is epigraphical evidence to place Derriopos<sup>2</sup> in the northern part of the plain of Monastir. Thence the consul fought his way into Eordaia and so into Eleimeia. Next he made his way westwards probably by the pass of Vlaho-Klisura, into Orestis where he won over Celetrum (Kastoria). Finally after taking Pelion,<sup>3</sup> probably near the Vlach village of Pliasa between Kastoria and Biklishta, he retired to Apollonia. From Eordaia come the important finds made in an Early Iron Age Cemetery at Pateli<sup>4</sup> on Lake Ostrovo, and a few unimportant inscriptions.<sup>5</sup>

*Lynkestis, Pelagonia, Derriopos.*<sup>6</sup>

This territory was probably the whole plain extending from Prilep and Krushevo to Florina, the basin of the upper Erigon. Its principal town was Herakleia Lyukestis, later known as Pelagonia. This is identified with Monastir, which itself is not an ancient site. The older mosques which are locally supposed to have been churches before the Turkish conquest, all seem on examination to date from after that event, for none show any signs of having been churches. All seem to have been built as mosques and the style of the construction resembles some Turkish buildings at Uskub.<sup>7</sup> In one of them there are built in a few architectural fragments which appear to be of late Roman date. The real ancient site is a hill<sup>8</sup> a little to the south-east of the town between the Greek cemetery and the brook below the village of Bukovo. Here there are the ruins of Byzantine fortifications and other traces of antiquity. The torso of a late Roman statue has recently been found built into a field wall, and several of the inscriptions published by Demitsas come from here,<sup>9</sup> as also No. 1 of those published below, which now lies in the Greek cemetery. Of the others here published two (Nos. 2 and 3) have been found in Monastir

<sup>1</sup> xxxi, 39, 40.

<sup>2</sup> Demitsas, *Μακεδονία* (cited below as Demitsas) No. 258 from Tsepik; Strabo, p. 327.

<sup>3</sup> Cf. Arrian i. 5, 5.

<sup>4</sup> Wace-Thompson, *Prehistoric Thessaly*, pp. 216, 255, 259.

<sup>5</sup> Mordtmann, *Ath. Mitt.* 1893, pp. 418 ff., Nos. 8 ff.

<sup>6</sup> See Pauly-Wissowa, s.n. *Deuriopos*; Heuzey, *Mission de Macédoine*, pp. 314 ff.

<sup>7</sup> Evans, *Archæologia*, Vol. xlix, p. 147.

<sup>8</sup> Demitsas, p. 251.

<sup>9</sup> *E.g.* Nos. 236, 237, 239-241, 245.



and so may be attributed to Herakleia Lynkestis. The rest form part of the collection in the Greek Gymnasium and may come from Monastir or anywhere in the neighbourhood. Of those published by Demitsas several come from Vashareitsa,<sup>1</sup> Mogila,<sup>2</sup> Noshpal,<sup>3</sup> Trikrst,<sup>4</sup> Tsepik,<sup>5</sup> Bela Tsarkva,<sup>6</sup> Krushiani,<sup>7</sup> and Krivogastani.<sup>8</sup> Since one of the inscriptions from Tsepik mentions Derriopos, and these villages, in which so many inscriptions have been found, are so close to one another, we should probably look for the sites of one at least of the towns of Derriopos in their neighbourhood. Prilep and its neighbourhood have yielded many inscriptions,<sup>9</sup> and other sites where antiquities are reported are Dobrushevo between Monastir and Prilep, and Kleshnitsa to the north of Florina.

1. In the Greek cemetery near which it was found. Marble block, apparently a statue base. H. '93; br. '70; th. '76. Letters '05.

ΕΣΤΙΑΒΟΥΛΛΙΑ	Ἔστια Βουλαία
ΚΥΛΙΑΝΙΚΟΠΟΛΙΣ	[Ἀ]κυλία Νικόπολις
ΘΥΓΑΤΗΡΠΟΛΕΩΣ	θυγάτηρ πόλεως.

For the origin of the cult of Ἔστια Βουλαία see Dittenberger's note<sup>10</sup> on a Pergamene inscription. For Ἀκυλία = Aquillia there are numerous parallels.<sup>11</sup> Νικόπολις is known in Macedonia both as a male and female name.<sup>12</sup>

For θυγάτηρ πόλεως see Liebenam's comments and examples.<sup>13</sup>

2. In the Turkish normal school, found at Monastir. Grave stele, incomplete on left. Letters '03, those in l. 6, '06.

ΙΑΙΟΝ ἸΑΓΓΤΡΙΟΝ	... Α]ἰλιον \[Μ?]ἔστριον
ΙΝΟΚΚΕΝΟΝΤ'ΟΤΟC	... ιως κενουτουτος
//ΙΑΥΚΕΙΛΙΗΕΔΙΑΙΠΟΥ	... ΙΑΥ κὲ τὰ πεδία ιπου
ΙΙΚΕΑΜΜΙΑΝΝΟΝ	... κὲ Ἀμμιαννὸν
5 ΝΙΔΙΩΝΜΝΕΙΑCΧΑΡΙΝ	ἐκ τῶ]ν ἰδίων μνείας χάριν.
ΕΤΟΥC Α9Τ	ἔτους ἀ' ϟ' τ'

<sup>1</sup> No. 229.    <sup>2</sup> Nos. 252, 253.    <sup>3</sup> No. 254.    <sup>4</sup> No. 257.    <sup>5</sup> Nos. 258, 259, 260.  
<sup>6</sup> Nos. 261-265, 267, 271.    <sup>7</sup> No. 268.    <sup>8</sup> Nos. 269, 270.    <sup>9</sup> Demitsas, pp. 310 ff.  
<sup>10</sup> *O. G. I.* 332, l. 49 (note 33); cf. *Syll.*<sup>2</sup> 600, l. 65 (at Erythrae: 65 is wrongly given as 15 in Index iv 1 *ad loc.*); Gruppe (in Iwan-Müller), p. 1405, note 1.  
<sup>11</sup> Ἀκυλ(λ)ία, at Ancyra, *C. I. G.* 4030 (= *O. G. I.* 545, *q. v.*); Demitsas, p. 258, No. 218.  
<sup>12</sup> Male, Demitsas, p. 64, No. 53; female, Demitsas, p. 467, No. 419.  
<sup>13</sup> *Städteverwaltung*, pp. 292, 553; cf. *B. S. A.* xvii, p. 246.

Nothing is certain in the first three lines, though *κὲ τὰ πεδία* (= *καὶ τὰ παιδία*) may well be right. The name *Μέστριος* (if rightly restored) is known<sup>1</sup> already. The year 391 = A.D. 245.

3. *Ibid.*; found at Monastir. Grave monument cut down into a column-base. Letters 'O25.

ΙΥ·ΛΟΥΚΙΑ·ΑΛΦΙΔΙΩ	Ἴν(λία?) Λουκία Ἀλφιδίῳ
ΙΟΥΛΙΑΝΩΤΩΑΝΔΙ//	Ἰουλιανῶ τῶ ἀνδρ[ι]
///Τ//ΛΤΙΩΤΗΛΕΓΙΩΝΑΙ//	[σ]τ[ρα]τιώτῃ λεγιωναρ[ίῳ]
ΕΓΙΩΝΟΣ·Δ·ΕΛΕΥΤ//	[λ]εγιῶνος δ' τελευτ[ήσ]-
5 ΑΝΤΙΚΑΙΕΑΥΤΗΚΕΤ	αντι καὶ ἑαυτῇ κὲ τ[ῶ τ]-
ΕΚΝΩΑΤΡΟΙΚΙΩ	ἔκνω Ἀτροικίῳ
ΖΩCΙΝΜΗΜΗCΧΑΡΙΝ	ζῶσιν μνήμης χάριν.

For Alfidius in its Greek form cf. Demitsas, p. 264, No. 234, ll. 22, 29. Julianus seems to have been a common name in Macedonia during all the Imperial period,<sup>2</sup> so that this gives us no certain clue to the date of the inscription. The ligatures and the spelling *κὲ* for *καὶ* suggest a later date than the first century. The IVth legion in question is presumably IV. Flavia,<sup>3</sup> though I know of no other Macedonian inscription relating to a soldier from it. From Dium there is a Latin inscription<sup>4</sup> relating to a *veteranus Leg. iv Sc[ythi]c[ae]*, but it does not follow that he was of Macedonian origin. *Ἀτροίκιος*, if correct, is a new name in Macedonia,<sup>5</sup> nor can I trace it elsewhere.

4. Built into the door of the Bulgarian church. Letters 'O3.

L. MARIVS PEREGRI  
NVS ANN LX  
L. MARIVS CELER AN XXX

<sup>1</sup> Demitsas, p. 307, No. 263.

<sup>2</sup> P. 32, No. 1 is dated to A.D. 180; p. 64, No. 53 (= p. 234, No. 216) to A.D. 143 (?); p. 666, No. 821 to A.D. 39; the other examples are not dated.

<sup>3</sup> Mr. G. L. Cheesman has kindly furnished this identification: during the second century it was stationed at Singidunum, and naturally recruited in the Danubian provinces.

<sup>4</sup> Heuzey, *Mission de Mactdoine*, p. 269, No. 110 (= Dem. 190, = *C.I.L.* iii. 592). It dates apparently from the reign of Caracalla.

<sup>5</sup> Is it possibly *Ἀπρίκιος*?

The following inscriptions are all in the collection in the Greek Gymnasium.

5. Grave stele. H. 1'63; br. '84; th. '13. Letters '035.

ΕΥΔΑΙΜΩΝΣΕΚΟΥΝΔΟΣΜΑΚΑΡΩ	Εὐδαίμων Σεκοῦνδος μάκαρ ὦ
ΦΙΛΟΣΕΝΘΑΚΑΤΟΙΚΕΙ	φίλος ἔνθα κατοικεῖ.
ΠΟΛΕΜΩΝΙΑΝΗΗΡΑ	Πολεμωνιανή Ἡρά-
ΚΛΕΙΑΗΣΥΜΒΙΟΣΑΥΤΟΥ	κλεια ἡ σύμβιος αὐτοῦ
ΕΠΟΙΕΙΜΝΗΜΗΣΧΑΡΙΝ	ἐποίει μνήμης χάριν.

Ll. 1 and 2 seem intended for a hexameter. Πολεμωνιανή does not occur in the inscriptions collected by Demitsas. Of the use of μάκαρ of the dead in epitaphs we have numerous examples.<sup>1</sup>

6. Ditto. H. 1'45; br. '65; th. '14. Letters '025.

ΙΣΤΟΡΙΑΓΡΑΠΤΩΚΑΙΚΑΛΗ	Ἱστορία Γράπτω καὶ Κάλῃ
ΤΟΙΕΓΟΝΕΥΣΙΜΝΗΜΗΣ	τοῖς γονεῦσι μνήμης
ΧΑΡΙΝ	χάριν.

None of these names are new. Ἱστορία is known for instance at Athens and in Thessaly.<sup>2</sup> Γράπτος likewise, (at Athens, *I.G.* iii 1, 1093, 1162, in Thessaly, *I.G.* ix 2, 881.)<sup>3</sup>

7. Ditto. H. '85; br. '57; th. '14. Letters '04-045.

ΣΗΒΙΑΜΑΞΙΜΕΙ	Σήβια Μαξίμ[ας?] ἐτ-
ΩΝ·ΜΕ·ΚΕΛΕΡΜΑΞΙ	ὦν μέ·Κέλερ Μαξι-
ΜΑCΕΤΩΝ·ΛΕ·ΟΚΤΑ	μας ἐτῶν λέ·'Οκτά-
ΒΙCΜΑΞΙΜΑCΕΤΩΝΙC	βις Μαξίμας ἐτῶν ιέ(?)

Sevius occurs twice in Demitsas,<sup>4</sup> but not Sevia. This emendation of the first line seems necessary as there are no letters missing; presumably the engraver omitted ΑC. Ὀκτάβις for Octavius needs little comment.<sup>5</sup> Possibly the last two signs represent a badly-cut K.

<sup>1</sup> Kaibel, *Epigrammata Graeca*, 141, 546, *add.* 97a, *add.* 288a.

<sup>2</sup> *I.G.* iii 2, 3224; *I.G.* ix 2, 759.

<sup>3</sup> Cf. the feminine name Γράπτῃ: Demitsas, *op. cit.* p. 37, No. 5, l. 13 (=Kaibel, *op. cit.* 517), p. 493, No. 484; Kaibel, *op. cit.* 369; *C.I.G.* 3846z,<sup>1</sup> *add.* 3857g.

<sup>4</sup> Nos. 234, 335, as Σηούιος each time.

<sup>5</sup> For β=Latin *v* cf. Meisterhans, *op. cit.* p. 77, note 666.

8. Votive relief. H. '28; br. '27; th. '06. Letters '01.

	ΔΙΟΝ		
	ΥΣΙΣ		
	ΚΑΙΑΑ		
	ΛΚΙΑΠ		Διον   ύσις   καὶ Λα   λκία Π    αρα-
5	ΑΡΑΜΟΝ	ΟΥ	μόνου   τῆ θαιῶ   κατὰ χρη   -
	ΤΗΘΑΙΩ		ματισ   μόν.
	ΚΑΤΑΧ	ΡΗ	
	ΜΑΤΙΣ		
	ΜΟΝ		

Θαιῶ for θεῶ is an interesting case of the interchange of ε and αι in later Greek.<sup>1</sup> Λαλκία I cannot find elsewhere, but there is no reason to doubt the reading.

The inscription is on the left hand part of the stone, and on the right is a male figure in relief. The figure, probably Poseidon, stands *en face* with the left foot raised and resting on the prow of a ship. In the left hand which is uplifted he holds a fish, and with his right he leans on a trident, the staff of which separates the last two letters of lines 5 and 7 from the rest of the inscription. The style of the relief is late and bad. Demitsas<sup>2</sup> mentions a votive relief to Poseidon at Monastir; this may perhaps be the same.

9. Fragment, complete below only. H. '67; br. '45; th. '10. Letters '06.

ΛΑΥΔΙΑ	-- Κ]λαυδία --
ΑΥΤΗΤΗΝΑ	-- έ]αυτῆ τῆν λ[ηνὸν? --
ΟΥ - ΒΠΤΕΤΟΥΣ	-- τ]οῦ β' π' τ' ἔτους --
ΚΑΤΑΘΕΣΘ	-- καταθέσθ[αι --

Clearly from a sarcophagus,<sup>1</sup> with instructions in the last line that no other body is to be interred in it: we might restore *e.g.* καὶ μηδὲν ἄλλο πτώμα καταθέσθαι. The date 382 = A.D. 236.

<sup>1</sup> For Athenian examples cf. Meisterhans, *op. cit.* p. 34, note 185; for the misspelling of short and familiar words papyri give us plentiful evidence: *e.g.* *Berliner Griechische Urkunden*, iii 846 (= Milligan, *Greek Papyri*, No. 37) contains *inter alia* ἀγῶ, σαι (= ἐγῶ, σε) ἀγραψα, αἰκίστην ἡμαίραν, αἰμαντῶ.

<sup>2</sup> *Op. cit.* p. 263. There is a votive relief to Poseidon and Amphitrite at Siatista, *Ath. Mitt.* 1902, p. 316, No. 39; cf. below p. 184, note 4.

10. Grave stele. H. '61; br. '50; th. '12. Letters '03.

ΕΥΡΩΠΗΛΕΙ	Εὐρώπη λει-
ΒΕΡΤΑΘΜΑ	βέρτα Μα-
ΝΙΚΟΥΤΚΛΗ	νικοῡ Τ. Κλη-
ΜΕΝΤΙΑΝΝΩ	μέντι ἀνώ-
5 ΙΟΥΝΟΥΕΙ	ρουν οὐει-
ΓΕΝΤΙ	γέντι.

Clearly an attempt to write Latin in Greek characters, the last two words being *annorum viginti*. Inscriptions so written have been found in considerable numbers in Italy,<sup>2</sup> but I know of no other from Greece or Macedonia. We may note that *ī* is written *ει* in *liberta* and *viginti*, but the second vowel of the latter word is represented by *ε*.<sup>3</sup> The name *Εὐρώπη* is known at Thessalonica<sup>4</sup> and is not rare elsewhere.

11. Slab. of marble. Ht. '35; br. '42; th. '10. Letters '025.

ΧΟΝ//////////ΑΙΡΟΠΟΙCΙ  
 ΘΝΜΟΥCΕCΙΝΑΡΙCΤΟΝ  
 ΕΥCΕΝCΕΜΝΗΠΟΛΛΟ  
 ΦΥΡΟΜΕΝΗΩΠΑΡΕΔΙ  
 ΟCΥΙΟCΕΧΩΝΠΑΙΔΙΙ  
 ΝΘΟCΙΑΡΥΤΕCΕΜΝΟC  
 ΟΜΕΝΟCΓΕΝΕΤΗΝ

[<sup>ν</sup>Εξο]χον [ἡρωῶν(?) χ]αιρόποισί[τε τ]ὸν Μούσεσιν ἄριστον  
 [Κήδ]ευσεν Σέμνη πολλ' ὀ[λο]φυρομένη.  
 Ωπα(σ)ε Διὸς υἱὸς ἔχων παιδῆ[[ιον ἄ]ρθος.  
 "Ἴδρυτε Σέμνος [τηκ ?]όμενος γενέτην.

Apparently not more than four letters are lost from the left of the stone. The restoration is quite conjectural. The first 'hexameter' cannot have less than seven feet, as there must be a syllable lost from the beginning of l. 2. Perhaps we should make *ἄριστον* the name of the dead

<sup>1</sup> Δ[ηρόν] in l. 2 is uncertain but not unlikely; it is common in this sense at Thessalonica, cf. Demitsas, Nos. 402, 409, 410, 426, 427, 468, 475, 506, etc.

<sup>2</sup> *E.g. I.G.* xiv, 1781, which contains λιθερτίνος, and ends ἐντι διον τρίτον Νῶναις, and cf. *op. cit.* Index xvii, *ad fin.*; the most striking performance is perhaps κομπαρουνηρονντ (comparaverunt!) 1989, l. 5. For Greek inscriptions in Latin characters, *ibid.* 1612, 1705, etc.

<sup>3</sup> It is easy to find parallels, *e.g.* Τέβριος, Dittenb. *O.G.I.* 660, l. 1.

<sup>4</sup> Dem. 455; in Thasos *I.G.* xii 8, 611 (=Dem. p. 857, No. 2).

man, though Σέμνος in l. 4 seems more likely, as his mother's name was evidently Σέμνη<sup>1</sup>: in this case read [φίλ]ον in l. 2. The fact that it is full of tags reminiscent of other epigrams,<sup>2</sup> and the spelling [χ]αιρόποισι for χαρόποισι, Μούσεσιν, ἴδρυτε, preclude us from valuing it highly as a composition.<sup>3</sup>

In the last line we clearly want a participle, which should be active meaning 'causing grief to'; the middle is used *metri gratia*.

12. Marble statue-base (or sarcophagus?). H. '20; br. '49; depth '40. Letters '03.

ΗΖΩCΙΜΩΤΩΑΝ	- -η Ζωσίμω τῶ ἀν-
∨ΙΙΚΑΙΕΑΥΤΗΖΩCΑ	[δ]ρὶ καὶ ἐαυτῇ ζῶσα
ΜΝΗΜΗCΧΑΡΙΝ	μνήμης χάριν.

Judging by l. 2 there cannot be more than three letters lost from the beginning of l. 1; thus we might restore e.g. [Νίκ]η, or [Φίλ]η.

The following have been published already:—

13. (= Demitsas, p. 262, No. 228.)

On the side of an Ionic capital of late style; found at Monastir. Even the new copy is beyond restoration, though it improves on the previous one in attributing the letters to their correct lines. Letters given by Demitsas but not by Wace are enclosed in round brackets.

	Α(Υ) . . ΑΝΑΝ(Ο) - - - - (ΕΚΑΤ)ΗΕΔΙΟ
(Π)ΔΙ	ΟΝΟΗΟCΑΟΝΟ(ΜΑΤ)ΙCΥΡΙΝ(ΘΡ)
ΩΝΑ	ΝΕΥΝΙΓΛΧΡΗΙΕΜΨΟΝΖΩ
ΟΥΙΝΕΤ	ΟΝΟΜΕΤΑΤΗΝΚΕΛΕ Υ
5 CΙΝΤΗ	ΘΕΟΥCΩC                    Θ
	(Τ)ΕΡΟCΔΩCΙ                    ΥΤΗΜ
ΤΑΜΙ ΡΙΜ ΥΡ	ΑΝΔC
ΔΕ            CΕ	

In l. 1, Dem. has Ν, Wace N; Dem. has ΗCΔΙΟ, Wace ΗΕΔΙΟ.

In l. 2, Dem. has ΠΑΙΟΝ, Wace ΔΙΟΝ; Dem. ΟΠΟCΑ, Wace ΟΗΟCΑ.

<sup>1</sup> As in a metrical epitaph from near Dium, Kaibel, *Epigr. Gr.* 544.

<sup>2</sup> Cf. Μουσῶν ἕχ' ἔριστος, *op. cit.* 330, l. 1; πολλ' ὀλοφυρ(δ)μενος, *ibid.* 704, l. 3; παιδείην ὤπασε Μούσα, *ibid.* 474, l. 5.

<sup>3</sup> Ὦπαρε I take to be a slip of the engraver for ὤπασε.

The chief difference is that Dem. mis-reads the first letters of l. 5, and puts ΤΗ in l. 6, and ΙΚΚΙΝ (for ΚΙΝ) in l. 7. He also misplaces or omits the right-hand portion of the last three lines, which in any case are difficult to place correctly, not being in line with the lettering at the beginning of the line.

The restoration of ll. 4, 5 shows that practically nothing is lost between the left-hand and main portions of the inscription. But beyond the words *μετὰ τὴν κέλευσιν τῆς θεοῦ* I prefer not to attempt a restoration. If however the copy of Demitsas is trustworthy in l. 1, this may be a dedication to Hekate (possibly of a *πεδίου = παιδίου* - - - *ὀνόματι Σύριν* ?)

14. (= Demitsas, *ibid.*, No. 229). Found at Vashareitsa.

In l. 2 we should no doubt correct Ἀμιάνην to Ἀμίαν τὴν.

15. (= Demitsas, p. 266, No. 235).

The lines are wrongly divided, the stone containing four, not three. Moreover both *omegas* have the same form, ω, not ω and Ω. It reads: Φίλιππος | Πρωτογέγονος | ἐτῶν— |

16. (= Demitsas, p. 275, No. 250). Found at Monastir.

Variations trifling: the top of l. 1 is worn away more than Demitsas indicates, and there is a leaf-ornament before EQ. L. 2, *ad. fin.* MT (= *mat*); l. 3, VIXIT; l. 4, XXIX not XXIX; *ad. fin.* A.

Between Monastir and Ochrida (Lychnidus) the Via Egnatia probably followed more or less the line of the Turkish high road at least as far as Resna. Between the latter town and Monastir, on the line of the road at Srptsi are some Byzantine ruins on a hill above the village, and at Dolentsi a little further to the west is an ancient site. A Latin inscription from this site is in a house in the Vlach village of Gopesh about an hour distant.

17. At Gopesh. Stele, brought from Dolentsi, complete on left only. H. 1·27; br. 24; th. 20. Letters 045.

CONS	<i>Cons</i> - - -
EXQV	<i>exqu</i> - - -
ANNI	<i>anni</i>
DION	<i>Dion</i> - - -
5 NAEV	<i>Naev</i> - - -
ΑΕΜΙΙ	<i>Aemi</i> - - -

NIGE	<i>Nige[r - - -</i>
XVA	<i>xv.A - - -</i>
VIXI	<i>vixi - - -</i>

Perhaps merely funerary.

On the top of the ridge to the west of Gopesh there is a spot called Tsitatc (Lat. *civitatem*) by the Vlachs which is said to be an ancient site. Here, however, there is nothing to be seen on the surface to-day, although walls are reported to exist.

At Resna itself no remains of antiquity were to be found, although Demitsas<sup>1</sup> has several inscriptions from this town. Istok, however, a Vlach village a little to the west of Resna, is said to possess inscriptions and other remains of antiquity, and also is believed locally to have been the birthplace of Justinian.

It is not clear whether the Resna district was in antiquity attached to Lynkestis or Dassaretia, and in the present state of our knowledge no certainty is obtainable.

*Dassaretia.*

This was one of the most important districts of Upper Macedonia and seems to have been inhabited mainly by Illyrians.<sup>2</sup> Philip II. was apparently the first Macedonian king who penetrated into this country as far as Lake Ochrida.<sup>3</sup> Lychnidus, the principal town of the district, stood on the site of the modern Ochrida which occupies a small peninsula jutting out into the north-east corner of the lake. Here the remains of the Byzantine citadel and town walls are still standing in the modern town. Many inscriptions have been found here, and have been collected by Demitsas.<sup>4</sup> The following however seem to be new :—

18. At Ochrida. Grave monument of pink marble, found beside a new house. H. '29; br. '56; th. '23. Letters '025.

ΕΥΤΥΧΙΑΤΩΙΔΙΩ	Εὐτυχία τῷ ἰδίῳ
ΤΕΚΝΩΒΑΥΚΙΔΙΩ	τέκνῳ Βαυκιδίῳ-
ΝΙΚΑΙΚΑΛΛΙΣΤΩ	νι καὶ Καλλίστῳ
ΤΩΑΝΔΡΙΜΝΙΑΣ	τῷ ἀνδρὶ μνίας
5 ΧΑΡΙΝ	χάρι<ι>ν.

<sup>1</sup> *Op. cit.* Nos. 242, 243, 244.

<sup>2</sup> Pauly-Wissowa, *s.n.*; cf. Polyb. v, 108. Rome gave it to Illyria at the end of the second Macedonian War; Livy, xxxiii, 34; Polyb. xviii, 30.

<sup>3</sup> Diod. xvi, 8.

<sup>4</sup> *Op. cit.* Nos. 329 ff.



*Βαυκιδίων* seems hitherto unknown. We may compare *Βαυκίς*, *Βαυκυλίσ* etc. The former, *I.G.* ii 3, 3810; *Βαυκιδεύς*, *I.G.* ii 3, *add.* 1620 *d*; *Βαυκυλίσ*, *I.G.* xiv, 1851 (= *Epigr. Gr.* 576).

19. *Ibid.*, in a street. Base (?), broken on right. H. '50; br. '34; th. '33. Letters '03.

/////// ΔΙΑΝΟ	. Ἀρμιανόν
////// ΝΟΥΒΙΟ	.. ν συβιο --
////// ΤΟΥΕΠΙ	.. του έπι --
ΛΑΛΩΕΚΑ	(κ?) αλώς κα[ι έν-]
5 ΔΟΞΩΕΤΗΡ	δόξως τηρ -- [κατασ-?]
ΤΑΣΑΝΤΑ	τάσαντα --
ΠΡΑΓΜΑΤΕ	πραγματε[υτήν(?)] οῦ -υσάμενον (?)
ΓΑΜΒΡΟΣ	γαμβρός α[ύτου]
ΚΑΙ Η ΘΥΓΑΤΗΡ	καί ή θυγάτηρ
10 ΑΝΗ· ΗΚΙ	* αν.... κ --

Certain restoration seems impossible. In l. 2 *συβιο* may be for *σύμβιος*, or possibly *ευβιο*, *i.e.* the beginning of some name like *Εύβίσιος*. Nor can we be confident as to the restoration of l. 5. L. 10 may perhaps have been *ἀνέθηκαν*, though the traces remaining do not justify this restoration as they stand.

20. *Ibid.*, at the right-hand side of the gate of the town wall, outside. H. '48; br. '74. Letters '05.

ΟΝ//////////	-- ον --
///ΘΥΑΝΔΗ	-- ουανδη --
//////////ΗΝ	--- ην --

This is just possibly a fragment of the stone published by Demitsas<sup>1</sup> as having been found at the same spot; if so these form the remains of the first three lines, the corresponding letters reading in his version ΟΝ|ΟΥΑΝΝΗ|ΩΝ. If it is new, restoration is impossible.

The following have been published previously.

21. *Ibid.*, in the Bulgarian school near the Bulgarian cathedral of St. Clement. (= Demitsas, p. 369, No. 329, = Kaibel, *Epigr. Gr.* 511.)

<sup>1</sup> *Op. cit.* p. 375, No. 338; the two other fragments from this gate (*infra* Nos. 21. 22) seem to have suffered further mutilation since Demitsas published them.

L. 2, Dem. ΗΞΕΝ, Wace ΗΒΕΝ; presumably ΗΚΕΝ (from ἦμι) is right.

L. 3, ἀλδήσκοντες is correctly written.

L. 5, *init.*: Ἀλλὰ με μοῖρ' etc. is correct.

L. 6, read γονῆς not γονῆες.

L. 7, *init.* ΖΗΝΩΙΕ, *i.e.* Ζήνω τε (the τε is really superfluous); *ad fin.* ΟΙΝΕΙΚΟΛΕ. Οἱ must be for μοι, and we require a nominative for the father's name, possibly Νεικολε[όντης], though the metre may here have been strained, *e.g.* by Νεικολε[ων] or Νικολε[ίδας].

L. 8, Wace's τεира[μ]ενοι, if certain, must be due to faulty engraving.

22. *Ibid.* near No. 20. (= Demitsas p. 374, Nos. 336, 337, *vide* No. 20, above.)

Wace has fewer letters than Demitsas in former, and in latter reads

ΛΙΘ	Dem. reads: ΔΙC
ΟC	NC
ΛΙC	ATC
ON	ON

Even if these are correctly attributed to the same inscription, restoration is hopeless.

### *Orestis.*

We have epigraphical evidence for the position of this district from inscription No. 23 below, and from the long inscription at Dranitshevo given by Demitsas.<sup>1</sup> Further, the modern town of Kastoria on the Lake of the same name, has been identified with considerable certainty with the Celetrum of Livy, which later seems to have been called Diocletianopolis.<sup>2</sup> Thus we may assume that Orestis is the basin of the lake of Kastoria. Here we know of three ancient sites. First is Kastoria itself which stands on a peninsula jutting out into the middle of the west side of the lake and is cut off from the mainland by a narrow isthmus still crowned by the ruins of a Byzantine wall. The second is Armenochori, a quarter of an hour north of the Bulgarian town of Hrupishta and between the Kastoria road and the Haliakmon, which has yielded the two inscriptions published below (Nos.

<sup>1</sup> No. 217. This was recopied by Messrs. Wace and Thompson in 1911 and Mr. Woodward hopes to publish this copy, which is more complete than that of Demitsas, in the *Journal of Hellenic Studies*, 1913, pt. 2.

<sup>2</sup> Livy, xxxi, 40; Procopius, *de Aedif.* iv, 3; cf. Pauly-Wissowa, *s.n.*

23, 24), and serves as a quarry for those in need of cut stone. The line of its late Roman wall may still be traced ; and to judge by inscription No. 23 below, it was probably the site of Argos Orestikon.<sup>1</sup> Somewhere between Nestram and Dranitshevo there is probably a third site, possibly at the kastro of Nestram in which is a late Roman grave monument ; to this site we might attribute the inscriptions from Tshuka, Radogozhdi<sup>2</sup> and Dranitshevo. The Orestai joined Rome on the occasion mentioned by Livy in the passage referred to above, and at the end of the war were rewarded with freedom<sup>3</sup> and consequently were not included in the fourth region after the downfall of Perseus.

23. Hrupishta, over the door of the Turkish school. Base, thickly covered with white-wash. H. '27 : br. '55. Letters *ca* '03, carefully cut and spaced.

///Ι·ΚΛΛΥΔΙΩΙΚΑΙΣΑΡΙ	[Νέρων]ι Κλαυδίωι Καίσαρι
///ΑΥΤΟΙΙΣΕΒΑΣΤΩΙ	[Γερμαν(ικῶι)] Αὐτοκρ[άτορι] Σεβαστῶι
///ΤΟΚΟΙΝΟΝΟΡΕΣΤΩΝ	- - - τὸ κοινὸν Ὀρέστων
ΟΣΔΡΑΚΑΤΟΥΑΛΕΞΑΝΔΡΟΙ	[ - - τ]ος Δρακᾶ τοῦ Ἀλεξάνδρου
5 ΛΙΕΠΙΜΕΛΗΘΕΝΤΟΣΤΟΥΕΡ	- - κα]λὶ ἐπιμεληθέντος τοῦ ἔρ-
ΞΤΟΥΝΤΟΣΑΛΕΞΑΝΔΡΟΥ	[γου καὶ νομοθ]ετοῦντος Ἀλεξάνδρου.

Restoration somewhat uncertain ; but from the names in l. 1 our choice is limited to Claudius and Nero. If the stone relates to the former [Τιβερίω]ι must be restored in l. 1. The order of the titles is in any case unusual,<sup>4</sup> but I can find no other explanation of the opening letters of l. 2. Those immediately before the Σ are not very clear, but there is exactly room for ΚΡ.

In l. 3 for τὸ κοινὸν Ὀρέστων<sup>5</sup> see above p. 178. In l. 4 there must be some participle to supply, e.g. δόντος,<sup>6</sup> and in l. 5 perhaps the gap should be filled by reading τοῦ κα[λ]. In l. 6 νομοθ]ετοῦντος accounts most reasonably for the letters preserved at the beginning. Of the name

<sup>1</sup> We owe our knowledge of this site to Sir Arthur Evans who generously placed his notes on Orestis at our disposal. For Argos Orestikon see Pauly-Wissowa, *s.n.*; Appian, *Syr.* x, 63.

<sup>2</sup> Nos. 25 and 26 below.

<sup>3</sup> Livy, xxxiii, 34 ; Polyb. xviii, 30.

<sup>4</sup> It is usually Ν. Κλ. Καίσαρ Σεβ. Γερμ. Αὐτοκρ.

<sup>5</sup> Rather than Ὀρεστών, on the evidence of Ὀρέστοις in the Dranitshevo inscription (Demitsas, *op. cit.* No. 217).

<sup>6</sup> Mr. Wace noted Τ before ΟΣ, though it is not visible on the squeeze, which is unfortunately too much damaged to reproduce ; Bechtel-Fick, *Griechische Personennamen*, pp. 29 f.

Δρακᾶς I know no other instances, though it is no doubt a 'short name' from the same root as Δράκων, etc.<sup>1</sup>

24. *Ibid.* In the garden of an Albanian Bey. Fragment of a sarcophagus. H. '65; br. '27; th. '56. Letters '055.

ΕΡ  
C  
ΚΛΕ  
ΚΛΕΙΤ  
ΚΑΙΔΟ

25. Tshuka (5 hours west of Kastoria.)

In the Church. Gabled grave-stele. H. '59; br. '45. Letters '04. The last line is cut in the border below.

ΜΑΡΚΙΑΝΟ	Μαρκιανὸ[ς]
ΠΡΕΥΡΑΔΟΥ	Πρευράδου
ΤΩΤΗCΑΔΕ	τῶ τῆς ἀδε-
ΛΦΗCΠΕΔΙΩ	λφῆς πεδίω
5 ΔΩΡΟΝΑΝΕ	δῶρον ἀνέ-
ΘΗΚΕΝ	θηκεν.
ΗΡΩCΧΕΡΕ	ἥρωc χέρε.

Πεδίον for παιδίον and χέρε for χάρει may both be paralleled in Macedonia and elsewhere.<sup>2</sup> Πρευράδης (?) is a name hitherto unknown.<sup>3</sup>

26. Radogozhdi ( $\frac{1}{2}$  hour from Tshuka), in the Church. Ll. 1 and 2 in a panel, separated from l. 3 by a female bust, half-length *en face*, now much defaced. Lettering '045--'05.

ΦΙΛΟΤΕΡΑ	Φιλοτέρα
ΙΠΠΟCΤΡΑΤΟΥ	Ἴπποστράτου
(Bust)	
ΗΡΩΕΙCΣΙ	ἠρώειcca.

<sup>1</sup> For such names ending in -ās cf. Kühner-Blass, *Ausführliche Grammatik der gr. Sprache*, i, pp. 493 f.; Mayser, *Gr. der gr. Papyri*, p. 253; Bechtel-Fick, *Griechische Personennamen*, pp. 29 f.

<sup>2</sup> Cf. Demitsas, *op. cit.* p. 141, No. 169 (at Dium), Σέμνη παροδί[τ]ες χέρων, χέρετε παροδίτε (= Σέμνη παροδίταις χάρειν, χάρετε παροδίται !); and see note on No. 4 above.

<sup>3</sup> Cf. Πρευγένης, Paus. iii. 2, 1; vii. 20, 8; and Pape-Benseler, *Wörterbuch*, for names beginning with Πραυ-.

*Parauaia and Tymphaia.*

The latter of these two districts included Aiginion, which we know from epigraphical evidence<sup>1</sup> was near Kalabaka, and also according to Strabo bordered both on Tricca and the sources of the Peneios.<sup>2</sup> Thus it may be considered as the district round Kalabaka reaching as far north as Malakasi and the hills by Velemisti, which form the watershed between the Peneios and Haliakmon valleys. Parauaia was probably the district described above as the Upper Haliakmon. Hitherto most geographers, following Leake,<sup>3</sup> have believed that the Parauaioi from their name must have dwelt by the side of the Aous. But there are several difficulties in the way of accepting this view. Arrian<sup>4</sup> in describing Alexander's march to Pelinnaion (Palaeogardiki) says he passed by Tymphaia and Parauaia, which would not be very intelligible if Parauaia were west of Pindus. Tymphaia and Parauaia are classed together as Macedonian territories ceded to Pyrrhus in 294 B.C.<sup>5</sup> In the year 429 also we find the Parauaioi in close connection with the Orestai.<sup>6</sup> Another reason why geographers have placed Parauaia west of Pindus, was because they believed the Upper Haliakmon to be part of Eleimiotis, and the Serfije district to be part of Pieria. The latter view has been proved impossible by the Latin boundary decree recently found in Northern Perrhaebia.<sup>7</sup> The former, which is based on an alleged resemblance between the modern Velemisti and the ancient Eleimia,<sup>8</sup> deserves as much consideration as any argument founded on the likeness between Macedon and Monmouth. It is of course possible that there may have been a Parauaia west of Pindus along the Aous, and a Paroreia<sup>9</sup> east of Pindus on the Upper Haliakmon. At all events for the present we may take Parauaia to be the Upper Haliakmon basin reaching from Grevena to above Lapsista, bordered on the west by Pindus and on the east by the hills running from Vlaho-Klisura to Zaborou. In this district we know the following ancient sites: (1) at Buboshte three hours

<sup>1</sup> *I.G.* ix 2, No. 329.

<sup>2</sup> P. 327. If the Ion of Strabo (p. 328) is the Mourgani river, then perhaps Oxyneia may be identified with the ruined city at Smolia near the source of the Mourgani.

<sup>3</sup> *Northern Greece*, iv, pp. 115 ff. <sup>4</sup> i. 7, 5.

<sup>5</sup> Plutarch, *Pyrrhus*, 6; the spelling Stympheia seems to be a mistake, cf. Diod. xvii, 57; Livy, xxxi, 40.

<sup>6</sup> Thuc. ii, 80. <sup>7</sup> *B.S.A.* xvii, pp. 193 ff.

<sup>8</sup> Demitsas, p. 218; cf. Heuzey, *Mission de Macédoine*, p. 296; the latter offers no etymological evidence.

<sup>9</sup> Cf. Strabo, pp. 325, 326; Plutarch, *op. cit.*, *loc. cit.*

south of Hrupishta, first noted by Leake,<sup>1</sup> whence come inscriptions Nos. 27-30; (2) at Palaeokastro<sup>2</sup> some two hours south of Siatista, where there are traces of an acropolis; (3) at Tsourchli three hours north of Grevena, where inscriptions Nos. 31-33 have been found, and there are traces of a town at a spot called Arsalia first noted by H. Barth;<sup>3</sup> in the village there are two late marble grave reliefs; (4) on the top of the ridge between the villages of Touzi and Vodensko some hours west of Grevena, where cut stone has been dug up and coins are found. The ruins at the village of Kastro, two and-a-half-hours west of Grevena, are of Byzantine date and seem to have been a small fort. Further the inscription at the monastery of Sisani (No. 34 below), unless transported from a distance, seems to indicate that there is some ancient site in the neighbourhood, although the site called Gradista near Siatista, noted by Leake, seems to be merely mediaeval.<sup>4</sup> Heuzey found near Cholenitsa a battered Roman statue and a much defaced Latin inscription.<sup>5</sup> At Liknades several hours west of Lapsista on a tributary of the Haliakmon, was found the bronze statue of Herakles which is now one of the treasures of the Constantinople Museum.<sup>6</sup> Also near Grevena is a cemetery of the Early Iron Age, in which have been found a bronze torque, a spectacle-fibula, a long bronze pin, like those found with Geometric pottery in Greece, and a triangular bronze pendant decorated with circles, all once in the possession of a Greek jeweller in the town. Careful exploration of the district would probably result in important discoveries.

27. At Buboshte, in a private house. Fragment, complete above only. H. 40; br. 30; th. 10. Letters 07, divided by horizontal lines.

C I M A X	- - Λυ]σίμαχ[ος - -
//ΚΛΕΟΞΕΝ//	- - κλέος ἐν[θάδε κείται(?)
// ΣΙΛΑΝ	- - ωιλαν - -
T I Γ	- - τυγ - -

<sup>1</sup> *Northern Greece*, i, p. 322; he saw a battered statue in this village.

<sup>2</sup> Cf. Leake, *op. cit.* i, pp. 313 ff.

<sup>3</sup> Kiepert, *Formae Orbis Antiqui*, text to Plate xvi. On the hill called Kastro a little to the west of the village, apart from the inscriptions (Nos. 31, 32) the only visible remains are Byzantine.

<sup>4</sup> *Northern Greece*, *loc. cit.*; two inscriptions from Siatista are published by Struck, *Ath. Mitt.*, 1902, p. 316, Nos. 38, 39.

<sup>5</sup> *Mission de Macdoine*, p. 296, *ad fin.*

<sup>6</sup> Demitsas, pp. 240-242, 254-257; *B.C.H.* 1884, Plate xii, pp. 342 ff; *Constantinople, Cat. des Bronzes*, No. 4.

28. *Ibid.*, in village dung-hill. Rectangular limestone block, inscribed on end. H. .47; length 1.26; br. of inscribed end .29. Letters ca. '036-'04.

ΞΟΧΟC	-- ξ]ξοχος --
WNCYΔ	-- ων συ δ --
ΟΙCΠΤΟ	-- οισ πτο --
ΑCΩCΠ	-- ας ὡσπ[ερ? -
5 ΥΡΑΝΩ	-- υρανω --
ΟΕΙC	-- οεις. (vacat)
ΜΑCΕΔΑΙΝ ///	-- μασε δαίμ[ων?]
ΝΑΤΟΙCΔ	? ἀθα]νάτοις δ --

This seems to be but a small fragment of a metrical epitaph, presumably continued on the adjoining blocks of some building of which this stone formed part. The end of l. 6 suggests the ending of a pentameter, but there is no hope of full restoration.

29. *Ibid.*, in a field. Gable-topped grave stele of *poros*, with acroteria, and a rosette in centre of gable. The stone below the gable is surrounded with a border. H. 1.40; br. '64; th. '10. Letters '04.

ΚΛΕΙΤΟCΠΥ	Κλείτος Πύ-
ΡΟΥΗΡΩC	ρου ἥρωc
ΧΑΙΡΕ	χαίρε.

Neither name is rare. Κλείτος is found at Beroea (Dem. 57), Πύρ(ρ)οc at Thessalonica (Demitsas, 410, 411).

30. *Ibid.* In a wall near the spring. Grave stele. H. 1.80; br. .58; th. '10. Letters '045.

ΗΡΑΚΛΕΑΙΑΝΤΙ	'Ηράκλεα<ι> 'Αντι-
ΠΑΤΙΟΥΗΡΩC	πάτρου ἥρωc
ΑΙΡΕ	[χ]αίρε.

Perhaps an error of the engraver for 'Ηράκλεια, though we should have expected ἡρώισσα: or perhaps it is the vocative of 'Ηρακλέα[ς] (? = 'Ηρακλᾶc, cf. Pape-Benseler, *s.n.*). Mr. Wacc regards the I as possibly an accidental scratch.

31. At Tsourchli, in ruins of Church of H. Nikolaos on Kastro hill. Small base of *poros*, with cutting on upper surface. H. '15; br. '45; th. '27. Letters '025.

ΘΕΥΔΑCΙΗΙΚΑ // // // IC  
ΑΠΕΛΕΥΟΞΙΟCΗΡΑ  
ΚΛΕΙΦΙΑΛΙ // // // 'ΟΝ

Θευδᾶς Νεικα...ις  
ἀπελεύθερος Ἡρα-  
κλεῖ φιαλί[σκ]ον.

For the name Θευδᾶς cf. Dittenb. *Syll.*<sup>2</sup> 872 (Hierapolis Phrygiae).<sup>1</sup> The other name is not obvious, but is perhaps a genitive formed in -ιος with the *omikron* omitted.

For another Macedonian dedication by a manumitted slave to Herakles cf. Demitsas, p. 174, No. 207. I restore the last word as *φιαλίσκον* not without hesitation as this form seems unknown, though *φιαλίσκη* occurs<sup>2</sup>; but the remains of an oblique stroke before the *Θ* point to this form rather than the obvious alternative *φιαλίδιον*. This dedication by an *ἀπελεύθερος* suggests the *φιάλαι ἐξελευθερικαί*<sup>3</sup> dedicated at Athens, though we need not suppose that in this remote corner of Macedonia there was any of the elaborate procedure accompanying such dedications at Athens. Nor is it likely that this votive offering was a substitute for the money-payment usual in Thessaly on occasions of manumission.<sup>4</sup>

32. *Ibid.*, in same place as No. 31. Block of *poros*. H. '44; br. '70; th. '27. Letters '025-03. The inscription is cut on a sunk panel, with a raised border '10 high above and below, '14 on l., '18 on r.

ΕΤΟΥC ΚΦ  
ΙΕΡΗΤΕΥΟΝ  
ΤΟCΝΕΙΚΑ  
ΔΟΥΤΟΥ // // H  
5 ΜΗΤ // // IC // // // //  
ΠΕCΚΕΥΑ // // // // Η

Ἐτους κ'φ' (? κ'ρ')  
ἱερητεύον-  
τος Νεικά-  
δου τοῦ [Δ]η-  
μητρίο[υ ἐ]  
πεσκευά[σθ]η.

Mr. Wace felt some doubt as to the antiquity of the inscription on the ground of its suspicious appearance, but there is nothing in the contents to warrant this except the almost incredible date κ'φ' = 520 (= A.D. 374), which

<sup>1</sup> And see the note on the name in No. 23, above. Θευδᾶς is not rare in Asia Minor, cf. Pape-Benseler, *s.n.*

<sup>2</sup> Schol. ap. Ar. *Ran.* 1403.

<sup>3</sup> Cf. Rouse, *Greek Votive Offerings*, p. 234; Tod, *B.S.A.* viii, pp. 197 ff.

<sup>4</sup> See *I.G.* ix. 2, *passim*.



should probably be altered, though  $\kappa\theta$  is impossible in view of the letter forms. I would suggest, in this case,  $\kappa\rho'$  and refer it to the Actian era, in spite of the absence of the word  $\Sigma\epsilon\beta\alpha\sigma\tau\omicron\upsilon$ . If the date  $\kappa\rho'$  were retained this would be one of the latest Macedonian inscriptions dated by the era beginning 146 B.C., and it would fall in the reign of Valentinian I!<sup>1</sup>

33. *Ibid.*, in the village in the church of H. Apostoloi. Block of *poros* much damaged by weathering. H. '44 : br. '55 ; th. '37. Letters '035.

	(Perhaps a line lost)
Κ Α Ι	- - - καὶ -
Λ Γ // Μ Ε Ο	- - Λ Γ μ ε ο - -
Α Μ Ο Σ // // // Μ Η Τ Ρ Ι Ο Υ	- α μ ο ς [Δ η ?] μ η τ ρ ί ο υ
. Κ Α Ι Γ Ν Α Ι Ο Λ // // // Ε Κ Τ //	- καὶ Γ ν α ἰ ο [ ν ?] ἐ κ τ [ ὶ ν ]
5 // // // // Ω Ν Ε Τ Ο Υ Σ	ἰ [ δ ἰ ] ω ν, ἔ τ ο υ ς
Α Τ	ἀ τ'.

In the middle of ll. 2, 3, and 4 is a flaw on the stone, so it is uncertain whether any letters are lost between  $\Gamma$  and  $\text{M}$  in l. 2 ; in l. 3 it is reasonable to supply  $\Delta\eta$  in this gap, perhaps one on either side of the flaw ; in l. 5 apparently no letters are lost except  $\Delta\text{I}$ .

'Ετος ἀτ' = 301, *i.e.* A.D. 155, (unless  $\Sigma\epsilon\beta\alpha\sigma\tau\omicron\upsilon$  has disappeared, in which case the date is A.D. 271).

34. At Sisani, in the church of the monastery. Marble stele. H. '80 ; br. '44 ; letters in ll. 1-10, '03 ; the rest '01 except the last two lines where they are '02. Published by Leake, *Travels in Northern Greece*, i. p. 318 (= *C.I.G. add.* 1957 g, = Demitsas, *op. cit.* p. 64, No. 53, and p. 234, No. 216).

As Demitsas publishes this stone twice, without indicating definitely that he is dealing with the same inscription, with a vast number of discrepancies between his two versions, it seems worth while to publish a better text, with the aid of Mr. Wace's copy, even if only in minuscules.

Ἀλειφούσης τῆς  
πόλεως ὃ ἔτους  
Ϛ Δ ϣ Ϛ ἄρχοντος  
τοῦ γυμνασίου Ϛ

<sup>1</sup> Heuzey, *op. cit.* p. 318, quotes an inscription of A.D. 482 from Thessalonica dated by the Actian Era ; in his inscription from Monastir, p. 317, No. 124, the date can hardly be correctly given, for  $\text{Z}\Xi\Omega$  (866) = A.D. 720 seems out of the question, in view of the lettering.

- 5 Τι. ϝ Κλαυδίου Ἴο<ο>υ-  
 λιανού ϝ ἔφηβαρ-  
 χούντος ϝ Τι. ϝ  
 Κλαυδίου Παρια-  
 νού ἔφηβοι οἱ ὕ- ϝ
- 10 πογεγραμμ(έν)οι  
 Πρόκλος Ἰουλίου, Τίτος Λυκάς,  
 Κλ. Εἰσίωv, Αἴλιος Εὐφρόσυννος,  
 Θεόφιλος Ἀλεξάνδρου,  
 Φλ. Εἰσίδοτος, Τυχικός Κοίντου,
- 15 Λύκος Λουκίου, Μάριος Ποτάμων,  
 Μάξιμος Ἀφρόδειτος,  
 Ἐψίγονος Εὐτάκτου, Στράτων  
 Σίλουαμ[ός?], Ἐγειᾶς, Τερ(ι?)τιανὸς Νεικοπόλεως,<sup>1</sup>  
 Ἰούλιος Σεκοῦνδος, Φίλιππος Μακέδου[ος?],
- 20 Φουδανὸς Ποσειδάωνιος, } Γάϊος Ἀντιπᾶ,<sup>2</sup>  
 Γέμελλος Ἀλεξάνδρου, }  
 Φλ. Σαμβαθίων,  
 Θεόδοτος Θεοδότου.

Letter-forms. In ll. 1-10: ΑΕΜΣΩ; in the rest: ΑΕΜΣΣΩΩ.

Leake transposes ll. 18 and 19 and omits the last three lines. The other variants do not seem to need tabulating. The date is now beyond doubt: 294 = A.D. 148.

### *Eleimiotis.*<sup>3</sup>

This, the last of the six districts of Upper Macedonia, occupied the Middle Haliakmon, an identification which is made certain by a consideration of Perseus' march in 171 B.C.<sup>4</sup> and the Latin boundary inscription already referred to.<sup>5</sup> In this district only two ancient sites are as yet known. One is Aiane,<sup>6</sup> identified by Heuzey (through inscriptions) with

<sup>1</sup> The Ε is in the raised border, the ΩC above the Λ.

<sup>2</sup> The ΠΑ are in the border. For Ἀντιπᾶς cf. *J.G.* iii. 1160 b, l. 2, and the notes on -ās names in Nos. 23, 31 above. For Φουδανός (?), Dem. gives in No. 53 Ἰουλιανός, in No. 216 Φουνδίνος.

<sup>3</sup> See Pauly-Wissowa, *s.n.*

<sup>4</sup> Livy, xlii, 53.

<sup>5</sup> *B.S.A.* xvii, pp. 193 ff.

<sup>6</sup> Demitsas, pp. 219 ff; Heuzey, *Mission de Macédoine*, p. 287.

the ruins to be found between Kaliani and Kaisareia about four hours south of Kozani. The other site is the kastro of Palaeogratsiano<sup>1</sup> midway between Serfije and Velventos. Here there is a small acropolis crowned with Byzantine ruins near the foot of which a cemetery of pithos burials, probably of the Early Iron Age, has been found. Here too, Heuzey found two inscriptions<sup>2</sup> and to this site we may attribute the two published below,<sup>3</sup> one from Velventos and the other from the church of H. Demetrios not far from the foot of the acropolis. Near Serfije, on the bank of the Haliakmon near the head of the bridge on the Serfije-Kozani road, is a pre-historic settlement.<sup>4</sup>

35. At Velventos, in the church of the Assumption, on a large stele. H. '97; br. '30. Letters in ll. 1-7, '06 high, in ll. 8, 9, '04. The face of the stone has been dressed down on each side, so as to leave the inscription on a raised panel.

	ΤΙΒΕ	[Τ]ιβέ[ρ-
	ΥΚΚ	ι]ος Κ[λ-
	ΥΔ	α]ύδ[ι-
	ΜΥ	ς Μυ[σ-
5	ΑΚ	ί?]ας [Α-
	ΙΟΛΛ	π]ολ[λο-
	ΩΡ	δ]ώρ[ου
	ΕΓΑΛΛ	Μ]εγαλά[ρ-
	ΖΓΑΝ	τ]ῶ γάν[ος?]

The name in ll. 4, 5 is not certain, *Μυσίας* being perhaps the simplest alternative.<sup>5</sup> *Ἀμύντας* is less probable as there seems no room for the first Α. The last two lines are puzzling, but the suggested restoration alone seems to suit what is left; and the sense 'a glad thankoffering to (Demeter) Megalartos' is quite suitable.<sup>6</sup> *Γάνος* is however a distinctly poetical word,<sup>7</sup> and I know no instance of its use as equivalent to *χαριστήριον*.

<sup>1</sup> Heuzey, *op. cit.*, pp. 216 ff; Demitsas, p. 173; *B.S.A.* xvii, p. 201.

<sup>2</sup> Demitsas, Nos. 207, 208. <sup>3</sup> Nos. 35, 36.

<sup>4</sup> Wace-Thompson, *Prehistoric Thessaly*, p. 254, 2.

<sup>5</sup> This does not occur in Demitsas' inscriptions, but is known in Thessaly, *I.G.* ix, 2, 472, 473; or perhaps *Μύστας* (= *Μύστης*).

<sup>6</sup> For her cult in Thessaly see an inscription from Pherae, *I.G.* ix, 2, 418, and cf. Athenaeus, 109 B.

<sup>7</sup> Cf. L. and S. *s.v.*; *Epigr. Gr.* 853 b, l. 5; cf. *εγνώσεν*, *ibid.* 985, l. 3 (= *C.I.G. add.* 4935 b; note too that in L. and S. these are not identified, the word being attributed under the former reference to *γνώω*, under the latter to *γνώω*).

36. At the church of H. Demetrios near Palaeogratsiano. Three large fragments<sup>1</sup> of the architrave from a tomb (or shrine?), with a dentil ornament below, and traces of a pediment and acroteria above.

(a) Outside the church. H. '62 ; l. 1'58. Height of inscribed surface '10 ; letters '055 high.

////////ΛΠΙϞΣΜΑΜΙ'ΑΙΑΝ

(b) Inside the church. L. '66 ; other dimensions as in a.

////////ΣΑΝ'////ϞΝΕΙΚϞΣΚΑΙΑΙ (blank).

(c) *Ibid.* L. '65. Uninscribed.

[M. Οὔ]λπιος Μ. Α(ι?)μ[ιλ]ιαν[οῦ υἱοῦ]ς Ἄν[δρ]όνεικος καὶ Αἰ - -

Apparently the last name was left unfinished. It seems to warrant the conclusion that the first *iota* of Αἰμιλιανός was omitted by the engraver. Perhaps we should read υῖος for υἱός as there scarcely seems space for more than four letters at the left of *ῆ*.

A. J. B. WACE.

A. M. WOODWARD.

<sup>1</sup> These apparently joined each other closely, and constituted the whole of the front architrave.

## THE TOPOGRAPHY OF BOEOTIA AND THE THEORIES OF M. BÉRARD.<sup>1</sup>

(PLATE IX.)

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EPHOROS remarked in his history that Boeotia was unique among Greek lands in having a coast well provided with harbours and fronting three seas, open to the West, the North, and the East, to Italy, Sicily, and Carthage, to Macedonia and the Euxine, and to Egypt, Cyprus, and the islands; and that it thus had ample opportunities for education, and was marked out by nature for rule over others. Strabo quotes this with approval, adding a remark of his own about the permanence of the success of the Romans due to the education they had received from contact with civilized countries: if only Boeotia had known how to educate her sons!<sup>2</sup> The author of the *Periplus* which passes under the name of Skymnos of Chios (about 90 B.C.) says the same in almost the same words;<sup>3</sup> and Stephanos of Byzantium repeats it.<sup>4</sup>

Some modern scholars have been much struck with the wisdom of Ephoros,<sup>5</sup> and M. Bérard has used his statement with great effect

<sup>1</sup> This article was written some time before the appearance of Dr. Leaf's *Troy: a Study in Homeric Geography*. I seem to have been working on the same lines, and have come to very similar conclusions with regard to Bérard's views.

<sup>2</sup> Strabo, ix. 2. 1-2, pp. 400-1.

<sup>3</sup> vv. 485-500.

<sup>4</sup> s.v. Βοιωτία.

<sup>5</sup> e.g. Tozer, *Selections from Strabo*, p. 232 ('an excellent specimen of criticism applied to historical geography'); Tucker, ed. *Seven ag. Thebes*, p. xi; Murray, *Rise of the Greek Epic*,<sup>2</sup> pp. 35-6 ('I suggest that these great fortress cities [Troy and Thebes] depended for their greatness entirely upon commerce'); cf. Cornford, *Thucydides Mythistoricus*, pp. 32 ff. Forchhammer, who knew the country, did not hold this view: 'Boeotia, tribus maribus interposita, tamen portubus, qui quidem ex interioribus terrae partibus facilem praebeant accessum, minime excellit.'—*Topographia Thebarum*, p. 6.

to bring Thebes within the sphere of his law of isthmuses, and the Kadmeans into his system of a Phoenician thalassocracy.<sup>1</sup> The law of isthmuses is, shortly, that ancient traders travelled as much as possible by land, and as little as possible by sea, so that rather than have one sea journey, they would disembark at a port on one coast, travel across country in 'caravans,' and embark again on the opposite coast; and that consequently we find traces of these ancient trade-routes which were later deserted.<sup>2</sup> Several of them, says M. Bérard, passed through Boeotia, and these would all meet at Thebes. Hence the story of the foundation of Thebes by the Phoenician Kadmos, 'en pleine Béotie, au centre du pays le plus continental, semble-t-il, de toute la Grèce. Consultant nos cartes et nos habitudes actuelles, les archéologues s'écrient que voilà une jolie fable: une ville de l'intérieur, fondée par des marins, à une grande journée de toutes les côtes!' But Thebes was a meeting place of trade-routes; and it was for this reason that 'Thèbes fut un fondation du commerce étranger.'<sup>3</sup>

Further on, he says: 'La seule topologie nous fournirait une preuve d'origine pour cette fondation phénicienne. L'étranger Kadmos, venu de l'Orient, fonde Thèbes, et le site de Thèbes prouverait à lui seul que ce bazar et cette capitale de la Béotie supposent en effet un commerce étranger venu des mers orientales. Thèbes n'est pas au milieu de la cuvette béotienne, mais à l'une de ses extrémités. La capitale indigène et le marché agricole de la Béotie devrait être au milieu des champs et des récoltes, dans le centre de la cuvette, en quelque site comparable à l'Orchomène des Minyens . . . Éloignée du centre, Thèbes a d'autres avantages: elle est au croisement des routes terrestres qui coupent la Béotie et qui, pour des marins orientaux surtout, serviraient à relier les mers du Sud et la mer du Nord. Une thalassocratie phénicienne implique un comptoir et une forteresse en cet endroit . . .

Pour les peuples de la mer, la Béotie n'est pas seulement la riche et grasse plaine que nous vantent les géographes et les poètes anciens, la contrée agricole d'où les navigateurs tirent les approvisionnements, leurs chargements de blés, de fruits, de légumes, de laines et d'animaux,

<sup>1</sup> With regard to the theory of a Phoenician origin of the Kadmeans, cf. my article in *J.H.S.* xxxiii (1913).

<sup>2</sup> *Les Phéniciens et l'Odyssee*, i. p. 69.

<sup>3</sup> *Op. cit.* pp. 78-79.

par l'intermédiaire des caravanes indigènes.<sup>1</sup> Il est d'autres raisons qui forcent les navigateurs à monter eux-mêmes, à pénétrer et à séjourner dans l'intérieur du pays, à y posséder quelques points de défense et d'entrepôt: la Béotie est un carrefour de routes isthmiques. 'La Béotie, dit Ephore, . . . touche à trois mers . . .' Cette heureuse situation de la Béotie entre les trois mers était proverbiale parmi les Anciens. Les manuels de géographie la décrivaient à qui mieux mieux et le prétendu Scymnus de Chios la célèbre dans ses vers de mirliton . . . Ceci nous ramène à notre loi des isthmes et à la traversée des continents par les caravanes des thalassocrates.'<sup>2</sup>

By way of preface I would point out an inaccuracy in this statement of the ancient evidence. First, there is only one manual of geography that celebrates this happy situation of Boeotia; the *Periplus* of Pseudo-Skylax, for example, says nothing about it. Secondly, it is evident that both Pseudo-Skymnos<sup>3</sup> and Stephanos are only quoting Ephoros, as Strabo did; and Stephanos probably at second-hand: that therefore we have only one ancient authority to support the view, not three or four, still less an ancient proverb.<sup>4</sup>

Let us see moreover exactly what this one authority does say; we note at once that Ephoros says one thing, and the moderns, with him as their motto, say another. First, he does not say that Thebes was a place with large external commerce, but implies that it is strange that it was not: the two things are not quite the same. However, Kadmean Thebes may have been, though classical Thebes remained inaccessible.<sup>5</sup> In the second place, Ephoros does not 'explain that Thebes commanded the roads between three seas': he says nothing about roads or trade-routes, but, as Boeotia was *τριθάλαττος, τὴν χώραν ἐπαινεῖ διὰ ταῦτα, καὶ φησι*

<sup>1</sup> Leave out 'ne . . . pas,' and this sentence expresses clearly and exactly what I wish to suggest was the case with Boeotia.

<sup>2</sup> pp. 224-6.

<sup>3</sup> He names Ephoros among his authorities at the beginning of the work (vv. 109 ff.), and explicitly follows him in describing Greece proper (vv. 470-2). See Bunbury *Hist. Anc. Geogr.* ii. p. 71 (cf. i. p. 183, n. 6).

<sup>4</sup> 'The untrained historian,' says Professor Bury (ed. *Gibbon, Decline and Fall*, Introd. p. xlvi), 'fails to recognize that nothing is added to the value of a statement by Widukind by its repetition by Thietmar or Ekkehard, and that a record in the continuation of Theophanes gains no further credibility from the fact that it likewise occurs in Cedrenus, Zonaras, or Glycas.'

<sup>5</sup> This is one of the chief difficulties in the way of Bérard's explanation of a Phoenician Thebes (as in the case of Troy, Leaf, *op. cit.* p. 258): Why, when the conditions were similar, as Bérard recognizes, should the effects in prehistoric and classical times have been so different?

πρὸς ἡγεμονίαν εὐφύως ἔχειν:<sup>1</sup> he might have said that France, having the sea on three sides, has geographically a natural tendency to hold the hegemony of the Mediterranean, the Atlantic, and the English Channel, while, England, naturally, would only rule in seas surrounding her. But this does not necessarily mean that France is more on the line of trade-routes than England.

Yet as Ephoros mentions not only the seas immediately bordering on Boeotia, the Corinthian Gulf and the straits of Euboea, but also the distant lands, Sicily and Libya, Egypt, Macedonia and the Propontis, with which Boeotia was connected by those seas, it is probable that he had foreign trade in his mind as well as hegemony; and it is perhaps in this connection that the words ἀγωγῆ καὶ παιδεία μὴ χρησαμένους are to be taken: being open to foreign lands, the Boeotians had unique opportunities for 'education,' of which they did not take advantage.<sup>2</sup> But again, it is necessary to point out that this passage does not imply that Thebes or Boeotia commanded a line of trade-routes, but only that it was easy of approach to foreign vessels. When you say that a town is situated on a trade-route, you do not only mean that foreign trade can easily reach it, but that foreign trade, in order to reach another place, must go through it.<sup>3</sup> This is perfectly understood by modern writers, who all point out that Boeotia is by nature an isthmus between two seas;

<sup>1</sup> He therefore says nothing about the Phocian ports, Krissa and Antikyra, as Bérard does; these would be important for trade, but would have nothing to do with Boeotian hegemony.

<sup>2</sup> The idea that their ill-success was due to want of education may seem at first sight parallel to Isocrates' idea that the success of the Megarians was due to virtuous moderation, in which case it would equally well 'illustrate the blindness of the Greeks to economic causes' (Cornford, *op. cit.* p. 32), and this early Greek support for the modern idea of Boeotia as a centre of trade-routes, falls at once to the ground. But it is probable that Ephoros intended to give a much wider meaning to ἀγωγῆ καὶ παιδεία—as it were, a progressive as opposed to a provincial outlook generally.

<sup>3</sup> At the head of his list of typical isthmus routes, M. Bérard (pp. 69-74, 233) places that from Eretria through Oropos and Dekeleia to Athens, of which we hear from Thucydides (vii. 27-8) and Herakleides (*Descr. Gr., F.H.G.* ii. p. 256): 'Athènes, ville continentale, assise entre deux mers, avait en réalité deux ports, deux échelles, le Pirée sur la mer du Sud, Oropos sur la mer du Nord' (so too Cornford, *op. cit.* p. 33). But this does not mean that trade passed on through Oropos, Athens, and the Piræus to other places; which would necessarily have been the case, had Attica been a real isthmus. This distinction is important. Goods for Athens from the North were landed at Oropos instead of being taken round Sunion by sea; goods from the South were landed at the Piræus. But we do not hear that trade from Chalkis, intended for the South or West, passed overland through Attica by the Oropos-Piræus route. So that when M. Bérard writes, 'à travers l'isthme attique, les caravanes débarquées à Oropos viennent reprendre la mer au Pirée,' these last words are an addition of his own, which begs the question and is not warranted by the ancient evidence. England also has ports on its three seas.



but Ephoros does not say so. He only says that trade could easily reach Boeotia, not that it travelled through it. It is perfectly possible to conceive that the Kadmean farmers (though not their descendants of the classical period) exported their surplus wheat in return for all the delicacies of the East, and in consequence were educated and held a hegemony; but that would not deny the truth of the statement that they were an agricultural community, nor affirm the suggestion that the great fortress city of Thebes 'depended for its greatness entirely upon commerce.' M. Bérard, and Professor Murray and Mr. Tucker after him, in referring to Ephoros as a support for their theory, are quoting him loosely, and attributing to his words an exaggerated meaning which they do not possess.<sup>1</sup> However, Ephoros may be understating the facts, and the moderns may be right; we must discuss first the statements of M. Bérard about the geographical position of Boeotia, and compare them with the actual nature of the routes within Boeotia from sea to sea, and afterwards examine its position as a whole in relation to the lines of trade in the Levant in prehistoric times.

In this case it is M. Bérard himself, who, 'consultant ses cartes<sup>2</sup> et ses habitudes actuelles, s'écria que voilà un joli isthme!' Let us examine the roads of Boeotia in turn, remembering that once within either of the two Boeotian plains, either that of Thebes or that of the Kōpais, travel and transport of merchandise is easy enough; *e.g.*: once at Plataia or Lake Hylake, it is easy to reach Thebes; once at Haliartos or Kopai, to reach Orchomenos. It is the roads to the towns situated at the extremities of the plains that must be considered (Pl. IX.). We can take those from the South first. Five routes pass over the mountains that separate Boeotia from Attica and the Megarid; they are, from West to East—(1) that from Megara by Pagai and Aigosthena, round Kithairon and up the valley of the Oëroë to Plataia. This was the road twice taken by the Lacedaemonians retiring from Thespiæ; its dangers were well known, and it was one of the most difficult passes in Greece; 'elle n'est qu'un sentier. . . Dangereux, étroit, exposé aux terribles rafales du golfe, ce

<sup>1</sup> Leake, *Northern Greece* ii. p. 220, accepted the more limited ideas of Ephoros.

<sup>2</sup> I imagine he has not visited Boeotia, judging from the fact that he never gives the results of personal observation, but refers, before describing the country, 'pour tout ceci' to Herakleides, Pausanias, or Mr. Frazer (*e.g.* notes to pp. 69, 226, etc.). Cf. 'M. Bérard, as I gather from his book, is not personally acquainted with the site of Troy, and his theory is evidently the product of the study.' Leaf, *op. cit.* p. 258.

chemin n'était suivi qu'en cas de nécessité.'<sup>1</sup> (2) A route from Megara to Plataia, somewhat to the East of the Eleutherai pass: it is mentioned by Pausanias<sup>2</sup> and Xenophon,<sup>3</sup> but was very little known or used. (3) The ordinary route from Attica to Boeotia by the pass of Eleutherai. This is so important that there must have been a road here from very early times, but the pass reaches a considerable height, and is frequently snowed up in winter. The road from Eleusis ascends fairly gradually as far as the upper valley of the Eleusinian Kephissos, a stony plain between Oinoë and Eleutherai. Past the latter the road winds in between the steep mountain slopes on either side to the highest point, then opens out somewhat and descends very rapidly and with many curves past the village of Kriekúki (just east of Plataia) down to the valley of the Asopos. With an important town on either side of the pass there will always be a great deal of traffic through it, for, though not the shortest, it is the most convenient road from Thebes to Athens; but it is not so easy as to invite men to cross it for its own sake. (4) The route through Phyle, Panakton and Skolos: this, too, 'n'est qu'un sentier.' It was important, because it was possible for an army invading Attica from the North to come this way and so turn the pass of Eleutherai; and it is a good deal shorter than the Eleutherai road. But it was never a trade-route; it was far too difficult. The fortress itself is over 2000 feet above sea-level, and it is a stiff climb from Athens. The path at first ascends gradually as far as the village of Chasiá; after that the ascent is very steep, over a torrent and up a mountain sparsely wooded with pines, to the foot of the rock on which Phyle stands. Beyond Phyle the path goes through hilly, rocky, deserted, and very bare and wild-looking country, where for miles hardly anyone is now to be met with: it continues high up, with the peaks of mountains all round, until it finally opens on to the stony plain of Panakton. Past this it descends the northern slopes of Kithairon, and thence north-eastwards across the plain to Thebes. It is

<sup>1</sup> Xen. *Hell.* v. 4. 16-8; vi. 4. 25-6; Bérard i. p. 232.

<sup>2</sup> ix. 2. 3; Frazer *ad loc.*

<sup>3</sup> *Hell.* v. 4. 14. There is a mule-track in use now from Aigosthena to Plataia: it climbs Kithairon, very steeply, in a north-easterly direction till it meets another track, and the road from Villa. It crosses the mountain high up (for some three hours above snow-level in winter-time) and descends not far from Kriekúki, whence it turns westwards to Kokla (by Plataia). It is seven to eight hours' journey. My guide told me there was a straighter path, which descended just above Kokla, but it was impassable on the day I was there (March, 1913) on account of the snow. Cf. Leake, *Northern Greece*, ii. p. 334.

altogether a hard two-days' journey from Athens *ἀνδρὶ ἐνζώνῳ*. (5) The last pass is the easiest; that due northwards by Tatóι, near Dekeleia, over the shoulder of Mt. Parnes. The ascent is easy and gradual, through thick pine-forests; the summit is not sufficiently high for it ever to be blocked with snow; the descent is much more rapid and the modern road winds about with great serpentine curves down to the valley, along which the railway now runs. There it branches into two, one continuing northwards over fairly low and wooded hills to Oropos, the other turning north-westwards to Staniátes (just east of Tanagra), along level or slightly undulating ground the whole way. This pass would only have been difficult if there were no road through, for the whole district is covered with forests. This may have been the case in Kadmean times, before Oropos became important as the northern port of Athens.

Before giving the routes from the north-eastern coast-line to the interior, it will be as well to summarize what the *Mediterranean Pilot*<sup>1</sup> tells us about the harbours and landing places of the Euboean Channel. Ships from Egypt and Cyprus would sail between Andros and Keos, and then off the coast of Attica into the channel. On the coast of Attica are Port Ráphtis and Marathon Bay, where 'the shore is low and sandy, . . . open to the south and south-east. Temporary anchorage in summer may be taken where convenient.' The dangers of passing Cape Marathon and the south-west point of the bay are considerable. The principles of ancient sailing as laid down by M. Bérard must be remembered—the necessity for frequent places of refuge *en route* in case of some sudden storm such as is wont to come on unexpectedly in the Aegean; at these refuges boats were liable to be detained for several days, and so food-supplies and water must be abundant—especially the latter, for very little water could be taken on board an ancient ship.

On the opposite coast is Karystos Bay, 'deep and clear of danger except on the western shore where it is rocky and foul; it is exposed to all southerly winds. . . . In entering under sail be prepared for the heavy variable squalls which blow from the high land: . . . the holding ground . . . is indifferent. . . . A sailing vessel should not, however, go too far in, as the winds may be light and baffling when leaving, and there is frequently an indraught into the bay.'

<sup>1</sup> 3rd ed. (1900), iv. pp. 80 ff.

West of the Bay of Karystos and further along the same coast are the group of islands now called the Petáli Islands.<sup>1</sup> M. Bérard has shown the importance of small islands as affording safety in a time of rough weather. The Petáli Group afford a good refuge, but there is no fresh water, and 'the currents run strongly between the islands and are much influenced by prevailing winds. . . .' But 'midway between Trágo islet and Megálo there is a snug anchorage for small vessels in seven fathoms, sandy bottom . . . good holding ground, with a smooth sea in all winds.'<sup>2</sup>

The channel then narrows between the Attic and the Euboean coasts at Xero Pass which only 'offers a few difficulties,' though a little further on between the Berdúgi islets and the shore, 'the currents at times are strong.' Port Armyró Pótamo is 'seldom visited even by boats'; but Limióna Bay must presumably afford anchorage, for it is 'now used for vessels shipping iron-ore from Marathon;' but the *Directions* do not say whether it is safe for smaller boats. On the opposite shore is Alivéri Bay, where 'there is good anchorage in 15 or 16 fathoms, rather close in [and so constantly exposed to winds from the mountains close by the shore], but the holding ground is good. . . . No fresh water can be obtained.' On the mainland again is Oropos Bay, 'where there is anchorage and landing.' There are shoals eastward of Port Eretri, and 'vessels should keep rather on the southern shore of the Euripo channel,' but 'north-eastward of these dangers, there is sufficient anchorage open for small vessels in case of necessity, and it can be approached from the eastward by keeping along the Euboean shore.' Sailing is easy after this (though no anchorage grounds on either coast are noted) until the Burj channel, the southern entrance to the outer Euripos port, is reached. The difficulties of passing 'this narrow and tortuous channel' are considerable. Once in the outer port, there is anchorage throughout the central part, if necessary, but only in deep water 'from 20-30 ft. soft mud;' there are bays all round, including the two bays of Aulis. 'On the north-eastern shore, near the head of the outer port, a plentiful supply of water which runs from the rocks may be obtained, though it is not always good for drinking, being impregnated with vegetable matter previous to entering the sea.' At the Stenó

<sup>1</sup> Ancient Περαλία (Strabo, x. i. 2, p. 444).

<sup>2</sup> M. Bérard himself notes the importance of these islands (omitting from his extracts from the 'Sailing Directions' the statement about the scarcity of water), and instances the voyage of Walpole from Sunion to Chalkis which took eight days; during which he took refuge at the islands, but after nine or ten hours was driven into the open sea again by contrary winds (pp. 186-7).

Pass, between the outer and the inner port, there is a strong current at about two knots. At the head of the Inner Port (the bay of Voúrko, which has 'an even mud bottom') are the strait, the Euripos proper, and the town of Chalkis. There 'the water is scarce, and obtained chiefly from wells . . . Sailing vessels . . . should only attempt the passage of the strait at slack water,' for there is strong variation in the tides and the stream according to the season: 'with southerly or south-westerly gales the velocity of the tidal stream from south to north is increased to 8 or 8½ miles an hour for the first day of the gale; followed, probably on the second day, by a rush of equal strength southward.' With its strong and variable tides, Chalkis was not easy to pass, and with its scarcity of water, not a convenient stopping-place.

Vessels from the north-east, from Macedonia, Thrace, and the Euxine, would enter the channel of Trikéri between the northern coast of Euboea and the Gulf of Volo.<sup>1</sup> In the latter, where there are 'excellent harbours, land-locked from every wind,'<sup>2</sup> they could always take refuge. It would also be the most convenient place to disembark at, to make the further journey by land, on the principle that 'the route which follows the land as far as possible, and takes to the sea only when the land fails, was the cheapest, easiest, and safest.' If, however, ships were to follow the unlikely course of sailing down the channel (called the Talánda, or Atalanti Channel, north of the Euripos), they would have in Oreos Bay on the north coast of Euboea, 'excellent anchorage in 20 to 5 fathoms along its E. and S.E. sides; and as it is protected to the northward by the Argyronisi islands and the main, the sea can have no fetch to endanger.' Further on is Kamaka Bay, which is 'good holding ground and place of shelter.'<sup>3</sup>

The Gulf of Lamia has anchoring depths everywhere, the only danger being the miasma with which the winds blowing along the southern part of the Gulf are charged; this would be the second most convenient landing-place for an 'isthmian route.' Beyond it there are many difficulties to be encountered in entering between the channel between Cape Lichádes and Vromo Limni. Once through this, on the Euboean coast is Aidipsó Gulf and Gialtra Bay. 'This bay is the only sheltered anchorage on the coast of Euboea, between Euripo and the Lichádes Islands, but the water in the central part is rather deep, and no supplies can be procured.' This

<sup>1</sup> *Med. Pilot*,<sup>3</sup> iv. pp. 326 ff.

<sup>2</sup> *Sailing Directions*, ed. 1852, p. 50.

<sup>3</sup> *Ibid.* p. 51.

would not encourage vessels to sail further; if they were at any time blown on to the Euboean shore, they would have no place of shelter within reach.

The coast of the mainland is, however, more favourable. East of Thermopylac the shore between Cape Longos and Cape Akritza is low and sandy,—always an advantage to ancient ships; but beyond the latter point ‘the whole western shore of Atalanti Bay should have a wide berth.’ But Atalanti Bay itself forms an excellent shelter. ‘It is very capacious, and has good anchorage almost all round, in any depth of water you choose.’<sup>1</sup> Here we have the first good harbour and shelter since the Gulf of Lamia; between it and Chalkis, there are some dangers in sailing, and the only harbour is that of Larymna. ‘Vessels rounding Cape Kerata should give it a wide berth, as a shoal extends a quarter of a mile N. of it.’ Larymna ‘is a narrow inlet running south-westward nearly 2 miles, having from 20 fathoms water at the entrance to 4 near its head, where there is a stream of drinkable water.’ Shoals exist on the N.W. side of the entrance. The water, especially, would be an inestimable advantage on this coast. Further eastward is Port Skroponéri (where were the chief outlets of the Kephissos and the Melas rivers); there is a small islet, called Gátza, just at the entrance, such as was beloved by the Phoenicians; but this was never a frequented port: ‘it is a bight running nearly 3 miles W.S.W., and surrounded by high land: the port does not seem to be resorted to by the natives; there is no village, and the water is deep for ordinary anchorage, being from 20–15 fathoms.’ The nature of the country surrounding the port is sufficient to deter men from settling there. Sailing from Atalanti to Chalkis, past Cape Gaídaro, sudden squalls and violent storms of wind from either coast were dangers that might be encountered. ‘Talanta Channel, N.W. of Cape Gaídaro, is clear of danger at a prudent distance from the coast, which generally is steep-to on either side of the channel. The high range of the Kandili Mountains in Euboea, which reach nearly 4000 feet above the sea, a little within the coast, extend to a distance of 7 miles. The violent gusts of wind which descend from these mountains during the north-east and northerly winds, and also the heavy squalls that may blow from the high land on the opposite side of the channel, should be carefully guarded against in vessels under sail.’ No mention is made of the port of Anthedon, though the

<sup>1</sup> *Sailing Directions*, ed. 1852, p. 52.

village of Lukísia is now near the site of that town; so presumably it cannot be very favourable, even as a refuge in time of stormy weather. Between Cape Gaídaro and Chalkis the channel has 'with the exception of the shoals near the lighthouse (just north of the town) anchoring depths all over it, in from 17 to 10 fathoms, mud bottom, sheltered from the westerly winds by Cape Gaídaro, and the shoal which extends nearly two-thirds of a mile north from it; in the winter season it would be advisable to anchor within about a mile of the town of Euripo.' This would be a good shelter, but for the fact that 'there is no water to be procured this side of the bridge (over the Euripo).' This at once puts a very great obstacle in the way of ancient vessels taking refuge here at a time when storms rage in the channel to the north-west.<sup>1</sup>

Along this north-eastern coast, there are five routes leading into the interior. Two are south of Chalkis, from the harbours of Oropos and Aulis. Both go over quite low hills; that from Oropos leads through beautiful pine-woods—at first through the flat and fertile plain at the mouth of the Asopos to Sykámino, a village situated at the eastern end of the last gorge through which the river flows, then over the hills to Tanagra. The way is smooth and not at all rocky, and goes, by one or two cultivated fields, at some little distance to the north of the river. The second route, from Aulis, followed the line of the present railway: it runs from Chalkis along the sea-shore at the foot of Megálo-Vounó, close by the two bays, Mikró and Megálo Vathý, then by a cutting through the low, but very rough and rocky hills that form the southern spurs of Megálo-Vounó and separate the narrow stretch of land by the sea-coast from the plain through which runs the road from Thebes to Chalkis. These hills too are not difficult, but they do not invite a crossing: they extend southwards as far as to join the hills over which goes the road from Oropos, so as to shut out completely the view of the sea from any town or village of Boeotia to the west of them. Beyond these hills the road runs along the fertile plain of Thebes, almost level the whole way—

<sup>1</sup> As an instance of the dangers of the Euripos to ancient ships (and showing how passenger traffic, if not trade, in ancient as in modern times, kept to 'routes de terre *maxima* et de navigations *minima*'), it may be noted that the embassy of the Hyperboreans to Delos travelled the length of Euboea by land (Hdt. iv. 33). Macan indeed in his note *ad loc.* says of this route from the centre of the Aegean to the North 'up through Euboean waters (the Euripos) from Karystos to Malis;' but it is clear that the journey was through Euboea by land: from the Maliac Gulf διαπορέεσθαι ἐς Εὐβοίαν· πόλιν τε ἐς πόλιν πέμπειν, μεχρὶ Καρύστου. τὸ δ' ἀπὸ ταύτης, ἐκλιπεῖν Ἄνδρον· Καρυστίους γὰρ εἶναι τοὺς κομίζοντας ἐς Τήνον· Τηρίους δὲ ἐς Δῆλον.

over only one very gently rising hill, till it joins the high road from Chalkis.

From Chalkis to Thebes the road goes by a high pass over Mt. Messapion; the ascent, from the side of Euboea, is extremely steep over ground that is now but sparsely wooded. At nine kilometres from Chalkis the top is reached, then after one short steep bend the descent westwards is straight and very gradual, leading down through cultivated fields to the plain of Thebes.<sup>1</sup> The country is quite open, and all places situated on the western side of the pass look naturally towards the interior, not towards Chalkis and the sea. Mykalessos was situated just below the steep part of the descent to the west of the summit of the pass.

Inland from Anthedon the route is not difficult.<sup>2</sup> North and south of Paralimni rocky mountains descend down to the water's edge; the path, however, does not ascend far, but runs along the south side of the lake to the village of Moríki, then turns southward across the plain to Thebes. To Akraiphnion, and so to Orchomenos across the Kopais, the path is steep and rocky, but nowhere does it reach any great height.

The route from Larymna to Orchomenos is easy (when the Kopais is drained), to Thebes circuitous and difficult. From the small but fertile plain in which Larymna lay, it mounts up the narrow but short valley of a stream (that has its source in the spring called Anchoe), and passes across wide and open moorland covered chiefly with evergreen oak and wild olive, then through a rough valley (Kephalári) along the line of the ancient shafts of the tunnel that was intended to take the waters of the Kopais,<sup>3</sup> till it arrives at the north-eastern extremity of the lake just above the Biniá Katavothra. Thence to Orchomenos, in the days of the Minyans, the road would have gone straight across the 'Αθαμάντιον πεδίων<sup>4</sup> and the Kopais. But a traveller to Thebes

<sup>1</sup> In early times the port of Thebes for Euboea seems to have been Aulis, not Chalkis (Hesiod, *W.* & *D.* 646-653). There are still traces of an ancient road by Aulis, Frazer, *op. cit.* v. p. 70.

<sup>2</sup> Herakleides, *Descr. Gr.* § 23 (*F.H.G.* ii. p. 257) ὁδὸς πλαγία, ἀμαξήλατος δι' ἀγρῶν πορεία.

<sup>3</sup> For these shafts, and the draining of the lake by the Minyans, see Kambanis, *B.C.H.* xvi (1892) pp. 121 ff., xvii. pp. 322 ff.; Curtius, *Gesamm. Abh.* i. pp. 266 ff.; Noack, *Ath. Mitt.* xix. (1894) pp. 410-2; and esp. Philippson, *Der Kopaissee, Zeitschr. d. Berl. Ges. f. Erdkunde*, xxix (1894), pp. 1-90.

<sup>4</sup> That the 'Αθαμάντιον πεδίων was the bay at the N.E. end of the Kopais, and not the inlet S.W. of Akraiphnion, as is generally supposed (see Frazer, vol. v. p. 130-1), is shown by Pausanias (ix. 23. 5-24. 1). He is travelling (by the route here described) from Thebes to Larymna *πρὸς* Akraiphnion. Arrived at the latter town he says, *προελθόντι ἀπὸ τῆς πόλεως ἐν δεξιᾷ* is the



must go first southwards along a rocky path just above the eastern shore of the Kopais, then descend into a stony but in part cultivated valley (the one place along the northern and eastern shores of the Kopais, from Orchomenos to Akraiphnion, where barren mountains do not descend abruptly or gradually, right down to the plain<sup>1</sup>), and then turn westwards by a high and very rough path through Kókkino village and round the shoulder of Mt. Ptoon southward again to Karditza, a village situate just north of the ruins of Akraiphnion. It is a full day's journey *ἀνδρὶ εὐζώνῳ* from Larymna to Karditza. Thence to Thebes the path goes either over low but rocky hills past lake Hylike and then through the Aonian plain, or by the shore of the Kopais round the Sphinx Mountain to join the road from Haliartos to Thebes.

From the small port of Halai on the Euboean Gulf a road goes through Malesina over the low wooded hill called Aëtolima to Martino, and thence down the nearly always dry valley of a stream to Larymna. Except by a steep and very rocky path from Martino to Hyettos and thence to Kopai, Halai has no independent connection with the interior.

The road to Thebes from Opus, whose harbour was the next port on the Euboean Channel, must have led through Kopai, and thence across the Kopais past Gla to Akraiphnion and the Aonian plain. The first part of the journey lay through all that rocky and mountainous country which lies between the Kopais and the Channel and must at all times have been impossible for wheeled traffic. The northern half of this is well-wooded, and the path winds its way up several magnificent gorges high above the streams which rush down them, past one or two isolated patches where olives are grown, till it reaches the summit of the range,—a flat piece of ground, grassy and intersected with streams, and very marshy,—the beginnings of the rivers. Immediately opposite are the actual peaks, sheer cliffs some 20–30 feet high. After

sanctuary of Apollo Ptoos; *ὑπερβαλόντων δὲ τὸ ὄρος τὸ Πτώων ἔστι . . . Λάρυμνα . . . ἐξ Ἀκραϊφνίου δὲ ἰόντι εὐθεῖαν ἐπὶ λίμνην τὴν Κηφισίδα . . . πεδῖον καλούμενον ἔστιν Ἀθαμάντιον . . . καὶ διαπλεύσαντί εἰσι Κῶπαι.* Going from Akraiphnion to Larymna, you first travel northwards, then turn round sharply to the right over the shoulder of the mountain; if you continue straight on you descend to the Kopais and ultimately arrive at Kopai on the opposite shore. That Pausanias did not himself travel by this way to Kopai is shown by his failure to mention the fortress at Gla which he would have passed (cf. de Ridder, *B. C. H.* xviii. p. 271, n. 2).

<sup>1</sup> Those belts of green and fertile looking soil which Mr. Grundy's map, for instance, gives to Kopai and Aspledon, did not exist before the lake was drained.

winding round these, the path descends rapidly through steep valleys and arrives at the head of the small plain in which are the villages of Lutsi and Pávlū. It is a long day's journey from Opus to Pávlū. Thence the way is over fairly level but extremely rough and rocky ground as far as Kopai, with low and bare hills on either side. The path from Hyettos (N.E. of Pávlū) to Orchomenos, before it descends to the Kopais between Mts. Strovíki and Trelloyánni, goes through very similar country. It was in this mountainous district that the always unimportant towns, Korseia, Kyrtones, Hyettos, Olmones and Kopai were situated, each with its own small plain of cultivable ground; the ancient, like the modern, inhabitants must have been almost exclusively shepherds.

There is also a path from Atalanti to Lutsi (now more used than the other) which keeps more to the west. It ascends the mountains, on this side covered with soil on which many bushes and trees grow, in a south-easterly direction, and arrives at the top—a long, flat and grassy plain—just north of Kolákas; thence it descends over much more rocky ground, and in parts very steeply, to Lutsi.

From Atalanti to Orchomenos, the other supposed centre of trade-routes, the way goes first westwards along the modern high road, then turns south over low and cultivated hills into a valley about  $1\frac{1}{2}$  miles long, with a flat surface some 300 yards wide and very regular and steep hills on either side—like a great broad street. At the southern end of this is Hyampolis guarding Phokis against incursions of the Lokrians.<sup>1</sup> Thence the natural road into the interior leads to Parapotamioi, thence to the Corinthian Gulf through Daulis, and sō does not touch Boeotia. From Hyampolis to Orchomenos the path bends round to the east of the hill on which Abai stands, and goes over rough and rocky, but nowhere high ground, down to Tsamáli, near the ancient Aspledon.

Along the southern coast of Boeotia and Phokis, for vessels coming from 'Sicily, Carthage, and the West,' the harbours are for the most part excellent. It is not difficult to reach Salona Bay, and once there 'you may anchor wherever you please within the two small islands; but small vessels may go inside the low point, where there is good

<sup>1</sup> A slightly shorter path from Atalanti leads up a gorge to the S.W. of that town and high over moors and hills—past a spring for the traveller—and down into the valley at the north end of the 'street.'

anchorage from 9 to 13 fathoms, with good holding ground, perfectly land-locked.'<sup>1</sup>

The west part of Aspra Spitia Bay (Antikyra) 'affords a well-sheltered and good anchorage in 13 to 16 fathoms of water about 2½ cables from the surrounding shores.'<sup>2</sup>

The Bay of Domvrena (Thisbe) is equally favourable. 'This magnificent bay is 5½ miles in length east and west and from about 1 to 1½ miles in width. In the middle is Kouveli islet. . . . The shores of the bay are rocky and irregular, the water is generally deep, and there are no hidden dangers. . . . The entrance is from the south, and is fronted by Phonia, Gromboloura, and Makro, three islands which make a land-locked basin of the interior. . . Mt. Korombili, of conical form and 2670 ft. high, rises over the east part of the bay, and serves as a good guide.'<sup>3</sup>

Lastly, of Livadostro Bay (Kreusis) we are told: 'the Kala islets lie nearly in the middle of the entrance to Dobrena Bay, but are steep-to and not of much importance except for the space they occupy. East of Dobrena Bay is port Livadostro, an inlet 2 miles wide at the entrance; on its west side the coast rises almost perpendicularly from the sea to the high land of Mt. Korombili.'<sup>4</sup>

The routes from the interior to this coast are interesting. That from Livadiá (which now holds the position of Orchomenos as chief town in Western Boeotia) to Antikyra,<sup>5</sup> after passing over cultivated hills and valleys, and some extensive moorland, descends into the wild and narrow valley of the Cleft Way, out into the small plain of Ambrossos (now Distomo).<sup>6</sup> From Distomo the way ascends a little to pass over the hills which shut out the view of the sea from the plain, then descends with astonishing abruptness down a narrow valley southwards to the sea; at the bottom of the valley it turns to the right along the coast to Antikyra. So that the first thing that faced a 'caravan' with goods that had been

<sup>1</sup> *Sailing Directions*, ed. 1852, p. 31.

<sup>2</sup> *Medit. Pilot*,<sup>3</sup> iv. p. 426.

<sup>3</sup> *Ibid.* p. 427-8. Cf. Bérard, i. pp. 430 ff.

<sup>4</sup> *Ibid.* p. 428. Cf. Paus. ix. 32. 1 for the violent winds of this gulf.

<sup>5</sup> See Paus. x. 5. 5; 36. 5. Frazer, v. pp. 222-33.

<sup>6</sup> The route from Orchomenos was probably the same, especially as the Sacred Way to Delphi went by Livadia; but the easier, if longer, road would have been through Chaeroneia and Daulis, to join the other at the Schiste.

disembarked at Antikyra was a very difficult climb up a narrow and precipitous valley.

The route from Thebes to the Port of Thisbe (Domvrena Bay) is curiously like this one, though so much easier. From Thebes to the town of Thisbe is perfectly simple, first westward along the road to the Kopais district, then to the left up the easy valley of the Thespios as far as Thespiiai. Here opens out another valley from the north-west coming from Askra and the Valley of the Muses. From Thespiiai the road goes down the equally easy valley of the Permessos, till it turns into the plain of Domvrena just above the village. From here, as from Distomo, the sea is not yet visible; the road after crossing the plain must first rise over the rocky and barren hills and then descend rapidly to the small harbour.<sup>1</sup> Though the bay is large and quite safe, almost everywhere the mountains come right down steeply to the water's edge, so that there is very little room for quays. With the barren hills for its background no one can think of the Bay of Domvrena as the centre of busy international traffic.

Also typical of Boeotian 'isthmio-routes' is that from Plataia to Kreusis.<sup>2</sup> On the map (followed by Bérard) it looks simple enough: Plataia is but three hours from the coast, and the route is along a river-bed. Yet it is in fact a difficult one: three ridges connect the mountains to the south of the Oëroë with those of the north, and the river cuts its way through these in narrow ravines that leave no room for the path, which has to climb the mountain side. Many mountain torrents flow from both south and north to join the Oëroë, and the path must make wide detours round each. It is not till two-and-a-half hours of the journey have passed, but half-an-hour from the coast, that the sea is visible. This is typical, like the routes to the opposite coast to Larymna, Anthedon, Chalkis or Aulis, and Oropos. In addition there is a scarcity of good drinking water along the coasts of the bay. Kreusis did not even belong to Plataia but to Thespiiai.<sup>3</sup>

In addition, on this coast were the small towns of Típha, Bulis, and

<sup>1</sup> Paus. ix. 32. 2 *πλέοντι δὲ ἐκ Κρευσίδος οὐκ ἄνω, παρὰ δὲ αὐτὴν Βοιωτῖαν, πόλις ἐστὶν ἐν δεξιᾷ Θίσβη. πρῶτα μὲν ὕρος ἐστὶ πρὸς θαλάσσην, ταῦτο δὲ ὑπερβαλόντα πεδῖον σε ἐκδέχεται καὶ μετὰ τοῦτο ἄλλο ὕρος· ἐν δὲ ταῖς ὑπωρείαις ἐστὶν ἡ πόλις.*

<sup>2</sup> See Skias, *Παρνασσός*, iv. (1900) pp. 114-139, with a map.

<sup>3</sup> If Plataia ever had a harbour, it was probably that now called H. Vasilios, S.E. of Kreusis, to which a rough path over the mountains S. of the Oëroë leads. The olive groves here and at Kreusis (in the small valleys of arable land) belong now to the inhabitants of Kaparelli, a village not far from Leuktra, not to those of Kókla, the village near Plataia (Skias, *loc. cit.* p. 120).

Korsiai ; but they were the homes of fishermen only, then as now, and did no trade. Communication with the interior was too difficult.<sup>1</sup>

Another point to be remembered is that these valleys, Aigosthena, Kreusis, Thisbe, Antikyra, and Amphissa, are all cut off from one another by high and difficult mountain ranges. Except for precipitous and rocky paths, the only communication between them is by sea (the easy and natural way) or by a devious route up one valley and down the next.<sup>2</sup> This means that each little port has its own *Hinterland* to draw on and nothing more ; that there is no possibility of the growth of any one large port, which as a medium of exchange and as a centre of international traffic is essential. Contrast with this the way almost all Attica, east of Mt. Aigaleos, slopes down towards the Piraeus, and still more, contrast the opposite shore of the Corinthian Gulf, the coast line of Achaia and Elis ; here there is a strip of flat land stretching the whole length of the coast, which makes possible a trading-centre like Patras, as well as minor ports such as Akrata, Vostitza, and Katakólo. There is no big port on the northern shore of the Gulf east of Ozolian Lokris.<sup>3</sup>

Boeotia, then, possesses some routes from the interior to the sea that are easy, some that do not of themselves invite travellers, but at the same time do not afford any very considerable obstacles to their passage if other advantages are present. The journeys, too, by sea up the channels north and south of the Euripos, are attended with difficulties (of which the lack of water is the greatest), but these are not such as could not be overcome

<sup>1</sup> Paus. ix. 32. 4 ; x. 37. 2 ; Frazer v p. 134. The inhabitants of Tiphā were known as the best seamen in Boeotia : a poor honour, and they made a virtue of necessity. See Skias, *op. cit.* p. 116, n. 2.

<sup>2</sup> Mr. Grundy in his map marks main *straight* roads between Pagai, Aigosthena, Kreusis, Tiphā, Thisbe, Korsiai, Bulis, Antikyra, and Kirrha, all the way along this mountainous coast. Except between Antikyra and Kirrha, where the path is a fairly easy one and goes over some cultivated ground (through Desphina), there is not now, nor ever was, any sort of direct land connection between these places, other than the roughest of Greek mountain paths. Cf. Paus. x. 37. 2, on the way from Antikyra to Bulis—*ἐξ Ἀντικύρας δι' ἡπέρου μὲν καὶ εἰ ἀρχὴν ἔστιν οὐκ οἶδα· αὐτῶ δὺσβατα ὄρη καὶ τραχέα τὰ μεταξὺ Ἀντικύρας τέ ἐστι καὶ Βουλίδος· ἐς δὲ τὸν λιμένα σταδίων ἐξ Ἀντικύρας ἔστιν ἑκατόν.* The same is not so true of the ports on the north-eastern coast. Oropos, Aulis, Chalkis, and Anthedon are not difficult to connect by road ; nor Larymna, Halai, and Opus.

<sup>3</sup> This is the principal reason why the trade of Livadiá, which used to go to Antikyra (*Medii. Pilot* <sup>3</sup> iii. p. 426), now goes to the Piraeus since the opening of the railway. It is not so much that the time taken is shorter, as that, once at the Piraeus, you are already at a centre of exchange. The inhabitants of Antikyra are now all agriculturists or fishermen ; and the carefully engineered road which connected it with Distomo, and had more turns and bends in its short but steep course than any other road in Greece, is now falling in ruin ; grass grows over it, and a bridge has broken down. The peasants of course prefer the steep mule-track mentioned above.

by very eager traders ; while in the Gulf of Corinth the harbours and bays afford every advantage to the sailor, so long as he avoids the storms of the extreme north-eastern gulf near Kreusis. That is to say, if Boeotia as a whole, lay in the way of trade-routes from West, North, and East, so that for instance, trade from the North to the West would naturally disembark at Larymna or Anthedon or Chalkis (or even at Opus in Lokris), and take to the sea again at Antikyra or Thisbe or Kreusis, then the roads within Boeotia are not sufficiently difficult to discourage such trade. From Chalkis or Anthedon to Thebes and so to the opposite coast, would be especially favourable routes. But if Boeotia does not possess this favourable position, then there is nothing within the country itself to tempt either the inhabitants to the sea, or through-traders to the land. Nearly all the way along its coast mountains or hills slope down to the water's edge and shut out the view of the interior, while the plains are so surrounded by mountains that from nowhere in Boeotia, except mountain-tops and places actually on the coast, is the sea visible.

Relying on Ephoros, Strabo, and Pseudo-Skymnos, as on three independent and equally trustworthy authorities, speaking of 'les manuels de géographie' and an ancient proverb when he means a single worthless compiler, and implying that they state that trade passed through Boeotia when, at the most, all they say is that foreign goods might easily have reached Boeotia, M. Bérard has asserted that Boeotia really is such an isthmus, is situated at an important junction of trade-routes with ports turned to all points of the horizon, and by means of this explains the tradition of the Phoenicians at Thebes, the very centre of this happily-placed country. But he omits to consider one very important factor—the island of Euboea and its situation along the north-eastern coasts of Boeotia and Lokris. Euboea is really part of the mainland, the channels of Euripo and Atalanti are but two gulfs stretching far into the interior.<sup>1</sup> This means that on its east coast, the coast that is really open to the Propontis and to Egypt, Boeotia has not a single harbour. No more inhospitable, shelterless coast could well be imagined: the mountains everywhere descend right down to the sea-shore. Owing to the absence of harbours on the east of Euboea, and the inhospitable nature of the coast, any vessel from the North and East making for Boeotia finds the way blocked by

<sup>1</sup> Geologically this is also true. Neumann-Partsch, *Physikalische Geographie v. Griechenland*, pp. 174-6.

Euboea, so that Larymna, Anthedon, or Aulis can only be reached by a long détour round either extremity of the island. Traffic from the Hellespont to the West,<sup>1</sup> if it took an isthmus-route at all, and that not the isthmus of Corinth, would pass through the northern straits of Euboea, and land either in the Gulf of Volo or perhaps in the Gulf of Lamia. In either case, the journey thence by land would reach the Gulf of Corinth at Itéa, and so would go through Phokis, but would not touch Boeotia.<sup>2</sup> No sailor would round the extreme north-west point of Euboea, then veer round and sail south-east till Anthedon or Chalkis was reached, in order that his goods might then take the caravan-route through Thebes to Domvrena or Livadostro. Similarly with vessels from the East and South-East, sailing for the West. Phoenicians indeed from Tyre or Cyprus would not touch Greece at all, but sail along the north coast of Africa. But from the islands of the Aegean and the coast of Asia Minor to Italy and Sicily, trade would pass through Corinth; this is by far the quickest route: to sail first up the Euripos, then cross Boeotia would be waste of time only, and no easier voyage—it was as dangerous to round the headland of Kaphareus as Sunion. And we know as a matter of history that with the growth of the Greek cities in Asia Minor and in Sicily, grew also the importance of Corinth—in the eighth and seventh centuries.

But, while Euboea shuts off from Boeotia the trade of the East, there is one case in which trade might have crossed the eastern plain through Thebes to the West—the trade of Euboea itself, of Chalkis, with its colonies in Italy and Sicily. There is also a second route, a land-route, across Boeotia, that between Phokis and the North, and Attica; thence from Attica past Megara and Corinth to the Peloponnese.<sup>3</sup> But the

<sup>1</sup> The only east coast harbour is Kyme, whence there is a long and circuitous road to Chalkis. No one who has watched the unloading of ships, by hand labour only, will imagine that any trader unloaded goods at Kyme, sent 'caravans' across Euboea, embarked his goods again at Eretria or Chalkis, unloaded them on the Boeotian shore, sent them across Boeotia, and then re-embarked them at Thisbe or Antikyra, all in order to avoid sailing as far as the isthmus of Corinth.

<sup>2</sup> How far the Hellespont and the Pontus were open to traffic in the Mycenaean age, is very doubtful. M. Bérard assumes that the Phoenicians were there before the Milesians. See Mr. T. W. Allen's remarks on this matter, *J.H.S.* xxx (1910) pp. 308, 319; and Leaf's *Troy*.

<sup>3</sup> Thucydides (i. 13. 5) thought that in early times Corinth was only a link between two continents not between two seas; though according to Cornford (*op. cit.*, p. 33) 'this is a modern view; we naturally think of the isthmus as a *land*-link, "opening up a range of territory"; we travel along it by the railway which takes us from Patras, through Corinth, to Athens.'

importance of both these routes depends entirely on the importance of the countries or towns at each extremity—of Chalkis and Sicily in the one case, of Phokis and Attica and Megara in the other. But it is worthy of remark in this connection—M. Bérard habitually ignores such points—of how little importance were Chalkis, Attica, and Megara in the Homeric period. The latter is not even mentioned. Chalkis reached the heyday of its greatness in the seventh and sixth centuries and then declined; Megara flourished about the same time; while Athens was even later. Had these towns had a large trade in Homeric times, then Kadmean Thebes might have been in some measure ‘un carrefour de routes isthmiques,’ or of one isthmus-route, from Chalkis to the Corinthian Gulf, and one land-route, from Phokis and the North to Attica.<sup>1</sup> How unimportant these ‘isthmic routes’ were even after the rise of Euboea, can be seen by many instances. Mykalessos, only six miles from the coast, situated on the very line of the traffic between Chalkis and Thebes, but on the *land* side of the pass, counted as an inland town,<sup>2</sup> and in the Peloponnesian war was as little expecting an attack from the sea as if it had been in the very centre of the plain.<sup>3</sup> Plataia, too, only three hours from Kreusis, had no traffic with the sea, and was proportionately proud of the part it took in the battle of Salamis.<sup>4</sup> The route from Antheion to Thebes is easy; yet scarcely anybody mentions it.<sup>5</sup> It passes by the two lakes, but of Likeri we do not know much more than the ancient name, of Paralimni not even that.<sup>6</sup> As Mr. Frazer says:<sup>7</sup> ‘It is strange that ancient history and mythology are almost wholly silent on the subject of these two lakes, one of which at least has good claims to beauty. In their secluded mountains they lay remote from the bustle and traffic of the world, from the caravans

<sup>1</sup> Tradition perhaps supports this view of the comparative unimportance of this land-route in early times. Neither of the two great early invasions from the North into the Peloponnese, the Achaean and the Dorian, is said to have touched Boeotia. When the Boeotians of Thessaly made their conquest, they came for the sake of the land itself; they did not march through it on their way southwards.

<sup>2</sup> *ἐνθα Βοιωτῶν ἐν μεσογαίᾳ πόλις Μυκαλησσὸς ἦν*, Paus. i. 23. 3. This is said from the point of view of the sailor in the Euripos, which is significant. The language is similar to that used in the sailing hand-books of the time.

<sup>3</sup> Thuc. vii. 29. 3 (*ἀπροσδοκῆτοις μὴ ἂν ποτέ τινος σφίσις ἀπὸ θαλάσσης τοσοῦτον ἐπαναβάντας ἐπιέσθαι*).

<sup>4</sup> *Ἰδτ. viii. 1 (ἄπειροι τῆς ναυτικῆς ἐόντες)*; Thuc. iii. 54. 4 (*ἠπειρῶται ὄντες*).

<sup>5</sup> Pausanias (ix. 26. 2) gives a rationalistic form of the Sphinx-legend, according to which she led a pirate-band which landed at Antheion and ravaged the Thebaid.

<sup>6</sup> Ulrichs (*Reisen*, ii. p. 258) suggested the lake of Harma (from Aelian) and the lake of Hyria (from Ovid). No earlier writer mentions it.

<sup>7</sup> *Paus. v. p. 62.*



of commerce, and the march of armies.' And how much do we hear of Antikyra, the southern port of Orchomenos, or of Abai and Hyampolis, the two towns on the route from Orchomenos to the northern coast? Of all the ports of Boeotia only Oropos appears ever to have been of great importance—as the place to which came traffic for Athens<sup>1</sup> from Thebes by land, and from Euboea and the North by sea.

Add to this, that, though tradition (at least from the fifth century onwards) placed Phoenicians in Thebes, it has nothing to say of their existence in any of the coast towns; which is strange if they were in Boeotia because of the country's advantages as a commercial centre. For how did Phoenicians rule and trade in Thebes, unless they held also the ports at the extremities of the various isthmic routes? Indeed all the legends of the Boeotian towns suggest that in early times the influence of Thebes spread over the whole of the interior of Eastern Boeotia but that it stopped short of the coast; and similarly, that Orchomenos ruled over the Western plain, but not over the coast-towns at its extremities. Theban legend can be traced, that is, in Plataia and Tanagra in the South, at Mykalessos, Harma, Glisas, and the Tenerian plain in the East and North, at Thespiæ and the Sphinx mountain in the West. But there is a little or no Theban legend in the coast-towns, Oropos, Hyria,<sup>2</sup> Aulis, Anthedon, Thisbe, Típha, Korsiai, and Kreusis; just as there is none in Eleutherai or Erythrai on the Attic border, or in Onchestos and Askra on the West. In the same way the influence of Orchomenos can be seen to have been strong in the Western district, in the Kopais plain itself, at Lebadeia, Koroneia, Haliartos, Schoinos (on Lake Hylike), Mt. Ptoon, Akraiphnion, Olmones, Hyettos, and Aspledon. It does not exist either in Halai or Larymna, and is to be seen only faintly in Anthedon, on the northern coast, or in Antikyra, Ambrossos, or Kirrha on the southern. All of which suggests that the importance of Thebes and Orchomenos at this time was due to the natural wealth of Boeotia itself, not to their being centres of international trade. This wealth was due to the richness of the soil; the agricultural products of Boeotia were proverbial in antiquity.<sup>3</sup> Not

<sup>1</sup> See Herakleides, *Descr. Græciæ*, 6 (*F.H.G.* ii. p. 256).

<sup>2</sup> Those legends (of Nykteus and Lykos) which connect Hyria with Thebes suggest rather an early conquest of the latter by the former, than *vice versâ*.

<sup>3</sup> See especially Eur. *Phoen.* 638 ff; Theophr., *Hist. Plant.* viii. 4. 4-5; *Caus. Plant.* iv. 9. 1-6; Pliny, *Nat. Hist.* xviii. 7. 12 §§ 63, 65-6 (wheat); Herakleides, *Descr. Gr.* 8-9 (vines at Tanagra); Paus. ix. 28. 1; Theophr. *Hist. Plant.* ix. 10. 3 (the soil of Helikon.)

well suited to the olive, for except in a few favoured spots like the Bay of Skroponéri, Anthedon, and Domvrena, the winter is too cold,<sup>1</sup> and, except for the hill slopes, especially by Livadiá, Boeotia having a soil which is in most parts too heavy for the vine, was preeminently the country for wheat-growing: it had much of the best corn-land in Greece. The positions of Thebes and Orchomenos gave them naturally the predominance in the Eastern and Western plain respectively. Both of them, Thebes with the springs of the Dirke and the Ismenos, Orchomenos with those of the river Mélas,<sup>2</sup> had abundant supplies of water. The former is in the very centre of the Eastern District, the latter commanded the Kopais. Their early importance, in the time of Kadmeans and Minyans, was due to their position as the chief towns in two large agricultural districts; the later importance of Thebes was due to the same cause; while the later comparative insignificance of Orchomenos was due, as Strabo implies,<sup>3</sup> to the flooding of the Kopais plain which destroyed what had been the chief source of the wealth of the Minyan city. We need not look for trade-routes.

A. W. GOMME.

NOTE ON THE MAP. (Pl. IX.)

Lake Kopais is shown as it is now, since it has been drained, and as it was in the Minyan Age. Its old boundary is marked thus — · — · — ·. As the canals lead the waters of the Kopais into Lakes Likéri and Paralississi, these latter have increased in area; their new boundaries are similarly indicated (— · — · — ·).

A. W. G.

<sup>1</sup> But some mid-European fruit-trees flourish that are unknown in the rest of Greece: Philippon, *Der Kopaissee*, p. 78.

<sup>2</sup> Now the Mavro-potamos: so-called both in ancient and modern times, according to Mr. Frazer (v. p. 193) 'from the dark colour of its deep clear water, in contrast to the light-coloured and muddy water of the neighbouring Cephissus'—itself called Mavro-Nero; the names are often interchanged.

<sup>3</sup> ix. p. 415.

## DATCHA—STADIA—HALIKARNASSOS.

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### I.

THE opinion of Captain T. A. B. Spratt<sup>1</sup> that the ruins at Datcha represent the Dorian city of Akanthos has naturally been adopted by subsequent cartographers as being that of the one man who has thoroughly explored the Knidian peninsula. The identification rests, like so many others, on slight evidence owing to the meagreness of ancient records concerning the city in question: added local knowledge makes another identification seem preferable.

The inhabitants of Syme, on the authority of M. Chaviaras,<sup>2</sup> himself a Symiote, to this day refer to the site as Stadia (Σταδία), of which Datcha is in reality only a dialectic variant with the Σ elided, as so often, by false analogy. The existence of a town called Stadia on this coast can be traced from Pliny downwards. The latter places a town variously called *Pegusa* or *Stadia* near Knidos—*Est in promontorio Cnidus libera, Triopia, dein Pegusa et Stadia appellata*<sup>3</sup>: the name *Pegusa* is readily explained by the springs in the plain of Datcha,<sup>4</sup> and the comparative obscurity of the town by the fact that it was in ancient times subordinate to Knidos.<sup>5</sup>

Stadia however appears to have outlived its parent-city, surviving as a bishopric in 787 A.D.;<sup>6</sup> later still it is mentioned by Acropolita<sup>7</sup> (thirteenth century) and Pachymeres<sup>8</sup> (fourteenth century), and charted

<sup>1</sup> *Remarks on the Dorian Peninsula and Gulf* (*Archæologia*, xlix. 1886), 347.

<sup>2</sup> Συλλογή Χτ. Ἐπιγραφῶν in *Viz. Vrem.* xv. (1908), cf. *B. C. H.* xxxiv. 425, xxxvi. 529.

<sup>3</sup> *H. N.* v. 104. <sup>4</sup> Spratt, *loc. cit.* p. 356.

<sup>5</sup> Cf. Hdt. i. 174 and inscriptions, *Ath. Mitt.* xxxvi. 97.

<sup>6</sup> Lequien, i. 917 (Σταδέλας).

<sup>7</sup> xxviii. p. 49. <sup>8</sup> i. 310, cf. 220.

on the Italian maps of the fifteenth century as Statia, Stadea, Statea,<sup>1</sup> thus leaving no doubt as to its identity with the modern Stadia-Datcha.

## II.

A late fifteenth-century reference to the place has a curious interest for the history of the Mausoleum of Halikarnassos. In the course of the expedition of Mocenigo (1472) a small successful raid was made by the Venetians on Budrum: this was followed by a reconnaissance on the other side of the Gulf of Kos. The fleet came, in the words of Coriolano Cippico, a participant in the expedition, 'ad un certo luogo di Caria che al presente si chiama Tabia. Quivi *venendosi da due lati a congiungere il mare reduce in penisola una gran parte di Caria*. Il territorio fu già degli Alicarnassei . . . nella quale Artemisia fece un monumento . . . le vestigie di questo vidi tra le rovine della città.'<sup>2</sup>

The Knidian peninsula, and precisely the isthmus, is indicated by the italicised passage. *Tabia* is either a misprint or a popular etymology (Tk. *Tabia* = battery) for (s)Tadia. It is further clear that Cippico regarded not Budrum but Datcha as the site of the Mausoleum. His words are quoted by Newton<sup>3</sup> along with the now well-known account in Guichard's *Funérailles des Romains* of the discovery of a tomb in 1522 by the Rhodian knight de la Tourette at a place called *Mesy*.<sup>4</sup> Newton naturally takes both Cippico's and Guichard's accounts as referring to Budrum and the Mausoleum he himself discovered, and like most subsequent writers on the Mausoleum uses details of Guichard's circumstantial account as *data* for the restoration of this monument.<sup>5</sup> But the evidence of the cartographers<sup>6</sup> shews that *Mesy* was close to Stadia on the Isthmus of the Knidian peninsula. It follows that the tomb mentioned by Cippico and Guichard was not at Budrum, but on the other side of the bay near Datcha.<sup>7</sup>

<sup>1</sup> Tomaschek in *Sitzber. Ak. Wien, Phil.-Hist. Cl.* xxiv. (1891), p. 40.

<sup>2</sup> Ap. Sathas, *Mon. Hist. Hell.* vii. 269-270.

<sup>3</sup> *Class. Mus.* v. 183 f.; *Halicarnassus*, i. 75.

<sup>4</sup> See Newton, *op. cit.*: Guichard's account is also reprinted in Ross, *Reisen n. Kos*, etc. p. 50. The discovery of the passage seems to be due to Lacroix (*Mem. de l'Inst., Classe d'Histoire*, ii. 1815).

<sup>5</sup> Adler (*Mausoleum*, p. 5) regards the whole account as too fanciful to be of practical use. Torr treats it as folk-lore and derives it from an Eastern source (*Class. Rev.* i. 79).

<sup>6</sup> Cf. e.g. *Atlas Catalan* (1375) in *Not. et Extr.* xiv. 102, where both *Stadia* and *Mesi* are marked.

<sup>7</sup> Spratt (*op. cit.* 355) mentions 'arches forming the basement of a large building' at Datcha.

## III.

This opens up a curious question: when was Budrum first identified with Halikarnassos? Newton's examination of the knights' Castle of S. Peter<sup>1</sup> seems to shew conclusively that the original builder, Heinrich Schlegelholz, in 1400 or thereabouts, plundered the real Mausoleum extensively for material: this is stated in so many words by Fontana more than a hundred years later<sup>2</sup> but it is very doubtful whether Schlegelholz and his brother knights knew or cared what building it was at the time.

The chance remarks of pilgrims passing through Rhodes on their way to and from Palestine may be taken as reflecting the current opinions of the time. By these Budrum is not identified with Halikarnassos before the sixteenth century. The fifteenth century pilgrims, William Wey of Eton (1458-62) and Lengerand (1485), identify it with Tarsus and Tarshish. Some lost popular etymology probably underlies this tradition. Before the building of S. Peter's there seems to have been a Turkish castle near by, but inland,<sup>3</sup> which perhaps used the present port: one suspects that some form of the word *Tersana* (= a place for building and repairing ships, our *arsenal*) is the solution of the riddle.<sup>4</sup>

Now Tarsus-Tarshish, according to John of Hildesheim,<sup>5</sup> was the port whence the Three Kings of Cologne embarked to escape from Herod, who in revenge 'with a strong wind brake the ships of Tarshish.' It should be noticed that John of Hildesheim placed Tarsus correctly in Cilicia, in his time Lesser Armenia, a Christian kingdom. In the fifteenth century the interior of Asia Minor was less known, and there was no obvious impropriety in a German knight—the Castellans of S. Peter's were

<sup>1</sup> *Halicarnassus*, ii. 647.

<sup>2</sup> *De Bell. Rhod.* ii. 1. *Petrea quam ex ruinis Halicarnassi, Piramidisque Mausoli sepulchri . . . struere coepit Henricus Schlegelholz eques Germanus. 'Essone von Slegleoltz' (? Hesso von Schlägelholz), Grand Prior of Germany in 1412 (Bosio. ii. 3, 130). is evidently identical.*

<sup>3</sup> Cf. Marulli, *Vite dei Gran Maestri* (1636), 389, and the MS. map of Kos by H. Martelli (B.M. *Add. MS.* 15, 760) which shows a conventional tower E. of S. Peter's marked *Turris turchorum distat ab castello sancti petri per tres leucas.*

<sup>4</sup> The name of Budrum before the building of the castle is not known: *Budrum* (= *dungeon, vault*) is of course a perversion of *Petrouion*, the Byzantine name for S. Peter's, still in use, it is said, amongst the Symiotes.

<sup>5</sup> Edn. of Frankfort, 1842, p. 99. The author wrote about 1375-8 and a German version was current at the end of the fourteenth century. The identification of Tarsus-Tarshish and its association with the Three Kings is however much earlier, cf. the *Itinerarium* (1211) of Willebrand von Oldenburg.

for a long time Germans—bringing the site into connection with his country's saints.

Be this as it may, in the latter half of the fifteenth century pilgrims who chanced to stray to S. Peter's were shewn the rock from which the Three Kings embarked and their 'tombs, of marble great and high'—admittedly however, cenotaphs.<sup>1</sup>

In the early years of the sixteenth century, with the revival of learning in full swing, Italian *dilettanti* began to take a considerable interest in the site. A certain Fr. Andreas de Martinis was collecting for Venice, Sabba di Castiglione for Isabella Gonzaga, the governor of Milan had his agents there, and the Grand Master of the Order was himself interested.<sup>2</sup> Sabba di Castiglione, from whose letters (1505-7)<sup>3</sup> most of these details are gleaned, habitually refers to the ruins at S. Peter's as those of Halikarnassos, adding in one passage '*ove gli è la sepultura che fece Artemisia a Masuleolo suo marito*.'<sup>4</sup> This may have been the sarcophagus referred to in a later letter<sup>5</sup> as *una nobile, celebre, et solenne sepultura* found recently at S. Peter's: its discovery evidently made a considerable stir as an English pilgrim of 1506-7, Sir Richard Guylforde, finds space in his very summary journal to mention the 'tumble that was found at Seynt Peer whyles we were in these partyes.'<sup>6</sup>

About the same time di Castiglione mentions the export of 'two little heads of Amazons' to Italy;<sup>7</sup> and of the two groups of slabs from the Amazon frieze formerly built into the castle of S. Peter one is dated 1510 by the inscription<sup>8</sup> on the shield of a combatant, while the other centred round a marble block bearing the name of the then Castellan and the date 1506.<sup>9</sup>

<sup>1</sup> Cf. W. Wey, *Itinerary* (1458-62) p. 118: Castellum Sympere vocabatur quondam Tharsis . . . et ibi est lapis super quem steterunt tres reges Coloniae quando accipiebant naves in patrias suas. *Ibid.* p. 94: Sympere ubi quondam erat civitas Tarsys ad cuius portam tres reges Coloniae accipiebant naves et post eorum transitum Herodes in spiritu violenti Tarcensium combussit naves. Ibi etiam Sanctus Paulus . . . erat in sua juventute nutritus. Lengerand (1485), p. 104: (Chastel S. Pierre) qui se souloit appeller la cite de Tarce dont les trois roys vinrent pour aouer nostre Seigneur, *reges Tarsis et Insue* etc., et combien que leurs corps n'y sont, leurs tombeaux y sont en marbre grands et hauts.

<sup>2</sup> It was probably at this time that the fine slab of frieze now in the British Museum (*Catal.* ii. No. 1022) came to Genoa.

<sup>3</sup> *Arch. Stor. Lomb.* ann. xiii. 1886, pp. 99 ff.

<sup>4</sup> *Ibid.* p. 99. <sup>5</sup> *Ibid.* 108, cf. 106 (1507).

<sup>6</sup> *Pilgrimage of Sir R. Guylforde*, p. 59.

<sup>7</sup> *Loc. cit.* p. 106. <sup>8</sup> *J.H.S.* xxix. 367.

<sup>9</sup> Allan, *Pictorial Tour*, 39; Newton, *Halikarnassus*, ii. 654.

It is thus clear that about this time excavation was proceeding on the site of the Mausoleum itself, and it is probable that this excavation, aided by increased classical knowledge, possibly also by inscriptions, led to the correct identification of the site of Halikarnassos. Subsequent writers down to the evacuation of S. Peter's by the knights (1522) adhere to it:<sup>1</sup> after this break in the tradition Halikarnassos is again lost till the eighteenth century.<sup>2</sup>

It is a tempting suggestion that the simultaneous discovery of the 'noble sepulture' and of the frieze-slabs was not fortuitous, but implies the finding of the tomb-chamber of Mausolus. It has long since been remarked that the preservation of the best slabs of the frieze is extraordinary if they were in the first place exposed to the weather for many centuries and finally hurled down from the height of the epistyle. But good technical grounds have lately been advanced to show that of the friezes preserved, only that of the Amazonomachia could have occupied the generally accepted position.<sup>3</sup>

F. W. HASLUCK.

NOTE ON A GREEK INSCRIPTION OF THE KNIGHTS AT BUDRUM.

*C.I.G.* 8698 (*Halicarnassi, in exteriori porta castelli*) has not hitherto been recognised as an inscription of the Rhodian Knights; it is the only Greek one known, if we except the motto PALITHARO (= πάλι θὰ ῥῶ) which occurs twice at Rhodes with the device of an hour-glass.<sup>4</sup>

The text of the Budrum inscription, derived from Beaufort and Walpole (ap. Clarke, *Travels*, III. 257 note), is as follows:—

† ὁ ἔνδον ἐρχόμενος τοῦ κάστρου τούτου | καὶ πραττειν ἢ λέγειν κακῶς  
βουλόμενος τιμωρηθήσεται | † ΦΙΓ : Φ . ΤΖΙΑΒΕΣΓΑΤΙΝΕΟΒΑ . . . . .  
ΤΑΝΟΣ

<sup>1</sup> Cf. Enriquez de Rivera (*Viaze* [1518–20] p. 154), 'A vn buen tiro de ballista ay unas paredes, adonde era la ciudad de Alicarnasso: y ado estava la sepultura de Artemisia'; B. de Salignac, *Itin. Terrae Sanctae* (1525) xv. 'Castrum Sancti Petri in continenti quo Alicarnasson civitas suo dionysio olim famata erat.' L. Tschudi, however (*Reyss* [1519] p. 80) identifies Halikarnassos with Mesi like Cippico: 'Halikarnassos jetzt Mesi genannt.'

<sup>2</sup> Cf. Leunclavius, *Pandect. Hist. Turc* § 217 and the discussion in Wheeler's *Voyage*, p. 275. The identification Budrum-Halikarnassos seems to have been generally accepted after Choiseul Gouffier (*Voy. Pitt.* i. [1782] 152), but even Beaufort (1813) does not yet regard the question as finally settled, and Gropius in 1803 still identifies the ruins of Iasos with Halikarnassos, an error started by Pickering (Wheeler, *loc. cit.*).

<sup>3</sup> Dinsmoor in *A.J.A.* xii. 17.

<sup>4</sup> The occurrence of the device and motto beside the arms of G. M. Antonio Fluviano (Belabre, *Rhodes*, p. 16, Fig. 2, cf. p. 88) shew that there is a punning allusion to his name.

The third line, unintelligible to the editor of the *Corpus*,<sup>1</sup> must certainly be read:

α,φινγ· φρ(ὰ) τζιά(κ)ες Γατινέο (κ)α[πι]τάνος.

Jacques Gatineau is known from an inscription in the same gate, to have been Captain of S. Peter's in 1513.<sup>2</sup> The use of Greek in official inscriptions of Latin potentates is paralleled elsewhere,<sup>3</sup> though the purity of the language here used is remarkable.

F. W. H.

#### NOTE ON THE THOLOS TOMB AT KIRK KILISSE.

I find, since writing my article on the Kirk-Kilisse tomb,<sup>4</sup> that I must disclaim priority of publication in favour of M. Degrand, then French Consul at Adrianople, who communicated particulars of the discovery to the Academy of Inscriptions early in 1892.<sup>5</sup> In his notes, published with brief comments by M. Perrot, M. Degrand lays less stress on the structure of the tomb than on its contents, to the list of which he adds (1) a bas-relief and (2) a fictile vase, of which I had no information.

F. W. H.

<sup>1</sup> 'Versu tertio, praeter numeros 6513 qui annum sistunt post chr. 1005 nihil video.'

<sup>2</sup> Newton, *Halicarnassus*, p. 650.

<sup>3</sup> Cf. the Greek inscriptions of the Gattelusi in the Thracian Islands (Conze, *Reise*, Pl. III. 4, 7; *C.I.G.* 8777) and Phocaea (*B.S.A.* xv. 258), and of Pandolfo Malatesta at Patras (*C.I.G.* 8776 = Pouqueville, iv. 356 = *Νέος Έλληνομνήμων*, vi. 105, vii. 95, cf. Duchesne and Bayet, *Mém. sur le Mont Athos*, 136 (200)).

<sup>4</sup> *B.S.A.* xvii. 76, ff.

<sup>5</sup> *Comptes Rendus*, 1892, p. 35 f. : cf. S. Reinach, *Chron. d'Or.*, II. 103.



## THE MASTER OF THE EUCHARIDES-STAMNOS IN COPENHAGEN.

(PLATES X.-XV.)

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I owe my thanks to Mr. A. H. Smith, Dr. Blinkenberg, Prof. Bulle, and Mr. Pottier for allowing me to publish vases in London, Copenhagen, Würzburg, and Paris: and to Dr. Blinkenberg and Prof. Bulle for sending me photographs.

THE only extant vase with the love-name Eucharides is a red-figured stamnos of severe style in the National Museum at Copenhagen.<sup>1</sup> Twenty-three vases must be assigned to the painter of the Eucharides-stamnos, among them such well-known pieces as the Danac-stamnos in St. Petersburg, the Tityos-vase in the British Museum, and the krater with Sarpedon or Memnon in the Louvre. His work, though not of the highest quality, is interesting in many ways; so I propose to make a list of his remaining vases, to describe the more prominent characteristics of his style, and to indicate very briefly the place he occupies in the history of Attic vase-painting.

### I.-III.—*Neck-Amphorae.*

The earliest extant rf. neck-amphora<sup>2</sup> is the fragmentary vase in Boston published by Hartwig in *Röm. Mitt.* 16. Pl. 5 and p. 119: the pictures are rf., but the rest of the decoration is the same as that on ordinary bf. neck-amphorae: neck and foot are missing; the handles

<sup>1</sup> Birket-Smith, 124; Klein, *Lieblingsinschriften*, p. 128. My No. 14 and Pl. X.

<sup>2</sup> I do not include under 'neck-amphorae' either amphorae of Panathenaic shape or the four rf. amphorae of Nikesthenic shape (1. Vienna, K. K. Museum, 226, Masner, *Cat.* p. 39; 2. Rome, Mr. Aug. Castellani (bf. and rf. like last); 3 and 4, Louvre, G 3 and G 2 (Pottier, *Album*, Pl. 88; by the painter Oltos).

are double. This is one of the earliest rf. vases we possess, and there is no parallel piece: the next rf. neck-amphorae belong to the time of Euphronios, and may be divided into two classes:—

(a) Mouth and foot in two degrees (Fig. 1, *a*); twisted handles.

1. Louvre, G 107. *Mons. Piot*, 9, Figs. 4, 6, 8.
2. Dresden. Gerhard, *A.V.* Pl. 124.<sup>1</sup>

(b) Mouth and foot in one degree (Fig. 1, *β*).

1. (Triple handles) Brussels, 296. (*A.* Herakles: *B.* Archer).
2. (Convex-handles like pelike-handles). Vienna, K. K. Museum. *Arch. Ep. Mitt. Oest*, 5, Pl. 4. Signed by Epiktetos (Klein, *Meist.* No. 26).

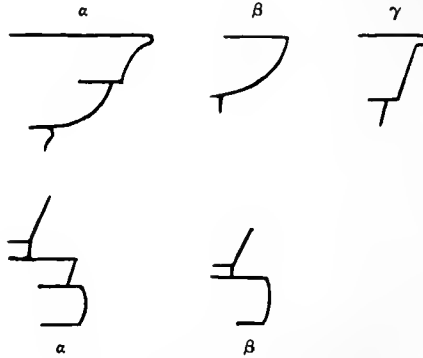


FIG. 1.—TYPES OF NECK AND FOOT IN NECK AMPHORAE.

Now the two vases classed under (*a*) are the earliest members of a very numerous and important group: for the commonest type of large rf. neck-amphora has this foot and mouth, and twisted handles.

The two large vases (*b*) are the ancestors of an equally important family: namely, what I should like to call the Nolan-amphora proper:

<sup>1</sup> The amphora with twisted handles, Louvre, G 30 (Pottier, *Album*, Pl. 90) is slightly earlier (perhaps by Euphronios); it has the same mouth in two degrees, but the foot is lost: it is not a pointed amphora. Louvre, G 106, is a companion piece to G 107 and bears the name of Euphronios; the foot is restored, and I am not sure if either neck or handles belong to the vase.

I conjecture the inscription on G 107 (ΔΟΚΕΙ : ΣΜΙΚΟΙ : ΙΝΑΙ) to be a miswriting for a δοκεῖ Σμικρῶ, καὶ continuing a (ὁ δεῖνα) καλός on a pendant vase (cf., e.g., the Memnon vase No. 35 in Klein's list, *Lieblingsinschriften*, pp. 60-61).

a small neck-amphora with mouth and foot in one degree and of the shapes shown in Fig. 1,  $\beta$ : in the severe period, triple handles are the rule in Nolan-amphorae; in the free period, ridged handles are more common.

We have six neck-amphorae by the Eucharides-master, three large (6, 1, and 2 in my list), and three small (3, 4, and 5), no two identical in shape. One of these, No. 6, belongs to the numerous class already described under (*a*); the mouth and foot are in two degrees, and the handles are twisted (as Fig. 1, *a*). The vase 1 has the same shape except for the handles, which are ridged. 2 keeps the same foot, but a new type of mouth appears (Fig. 1,  $\gamma$ ). The small vase 3 has a further variation: ridged handles, and neck (Fig. 1,  $\gamma$ ), but simple disc-foot (Fig. 1,  $\beta$ )—the Nolan-amphora foot. 4 and 5 have neck and foot like No. 3, but double handles: 3 and 4 have, besides, a black horizontal cylindrical projection under each handle, 5 has not. A table will make clear these variations from vase to vase.<sup>1</sup>

NUMBER OF VASE.	HANDLES	MOUTH	FOOT.	PROJECTIONS.	SIZE.
6	Twisted	$\alpha$	$\alpha$	No	Large
1	Ridged	$\alpha$	$\alpha$	No	Large
2	Ridged	$\gamma$	$\alpha$	No	Large
3	Ridged	$\gamma$	$\beta$	Yes	Small
4	Double	$\gamma$	$\beta$	Yes	Small
5	Double	$\gamma$	$\beta$	No	Small

5 nearly approaches the ordinary Nolan-amphora shape, the neck alone is different. At the time when our master was painting, the canonical Nolan-amphora was only beginning its career. The earlier examples we possess were painted by the 'Dutuit-master' (see *J.H.S.* xxxiii. p. 109), an artist who touches the Eucharides-master at several points. Hardly later is the large group of Nolan-amphorae painted by the Berlin-master and his imitators (*J.H.S.* xxxi. pp. 286, and 294-5): it was the Berlin-master who popularised this pretty and modest shape.

<sup>1</sup> I count 17 *rf.* neck-amphorae with ridged handles (excluding Nolan-amphorae with ridged handles), and 13 with double handles. The mouth  $\gamma$  is found on no other *rf.* ridged amphora, but it is found on three other double amphorae, two of them by the Dutuit-master (*J.H.S.* xxxiii. p. 108). The cylindrical projection is found on six other ridged amphorae, but on no other doubles.

I.—*Neck-amphorae with ridged handles.*

1. British Museum, E 279. Inghirami, *Vasi fittili*, Pl. 347-348.  
(Pls. XI, XII from new drawing and Fig. 2.)

A. Dionysos and

B. Woman with oinochoe and torch.



FIG. 2.—NECK-AMPHORA IN THE BRITISH MUSEUM (E 279).

2. British Museum, E 278. *Mon.* I. Pl. 23. (Pls. XIII, XIV from  
new drawing and Fig. 3.)

A. Apollo and

B. Tityos and Ge.

## 3. Louvre, G 202. (Fig. 4.)

*A.* Silen pursuing*B.* Maenad with torch.

The picture on *B* always completes the picture on *A*. In all three upper side of mouth black, and shoulder-cushion red.



FIG. 3.—NECK-AMPHORA IN THE BRITISH MUSEUM (E 278).

Foot of 3 black: side of upper section reserved in 1, black like lower section in 2.

Rich ornamentation: in all three the neck is not left black but covered with elaborate rf. palmette or palmette-and-bud patterns. The petals of the palmettes all ribbed.

1 and 2 have a single rf. palmette, pointing downwards, at each handle: 3 has a rf. pattern of two palmettes and two buds at each.

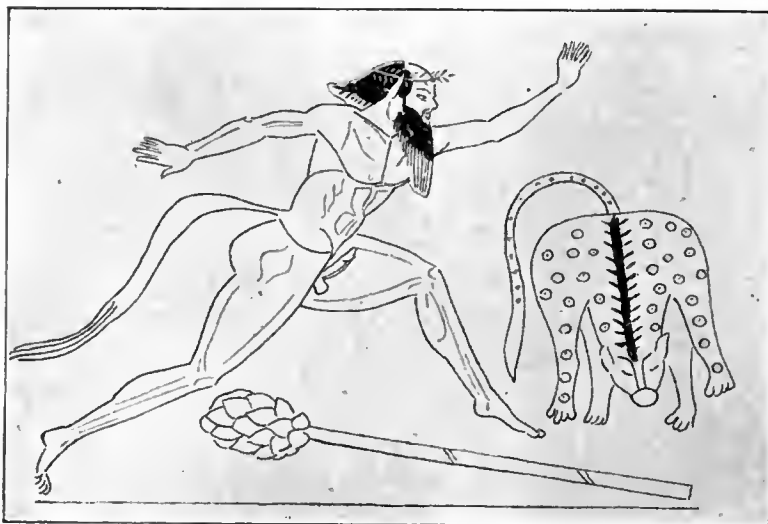


FIG. 4.—DESIGNS ON A NECK-AMPHORA IN THE LOUVRE (No. 3, *A* AND *B*).

The pictures on 1 and 2 are framed on all four sides ; on 3 only above and below. The band of pattern below the pictures always runs right round the vase. (For patterns see Fig. 6, p. 231.)

## PATTERN.

NUMBER OF VASE.	ABOVE.	SIDES.	BELOW.
	Tongues	3	3
2	Tongues	12	1
3	Egg	Nothing	Two bands of 16

II.—*Neck-amphorae with double handles.*

## 4. Brussels, A. 721.

A. Akontist.

B. Akontist.

A. moving quickly r. regardant, l. extended, r. extended downwards holding akontion near middle. On right, an akontion (as if leaning against the wall), and on the ground a diskos with a silhouette owl painted on it and letters (*καλος*?). For owls on diskoi v. *J.H.S.* xxviii. p. 316 and Pl. 31. B. running l., r. leg raised from ground, r. hand raised behind head holding horizontal akontion, about to hurl it. On the left an akontion ; on r., a dikella. Prof. Reichhold informed me that this pretty vase is to be published in Furtwängler-Reichhold.

## 5. Naples, (B) Phot. Sommer, 11096.

A. Dionysos with horn and branch.

B. Silen with wineskin.

Upper side of mouth black in both. Foot black. 4 richly ornamented, 5 not : on neck of 4, elaborate rf. palmettes and buds, and below them pattern No. 5 ; neck of 5 black.

At the handles : 4 has a pattern of two palmettes and four buds at each (as 3, but with a second bud on each side) : 5 no pattern.

Patterns : above ; 4 egg and dot : 5, nothing. Below ; 4, all round patterns 16, 5, and 16 again, separated by black bands. 5, under each, No. 14. 4 careful, 5 not.

III.—*Neck-amphora with twisted handles.*

6. Munich, 2317. Lützow,
- Münchner Antiken*
- , Pl. 18.

A. Woman with lyre.

B. Woman with lyre.

Upper side of mouth black, as in 1-5.

Foot black all over, like 2's.

Below A, No. 8; below B, slight variant, No. 9.

Both faces are restored.

IV.—*Amphora of Panathenaic shape.*

7. Louvre, G. 221.

A. Man with pig.

B. Man.

A. standing r. leg frontal, head turned to l., in l. branch and knife, in r. pig: himation. B. moving r., regardant, in r. stick, l. extended from elbow.

Rough and much restored. Ordinary shape. The handles, which are twisted, do not belong to the vase. Below each picture, No. 6: upper edge of mouth black.

V.—*Kalyx-kraters.*

8. Berlin, Inv. 3257.
- Arch. Anz.*
- 1893, p. 88.

A. Fight.

B. Warriors.

9. Louvre, G 47. Pottier,
- Album*
- , Pl. 93-4.

A. Arming.

B. Warriors running.

10. Louvre, G. 163. *Mon.* 6-7, Pl. 21; *Ann.* 1858, Pl. P; Ravaisson, *Mons. grecs relatifs à Achille*, Pls. 2 and 1, (tirage à part from *Mém. de l'ac. des inscriptions et belles-lettres*, t. 34, 2<sup>me</sup> partie).

A. Death and Sleep lifting the body of Memnon: below, two Silens.

B. Embassy to Achilles: below, two Komasts.

A good deal of restoration, including the face of Memnon.



Ravaisson speaks of the vase throughout as 'le cratère d'Euphronios' without any apology, which is very odd; he no doubt confused it with the Louvre Antaios-krater.

11. Naples (2201), fragment. *Museo Borbonico*, 15, Pl. 15.

I have only seen one side of this vase; small parts of the komasts are antique, and a foot and a little drapery in the main scene; on the other side, I should judge from the illustration that some square inches are genuine.

8, 10 and 11 have tongues at the base, 9 not.

8 and 9 have palmettes at the handles, 10 not.

Patterns. Above: 8, No. 13. 9 and 10, No. 15.

The pattern No. 15 does not occur on any other rf. kalyx-krater: the pattern No. 8 on one other rf. kalyx-krater only, a fragment in Athens by the Nikoxenos-master (*v. p. 233*).

Below: 8 and 9, No. 12. 10 and 11 are the only rf. kalyx-kraters which have little pictures instead of pattern on the lower part of the vase, although the same system is found on the bf. kalyx-krater in Vienna, Masner, *Cat. Pl. 4*.

#### VI.—*Column-krater.*

12. Florence, 3990.

*A.* Warriors and woman: departure.

*B.* Maenad and Silens.

*A.* 1. Young warrior r., in r. phiale, l. raised; 2. woman l. with spear and shield; 3. warrior, upper half restored. *B.* 4. Silen r., with horn; 5. Maenad l. regardant with krotala; 6. Silen r. regardant with horn.

Large: usual patterns on mouth, and usual frames round pictures. Neck black. At base, rays.

#### VII.—*Stamnoi.*

13 Würzburg, 329. (Pl. XV.)

Women and warriors: departure.

14. Copenhagen, 124. (Pl. X.)

*A.* Youth seated between two standing women.

*B.* Youth standing between two seated women. Over each handle a flying Eros.

The Eucharides-stamnos.

15. Once Naples, Coll. Bourguignon, *Cat. Vente Bourguignon*, Pl. 3, No. 30.

A. Peleus and Thetis.

B. Nereus mounting chariot.

16. St. Petersburg, 1357. *Mon.* 1856, Pl. VIII.

A. Danae's chest.

B. Warriors.

15 and 16 I have not seen.

Mouth: 13, 14, 15 have detached lip; 13 has a groove near the lower edge of the mouth, 14 and 15 not. On the mouth, different kinds of egg-pattern.

The neck of ordinary archaic shape size in 13; in 14, shorter than usual.

Foot: in 14 and 15, simple black disc; in 13, double-curved.

Handles flattened.

Above the pictures, usual tongues. Below, going all round the vase, a reserved line in 13; in 14, No. 7; in 15, No. 2.

In 13, which is no doubt the latest of the four, the scene is continuous all round the vase.

#### VIII.—*Hydriai-Kalpides*.

(a) Picture on the shoulder, framed all round (above, No. 4; sides, No. 12; below, No. 17). Mouth has detached lip, and an egg-pattern: upper side of it, black. Foot double-curve.

17. Vatican. *Mus. Greg.* 12. 2: Gerhard, *A.V.* Pl. 202: best reproduction, phot. Moscioni, 8602. Fight: Achilles and Hector, with Athena and Apollo.<sup>1</sup>

(b) Picture on shoulder, but not framed. Below the picture a reserved line: below that, a band of No. 11, which stops 2 cm. from each handle.

Mouth and foot black. Upper side of mouth reserved. Rough.

18. British Museum, E 174. *El. Cér.* 3. Pl. 19.

Poseidon and Aithra.

<sup>1</sup> This careful piece may be compared with the far finer representation of the same subject on the British Museum volute-krater by the Berlin-master (Gerhard, *A.V.* Pl. 204; *J.H.S.* xxxi. Pl. 14). I may say here that the sadly mutilated volute-krater, Louvre, G. 166, is also by the Berlin-master, and should be added to my list of that painter's works.

(c) Picture on the body. Below it, a band of 7. Mouth black, with detached lip: upper side of it, reserved. Simple black disc-foot.

19. Würzburg, 144.

Dionysos with kantharos and branch, and woman with oinochoe and phiale.

A fragment from the Acropolis of Athens seemed to be part of a hydria with picture on the body.

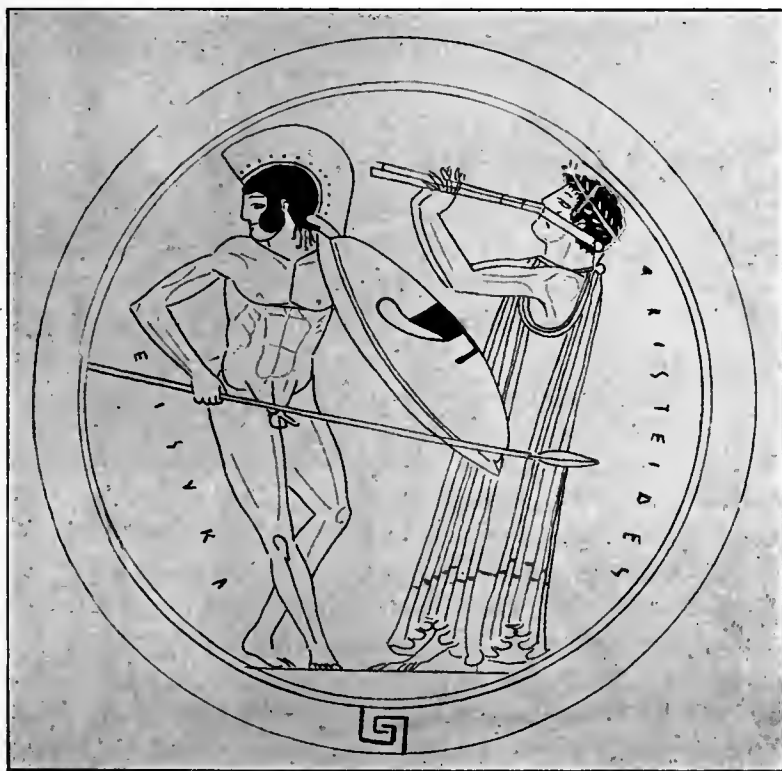


FIG. 5.—SCENE ON CUP IN THE LOUVRE (NO. 12).

20. Athens, fragment.

Warrior and woman.

1. Youth standing r., helmeted (Attic helmet, black with a red spiral).
2. Woman standing l. Between them a spear held by one of the two.

IX.—*Lekythos*.

21. Oxford, 315. Gardner, *Ashmolean Vases*, Pl. 24. 3.  
Triptolemos.

Neck short; ordinary disc-foot, side reserved, without groove. Shoulder black, with tongues. Above picture, egg: below it, No. 10.

X.—*Cups*.

22. Louvre, G. 136. Fig. 5.  
Hoplitodromos and youth fluting.

23. Boston. *now woman's possession at Louvre*

Man and naked woman on bed: fragmentary.

Head of woman was frontal. Added to the museum in 1912.

Small: picture on inside only. Foot missing from both. Round picture, No. 1.

24 bears the name of Aristeides: a second small cup with the same name is mentioned by Klein, *Liebblingsinschriften*, p. 97, but it has disappeared.

## THE STYLE OF THE EUCHARIDES-MASTER.

The collar-bones are rendered by two black lines, each with a single curve slightly concave to the chest (2, 3, 4, 7, 9, 10, 12, 14, 17, 22, 23).

On seven of these vases, brown lines are added below, to mark the lower edge of the collar-bone (2, 3, 4, 7, 14, 22, 23).

On two vases, we find a different rendering of the collar-bones: but there is a reason for that. Dionysos on 1, and Triptolemos on 21, both wear an Ionic chiton bounded above by a number of parallel black lines: in order to keep the markings of the body quite distinct from the markings of the clothes,<sup>1</sup> the master chooses a different rendering for the collar-bones, two *brown* lines convex to the chest, meeting and recurring.

On each breast, the master frequently draws two brown lines diverging downwards (2, 3, 4, 14, 22, 23). The chest is usually very deep (*e.g.* 2).

<sup>1</sup> Cf. the Berlin-master's Perseus-vase (Furtwängler-Reichhold, Pl. 134, 2) (brown collar-bones instead of black).

The nipples, when marked, are simple brown circles (2, 3, 14, 22 ; on 23, this circle is twice broken) except on 8, where the nipple is a black circle.

The female breast in profile is small and round, with a projecting nipple separated from the breast by a black line (1, 2, 3, 6, 12, 14, 15, 19, 23).

The junction of the breast-lines below is most characteristic (2, 3, 4, 10, 12, 14, 17, 22, 23). The short black straight line is only missing on 9.

The upper edges of the brown torso muscles are not rounded, but straight, a most singular rendering (2, 3, 4, 12, 14). 22 and 23 have the same peculiarity, but brown lines are added between these horizontal edges and the breast.

A brown line, longer than usual, indicates the lower edge of the serratus magnus (2, 3, 4, 22). The ribs are rendered by a *single* series of brown curving lines (2, 3, 4, 22).

The frontal navel-pubes line is black in all three instances (2 and 22 (male), and 23 (female)). The navel is not distinguished from the rest of the torso-markings on 22 ; on 2 it is a broken brown ellipse ; in the woman on 23 it is not marked.

The drawing of the profile hip is to be carefully observed. The iliac furrow is rendered by a long black line with a single curve convex to the thigh. The front line of the thigh curves round above this line: the thigh is full (2, 3, 4, 12, 15, 17). The furrow is not marked on the Erotes in 14. In 10 the rendering is different: Memnon's hip is of the usual kind but has an additional curving black line at the small of the back: in Odysseus, the furrow is marked by a brown line of unusual shape.

The profile knee is rendered by a single curved brown line on 22 ; a second line is added on 2 and 5 to mark the upper end of the tibia: and both forms occur on 3.

There are three frontal knees, on 2, 17, and 22. The knee is narrow, and in 2 and 17 the shin-bone is marked by *two* black lines. This double shin-line is extremely rare: I only know one other example, on the early rf. cup with the love-name Dorotheos, Munich, 2586.

The nearer foot is very remarkable. The toes are rendered schematically by a series of straight lines running sharply downwards. This curious rendering may be seen on all the vases where feet are preserved, including the krater 11 where little else but feet remains. In the frontal

feet flat on the ground, which appear on four vases (7, 14, 21, 22), the toe-lines are usually not quite upright, but lean a little to one side (see 21 and 22, and one of the two frontal feet on 14).

There is no black line for the ankle; the ankle where marked is rendered by brown lines, sometimes continuous with the brown lines of the leg.

One of the most typical hands is the closed frontal hand of Apollo on 2; notice the very long thumb, with narrow ball and separate indication of the lower joint by a line *convex* to the palm. This long narrow thumb is very characteristic, and the convex line invariable in closed frontal hands (1, 2, 3, 5, 9, 12, 13, 14, 17, 19, 21, 23). For the straight brown lines on the back of Dionysos's hand in 1, cf. 5, 6 and 10.

The head. The eye is narrow and slightly oblique. The dot-and-circle eye is not used. The most typical variety of ear has a double lobe (1, 2, 6, 9, 10, 14). Simpler forms are also found, sometimes on the same vase with the double-lobed ear.

A single brown line is drawn on the neck in 1, 2, 3, 4, 22.

Relief-line is almost always used for the whole contour of the face. The forehead-nose line bends inwards to the face rather than outwards, so that the nose is not aquiline. The tip of the nose is sharp, the mouth a straight line slanting downwards towards the cheek, the chin long but somewhat narrow. The nostril is marked on three vases only; twice on 1, and once on 9 and 10; in 1 and 10 it is a brown line with a full curve, in 9 a black line of the same shape. Silens have a lump over the eyes (3, 5, 10, 12).

The outline of the hair is reserved. Relief lines are never used for the little loose hairs against the face. Women often wear a krobylos and usually a stephane with it: this stephane is generally dotted (1, 2, 14, 16, 19). The little (metal) leaves with brown centres on the Maenad's stephane in 1 are to be seen on 13 also.

Clothes. Notice the lower edge of garments (1, 2, 3, 6, 9, 10, 12, 13, 14, 17, 19, 21, 22). Clothes are often ornamented with patterns: with groups of three or four dots on 1, 2, 6; single dots on 6 and 23; dots within circles on 1 and 5. Dots within circles also decorate barbitoi on 6, and panther-skins on 3 and 10. On A of 6, the dress is covered with a yellow wash,<sup>1</sup> like the veil of Ge on 2.

<sup>1</sup> See *J.H.S.* xxx. p. 65, note 92.





















No.	Pattern.	Used on Vases.
1.		22, 23, and with six lines instead of four, 2.
2.		15.
3.		1.
4.		17.
5.		4.
6.		7.
7.		14, 19.
8.		6.
9.		6.
10.		21.
11.		18.
12a.		2, 9, 17.
12b.		8.
13.		8.
14.		5.
15.		9, 10.
16.		3, 4.
17.		17.
18.		21.
19.		13, 18.

FIG. 6.—DIAGRAM SHOWING PATTERNS USED ON VASES BY THIS MASTER.

The chiton is edged at the neck by three simple curved black lines (3, 6, 13, 14, 15, 17, 18, 19, 20, 21), or even by four such, which is much rarer on vases (1, 2, 5, 12, 14). The sleeves are usually bounded by a black ingrailed line.

The necklace consists of two brown lines meeting at a sharp angle with a brown bead at the join (1, 2, 3, 6, 12, 14). The bracelets are usually not red but brown (1, 6, 13, 14, 18, 19); on 2, one bracelet is brown, the other red, and on 3 both are red.

The usual helmet is the simple Attic helmet made all in one piece (8, 9, 12, 17, 20, 22); black helmets occur on four vases (9, 12, 20, 22); on two of these, a red spiral is added over the forehead (12, 20).

It will be seen from the illustration (Fig. 6) that the Eucharides-master uses a variety of patterns. But he is particularly fond of the *crossing* maeander with or without pattern-squares, and stopt or unstopt (six times altogether). Groups of maeander on any vase all face the same way, except on 4, where the two maeanders in each group face each other.

#### INSCRIPTIONS.

On 14: *A.* Ευχαριδες καλος. *B.* καλος. (Klein, *Liebl.* p. 128.)

On 22: Αριστειδες and εισυκα (for εἰ σὺ καλός, Klein, *ib.* p. 96, no doubt rightly).

On 8. καλος, and on two shields, Νικον, and Ηιπον. (*ib.* p. 139, No. 9.)

On 15. *A.* καλος. *B.* καλος. On an-altar, καλος; on another, εισυγε (= εἰ σὺ γε).

On 10: *A.* Ηυπνος. *B.* Ολυτευς and Διομεδες.

On 4: on a diskos, καλός.

On 5: on a wineskin, καλος.

On 23, some rough letters.

I shall attempt in a few words to assign the Eucharides-master his place in the history of vase-painting. He is a capable but not a great artist working between 500 and, say, 485. Certain observations, which this is not the place to detail, lead me to conjecture that he learnt his craft from the master who painted the Nikoxenos pelike in St. Petersburg which is figured by Klein on p. 121 of his *Lieblingsinschriften*.



A list of this Nikoxenos-master's works is given in a note below ;<sup>1</sup> his curious and repellent style I hope to study in another place.

Among our master's contemporaries, the Dutuit-master, of whose work some account will be found in *J.H.S.* xxxiii. pp. 106-110, touches him at several points and was no doubt connected with him. To the same 'school,' using the word in a wide sense, belongs the painter of the Oxford column-krater, *J.H.S.* xxviii. Pl. 31.

It is out of this milieu that the Pan-master springs.<sup>2</sup>

<sup>1</sup> WORKS OF THE NIKOXENOS-MASTER.

Pelike.

1. St. Petersburg, Coll. Stroganoff. Klein, *Liebl.* p. 121. A. Athena. B. Athena.
- Amphorae of Panathenaic shape.
2. Boston (mentioned *Arch. Ans.* 1896, p. 96). A. Athena. B. Athena.
3. Berlin, 2161. A. Athena. B. Citharode.
4. Louvre, G. 60. Pottier, *Album*, Pl. 95. A. Athena. B. Man.
5. Louvre, G. 61. A. Athena. B. Woman.

Amphorae.

6. Munich, 2304. Gerhard, *A. V.* Pl. 7. Gods.
7. Louvre, G. 46. Pottier, *Album*, Pl. 93. A. Departure. B. Thiasos.
8. Once Paris, Canessa. Sambon, *Vases Antiques coll. Canessa*, p. 62 and Pl. 15. Death of Priam.
- Rf. Hydria of bf. shape
9. B.M. E 160. Heroes dicing.

Hydria-Kalpis.

10. Würzburg, 140. Athletes.

Fragment of Kalyx-krater.

11. Athens, Acropolis collection. Male with horse, and seated youth.

Two fragments.

12. Athens, Acropolis collection. Athlete with halteres, and head of boxer.

<sup>2</sup> *J.H.S.* xxxii. pp. 354 ff.

J. D. BEAZLEY

## DAMIS OF NINEVEH AND WALTER OF OXFORD: A LITERARY PARALLEL.

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WHEN reading through Professor Phillimore's admirable preface to his translation of the *Apollonios of Tyana* of Philostratos, the discussion of the authenticity of the memoirs of Damis suggested to me a parallel in which literary history appears to have repeated herself. Although it possesses no intrinsic importance the coincidence is perhaps sufficiently a curiosity of literature to be worth recording. Philostratos' statement about the alleged memoirs is as follows (1, 3):—

'There was one Damis, a man not without accomplishments, who at one time inhabited Old Nineveh. His studies drew him into intimacy with Apollonius, and he has left a written account of the Sage's travels (in which he claims to have shared), his maxims, his discourses, and his prophetic sayings. A person who was related to this Damis brought the originals of these memoirs, hitherto undiscovered, to the knowledge of the Empress Julia. And since I had a place in her majesty's circle (she was a great admirer and patroness of all literary studies), she laid on me the task of transcribing and editing these papers. It was her wish also that I should be responsible for the form of expression; for the Ninevite's language, though clear, was anything but a model of literary art.' The parallel is to be found in the dedication and the epilogue to the *Historia Regum Britanniae* of Geoffrey of Monmouth:<sup>1</sup> 'Whilst occupied on many and various studies, I happened to light upon the History of the Kings of Britain, and wondered that in the account which Gildas and Bede, in their elegant treatises, had given of them, I found nothing said of those kings who lived before the Incarnation

<sup>1</sup> I quote Thompson's translation edited by J. A. Giles, Bohn, 1842.

of Christ, nor of Arthur, and many others who succeeded after the Incarnation ; though their actions both deserved immortal fame, and were also celebrated by many people in a pleasant manner and by heart, as if they had been written. Whilst I was intent upon these and such like thoughts, Walter, archdeacon of Oxford, a man of great eloquence and learned in foreign histories, offered me a very ancient book in the British tongue, which, in a continued regular story and elegant style, related the actions of them all, from Brutus, the first king of the Britons, down to Cadwallar the son of Cadwallo. At his request, therefore, though I had not made fine language my study by collecting florid expressions from other authors, yet contented with my own homely style, I undertook the translation of that book into Latin. For if I had swelled the pages with rhetorical flourishes, I must have tired my readers by employing their attention more upon my words than upon the history.' The epilogue repeats this claim to an exclusive source of authentic information : ' But as for the kings that have succeeded among them in Wales since that time, I leave the history of them to Karadoc of Lancarven, my contemporary ; as I do also the kings of the Saxons to William of Malmesbury and Henry of Huntingdon. But I advise them to be silent concerning the kings of the Britons since they have not that book written in the British tongue, which Walter, archdeacon of Oxford, brought out of Britain, and which being a true history published in honour of those princes, I have thus taken care to translate.'

Both Geoffrey and Philostratos assert that their works are based on exclusive information of an exceptionally authentic kind. In either case it is possible that there is something behind their claim, though it is hardly probable that there is sufficient to justify it. It must be admitted that Damis, whose authority is to dispose for ever of the hostile record of Moeragenes, is a very shadowy character. Professor Phillimore, but only after anxious consideration, decides on the whole for the existence of authentic 'memoirs of Damis' on the ground that a forgery would imply collusion between Julia, the temple staff at Tyana, and Philostratos.<sup>1</sup> Geoffrey's authority is even more suspect. Again we have nothing but the author's word for its existence and the tone of his epilogue does not tend to increase our confidence. Geoffrey doth

<sup>1</sup> Phillimore, *Philostratos : In Honour of Apollonius of Tyana*, p. xxi.

protest too much. Some scholars, it is true, appear to believe him,<sup>1</sup> but sceptics have always existed from the days of William of Newburgh (1190) who genially remarked, 'It is manifest that everything which this person wrote about Arthur and his successors and his predecessors after Vortigern, was made up partly by himself and partly by others, whether from an inordinate love of lying or for the sake of pleasing the Britons.'<sup>2</sup> And we are told by a modern scholar that 'the fact remains that no document either in Welsh or in Breton has yet been found even remotely resembling that which Walter the archdeacon is said to have brought over from Brittany.'<sup>3</sup>

Now whether Damis' memoirs or the alleged British MS. existed or not (ultimately there is no means of knowing), I am tolerably certain that in either case our authors are guilty of deliberate bad faith with their public. I suspect that if the documents existed they bore the same kind of relation to the narrative which is supposed to be extracted from them as the historical Apollonios or Arthur to the heroes of the two romances. Of course, Philostratos must have had some further material to work with besides Maximus and Moeragenes, and Geoffrey obviously drew from sources other than Nennius. He may even have possessed some Breton MS. Arthurian material. But the point of course is that in either case the manifesto on the part of the author suggests deliberately that the novelties in his account of his hero are *bona fide* taken over in essentials from an alleged authentic source. Notice in each case the insistence on the suggestion that there has been a mere change of form. Damis' Greek had to be polished up for polite readers; Geoffrey, though he did not profess to be a writer himself, felt that it was worth while trying to give the public a chance of reading this very interesting document which came into his hands! We can hardly acquit our authors of the guilt of an attempted *suggestio falsi*.

Both were born romance writers and to each there came a theme which lent itself to writing up. The problem set Philostratos is to turn a rather second-rate local miracle-monger into the Prophet of Mankind to the honour and glory of Julia and her Oriental religious philosophy. Obviously it is a serious disadvantage that accounts of this in truth not

<sup>1</sup> Miss Weston for example speaks of "Geoffrey of Monmouth drawing upon a work probably compiled by a continental Breton." *King Arthur and his Knights*, p. 7.

<sup>2</sup> W. Lewis Jones, *King Arthur in History and Legend*, p. 69.

<sup>3</sup> Jones, *op. cit.* p. 63.

very remarkable personage are already in existence. And Maximus may have been more of a stumbling block than Moeragenes. It is easy to discredit a critic as a backbiter; it is harder to explain the misconceptions of a friend. The only hope of gaining credence for the proposed imposition is to convince the audience, if it can be done, that a new and unimpeachable authority has turned up. If there are actual papers to wave before the public eye, so much the better. As long as reasonable care is taken that no one sees what is written inside them, you will be safe in making them the authority for your statements.

The case of Geoffrey is not dissimilar. I am aware that it is dangerous for a layman to form views about a scientific subject so involved and controversial as the Arthurian Legend. I believe, however, that it is undisputed that Geoffrey's work revolutionised the position of Arthur in the national imagination. Arthurian stories do not belong to the most ancient strata of Welsh literature: in the authentic *Mabinogi* there is no reference to them. *The Matter of Britain* seems to have been developed chiefly on the continent, partly through the medium of Breton minstrels, partly, after the Norman conquest of England, through that of Welsh texts.<sup>1</sup> I understand, however, that neither in the Welsh nor in the Breton traditions is the material at this stage so disposed as to throw into relief the figure of the national king as the centre of interest. Doubtless there would be a natural tendency for Normans to create a national hero from *The Matter of Britain* to rival Charlemagne the hero of *The Matter of France*, but there can be little doubt that to Geoffrey belongs the credit of being the first writer to impose this apotheosis of an obscure Welsh hero successfully upon the world. The achievement of this is the main object of his history and to it he devotes all his powers of circumstantial invention and ingenuity. At the outset his task, like that of Philostratos, is complicated by certain considerations. The inconvenient silence of the 'elegant treatises' of Gildas and Bede as to the very existence of this national hero at all, is discounted by ingenuously marvelling at it. Once more it is the friendly sources that present the greater difficulty. People already know something about Arthur. Nennius' account probably represents the received historical tradition which by no means gives the required spirit. Arthur we find is a great warrior and commander-in-chief of the kings of the Britons whom he led victoriously

<sup>1</sup> Nutt, *The Influence of Celtic on Mediaeval Romance*, p. 15.

in twelve great battles. He is further the hero of certain stories. He is, for example, the huntsman who possessed the wondrous dog *Cavall* and slew the *Boar Trwyth*. But he is in no sense the great ensample of national monarchy. It is Geoffrey who made for Arthur a niche in national history and created him the national hero. His are the skilful synthesis of floating material of different kinds, the ingenious invention of circumstantial detail, and the turning to account of the stock romantic machinery, *e.g.* the continental achievements which make Arthur the rival of Charlemagne and a traveller as notable in the military sphere as Apollonios in the intellectual. That Arthur became chief and best of the 'nine worthy kings and the best that ever were' is directly due to Geoffrey.

In effecting this apotheosis he is driven by the analogous necessities of his task to adopt a device similar to that of Philostratos. He appeals to the authority of a newly discovered document which he retains in his possession, and claims that his work is a translation from this hidden source. Whether Julia really gave the *Memoirs of Damis* to Philostratos or whether Walter the archdeacon ever did bring back a Celtic manuscript from Brittany will never now be susceptible of proof.<sup>1</sup> Of one thing I am tolerably convinced. The alleged documents may or may not have existed, but if they did, they were certainly not what Philostratos and Geoffrey would have us believe. If their existence is not a fiction, the suggestion at any rate that the two romances consisted in essentials of a translation of their contents is certainly untrue. To believe it would be to insult the powers of ingenuity and grave yet daring mendacity displayed by our authors.

W. R. HALLIDAY.

<sup>1</sup> It is perhaps worth remembering that the invention of an authentic document was a commonplace of the romance writers. No one supposes, for example, that the history of the Trojan war written in Phoenician characters by the contemporary *Diktys* was really found in that hero's grave during the reign of Nero, or believes in the two autobiographical cyprus-wood tablets which were said to have been recovered from the grave of *Deinias* in the days of Alexander the Great. Further examples of the alleged discovery of historico-romantic documents in graves are given in Pfister, *Der Reliquienkult im Altertum*, ii. pp. 503-505.

## THE ACCLAMATION OF EMPERORS IN BYZANTINE RITUAL.

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THE practice of acclaiming the Emperors with certain set forms of words is mentioned by the Byzantine chroniclers in their account of the court ceremonies. Both Constantine Porphyrogenitus and the writer of the handbook which goes under the name of Codinus Curopalata<sup>1</sup> give the proceedings in some detail, whereby we learn the names of the court officials, their gorgeous robes, and symbols of office, the various sections of the Imperial guard and the solemn pageantry enacted by them on state occasions, and can easily imagine the pomp, tiresome perhaps, but certainly impressive, that surrounded the Eastern Throne. As Gibbon writes:

‘The task of applause was not abandoned to the rude and spontaneous voices of the crowd. The most convenient stations were occupied by the bands of the blue and green factions of the circus; and their furious conflicts, which had shaken the capital, were insensibly sunk to an emulation of servitude. From either side they echoed in responsive melody the praises of the emperor; their poets and musicians directed the choir, and long life and victory were the burden of every song. The same acclamations were performed at the audience, the banquet, and the church; and as evidence of boundless sway, they were repeated in the Latin, Gothic, Persian, French, and even English language, by the mercenaries who sustained the real or fictitious character of those nations.’<sup>2</sup>

The most elaborate forms of saluting the Emperors were used at Christmas, as may be gathered from the *De Officiis*, ascribed to Codinus.<sup>3</sup> On Christmas Eve, it appears, when the Emperor came forth from his own

<sup>1</sup> See appendix to Bury's edition of Gibbon's *Decline and Fall*, vol. vi, pp. 516-7.

<sup>2</sup> *Op. cit.* vi, p. 85 (c. liii).

<sup>3</sup> Codinus Curopalata, *De Officiis*, c. vi (pp. 77 c *seqq.* Bonn edition).

apartment to the assembled congregation, the singers sang the Polychronism,<sup>1</sup> or acclamation, while the Emperor adored the Holy Images. Later on in the service, the following forms were used in interceding for him :—

‘May God prolong thy mighty and holy reign for many years!’ and ‘May God prolong thy reign, divinely ordered, crowned, and guarded, mighty and holy, for many years!’<sup>2</sup>

In the Liturgy, after the *Troparia*, all the singers and readers again wished the Emperor long life, as he entered to worship in the Church and to receive the Antidoron (Consecrated Bread). Later on, the Emperor mounted his throne, and received similar acclamations, this time with instrumental accompaniments and interludes. ‘After the Polychronism the singers are silent, but the instruments play for a considerable time. Then, when the Emperor gently waves his kerchief, they too cease; and the singers begin again, singing verses appropriate to the feast, and then “Christ, who crowned thee King, is born!” then more verses, with repetition, for a considerable time. Then the names of the royal house are blessed, after which the singers again sing the Polychronism.’

At the Imperial table, various detachments of the body-guard gave and received similar greetings: these were conveyed from the Emperor by the Protovestiarius or other official, in the terms, ‘Our Lord the King wishes you long life.’<sup>3</sup> Finally the singers again entered and sang the Polychronism, followed by the hymn of Romanus, ‘This day the Virgin,’<sup>4</sup> and then the Polychronism once more. After dinner similar greetings were given to the Emperor by members of the Royal house and by the Royal pages. On Christmas Day acclamations of the same kind were used.<sup>5</sup>

Not only have the actual words used in saluting the Emperors come down to us, but also the music, to which they were sung, has survived in a few manuscripts, and will be exemplified in the present article.

<sup>1</sup> The Greek verb is *πολυχρορίζειν*, the noun *πολυχρόνιον*.

<sup>2</sup> *πολυχρόνιον ποιήσαι ὁ Θεὸς τὴν θεοπρόβλεπτον, θεόστυπτον καὶ θεοφρούρητον, κραταίαν καὶ ἀγίαν βασιλείαν σὺς εἰς πολλὰ ἔτη.*

The forms given by Constantine Porphyro. (*de Cerim.* i. c. 2.), also for use at Christmas, are very similar to those in the *De Officiis*.

<sup>3</sup> *De Offic.* c. vii (p. 89, Bonn). *εἰς πολλὰ ἔτη ὀρίζει* (lit. ‘determines’) ὁ αὐθέντης μᾶς ὁ βασιλεύς.

<sup>4</sup> Ἡ παρθένος σήμερον τὸν ὑπερούσιον τίκτει. The text of this famous hymn is given in Pitra, *Analecta Sacra*, i. In the service of the Church only the first verse is used, as a *Kontakion*.

<sup>5</sup> *De Offic.* p. 91 B.



The invocation of Divine Blessing on the sovran was not confined to these public acclamations, but formed a regular part of the ordinary services. Such petitions occur in the *Ectenia*, or short litanies, in the first part of the Liturgy, and are called in Greek *εὐφήμησις* or Blessing.<sup>1</sup>

After the Fall of Constantinople Polychronisms were used for ecclesiastical dignitaries, and they occur fairly often in manuscripts. At the present day they are only sung on rare occasions, such as an official visit by an Archbishop to a monastery. This branch of composition has not been neglected by later musicians; and specimens have been published in quite recent times.<sup>2</sup>

My chief examples are taken from the Athos manuscript, Pantocrator, 214. The MS. (paper 8vo., unpagged) seems to be dated 1433. It is a kind of *Anthologia* and contains the usual variety of hymns, and also some services including the *Μέγας Ἑσπερινός* (Great Vespers) as well as the first part of the Eucharist in which our Euphemesis is placed. If the date is correct, this would be a very early specimen of an *Anthologia*, and of great musical importance. The Euphemesis itself, being meant for the Emperor actually reigning at this date, is, if not an adaptation of earlier music, a composition contemporary with the MS. It and the acclamation were composed in honour of the Emperor John Palaeologus (1425-1448). The mention in the same context of the Patriarch Joseph II. (1425-1439) fixes beyond doubt the identity of the sovran.

John VI (or VIII) Palaeologus,<sup>4</sup> the last Emperor but one of the East, made with Joseph the famous but ill-fated journey to the Papal court in 1438-9, for the sake of reunion between the Eastern and Western Churches. The Synod of Florence, under Pope Eugenius IV declared the union in

<sup>1</sup> Such appear in the Liturgy as given by C. Cracau, *Liturgie d. heil. Joh. Chrysostom*, p. 46, and G. V. Shann, *Euchology*, p. 2, etc. Nothing like the Euphemesis given below, however, is found in the regular Liturgy.

<sup>2</sup> Examples: Rebours, (P) *Traité de Psaltique*, p. 234; Sigalas, *Συλλογή ἑθνικῶν Ἀσμάτων*, pp. 15-19; Sakellarides, (I. Th.) *op. cit.* p. 466, for the Sultan. A mediæval example is given in Sakellarides, *Tyrtaeus*.

<sup>3</sup> I visited the Monastery of Pantocrator in September 1912, in the course of a journey undertaken for the study of mediæval Greek music. I was enabled to carry this out by the provision of a grant from the Carnegie Trust for the Universities of Scotland: for which generous aid I heartily thank the Trustees. I am also much indebted to the Abbot and Brethren of Pantocrator for their most kind and hospitable treatment, and for the facilities, readily granted, for studying the MSS. in the Monastery library.

<sup>4</sup> Called John II by Gibbon, VI by Finlay, VIII by Krumbacher. For his reign, marriage, and mission to Italy *v.* Finlay, *Byz. and Gk. Empires*, vol. ii, pp. 613 *seqq.*; Gibbon, c. lxvi.

July 1438: Joseph<sup>1</sup> died at Florence in June 1439; and, on the return of John to Constantinople, the schism broke out afresh.

The Empress Maria Comnena of Trebizond was the third wife of John Palaeologus. On his accession he had divorced his second wife, and married Maria, in spite of the protests of the clergy.

#### THE BYZANTINE MUSICAL NOTATION (XIII–XVIII CENTURIES).

The notation with which we are concerned in this article is conveniently known as the Round System, and its rules are as follows. Each note in the melody is represented by an interval-sign indicating its distance from the previous note. The starting-note of the tune depends on the mode, which is shewn at the beginning of the piece by a *Martyria*, or signature. Such signs sometimes recur during the course of a melody, most commonly at pauses or middle cadences, and thus enable the singer to be sure that he has sung right and regained the proper note. The interval-signs themselves are divided into *Somata* ('steps') and *Pneumata* ('skips'). A remarkable feature of the Round System is that in certain combinations the signs lose their interval-value and become *aphone* or voiceless. The cases are these:—

(1) When a Pneuma stands below or to the right of a Soma of similar direction, the Soma becomes aphone, and only the Pneuma is heard. If on the other hand the Pneuma stands above a Soma of similar direction, the interval-values of both are taken together, and a single large interval is formed.

(2) The *Ison* or equality-sign annuls the value of an ascending sign placed below it. The annulled sign is probably heard as a grace-note. Descending signs are not affected by the *Ison*.

(3) If a descending sign stands above an ascending sign, the latter loses its value, and is probably heard merely as a grace-note. (But a descending sign is not affected by an ascending.)

(4) Two *Somata* superposed over one syllable form a single interval, except two *Apostrophai*, and an ascending Soma in any combination with *Duo Kentemata*, when the notes are given as successive steps.

The origin of these seemingly strange and arbitrary rules is not

<sup>1</sup> V. Gedeon, *Πατριαρχικοί Πίνακες*, pp. 464–5; portrait and life of Joseph II.

known; but the rules themselves are given in the well known singer's handbook, found in countless MSS., and usually called the *Papadike*.<sup>1</sup>

Besides the interval-signs and Martyriæ there are also a number of symbols called *Hypostases*, which are mainly execution-marks of various kinds.<sup>2</sup> Some relate to time and rhythm, others again are slurs and marks of emphasis, while a third class consists of summary signs for whole phrases, of which the actual notes are indicated by the interval-signs: these form a kind of parallel notation and may have been meant to help singers whose power of reading the interval-signs was unequal to the task. Such signs were usually added in red, and they are rare except in certain late MSS. In this article I shall confine my attention to such Hypostases as actually occur in the music before us.

*The Modes.*—The tonality of Byzantine music is a matter of great uncertainty. Most western scholars have assumed that the eastern modes are the same as the Gregorian.<sup>3</sup> This view, however, goes against the modern Greek classification of the modes, itself full of confusion and inconsistency.<sup>4</sup> I have preferred to follow the theory of Gaisser, which attempts to reconcile to some extent the modern view of the modes with their description in the *Papadike*. By this method the names of the modes in the *Papadike* are taken in the ancient Greek sense, and their pitch is made to agree with modern tradition. The *Papadike* names the modes as follows: I Dorian, II Lydian, III Phrygian, IV Mixolydian. The plagal modes have the same names as the authentic with the syllable hypo- prefixed.

The four authentic modes are therefore the scales of *d, e, f, g*, respectively. Of these, Mode I from *d* requires two flats in the signature, and the others, three flats. Of the plagal modes, No. I takes one flat in its signature, the others, two flats.

<sup>1</sup> Published *in extenso* with explanations by Fleischer (O.) *Neumenstudien*, T. 3. Cf. my articles in the *Musical Antiquary*, Jan. 1911 (and books there mentioned) and April, 1911. Also in *Byz. Zeitschr.* 1911, 437 *sqq.*

<sup>2</sup> For a fuller account cf. Fleischer *op. cit.*; Riemann (H.) *d. Byz. Notenschrift*, 31; Gaisser (U.) *Les Heirmoi de Pâques*, 9; Thibaut (J.), *Origine Byzantine de la Notation Neumatique de l'Église Latine*, chapter iii. Thibaut's term '*Hagiopolitan*' for the Round Notation is cumbersome and probably unwarranted historically. The other designation of '*Damascenian*,' after St. John of Damascus, is absurd.

<sup>3</sup> Cf. J. M. Neale and S. G. Hatherly, *Hymns of the Eastern Church*, xxxi.

<sup>4</sup> V. Burgault-Ducoudray, *Études sur la musique eccl. grecque*, and, less in detail, W. Christ and Paraniak, *Anthologia*, Introd. lib. iv. Modern theory dates from Chrysanthus (fl. 1820) whose treatise, *Θεωρητικὸν μέγα τῆς Ἐκκλ. Μουσικῆς*, has lately been reprinted (Athens, 1911).

The *Martyria* at the beginning of a piece gives the number of the mode to be used. The usual starting-note in the authentic modes is the central note, but the base-note is equally possible. The suitability of pitch is our guide in this matter. The plagal modes are theoretically located a fifth below the authentic, but in practice they are transposed to the same pitch as the authentic, except the fourth plagal, which was high enough without transposition, and the third, which could be used either transposed or not; in the latter case it was the lowest mode in use, and hence appears to have got its name of *Barys*.

When in the course of a melody the *Martyria* of some other mode than the original one occurs, this only means that a pause is made on one of the starting-notes of that mode, not that any change of mode or key is made; for this purpose a *Phthora*, or modulation-mark, was required.

Besides the regular eight modes there was the *Nenano* or chromatic mode. This is now Mode II plagal, but is distinguished from it in the *Papadike* by a separate *Phthora*. It is usually held that this mode (a favourite one in Turkish music) is of Oriental origin.

For the arguments in favour of Gaisser's hypothesis the reader is referred to Gaisser's own works.<sup>1</sup> The whole question is too big for discussion here. Anyone who is unconvinced by his advocacy can alter the key-signature of my transcriptions, given below, to suit whatever theory he prefers to adopt.<sup>2</sup> The progression of the melody at any rate may be regarded as fairly certain.

*The Rhythm.*—With very few exceptions Byzantine hymns do not scan by the ancient laws of quantity, but by certain laws of rhythm, which gave the composer great freedom in setting the words to music. The critics of the Byzantine age did not, in fact, regard such rhythmical compositions as verse at all. From the way in which the stress and length marks are assigned in the MSS. it is clear that the word-accent rules the metre almost as completely as in Modern Greek, and that the musical accent coincides with this, regardless of quantity.

The unit of scansion is a *Colon* (phrase or versicle). In the musical MSS. the Cola are marked by a dot in the text, and in the modern service-books by a comma. Sometimes, however, there seem to be double and

<sup>1</sup> *Op. cit.* and *Le système mus. d. l'Église grecque d'après la tradition.*

<sup>2</sup> Fleischer and Riemann, *opp. cit.* have entirely different accounts of the Byzantine modes. Am. Gastoué, *Introd. à la paléographie mus. byz.* keeps rather nearer to the modern Greek view.

even triple Cola not otherwise divided, perhaps because the music was meant to run on without any break. In spite of this irregularity the practice of separating single Cola is constant enough to leave no doubt that these were the metrical divisions actually in the composer's mind, on which he based the structure of his melody.

A Colon, as far as can be judged, never contains more than three principal accents (the accents on prepositions, conjunctions, and short pronouns do not count for this purpose). But, for the sake of emphasis or other special effect, fewer accents may suffice. The number of syllables and the position of the accents in the Colon seem to vary at the will of the author. Attempts to prove either a fixed number of syllables or the occurrence of regular feet within the Colon have completely failed. We are left with a kind of rhythmical prose, resembling the Psalms, on which probably the methods of Greek hymnography were based. Furthermore, it is generally found that the number of lines in a hymn is a multiple of 4; and this indication usually enables us to note where double or triple Cola occur, and so to make out the full metrical scheme of the hymns.

Greek hymns are divided into three classes: Hirmological, Sticherarical, and Papadical.<sup>1</sup> The first class consists mainly of the canons, in which the typical verse of each ode was called the *Hirmus*. Now a melody to which many verses or sets of verses were to be adapted, would have to be fairly regular and decided in its character, and hence we find that in hirmological hymns there is little florid writing, and it can be reasonably conjectured that each Colon had a fixed musical value (reckoned for convenience as two bars of common time). The sticherarical hymns are mostly *Idiomela*. That is to say, they have music of their own and do not serve as models for other hymns. In these therefore, while the normal Cola still appear to have the same value of two bars of our music, expanded phrases and *ad libitum* passages are admitted.

A sticherarical hymn is rather more like an anthem than a regular air, though the general effect of the rhythm is kept up, and the repetition of words or syllables very seldom allowed.

Papadical compositions are intended for the use of the Papas or priest, and are therefore a kind of intoning. They include, in the first instance, all prayers and versicles, and next such slow music as *Kratemata* (vocal

<sup>1</sup> For a full list of the kinds of hymns in each class *v.* Chrysanthus, *op. cit.* §§ 401 ff. Cf. also P. Rebours, *Traité de Psallique*, pp. 78 ff.

exercises) *Cherubica* and *Polychronisms*. In these there seems to be no strict time. Any number of notes may be set to one syllable, and words or syllables may be repeated as often as desired.

Modern Greek theory, while giving no explanation of the names of these different kinds of hymns, assigns special forms of the modes to each class. No trace of such distinction appears in the *Papadike* or other early source of information; and I am inclined to believe that it is simply due to the confused state of Greek musical tradition, which had preserved the more familiar Hirmological melodies in something like their original shape, while Oriental influence had been freely at work elsewhere. The modern forms of the canons are recognisably like the mediaeval in most cases that I have studied. But nearly all the *Idiomela*, as far as they have regular melodies at all to-day, are late compositions.

*Explanation of Hymns given in Byzantine Notation.*

The following are the rubrics for the first hymn (Cod. Athon. Pantocrat. 214).

- (1) Title. Εὐφήμησις τῶν Βασιλέων· λέγει δὲ πρῶτων ὁ ἐν τῷ βήματι.  
 (2) At A. Ἀποκρίνονται οἱ ἔκτος τὸ αὐτό· καὶ πάλιν οἱ ἔντος ἕτερον εἰς τοὺς Βασιλεῖς.  
 (3) At B. Καὶ οἱ ἔκτος πάλιν ὁμοίως τὸ αὐτό, καὶ πάλιν οἱ ἔντος εἰς τὸν Πατριάρχην.

The fourth mode at the present day has two chief forms, one starting from *e*, the other from *g*.<sup>1</sup> The latter is probably the original type. In the *Papadike* the fourth mode is called Mixolydian: this would require three flats in the signature.

The initial Martyria in the MS. is wanting, owing to the fading of the red ink. There is, however, no doubt about the mode. At A, where a start is evidently made from the original, not the preceding note, the Martyria is also missing.

We will now analyse in detail the first passage.

The first and second syllables bear the Ison, denoting equality: underneath each is the Diple, one of the length-marks, making here a minim. The sloping curve which follows is the Bareia, denoting a slight accent. The next two interval-signs are Petaste (one note upwards) and

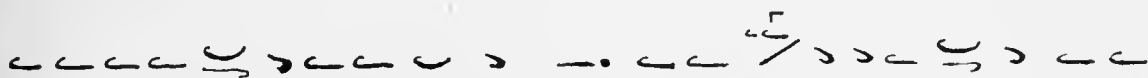
<sup>1</sup> Chrysanthus, *Θεωρητικόν* (Athens reprint 1911, p. 108) κεφ. θ'. § 340.



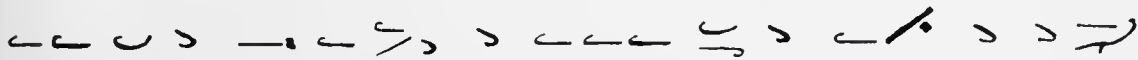
Πολλά . . . τὰ ἔ-τη· τῶν βα-σι-λέ-ων πολλά . . .



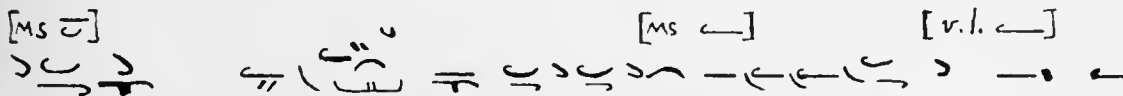
τὰ ἔ-τη τῶν βα-σι-λέ-ων.(A) ἰ-ω-- άν - - - νου



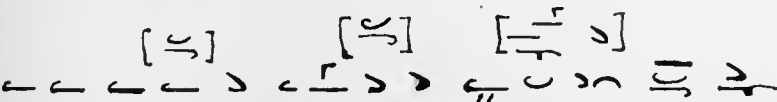
τοῦ εὐσεβεστά-του βασιλέ-ως καὶ αὐτοκράτορος Ρωμαίων τοῦ Πα



λαι-ο-λό-γου· καὶ Μαρί-ας τῆς εὐσεβεστάτης Αὐγούστης πολ-λά



τὰ ἔ-τη (B) ἰ-ω-σήφ . . . τοῦ ἀ-γι-ω-τά-του καὶ οἰ-



κουμ-εν-ι-κού πα-τρι-άρχου πολλά τὰ ἔ-τη.

FIG. 1.—EUPHEMESIS IN HONOUR OF JOHN PALAEOLOGUS (Cod. Athon. Pantocrator, 214).

Apostrophus (one note downwards); above them stands a small gamma; this is the Gorgon, or quick sign, and here denotes quavers. Another Barcia and Petaste follow. The latter, it may be said, is only used when a descending sign is to follow. In such cases a turn is often introduced at the present day, at the discretion of the singer. The word  $\tau\acute{\alpha}$  has the compound Apostrophus-Elaphron. The latter sign, being a Pneuma to the right of a Soma, absorbs the Soma, which is not heard. There follows Oligon (one note upwards) with Choriston (probably an accent). Below stands Lygisma, which may be a slur of some kind. Over  $-\tau\eta$  stand Apostrophus above Petaste and Kentemata: the descending sign Apostrophus annuls the Petaste, which is heard only as a grace-note. The Duo Kentemata denote one tone upwards: this sign never begins a syllable, but is tacked on to some other sign. Two Apostrophi follow, the second charged with Klasma, another length-mark, here making a minim. The signs over  $\beta\alpha\text{-}\sigma\iota$  need no further explanation.<sup>1</sup> Over  $-\lambda\acute{\epsilon}$  stands a Petaste with Antikenoma, a mute Hypostasis indicating an up-and-down movement. At the double bar is the Martyria of Mode IV, here denoting *g*, the regular starting-note of the mode. The next passage also needs no special explanation beyond the last note of all, which bears the Apoderma or pause, mostly used on cadential notes. In the third line over  $\kappa\alpha\lambda$  stands Kentema (= two notes upwards) to the right of Oligon. The former being a Pneuma absorbs the Oligon, and a single interval of a third results. Over  $-\kappa\rho\acute{\alpha}$ - we have Little Ison; Big Ison above Oxcia (= one tone upwards). The Big Ison annuls the ascending sign which is heard as a grace-note; so also, probably, is the Little Ison; the Gorgon merely expresses the rapidity of the grouping. In line 4 over the second syllable of  $\text{Μαρίας}$  the Oxcia is similarly treated, and over the second syllable of  $\text{Αὐγούστης}$  the Kentema absorbs the Oxcia. At the beginning of line 5, I have corrected the MS. A cadence on *a* is impossible in Mode IV, and, as the various readings in the somewhat similar final passage shew, there is a certain amount of confusion. Another Apoderma marks the cadential note. The bow-shaped Hypostasis under the notes belonging to the second syllable of  $\text{Ἰσωήφ}$  is called Epergema: it may denote an accent. The other Hypostases, Barcia and Klasma, are familiar. In the next passage I have made one simple correction in the MS., which

<sup>1</sup> The reading followed is found in the repetition of this passage in the MS. The first time an Elaphron is added (evidently in error) to the Apostrophus.



is obviously in a somewhat confused state. Of the alternative readings I adopt the more satisfactory.

In the last line over *-τρί-* we again have the Little Ison, marking, as I believe, a grace-note.

FIRST POLYCHRONISM.—Title, *εἰς τοὺς Βασιλεῖς*.

The rubrics are as follows:—

1. At the beginning. *τὸ αὐτὸ πάλιν ὕστερον δέ.*
2. At C. *εἶτα λέγει ὁ Δομεστικός εἰς διπλασμόν.*
3. At D. *ὁ ἕτερος Δομεστικός ἐξωφώνως.*

(*Δομεστικός* = Precentor ; roughly equivalent to *πρωτοψάλτης*.)

Resuming our musical analysis, we find over *τῶν* in line 1 Petaste and Psephiston, another accent-mark. The next sign, Barcia, here separates the Elaphron and Apostrophus over *βα-*, which would otherwise be taken together. Over *-λέ-* stand Oligon and Kratemohyrrhoön. The latter is a compound of Kratema (probably a length-mark) and Hyporrhoe (=two descending seconds in succession). The result is the group shewn. At (C) we have a somewhat mysterious Martyria. First comes the signature of Mode IV plagal, then Kentema above Oligon (= a fourth upwards) and below this the Martyria of Mode III: then Ison twice. All this seems to shew that, while we must use the scale of Mode IV plagal, we start on the initial note of Mode III, *i.e. f*. As this procedure finally leads us to the proper cadence of Mode IV plagal, I have no hesitation in adopting it. In line 2 over *-λεῖς* we have the Ison, and Choriston (accent), and also Parakletice, a mute Hypostasis of unknown value, perhaps an expression-mark. The Psephiston recurs over the next syllable, and, after six notes, comes the Heteron tou Psaltikou, another Hyporrhoe compound, indicating a group, but devoid of interval-value. The Hyporrhoe itself occurs last of all in this line, and three times before. At (D) we again have the Martyria of Mode IV plagal, this time surmounted by an Ison, to shew that we go on from the regular initial note *c*. In the same line we again have the Heteron tou Psaltikou: five notes later the Pelaston, which seems to be a compound of Petaste and Psephiston. It has the value of one note upwards. At the end of the line the Hypostasis is the Kyllisma, a slur.

Πολ-λά . . . τὰ ἔ-τη τῶν βα-σι-λέ--ων (C) Κυ-

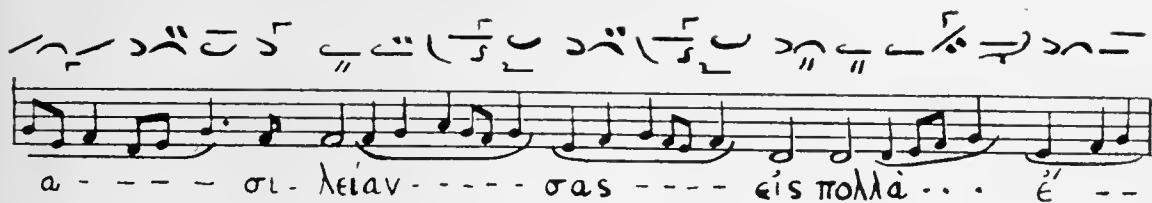
ρι-ε σώσον τοὺς βασι-λεῖς

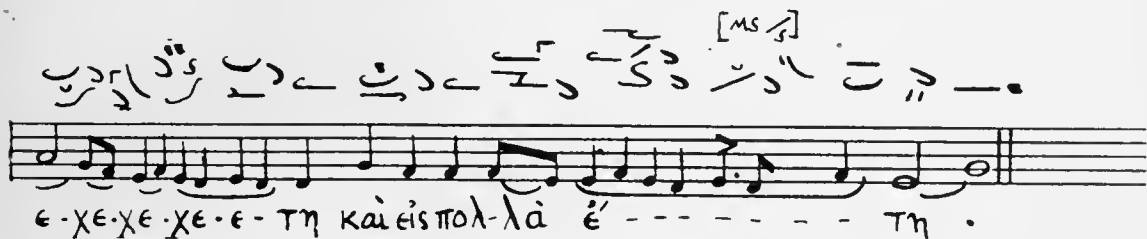
---(D) καὶ ἐπ-ά-κουσον ἡ-μῶν

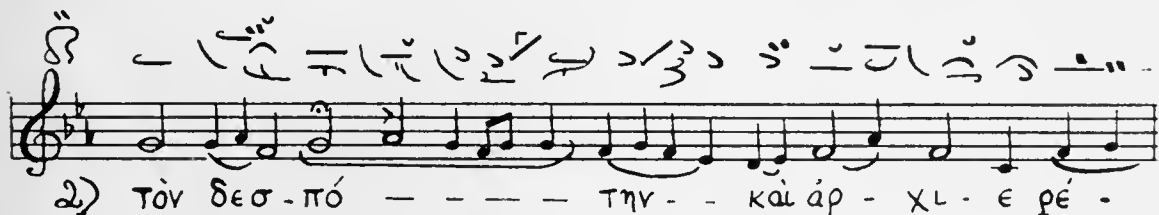
1) Πο-λυ--χρό - - - - - νι-ον ποι-ήσαι... ὁ Θε-ός

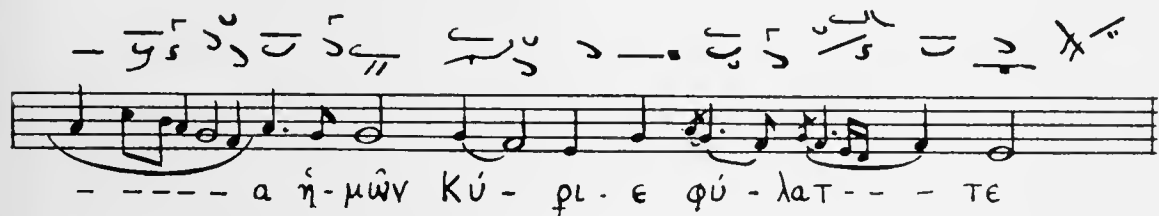
ε... ὁς . . . . . τὴν ἀγί- - αν βα-

FIG. 2.—POLYCHRONISM: εἰς τοὺς βασιλεῖς.


  
 α - - - - - σι - λείαν - - - - - σας - - - - - εἰς πολλὰ . . . ἔ - -


  
 ε - χε - χε - χε - ε - τη καὶ εἰς πολ - λά ἔ - - - - - τη .


  
 2) τὸν δεσ - πό - - - - - τήν - - καὶ ἀρ - χι - ε ρέ -


  
 - - - - - α ἡ - μῶν Κύ - ρι - ε φύ - λατ - - - - τε


  
 εἰς πολλὰ ἔ - - - - - τη δέσ - - πο - -

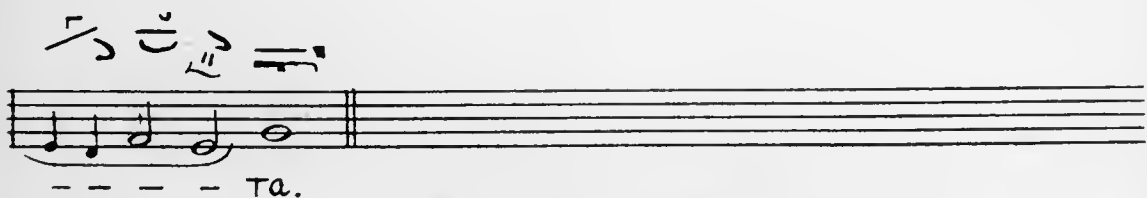

  
 - - - - - τα.

FIG. 3.—POLYCHRONISMS: εἰς τοὺς βασιλεῖς (continued) AND εἰς ἀρχιερεῖς.

In the next hymn we again start with the Martyria of Mode IV. The Hypostases over  $\lambda\nu$ - are Bareia and another form of Epergema. Observe that the Ison over this syllable does not affect the descending sign (Elaphron) below it. Over the minim  $a$  we have another Hypostasis, the Piasma, here indicating merely an accent, but often marking a rapid group. In its origin it seems to have been a double Bareia. In the middle of the next line, over the tied  $g$  the Hypostasis is Psephiston-Synagma (exact meaning not known). The time-marks, Klasma, Diple, and then Gorgon, suggest the rhythm given.

In l. 2 (Fig. 3) the Hypostasis over  $\lambda\delta$  is not very clear. It may be the Parakletike or else the Gorgosyntheton. The latter would require the addition of a turn: like the Heteron tou Psaltikou, it is a Hyporrhoe compound. Over the second note to  $\xi$ - (last word of hymn) is the Ekstrepton, of uncertain meaning, perhaps a *mordente*. The correction in the MS. is suggested by the similar passage in the next hymn.

SECOND POLYCHRONISM.—Title, *εἰς ἀρχιερεῖς, ἕτερον*.

Again we have the Martyria of Mode IV. The Epergema recurs in a slightly different form. The opening is very like that of the last hymn. Over  $\tau\eta\nu$ , we have a slightly varied Ekstrepton. In line 2 the Piasma over  $\lambda\alpha\tau$ - here shews a rapid group, as often. At the end of the line is a Martyria called Legetos. It stands for the note  $e$ ; but its origin is uncertain. Annexed to it are Oxeia and Kentemata, shewing two seconds upwards: this gives us  $g$ , the note already indicated by the interval-signs over the words. This doubling of indications is fairly common, and was meant to give the singer confidence. At the end of the next line, the Hypostasis, besides the Piasma, is the Heteron Parakalesma (or simply Heteron), probably a slur. It recurs in the next line.

It must be noticed that the occurrence, in our reading, of the note  $e$  with its special Martyria is a satisfactory proof that we were right in starting the melody on  $g$ .

POLYCHRONISMS FOR AN EMPEROR AND FOR A PATRIARCH.

By way of illustration, I will now give some other compositions of the same kind. The first is an antiphonic Euphemesia from the Athos MS, Laura A 166. This is a Sticherarium, probably of the fifteenth century,

written on paper, with coloured miniatures in the margin. The Martyriac and Hypostases are in red ink, now badly faded. The hymn is found in the service for Christmas Eve.

καὶ μετὰ ταῦτα λέγει εὐφήμως ὁ πρωτοψάλτης.

<Ἦχος δ'.> ὁ λαός· δ'

Φ. γ'. πολ - λὰ τὰ ἕ - τη τῶν βα - σι - λέ - ων. πολ - λὰ . . . .

τὰ ἕ - τη τῶν βα - σι - λέ - ων. πολ - λὰ . . . .

ὁ πρωτοψάλτης  
τὰ ἕ - τη τῶν βα - σι - λέ - ων. [ desunt verba ]

τοῦ εὐ - σε - βεσ - τά του βα - σι - λέ - ως καὶ αὐ - το - κρά - το - ρος  
Φ nenano.

Ῥω - μαί - ων τοῦ [ - - - - ] πολ - λὰ τὰ ἕ - τη.  
ὁ λαός (ἀποκρίνεται)

[ - - - - ] τοῦ εὐ - σε - βεσ - τά - του

βα - σι - λέ - ως καὶ αὐ - το - κρά - το - ρος τῶν Ῥω - μαί - ων τοῦ

1. 2.  
[ - - - - ] πολ - λὰ τὰ ἕ - τη [ - - - - ]

καὶ [ - - - - - ] πολ-λὰ τὰ ἕ - τη

This Euphemesis is remarkable in two ways. The rapid responses are very dramatic in their effect; and also, curiously enough, the names of the Emperor and Empress (?) are omitted. It was intended of course that the singer should supply these himself.

There follow three Polychronisms, of which I quote the first: the others are of excessive length, and contain much meaningless vocalization.

At the beginning of the Euphemesis the Martyria is wanting, the ink having faded. The mode is certain from the general character of the piece.

Below appears the Phthora of the Nenano, or chromatic mode. This has two forms, one with *f* and  $\natural e$ , the other with  $\sharp f$  and  $\flat e$ . There is nothing to shew us which form is meant here. So with some hesitation I choose the more effective musically. The Phthora of Mode III, which stands, very oddly, at the beginning of the piece, was probably a warning to keep strictly to *a*-flat and *f*, both notes common to Modes III and IV. The effect of the Phthora does not last beyond the next cadence. The conclusion is practically in Mode IV plagal.

The Polychronism is very simple. Observe the late form *σας*, and the meaningless syllable *κε*.

Πο - λυ - - - χρό - - - νι - ον. ποι - ή - - -

σαι . . . ὁ . . . Θε - - - ὁς . . .

την ἁ - γί - αν βα - - -

σι - λεί - αν . . . σας . . . εἰς

πολ - λά . . . ἔ

τη . κε . . εἰς πολ - λά ἔ - - - - - τη . . .

The next example is from a MS. in the Monastery of Leimon in the island of Lesbos. No. 230 (paper, probably XVII century,) fo. 245.

Title:—<Πολυχρόμιον> εἰς τὸν οἰκουμηνικὸν π<ατ>ρίάρχην παλαιὸν ἦχος δ'.

Νε . . . πο - λυ - - - - - χρο - μι - - - - - δ'.

ον . . . ποι - - - ἡ - σαι ὁ . . . Θε - - - ὸς

τὸν παν - - - - - α - - - - - γι - - - - - β'.

ώ - - - - - τα - - - τον . . . ἡ - - - μῶν . . . λ'.

αὐ - θέν - - - - - την

πλ. δ'.

καὶ . . . δε - - σπό - - τήν. πᾶ - - λιν

πο - λυ - - - - - χρο - - - - - νι - - -

- ον . . ποι - - ῆ - - σαι . . .

ὁ . . . θε - - ὸς τὸν παν - α - γι - ῶ - -

- - - τα - τον . . .

ἡ - - - - - μῶν αὐ - θέν - - - - -

- - - - - τήν . . . καὶ . . .

δε - - - - - σπό - - - - -

- - - - - τήν, τὸν οἰ - - - - - κου - - -



πλ. δ΄.

με - νι - - - κὸν τὸν οἶ - κου - - -

με - - - νι - - - κὸν . . . πα - - -

πλ. δ΄.

τρι - - - ἀρ - - - χην.

Κύ - - - ρι - - - ο - - - Κύ - ρι - ον

[ desunt verba ] Κυ - - -

δ΄.

ρι - Κύ - ρι - ε, φύ - λατ - - - τε . . . αὐ - - τόν

δ΄.

φύ - λατ - - - τε - - - αὐ - - τόν εἰς πολ -  
πλ. δ΄.

λά . . . ἔ - - - τη.

δ΄.

τρε - ερ - ρερ - ρερ - ρερ - ρερ - τρε - ε - τε - ρε ερ - ε - ρε - ρε - ρε. etc.

End.

εις πολ - λὰ . . . εἶ - - - τη . . .

δέ - - - σπο - - - τα . . .

The course of the melody is fairly plain. Most of the cadences are on *g* or *c*, which are the usual ones in this mode. We have two on *e*, one denoted by the signature of Mode II, the other by the Legetos. This suggests that the Legetos may originally have been a form of Mode II, transferred to Mode IV, when the chromatic form of Mode II came in. But all this is pure guess-work with our present knowledge. The marking of the note *c* with the signature of the plagal mode does not imply a modulation into that mode, but only shews clearly that the lower final of the authentic (which it shares with its plagal) is to be used. Before the last passage is a long Teretism,<sup>1</sup> of which I give only a few bars as a specimen.

Just before this long Polychronism is a very short one for a bishop. This I also quote.

Εἰς εὐφήμησιν ἀρχιερέως ὅταν ἀσπάζεται.<sup>2</sup>

<sup>3</sup>Ἦχος βαρύς

Τὸν δεσ - πό - - - την . . . καὶ ἀρ - - -

χι - - - ε - - - ρέ - - - - - α ἡ - - - μῶν

Piasma \* Thes-kai-apothes \*

<sup>1</sup> This meaningless repetition of certain syllables was probably nothing but a vocal exercise, devoid of any mystical meaning. Various attempts to read some verbal sense into it have been made (cf. Thibaut *op. cit.* p. 42), all rather fantastic.

<sup>2</sup> In late Greek ἔταν takes the indicative.

Thes-kai-apothes \* β' (?)

Κύ - ρι - ε . . . . . φύ - λατ - τε

είς . . . πολ - λὰ . . . . . ἕ - - - -

τη, Δέ - - - -

Piasma \*

σπο - - - - τα . . . . .

It is in the third plagal or Grave mode, here obviously in its untransposed form, starting from *b* flat. This form is used to-day in most Papadical hymns, while the transposed form, from *f*, is preferred in sticherarical compositions. In the middle of the hymn we seem to pass entirely into Mode II. I have therefore made a change of key and we reach a regular Mode II cadence. Of the Hypostases, the Piasma is familiar as denoting a rapid group: the *θὲς καὶ ἀπόθες* is doubtful. It probably means 'touch the note and leave it'; and this could mean either (1) sing the note, and then make a rest: or (2) touch the base-note, and then ascend. The former seems more likely.

#### CONCLUSION.

It is unlikely that any of the specimens of Byzantine music here presented can deserve to rank very high as compositions. There is a certain monotony of rhythm and indefiniteness in the melodic subject-matter, which though familiar enough to all acquainted with modern Byzantine music, cannot fail to be displeasing to most western ears. The last example is probably the most acceptable from our point of view. On the other hand, an unprejudiced listener will find

a suggestion of power and dignity in the deliberate flow of the music, unchecked by formal laws of rhythm, and the tonal effects will sound novel and even mysterious. Above all, it must be remembered that only one class of Byzantine music is here exemplified, while the brighter and more rhythmic hirmological and sticherarical hymns present a very different character. Perhaps too, owing to the late date of our Polychronisms, we should be prepared for some falling-off in their style. But in any case until we are familiar with a wider range of Byzantine music, we cannot tell what canons of taste the composers set before themselves, nor can we judge how far they succeeded. In this field, as one writer has said,<sup>1</sup> we are all beginners; and for the present we must be content to bring small contributions, in the hope of establishing historical connexion between mediaeval and modern Greek Church music, whereby the remaining problems may be solved, and the sacred song of the East take its proper place in the world's musical history and tradition.

H. J. W. TILLYARD.

<sup>1</sup> O. Fleischer, *op. cit.*

## ON IMITATION OF THE VENETIAN SEQUIN STRUCK FOR THE LEVANT.

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THE long-established popularity of the Venetian gold ducat or sequin as a medium for international trade in the Levant, is easily accounted for by its unvarying fineness and constant types from its first appearance in the thirteenth century to the end of the Republic in 1797. Throughout this long period it held its own as the standard gold coin of the Levant trade. Imitations of varying date, standard, and workmanship are an inevitable consequence of this popularity: they are found so far afield as India, and are even at the present day manufactured for jewellers' purposes in Alexandria.

A conspicuous mediaeval example of these trade imitations is to be found in a series of more or less barbarous imitations of the sequin of Andrea Dandolo (1343-54), which, though attributed to no definite mint, have long been recognised as a Levant currency. The designs are imitated closely from the Venetian original, the name of the doge and the motto of the reverse—*Sit tibi, Christe, datus quem tu—regis iste ducatus*—being blundered or distorted in various ways. A peculiarity common to the whole class is the substitution of the letters *Z* for *N* and *K* for *R* in the legends. P. Lambros, noting that certain coins had a *K* left of the figure of Christ on the reverse, assumed rather arbitrarily that this was the mint mark *R* of Robert of Anjou, prince of Achaia,<sup>1</sup> regardless of the fact that the one undoubted gold coin of the latter follows the Florentine, not the Venetian, model. Moreover a comparison with the Venetian series shews that this *K* merely replaces the

<sup>1</sup> *Ἀνέκδοτα νομίσματα κοπέντα ἐν Γλαρέντζῳ*, (1876), pp. 1-7; the attribution is provisionally accepted by Schlumberger in *Num. de l'Orient Latin*, p. 320.

*R* of *Regis* in the second half of the motto,<sup>1</sup> being followed nearly always by -GIS or (blundered) -SIS, in one instance (Fig. 1 *b*) by -OGIS, where the O replaces the original  $\Theta$ . The supposed Clarenza sequin, then, has no more historical interest than the rest of its class. (Fig. 1.)

Now these imitations of Dandolo's sequins do not stand alone. There also occur, though more rarely, coins of the same poor style based on Venetian originals of Antonio Veniero, Michele Steno, and Tommaso Mocenigo, which are assigned by Lambros to Chios, but bear no distinctive mintmark; others, again, imitating sequins of Andrea Contareno and Pietro Gradonigo, are attributed by the same author, on the ground of a quite fanciful interpretation of their blundered legends,<sup>2</sup> to the Catanei of



FIG. 1.—PSEUDO-VENETIAN SEQUINS ATTRIBUTED TO CLARENZA (after Lambros).

Phocaea. We have thus to account for a fairly consecutive series of sequins imitating the Venetian coinage from about 1343–1423, the blundered sequin of Gradonigo falling chronologically outside the main group.

As to the place of mintage, provenance is obviously no guide: no large hoard is known; Lambros obtained his specimens at various centres in the Levant, and most trade-imitations circulated over a wide area.<sup>3</sup> It

<sup>1</sup> Among half a dozen of these sequins bought by me (1912) in Constantinople, and all of the same fabric, one omits the *K* altogether.

<sup>2</sup> The legend of the first, ANDRDTAO, is certainly blundered for ANDRQTAR, that of the second is recognised by Lambros himself as derived in part from the sequin of Gradonigo.

<sup>3</sup> It may be of interest to note that this year I obtained a very base Sequin of the 'Clarenza' type at Konia, while a hoard of forty fine specimens appeared at Constantinople. In Greece I have never met with a 'K' Sequin and have only once seen a blundered Sequin of Dandolo.

is improbable that the blundered coins are Venetian: they are more likely to have been coined by a foreign settlement taking advantage of the popularity of Venetian types.

The chief communities in the Levant which are known to have struck sequins on the Venetian model are the Genoese colonies of Pera, Mytilene, and Chios.<sup>1</sup> The claim of Pera to the counterfeit coinage would rest on the isolated coin of Gradonigo, since the city became Genoese in his reign (1303), beginning to strike gold in its own name in 1421. Of Mytilene, which was more loosely attached to Genoa, we know that its first duke, Francesco I. Gattelusio (1355-84) was accused by the Venetians of striking sequins of low standard with Venetian types<sup>2</sup>: the only distinctively Mytilenean sequins are again later, bearing the name of Jacopo (1404-28).

Chios is of all the Genoese colonies numismatically the most important, and a number of sequins have come down to us which can be definitely assigned to it, as bearing the names of Genoese doges and the Chian mintmark S. None of these, however, are earlier than Tommaso Campofregoso (1415-21). Chios was occupied by the Genoese from 1304 to 1329 and from 1346 to 1566: the island was in a flourishing state till the end of the fourteenth century, having a large share of the overland trade from Asia Minor, which was, be it remembered, carried on with a foreign and (for our purposes at least) illiterate nation. The second conquest of Chios took place while Andrea Dandolo was reigning at Venice, and the first issue of definitely Chian sequins coincides with the reign of Tommaso Mocenigo.<sup>3</sup> It is not improbable therefore, that the series of blundered imitations represents the earlier gold coinage of Chios under the Genoese before the substitution of Genoese legends.<sup>4</sup>

Confirmation of the attribution to Chios is to be found in a passage of Coronelli's *Isolario* (1695) which may be given in full:—'Spendono anco attualmente i *Scioti* il zecchino d'oro stampato da Veneti nel tempo che furono altre volte Padroni di questa Città, il quale dal corrente da Venetia differisce per alcune littere greche scolpite all'interno.'<sup>5</sup>

<sup>1</sup> The Rhodian Knights also struck them from the reign of Antonio Fluviano (1421-37) onwards.

<sup>2</sup> Document of 1357 published in *Giornale Ligustico*, i. (1874), p. 84.

<sup>3</sup> The Genoese in Chios had the right to coin silver from the establishment of the colony (Doc. in Pagano, *Imprese dei Genovesi*, p. 281).

<sup>4</sup> It will be noted that both the Genoese colonies and Rhodes began to strike gold in their own name between 1420-1430, so that the cause probably lay in local affairs, not Genoese.

<sup>5</sup> P. 271.

Now the sequins here mentioned could not have been struck by the Venetians, since Venice only held the island for two short periods, (1) in 1191, when sequins were not yet invented, and (2) in 1694-5 which is subsequent to the writing of the *Isolario*.<sup>1</sup> *Littere greche* seems to point certainly to the blundered and reversed lettering of the series of sequins we are discussing, in which, moreover, the form of *A* used, often approximates to that of the Greek Δ.

It is probably these same sequins, not the rare issues struck in the name of Genoa, which are referred to as 'Chian ducats' (δουκάτα Χίου) in a Chian document of 1572.<sup>2</sup>

The conclusion is thus, that the series of blundered sequins, falling exactly between the acquisition of Pera and Chios by the Genoese and the striking of the first confessedly Genoese sequins in the Levant, are therefore probably of Genoese origin and struck for the Turkey trade. There is further, especially considering the strictly commercial basis of the Chian colony, a strong presumption that many, if not all of them, were struck in or for Chios.

F. W. HASLUCK.

<sup>2</sup> In spite of the detail in which the island is treated by Coronelli, this Venetian exploit is not mentioned.

<sup>3</sup> Photeinos, *Νεαμονήσια* (Athens, 1865), pp. 185, ff.; Χίου is probably inserted because the Chian imitations were of a standard inferior to that of the Venetian original.



## PLATO IN THE FOLK-LORE OF THE KONIA PLAIN.

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THE recognition of Plato by the Arab philosophers, and consequently by the Seljouks of Roum, has long been the accepted explanation of the fact that his name is popularly associated with a remarkable spring (Eflatoun Bounari=Plato's spring) with 'Hittite' ruins some fifty miles west of Konia,<sup>1</sup> the Seljouk capital, and with a spring at Konia itself<sup>2</sup>: the connection has not hitherto been made clear. Stray references to Plato in the description of this part of Asia Minor by the Turkish geographer Hadji Khalfa (1648)<sup>3</sup> seem to throw some fresh light on the subject.

These references are three in number. The first records the existence of a 'tomb of Plato the divine'<sup>4</sup> in the citadel at Konia.<sup>5</sup> This is also mentioned earlier by the thirteenth-century geographer Yakut,<sup>6</sup> one of Hadji Khalfa's acknowledged sources: Yakut adds that the tomb was 'in the church by the mosque.'<sup>7</sup> This church is identified with that of

<sup>1</sup> See Hamilton, *Asia Minor*, ii. 350; *A.J.A.*, 1886, p. 49; Sarre, *Reise in Kleinasien*, 123; Perrot et Chipiez, pp. 730 ff.

<sup>2</sup> Konia, from 1233 onwards, the headquarters of the philosophic Mevlevi order of dervishes, would be less averse to Platonic studies than a more orthodox place. At Karaman near by, the highest class of students at the Zinjirli Medresseh were known as Platonists (Hammer-Hellert, *Hist. Emp. Ott.*, i. 232, 405).

<sup>3</sup> Tr. Armain, *ap.* Vivien de S. Martin, *Descr. de l'Asie Mineure*, ii. 651 ff. There is a Latin translation by Norberg (Lund, 1818).

<sup>4</sup> Plato, Aristotle, and Socrates are given the title of 'divine' as having admitted a Prime Cause in their philosophies: the tomb of Plato is placed by Hadji Khalfa immediately after the orthodox Mahommedan pilgrimages at Konia.

<sup>5</sup> P. 670; cf. Otter (*Voyage*, i. 61), who borrows direct from Hadji Khalfa, as often, *e.g.* in the case of the Ivriz relief; a comparison with Hadji Khalfa shews that he never visited this monument, though he is generally credited with the discovery.

<sup>6</sup> The date of Yakut's Geography is generally given as 1224; Sarre places him in the xiv. century. The point is of some interest as the earlier date would prove that 'Plato's tomb' was recognised before the establishment of the Mevlevi at Konia.

<sup>7</sup> *Ap.* Sarre, *op. cit.* p. 34, note, cf. 125.

S. Amphilochius by a note in the *Pilgrimage of the Merchant Basil* (1466):—'il y a là une église chrétienne [consacrée] selon eux à Platon et selon nous à Amphilothee (*sic*). Il repose entre la grande porte et la porte septentrionale [de l'autel]; et l'huile sainte découle de lui jusqu'à présent.'<sup>1</sup> The church of S. Amphilochius, a fourth-century bishop of Iconium, is still standing,<sup>2</sup> and in it is said to exist a 'spring of Plato,'<sup>3</sup> probably the *ayasma* of the saint.

The second reference<sup>4</sup> is to a so-called 'river of Plato' by a village (not marked on our maps) called Bounarbashi, near Madenshehr and the 'Thousand and One Churches.'

In both these passages as at Eflatoun Bounari, Plato's name is associated with water-springs,<sup>5</sup> and that in a country where the water-supply is regulated by mysterious and still imperfectly known subterranean channels.<sup>6</sup> Pre-hellenic Iconium had a legend of a deluge in which the entire population perished.<sup>7</sup> The whole plain was and is subject to floods.

The missing link in the connection is supplied by Hadji Khalfa's third reference to Plato:—'The inhabitants of the country<sup>8</sup> say that the plain of Konia was once a sea, which Plato caused to disappear.'<sup>9</sup>

In our own times Hamilton, the discoverer of Eflatoun Bounari, heard at the lake of Egerdir a converse tradition that '800 years ago it was all dry and that a river ran through it until its course was stopped by a magician named Eflat.'<sup>10</sup>

The rôle of the magician-philosopher-engineer Plato in the plain of Konia thus proves to be similar to that of Herakles in Thessaly, at Lerna, and at Phencos, and of the Minyans in Bœotia. He represents not

<sup>1</sup> Ed. Khitrovo, *Itin. Russes*, p. 256.

<sup>2</sup> Ramsay and Bell, *Thousand and One Churches*, Figs. 328-330 incl.; Ramsay, *Cities of S. Paul*, p. 380 and Pl. XIV.; *Pauline Studies*, 170 f.

<sup>3</sup> *Pauline Studies*, 177.

<sup>4</sup> *Op. cit.* p. 735: *Maaden Schari alio nomine Eflatun sui* in Norberg's translation (ii. 529).

<sup>5</sup> I do not know this country well enough to say whether plane-trees, which in some parts habitually grow by springs, or some Greek place-name derived from *πλατάνος*, may have suggested the connection.

<sup>6</sup> Ramsay, *Cities of S. Paul*, 323; cf. Hamilton, *op. cit.* i. 482, ii. 342. With these channels are probably connected strange places like the 'devil-haunted' lake of Oobruk (Sarre, *op. cit.*, p. 74).

<sup>7</sup> Ramsay, *ibid.*, 319 ff.

<sup>8</sup> About Ismil, east of Konia.

<sup>9</sup> P. 670: the saltness of L. Tatta and others in the district suggests a 'sea' rather than a mere freshwater inundation.

<sup>10</sup> *Op. cit.* i. 482.

only superhuman skill, magical or divine, but also the superior science of an age long past and dimly remembered by its monuments.<sup>1</sup> The conception of the 'magician' who makes water appear and vanish is doubtless aided in this particular instance by the frequency of *mirage* effects in the district,<sup>2</sup> and that of the engineer by the subterranean water channels (*douden*) alluded to above.

From various analogies Ramsay, in his study of Iconium, infers that in ancient times the drainage and irrigation of the plain were attributed to divine agency,<sup>3</sup> though the legend has entirely perished. From such scanty records as we have of the local religion we may guess that the hero-saviour was Hellenised as Herakles or Perseus;<sup>4</sup> beyond this we cannot safely venture. Frazer has pointed out that the dragon of the Perseus type of myth is often closely connected with water,<sup>5</sup> but besides the coin of Koropissus already mentioned there is nothing to shew that the dragon incident was localised in the plain of Konia.<sup>6</sup>

Whether in Christian tradition S. Amphilochius or any other saint was credited with a beneficent miracle similar to Plato's as the archangel Michael certainly was at Colossac,<sup>7</sup> we cannot say. The fact that 'Plato's

<sup>1</sup> This non-magical side is well illustrated by the strictly utilitarian and rather commonplace works ascribed by Orientals to Pliny—an economically-heated bath at Caesarea Mazaca (Hadji Khalfa, p. 676, cf. H. Barth, *Reise von Trapezunt nach Scutari*, 266) and the canal at Damascus (Lestrangle, *Palestine under the Moslems*, 266). On the other hand, the really remarkable engineering works of Alexander become so exaggerated as to be inexplicable save by magic (cf. e.g. Hadji Khalfa, p. 685). In western folk-lore the rich legend-cycle of Vergil covers the whole ground (see Comparetti, *Vergil in the Middle Ages, passim*).

<sup>2</sup> Sarre, *op. cit.*, p. 96.

<sup>3</sup> *Cities of S. Paul*, p. 235, cf. p. 18: for Herakles and Perseus at Tarsus, see p. 136.

<sup>4</sup> There was a tribe Herculana at Iconium and both Perseus and Herakles figure on the coins. Kybistra (Eregli) took the name of Herakleia and used the *harpa* as its coin-type (*B.M. Catal.* p. 95): the neighbouring god of Ivriz was very probably (Ramsay, *op. cit.*, p. 400) identified with Herakles. Of other cities in the district Koropissus uses the type of Perseus and Andromeda (*Rev. Num.* 1883, p. 32), Hyde (Kara Bounar?), Tyana (near Bor), and Karallia (Iskeles?) strike coins with Perseus (*B.M. Catal.* Pl. XL. 1; p. 96; p. 47 note 1 respectively); so that Perseus and Plato have roughly the same domain. It is fair to add that the Perseus type is common south of Taurus also, but this is again a *douden* country (Bent in *P.R.G.S.* 1890, 447).

<sup>5</sup> *Commentary on Pausanias*, v. p. 142.

<sup>6</sup> The 'tradition' of the dragon cited by Cuinet (*Asie Mineure*, i. 820) mentioned also by I. Valavanis (*Μικρασιατικὰ*, p. 110), I confess myself unable to trace: it seems to be no more than a local *contaminatio* of ancient sources. The Iconian Perseus-legend, as we have it in Malalas, Cedrenus, the *Chronicon Paschale*, and John of Antioch, commemorates merely a conquering hero and city-builder. At Koropissus the dragon or monster of the legend is suggested by the name of the district (Κῆρις) in which the town lay (Ramsay, *H.G.* 363).

<sup>7</sup> Ramsay, *Cities and Bishoprics*, i. 215. For S. Michael's association with waters see Lueken, *Michael*, pp. 53, 131.

tomb' was shewn in a Christian church seems to favour such a supposition, but the substitution of names may have been made on quite untraceable grounds;<sup>1</sup> even a supposed resemblance between 'Eflatoun' and some perverted form of Amphilochius is not impossible.<sup>2</sup> Nor is there any need to suppose a survival or continuous tradition, since the natural conditions of the country have at all times been sufficient to account for the *genesis* of so simple a type of myth. At Dineir, for instance, where somewhat similar conditions prevail, we need not connect the ancient legends of the Deluge<sup>3</sup> with the modern folk-tale, located apparently at Sheikh Arab Gueul, of an 'infidel (*giaour*) dervish' who flooded a town in revenge for ill-treatment.<sup>4</sup> Nor is a deluge-legend necessarily evidence of floods: the very instructive series of flood-legends given by Carnoy and Nicolaides<sup>5</sup> as current at Caesarea seems based merely on a gradual identification, probably by Armenians, of Argæus with Ararat.

F. W. HASLUCK.

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#### ADDENDA.

I may here add some supplementary notes on current Plato-legends, collected almost entirely from Sir W. M. Ramsay's servant, Prodrornos Petrides, during a recent visit to Konia.

1. Eflatoun Bounari is regarded as the spot where 'Plato' blocked (with cotton, pitch, and large stones) the outlet of a subterranean river which threatened to flood Konia: this legend is current also at Konia itself. 'Plato' is generally described as a Turkish boy, but is said, by the more imaginative, to have come from Bagdad.

<sup>1</sup> So the origin of the Ivriz river, with its mysterious source and disappearance, was locally attributed, for reasons entirely lost to us, not to Plato but to one of the Companions of the Prophet (Davis, *Asiatic Turkey*, 251, cf. Hadji Khalfa, 671).

<sup>2</sup> Note especially the form *Amphilotheos* in the *Pilgrimage of Basil*, which would help the identification as containing the consonants *f, l, t*. It is of course possible that the original dedication of the church was to S. Plato of Ancyra, martyred under Diocletian and celebrated by the Eastern Church on Nov. 18; he was sufficiently important to have had a cult at Constantinople, but nothing connects him with Iconium. S. (*ἅγιος*) Amphilochius was never a full-fledged saint and many churches are known by their founders' names rather than by those of their patron saints.

<sup>3</sup> Ramsay, *Cities and Bishoprics*, ii. 669.

<sup>4</sup> Laborde, *Asie Mineure*, 105.

<sup>5</sup> *Traditions de l'Asie Mineure*, 222-3; cf. Scott-Stevenson, *Our Ride through Asia Minor*, p. 206; Tozer, *Asia Minor*, p. 333.

2. The church of S. Amphilochius is still vaguely connected with Plato: some hold that it was his observatory, others 'have heard' that his tomb is there. I could see no trace of tomb or *ayasma* inside the building, nor does the saint share 'Plato's' connection with the underground river supposed to flow beneath it. The similarity (?) between the names of saint and sage, suggested by me as a possible reason for their identification, was brought forward spontaneously as an explanation.

3. Hamilton's Egerdir legend is current at Beyshehr. 'Plato' blocked the outlet of the lake in order to bring the water to Konia but desisted on finding that a town was flooded by his operations.<sup>1</sup>

It is noteworthy that all these legends concur in associating 'Plato' and his works with Konia, which historical considerations have led us to consider the home of the myth.

F. W. H.

<sup>1</sup> The similarity of this story to that of the Dineir lake, quoted above, makes one suspect that 'Plato' is the hero of both. *Giaour* is used as well as *pout-berest* to designate pagans (von Diest, *Tilsit nach Angora*, p. 38).

## TOPOGRAPHICAL DRAWINGS IN THE BRITISH MUSEUM ILLUSTRATING CLASSICAL SITES AND REMAINS IN GREECE AND TURKEY.

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THE British Museum drawings indexed below, though in almost all cases admirably catalogued,<sup>1</sup> are scattered through the four departments of Prints and Drawings (P. & D.), Greek and Roman Antiquities (G. & R.), Manuscripts (MSS.), and Printed Books (P.B.). They are here arranged alphabetically under artists' names. I am indebted to the kindness of Mr. A. H. Smith, Keeper of the Greek and Roman Antiquities, for much information concerning the drawings in his care.

BROWNE, SIR E.

MSS. *Add. 5,233. f. 48.*

A small pencil sketch of Turnavo in Thessaly.

The author travelled in the Levant in 1669, cf. his printed *Travels* (1672, etc.).

BURGON, MRS.

G. & R. *Portfolio A.*

A sepia drawing of the temple at Bassae from a sketch made by Mrs. Burgon in 1815.

COCKERELL, C. R.

G. & R.

The series of Cockerell sketches (1810-1817) is described by Miss C. A. Hutton in *J.H.S.* xix. 53 ff. Pl. VII.

<sup>1</sup> See especially Madden's *Catalogue of MS. Maps, Charts, and Plans and topographical Drawings in the British Museum*, vol. iii., which contains the sections *Mediterranean* (pp. 30 ff.), *Greece* (70 ff.), and *Turkey* (260 ff.), and Binyon's *Catalogue of Drawings by English Artists*, (1900-7).

COVEL, J. (chaplain at Constantinople 1669-1677).<sup>1</sup> MSS. *Add.* 22, 912.

In this volume are topographical drawings by several hands, including some by J. Grelot (*q.v.*), J. Salter (*q.v.*), and

(f. 31-3) Two plans, (*a*) Italian, (*b*) French, of Candia during the siege.

(f. 39) Folding view in ink, the drawing clumsy but conscientious, of the sea-front at Smyrna, probably made by C. in 1677.<sup>2</sup>

(f. 118) Clumsy drawing in ink and grey wash of the Valideh (?) mosque at Constantinople.

(f. 125) 'A Prospect of the Grand Signior's Seraglio' in brown ink, from G. Sandys or his original.<sup>3</sup>

DANIELL, REV. E. T. (1804-42).

P. & D.

A series of fifty-five drawings by Daniell, chiefly in water and body colour over pencil or brown ink on buff paper, is fully described in Binyon's catalogue. The subjects include views of Telmessus, Pinara, Xanthus, Tlos, Antiphellus, Cassaba, Myra, Phineka, Limyra, Chimera, Termessus, Cibyra, Sillyum, and Aspendus, also Rhodes and Larnaka. Two other drawings, *Termessus* and *Turkish house at Cassaba*, are in the Reeve collection. All were made for the Lycian expedition of Spratt and Forbes (1840-2), in the course of which Daniell died of fever at Adalia: the illustrations of the book are with few exceptions the work of Forbes.

DILETTANTI COLLECTION.

G. & R.—P. & D.

This collection, catalogued by Madden, contains a volume of eighty-three drawings of Athens and Asia Minor by Pars and another of a hundred and twenty-six Athenian drawings by Revett. Most of these are published in the *Antiquities of Athens* or *Ionian Antiquities*.<sup>4</sup> The third volume of Dilettanti drawings, by Bedford, Gell, and Gandy Dering<sup>5</sup> was never handed over to the Museum,<sup>6</sup> though its contents, some of which

<sup>1</sup> See *B.S.A.*, xii. 211.

<sup>2</sup> The drawing is to be referred to the homeward journey as it shews the *Khan* of Achmet Kuprulu, built 1675-7 (*Rycaut, Hist. of the Turks*, 256, 263).

<sup>3</sup> Covell says in his text (f. 76) that he had two prospects of Constantinople, one a very large panoramic view by Grelot, the other taken from the Embassy by an Englishman 'in Sir Paul Pindar's time.' A receipt for 90 livres received by the artist in payment for the former is to be found in Covell's letters (*Add.* 22, 910 f. 187).

<sup>4</sup> Exceptions are drawings of the Cave at Vari and the Castalian Spring, which, with the rest of the pictorial subjects by Pars (twenty-four in all), except the view of the Acropolis exhibited in the Elgin Room, are to be found in the Print Department.

<sup>5</sup> For the Dilettanti mission of 1812-13 see Cust, *Hist. of Dilettanti*, 149.

<sup>6</sup> The volume is said to have perished in a fire.

were published in *Unedited Antiquities of Attica*, are catalogued by Madden.

## ELGIN COLLECTION.

G. &amp; R.

The series of drawings made for Lord Elgin during his embassy to the Porte is contained in five volumes. They include the drawings of Athenian Sculpture made by Theodore 'the Kalmuck' and reproduced in Stuart and Revett (*Vol. V.* in Madden but lettered *4*); surveys, plans and perspectives of Greek sites and buildings by Sebastiano Ittar (*q.v.*); and a series of ink drawings of the Troad by an anonymous artist, probably Préaux (*q.v.*). In vol. i. are three unattributed pencil drawings of landscape in Crete. A rough list of the Elgin drawings is given by Stuart and Revett (*Ant. of Athens*, 2nd ed. IV. pt. 3. p. 28, note *a*), where the only artists' names given are those of Lusieri (landscape) and Ittar (architecture).

## GELL, SIR W. (1777-1836).

P. &amp; D.

A series of drawings made by Gell in Greece between 1801-6 is contained in twelve sketch-books averaging  $9\frac{1}{4} \times 14\frac{3}{4}$  in. and a packet. The drawings are executed chiefly in ink and pencil with or without the addition of wash, and are conscientious rather than artistic. The draughtsman's chief object was topographical, and many of the drawings are panoramas of country: an interesting example is that of the Piræus harbours (VII. 12). Of the well-known Athenian and other ruins there are many elaborate studies, sometimes from uncommon points of view. The whole series is catalogued in detail by Binyon: below is a rough list of the contents of the sketch-books:—

I. Navarino, Phigalia, Mantinea, Stymphalus, Argolid (published), Troad (published).

II. Megalopolis, Mistra and Sparta (nine views, mostly panoramic), Phyle, Thebes, Thermopylae, Pharsala, Tempe and Thessaly, Elatea, Chaeronea.

III. Delphi, Bassae, Karitaena, Olympia, Ithome.

IV. Corinth, Eleusis, Thebes, Daulis.

V. Aegina, Athens, Daphne, Sunium, Vari.

VI. Mesolonghi, Klitor, Kalavryta, Megaspelaeon, Bura, Sicyon, Oeniadae, Ithaca, Naupactus.

VII. Athens, Plataea and other Boeotian sites.



VIII. Athens and Attica, Marathon, Cave of Trophonius.

IX. Mistra, Corinth, Thebes, Orchomenos, Livadia, Delphi.

X. Corfu, Zante, Delos, Islands.

XI. Delphi, Thebes, Livadia, Corinth, H. Loukas.

XIII.<sup>1</sup> Parga, Nicopolis, Ithaca, Cephalonia, Patras, Delphi, Livadia, Athens.

GRELOT, J. (at Constantinople 1674). MSS. *Add. 22, 912*.<sup>2</sup>

ff. 133-4. Two small drawings in brown ink of *A Khane*, interior and exterior, the former signed *Grelot delineavit ad locum*.

f. 119. Similar drawing of the Historical Column at Constantinople (Fig. 1).

This drawing of the column is a new one: for other views known see *Jahrb.* vii. 230 ff., *Mon. et Mem.* ii. 99 ff., and details in C. G. Curtis, *Old Byzantium*, ii. 413. The style is exactly similar to that of the signed Grelot drawing though Grelot does not mention that he drew this monument. A note at p. 68 of the English edition of Grelot's *Voyage* explains the omission of the base of the column in the drawing: 'the lower part is so surrounded with Houses built upon it that neither the Pedestal nor the base of the Pillar can be discover'd.' A rough draft of the same subject in *Lansd.* 792 (see *B.S.A.* xvii, 156) is taken from Sandys.

GROPIUS, J. (Austrian Consul at Athens). P. & D.

A few slight pencil sketches in the odd packet of Gell's drawings illustrate a journey made in May-June 1803 to Smyrna, Ephesus, Phocaea, Chios, Samos, Miletus, Cos, Myndus, 'Halicarnassus' (Iasus), Sardis.<sup>3</sup>

HALLER, F. VON (d. 1817). G. & R.—P. & D.

Haller's sketches and notes of the temple at Bassae are bound in a book of thirty-one pages (10 × 8½ in.) written both sides, containing measured plans, sections, and detail drawings of the temple, done free-hand but with great accuracy. The drawings include (ff. 24-5) a very careful elevation, half-plan, and various sections of the famous Corinthian capital.<sup>4</sup>

A few slight pencil sketches by Haller are to be found among the Cockerell and Gell (ix. 3) collections, and a detail from Aegina in *Portfolio A*.

<sup>1</sup> Sketch book XII. contains Spanish subjects.

<sup>2</sup> See above, *s.v.* *Covel*.

<sup>3</sup> The order is taken from the dated sketches.

<sup>4</sup> See Durm in *Jahresh.* ix. 287 ff.

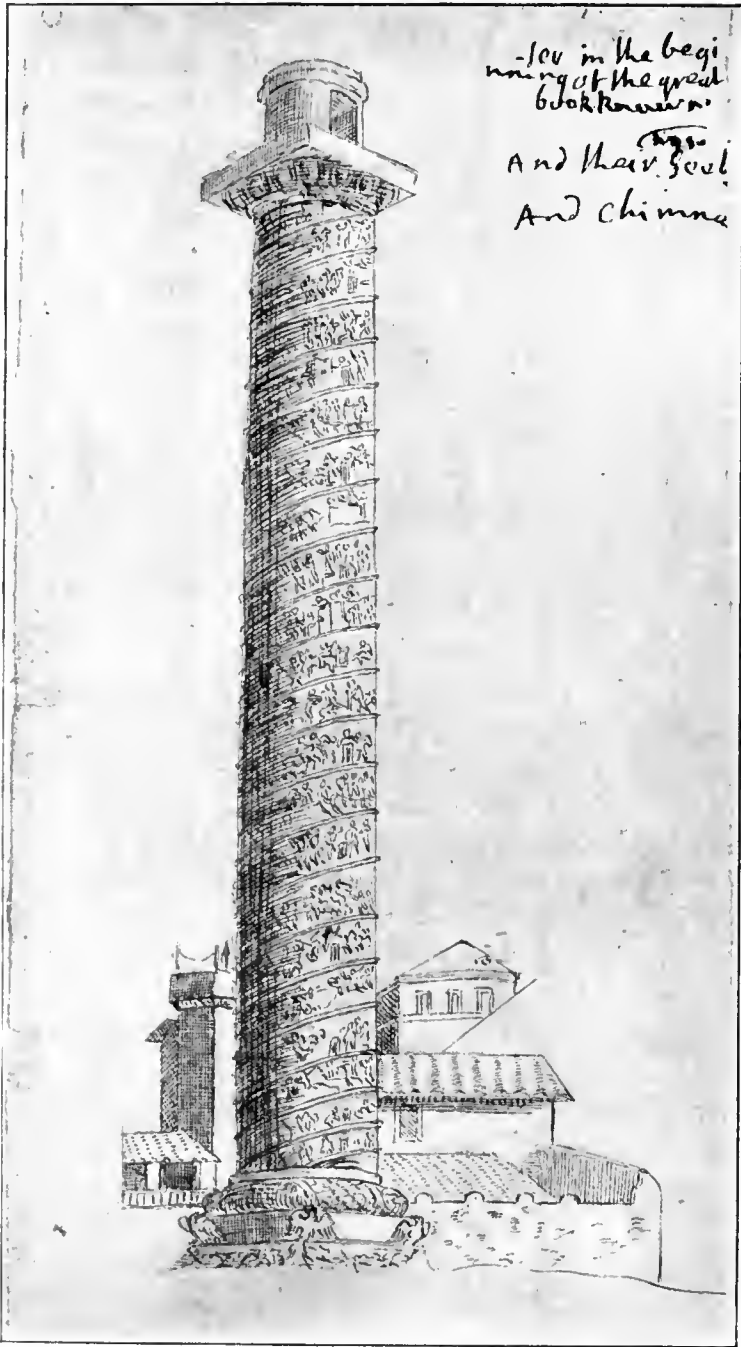


FIG. 1.—THE HISTORICAL COLUMN AT CONSTANTINOPLE  
(from a drawing attributed to J. Grelot).

HAWKINS, J. (of Bignor, 1758 ?-1841).

G. & R.

A drawing in wash of the lions at the gate of Mycenae is to be found in *Portfolio A*.

ITTAR, S.

G. & R. *Elgin Collection*.

Ittar's drawings occupy the greater part of vols. i.-iv. of the Elgin drawings. Vol. iv. contains working drawings, the others finished drawings in ink and wash. Vol. ii. is the most important as including less-known sites. The collection embraces Aegina, Argos, Athens, Sunium, Corinth, Eleusis, Epidaurus, Mantinea, Mycenae, Nemea, Sicyon, Sparta (three plans and drawings of Artemision (Fig. 2) and 'Leonidacum'), Tiryns. All are described in detail by Madden.

KINNARD, W.

G. & R. *Portfolio A*.

Some small finished drawings in ink and wash of architectural details from Delphi and Delos (1820), in part published (Stuart and Revett, vol. v.).

LEWIS, PROF. T. HAYTER.

G. & R.

Of this artist the Museum possesses four careful pencil drawings on a small scale of Athens (Acropolis, Propylaea, Pinacotheca, Pnyx) dated 1842, with two pencil notes of the acropolis wall at Chaeronea and the temple at Kardaki, Corfu (Stuart and Revett, *Ant. of Athens, Supp.* Pl. I-V).

LUPAZZOLO, F.

MSS. *Lansd.* 792.

See *B.S.A.* xvii. 155.

MAYER, LUIGI.

P.B. *Tab. xi.*

A folio volume in the King's Library contains fifty-eight elaborate water-colour drawings by Mayer of Constantinople (20), Ephesus (12), Samos (7), Smyrna (1), Sicily and the Lipari Islands.<sup>1</sup> The artist was employed by Sir R. Ainslie, member of the Dilettanti and Ambassador to the Porte 1778-93, and his drawings of European Turkey, Caramania, Syria, Palestine, and Egypt were lithographed in colour and published.<sup>2</sup> In the *P. & D.* copy of his *Views in Turkey* is a Prospectus dated 1807,

<sup>1</sup> Fully described in Madden's Catalogue.

<sup>2</sup> See bibliography in Lowndes and in Rohricht, *Bibliogr. Geog. Palestinae*, p. 335, Boppe, *Peintres du Bosphore*, 220. A few plates (e.g. Budrum) were engraved for the *Ionian Antiquities*. Ainslie presented many of his books to the British Museum (Cust, *Hist. of Dilettanti*, p. 144).

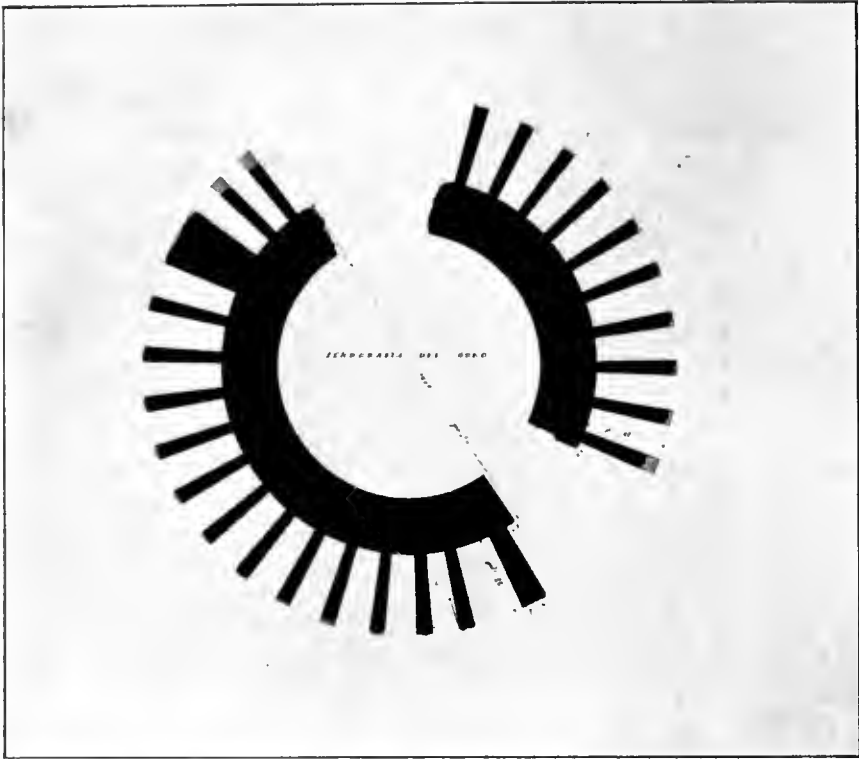


FIG. 2.—PLAN AND PERSPECTIVE OF THE ARTEMISION AT SPARTA BY S. ITTAR.

showing that the King's Library drawings were intended for publication on a similar scale.

MÜLLER, W. J. (1812-45).

P. & D.

W. J. Müller of Bristol is represented by a series of thirty-five water-colour drawings of Lycia, illustrating Telmessus, Xanthus, Tlos, and Pinara, five of Smyrna and three of Rhodes.<sup>1</sup> Müller accompanied the Lycian expedition of 1843. His travels are described in his *Letters*<sup>2</sup> and in Solly's *Life*.<sup>3</sup>

PORCHER, COMM. E. A.

G. & R.

A portfolio of original drawings of Cyrene and the Cyrenaica, mostly coloured views, but including also plans, made for Smith and Porcher's *Cyrene* and in part published.

PORTER, SIR R. K. (1777-1842).

MSS. *Add. 14,758*.

Views of Amasia and Tocat made during his travels (1817-20) and published.

PRÉAUX, MICHEL-FRANÇOIS (at Constantinople 1796-1827).<sup>4</sup>

G. & R. (*Elgin Collection*).

The series of Troad views in vol. i. of the Elgin Collection may be attributed with some certainty to a French artist, Michel Préaux or Préault, who is repeatedly mentioned in the correspondence of John Tweddell (1798-9).<sup>5</sup> He is there said to have studied eight years at Paris and ten years at Rome at the expense of Louis XVI. with a view to becoming King's painter for the department of architecture.<sup>6</sup> He came to Constantinople at the invitation of Choiseul<sup>7</sup> to help in the illustration of his great work, but none of the plates in it are signed by him. The Revolution put an end to Choiseul's career in the East and Préaux was stranded. Tweddell in 1798 found him ready to join

<sup>1</sup> Fully described by Binyon (*Catalogue*, iii. 118-126). A few others of this series are exhibited at the Tate Gallery (2373-7) but are not archaeological except the fine view of Tlos (2376).

<sup>2</sup> *Art Union Journal*, 1844, pp. 41, 209, 356.

<sup>3</sup> Pp. 202 ff. Views of Telmessus, Pinara, Tlos, and Xanthus are reproduced. The artist is said by his biographer to have made upwards of fifty sketches at Athens. Cf. Tate Gallery, 2348-2350.

<sup>4</sup> A. Boppe, *Peintres du Bosphore*, 223.

<sup>5</sup> *Tweddell's Remains* (edn. of 1816), 248 ff.

<sup>6</sup> *Ibid.* 267.

<sup>7</sup> *Ibid.* 248, 261, 267; but cf. Boppe, *op. cit.*

his tour on very moderate terms, and Préaux drew on Athos<sup>1</sup> and in Athens till the death of Tweddell in the following year.<sup>2</sup>

In July 1803 the artist was with Lord Aberdeen in the Troad<sup>3</sup> and the Elgin drawings appear, like the (signed) engravings of the Troad in the quarto edition of Clarke's *Travels*,<sup>4</sup> to have been the result of this expedition. In 1810 Choiseul-Gouffier wrote repeatedly to Préaux begging for copies of the drawings made in the Troad and the Thracian Chersonnese.<sup>5</sup> In 1807-8 Préaux undertook a journey to Persia with General Gardane's embassy. A long series of unpublished drawings made during this expedition is catalogued by Boppe.<sup>6</sup> To these must be added the four plates of Angora engraved in Boré's *Arménie*,<sup>7</sup> some of which, as possibly the unsigned view of Mt. Ararat,<sup>8</sup> may be derived from the known drawings. Further, two plates<sup>9</sup> in Jouannin's *Turquie* are signed by our artist. Of these the *Église à Nicée* (really the Green Mosque) figures in Boppe's list of drawings. The second, a view of Trebizond, can hardly belong to the same series, since Gardane did not take this route:<sup>10</sup> the artist may have been with Jaubert, who went and returned by Trebizond.<sup>11</sup> Both *Arménie* and *Turquie* belong to the well-known *L'Univers* series published by Firmin-Didot; it is possible that the original drawings were brought home by Ambroise Firmin-Didot, who was a collector of pictures, from his eastern tour (1816-17).<sup>12</sup>

Préaux later illustrated the works of Pertusier,<sup>13</sup> Jaubert,<sup>14</sup> and Andreossy:<sup>15</sup> full titles of these plates are given by Boppe.

<sup>1</sup> *Tweddell's Remains*, 331. Cf. Clarke's *Travels*, viii. 17.

<sup>2</sup> *Ibid.* 279. Préaux' drawing of the Theseum is engraved-p. 300; it had been published as a coloured print in 1815. Other Préaux drawings of Athens, Corinth, Nemea, Rhodes and Constantinople are engraved in the quarto edition of Clarke's *Travels*,

<sup>3</sup> Aberdeen's MS. diary, vol. i. (in G. & R. department of B.M.).

<sup>4</sup> Broxbourne, 1812, vol. ii. pt. i. The style (and in some cases the subject) of these is identical with that of the B.M. drawings: in the octavo edition some small vignettes only are engraved.

<sup>5</sup> Boppe, p. 202.

<sup>6</sup> *Op. cit.* p. 225.

<sup>7</sup> Pl. 33-36 inclusive.

<sup>8</sup> Pl. 1.

<sup>9</sup> Pl. 60, 64.

<sup>10</sup> Cf. Vivien de S. Martin, *Asie Mineure*, ii. 156, where the route is given, and his bibliography, No. 231 (*Journal of Ange de Gardane*, Paris, 1809).

<sup>11</sup> Cf. Vivien de S. Martin, *op. cit.* ii. 155. Jaubert's *Voyage* was one of the books illustrated by Préaux, though Trebizond does not figure and all the plates can be paralleled in the Gardane collection of drawings.

<sup>12</sup> Described in the (anonymous) *Notes d'un Voyage* [1827].

<sup>13</sup> *Promenades dans Constantinople* (1817).

<sup>14</sup> *Voyage en Arménie* (1821).

<sup>15</sup> *Constantinople* (1828).

PULLAN, R. P., and others.

MSS.

The large folio album *Add.* 31, 980 (ff. 186) together with the smaller volume *Add.* 30, 998 constitute a pictorial record of the work of Newton at Halicarnassus, Cnidus, Branchidae, Cos, and Lagina, by his companions, R. P. Pullan, Lieut. R. M. Smith, R.N., and Corporal Spackman.

The former volume contains water-colour views, plans, working and finished drawings, and a large series of photographs of the sites in question: of these records the more important have been published in Newton's *Halicarnassus* and *Travels and Discoveries*.

*Add.* 30, 998 contains sixty-two leaves of which fifty-seven are taken up with drawings in ink and wash of heraldry, inscriptions, *graffiti*, etc., from the castle of Budrum: these are described, but not illustrated, by Pullan in *Halicarnassus*. The remaining pages contain drawings of Coan antiquities (cf. *Halicarnassus*, ch. xxvii), including the Charmyleion (*Halicarnassus*, Pl. LXXXII.), frieze-blocks in the castle, and heraldry at Kephalos and Antimachia.

RICARDO, H. R., A.R.A. (1823-1860).

G. & R.

The Ricardo drawings consist of seven highly-finished views, chiefly in pencil, of Athenian buildings, including Acropolis (two general views), Propylaea, Erechtheum, temple of Nike, Olympieum, and ten drawings of architectural details of the same, some full size. The series is dated 1845-7.

SALTER, J.

MSS. *Add.* 22, 912.

The following series of ink drawings, all by the same hand, are identified by the handwriting on them as the work of Jerome or Jeremy Salter, merchant at Smyrna, c. 1673.<sup>1</sup>

(f. 43-4) *Ephesus as now in her ruins* (on the back a description of the 'Gate of Persecution' in J. S.'s hand).

(f. 45) *Ephesus*.

(f. 59) *Prospect of part of γ<sup>e</sup> buildings at Ephesus designed by Mr. J. S.*

(f. 61) View of the inscribed aqueduct near Ephesus.

(f. 231) *Sultan Selym's Royall Moske in Adrianople*.

(f. 305) Iasus (inscribed on back *Jerem<sup>o</sup> Salter's Travails*, cf. Wheler, 273).

<sup>1</sup> This is the date of the expedition to Iasus described by Wheler and Spon. For the drawings cf. Wheler's *Voyage*, 268.

(f. 307-8) *The Temple of Apollo Didymeus* (cf. Wheeler, 271).

(f. 309) *Esqui Izzer* (Stratonicea Cariae).

(f. 313-14) *The Ruines at Melassa* (cf. Wheeler, 276).

SCHARF, G. (afterwards Sir G.), jun.

G. & R.

Scharf travelled with the Lycian expedition of 1843: his note-books are preserved in the Dept. of MSS.<sup>1</sup> He projected an elaborate work on Lycia, etc., of which only an Introduction<sup>2</sup> and one part<sup>3</sup> was published. According to the *Introduction* the first part was to contain general views of Lycian sites, the second the separate monuments, and the third illustrations of the author's route to Smyrna.

In the G. & R. Dept. are preserved:—

(1) Eighteen elaborate pencil drawings illustrating Xanthus, Cadyanda, Pinara, Myra, Tlos, Telmessus, Antiphellus, with eighteen architectural drawings and plans (Portfolio labelled *Xanthian Expedition*).

(2) Drawings of Lycian sculptures (Two small portfolios labelled *G. Scharf* and *Finished drawings* respectively).<sup>4</sup>

(3) A few drawings of sculpture, mostly reliefs, made in Athens, 1840 (*Portfolio A*).

SMIRKE, SIR R. (1781-1867).

G. & R.

Two water-colour drawings, exhibited in the Elgin and Phigaleia rooms respectively, represent:—

(a) the west front of the Parthenon,

(b) the temple of Bassae.

Smirke travelled in Italy and Greece 1801-5: both drawings were made in 1802.

TREVELYAN, PAULINE, LADY (d. 1866).

P. & D.

Album of seventy-one<sup>5</sup> water-colour drawings made on a tour through Central Greece and Peloponnese in 1842. Several are of archaeological interest, e.g. Walls of Chalcis, Acropolis of Athens, Odeum of Herodes,

<sup>1</sup> *Add.* 36,488. See *B.S.A.* xiii. 214.

<sup>2</sup> *Introduction to Mr. George Scharf's Illustrations of Lycia, Caria, Lydia*, 8°. London, 1847.

<sup>3</sup> *Lycia, Caria, Lydia, illustrated by Mr. George Scharf, described by Sir Charles Fellows*, fol. London, 1887: it contains nine lithographs of Xanthus, Telmessus, Tlos, Myra, and Patara.

<sup>4</sup> These drawings were made, Mr. A. H. Smith informs me, for a part of the *Museum Marbles* which was never published.

<sup>5</sup> One is exhibited in the Elgin Room. The series is fully described in Binyon's *Catalogue* (iv. 205-8).



Callirhoe, Nemea, L. Pheneos, Fragment of the Artemision at Sparta, Bassae, 'Arcadian Gate' of Messene.

WILLIAMS, H. W. (1773-1829).

G. & R.

A sepia drawing of the Acropolis taken from the top of the propylaea in 1817 or 1818<sup>1</sup> is exhibited in the Elgin Room. 'Grecian' Williams is well known for his engraved *Views in Greece*.

ANONYMOUS I. (xvii. cent.).

MSS. *Add. 5, 234 f. 75.*

A small ink and wash drawing of *Pompey his pillar at the Entrance into Black Sea*. This may have belonged to Sir E. Browne, many of whose drawings are included in the volume, but he is not known to have been at Constantinople and the drawing does not seem to be by his hand.

ANONYMOUS II.

G. & R. *Portfolio A.*

A plan with sections of the ruin called the 'tomb of Sardanapalus' at Tarsus, possibly by Consul Barker (1810?-1856), cf. his *Lares and Penates*, p. 133.

F. W. HASLUCK.

<sup>1</sup> See his *Travels*, ii. 287.

## A POSSIBLE EGYPTIAN DATING FOR THE END OF THE THIRD LATE MINOAN PERIOD.

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IN the last number of the *Zeitschrift für Aegyptische Sprache*<sup>1</sup> Max Burchardt publishes two swords lately acquired from Egypt by the Berlin Museum. The first (Inventory Number 20447), (Fig. 1), almost perfectly preserved, is a fine example of Naue's Type II.<sup>2</sup> It is a cutting sword with edges almost parallel and the end bluntly pointed. The handle is made in one piece with the blade. Its edges are raised on either side and it is fitted with eight rivet holes. Down the blade, whose faces are slightly convex, run on either face four fine furrows parallel to the edges. The total length is 715 mm. The sword was found at Zagazig (Bubastis) in the Delta.

The second sword (Inventory Number 20305) is unfortunately badly damaged but probably belongs to the same type.<sup>3</sup> It certainly has the same section and the same almost parallel edges. There is, too, the same thickening of the handle at the point where it joins the blade and the disposition of the rivets is similar in the case of such as remain. I have not yet had the opportunity of examining the original and so must be content with quoting Burchardt's opinion on this point. He says: Whether the sword, "which not only has in common with the example from Bubastis the section of the blade and the parallel edges but is also closely related to it in time,<sup>4</sup> is to be ascribed to exactly the same type cannot be

<sup>1</sup> *A.Z.* 50, p. 61 ff. and Taf. v.

<sup>2</sup> See Naue, *Die Vorrömischen Schwerter*.

<sup>3</sup> The Berlin Museum possesses another blade from a sword of the same type (figured by Burchardt, Fig. 3) also found in Egypt. This has two fine furrows on each face of the blade. Another from Egypt of exactly the same type was published by Budge in *Arch.* liii. Burchardt surmises, however, that the hilt of this sword is not the original one but a mirror handle fitted on to it in later times.

<sup>4</sup> I confess I see no evidence for this assertion, though it is doubtless true.

determined with certainty owing to the bad state of preservation of its hilt, but is in a high degree probable."

This sword, which is said to have been found at Tell Firaun in the Egyptian delta, bears the cartouches of King Seti II of the nineteenth dynasty. Now Seti's reign is fixed with a high degree of probability to the last decade of the thirteenth century B.C. This dating is based on a calculation of the lengths of reigns as fixed by the monuments from the last astronomically determined reign, that of Thothmes III of the eighteenth dynasty. It does not pretend to perfect accuracy but the margin of error is certainly small.<sup>1</sup> If the date is wrong at all it may be a little too early rather than too late.

If then the Seti sword is really, as seems highly probable, of Naue's Type II we have the certainty that this type was known in Egypt at the end of the thirteenth century. This is a fact of great importance, for we know at what moment in the terms of Minoan chronology this weapon appears in the Aegean. There, as in Egypt, it is foreign and intrusive. It is beyond all doubt a European type and there is some probability that its home lies in the Danube valley or the Balkans. In Italy it occurs at the end of the Bronze Age, but unfortunately, it is usually found in circumstances which give little help as to closer relative dating.<sup>2</sup> It is significant that it is practically absent west of the Appennines, most of the known examples coming from the valleys of the Adriatic side.<sup>3</sup>

In Crete, however, we can date its first appearance fairly accurately, for it occurs in one of the famous tombs of Moulianà.<sup>4</sup> These tombs had unfortunately been interfered with before scientific investigation, but it is quite certain that the oldest burials in them belong to a period just subsequent to L.M. III. They contain objects of iron, arched-bow fibulae, Naue's Type II sword (which was unknown in the



FIG. 1.—BRONZE SWORD OF NAUE'S TYPE II FOUND IN THE EGYPTIAN DELTA.  
(After Burchard in *Ägyptische Zeitschrift*.)

<sup>1</sup> See Breasted, *Ancient Records of Egypt*, i. pp. 38-75; Petrie, *History of Egypt*, iii. pp. 2-3.

<sup>2</sup> Peet, *Stone and Bronze Ages in Italy*, p. 348.

<sup>3</sup> *Liverpool Annals*, iii. p. 133.

<sup>4</sup> *Εφ. Ἀρχ.* 1904, pp. 21-50.

L.M. III cemetery of Zafer Papoura), and vases of a type now commonly known as L.M. IIIb. This pottery includes very degenerate *Bügelkannen* with, in some cases, relics of the octopus design, and bell-shaped amphorae occasionally with human figures and rather stiff un-Mycenaean handles. In Tomb A at Moulianà one of these amphorae held cremated remains. The period has been termed Achaean by Mackenzie<sup>1</sup> who sees in it an epoch distinct both from Late Minoan and from full Geometric. According to Thompson it is the period which satisfies the conditions of the Homeric armour.<sup>2</sup>

The known remains of this period are as follows:—

1. The Moulianà tombs.<sup>3</sup>
2. The chamber tomb of Milatos.<sup>4</sup>
3. A series of pottery vases found at Palaikastro and elsewhere in East Crete.<sup>5</sup>
4. Certain tombs found at Kavousi in East Crete, containing arched-bow fibulae.<sup>6</sup>
5. Probably some tombs at Erganos near Lyttos.<sup>7</sup>
6. The warrior vase and certain other remains from the Lower City at Mycenae,<sup>8</sup> including a sword of the type under discussion.
7. The post-Mycenaean cemetery excavated by Tsountas at Salamis.<sup>9</sup>
8. Many of the sub-Mycenaean tombs of Cyprus.<sup>10</sup> Here, however, the violin-bow fibula occurs and, as Mackenzie points out, may mean a slightly earlier date.
9. Probably some fragments of vases found in a settlement at Coppa Navigata on the Adriatic coast of Italy.<sup>11</sup>
10. Possibly some of the pottery found in the upper stratum of the *terramara* at Taranto.<sup>12</sup>

All these groups are definitely later, though by very little, than the end of L.M. III and this Egyptian evidence therefore gives good reason

<sup>1</sup> *B.S.A.* xiii. pp. 430-441.

<sup>2</sup> *Liverpool Annals*, v. pp. 1, ff.

<sup>3</sup> *Εφ. Ἀρχ.* *l.c.*

<sup>4</sup> Evans, *Prehistoric Tombs of Knossos*, pp. 93-103.

<sup>5</sup> *B.S.A.* viii. p. 289, Fig. 2; p. 303, Fig. 19; ix. pp. 317-320, Figs. 17-19.

<sup>6</sup> *A.J.A.* 1901, pp. 132-6.

<sup>7</sup> *Op. cit.* 1901, pp. 270-281.

<sup>8</sup> *Εφ. Ἀρχ.* 1896, Pl. II. Figs. 6, 7 and 8.

<sup>9</sup> Tsountas and Manatt, *Mycenaean Age*, p. 388.

<sup>10</sup> *Excavations in Cyprus*, p. 37, Fig. 65, 1088; p. 40, Fig. 69, 876; p. 48, Fig. 74, 1147 and 1149.

<sup>11</sup> *Monumenti Antichi*, xix. pp. 306 ff.; *Liverpool Annals*, iii. pp. 123-4.

<sup>12</sup> In the Taranto museum.

for believing that the close of this latter period is to be placed in the last years of the thirteenth century B.C. Naturally this is only an approximate dating,<sup>1</sup> but of one thing we may be certain, namely that if our identification of the Seti sword with Naue's Type II be correct, the introduction of this sword into Egypt is to be explained in connection with the raids of northerners of which we hear so much in the reigns of Merenptah and Rameses III.<sup>2</sup> It is almost equally certain that the appearance of the same type in Crete is to be explained in the same way.

It has long been observed that the fall of the Minoan power in the Aegean and the struggles of Egypt to defend herself from a northern foe were part of one and the same great movement from Europe southward, and the occurrence of this type of sword, which the invaders doubtless carried, in Crete and in the Egyptian delta goes far to confirm the theory in detail. In Crete the invasion was apparently successful and the conquerors were able to impose their weapons, their fibulae and their art, if such it can be called, on the vanquished territory: in Egypt the invasion failed and we may therefore expect to find few traces of it except in the record of its failure preserved on contemporary monuments, and in a few odd swords left behind in the delta together with the copies of them made by Egyptians interested in and attracted by this new type of weapon.

T. E. PEET.

<sup>1</sup> This sword-type may have been current for many years.

<sup>2</sup> We have the last signs of Minoan connections with Egypt in the metal *Bügelkannen* depicted in the tomb of Rameses III who came to the throne perhaps a decade later than Seti II. It would be perhaps refining too much to argue that the conquest of Crete by the northerners (which put an end to Egypto-Cretan relations) must therefore have been slightly later than their last descent on Egypt. These vases painted in Rameses' tomb may have been already only a survival of past glories; in any case they may have been painted early in his reign, as was often done, before his final defeat of the Libyans and their allies in the eleventh year of his kingship.

## THE TOPOGRAPHY OF THE SCAMANDER VALLEY.—II.

(PLATE XVI.)

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GERGIS ; GERGITHION ; GERGITHA ; PETRA ; MARPESSOS.

THE name of Gergis appears first in Herodotos, and is applied to a tribe said to be the descendants of the ancient Teukrians; *Ῥμέης . . . εἶλε μὲν Αἰολέας πάντας, ὅσοι τὴν Ἰλιάδα νέμονται, εἶλε δὲ Γέργιθας τοὺς ὑπολειφθέντας τῶν ἀρχαίων Τευκρῶν* (v. 122). Where they dwelt is made clear in vii. 43. After his visit to the temple of Athena at Ilion, Xerxes marches to Abydos, keeping Rhoiteion, Ophryneion and Dardanos on his left, and the Teukrian Gergithes on his right; *ἐπορεύετο ἐνθεῦτεν ἐν ἀριστερῇ μὲν ἀπέργων Ῥοίτειον πόλιν καὶ Ὀφρύνειον καὶ Δάρδανον, ἥπερ δὴ Ἀβύδωι ὁμουρός ἐστι, ἐν δεξιῇ δὲ Γέργιθας Τευκρούς*. The Greek colonists, the Aeolians, had occupied with their towns the whole of the coast; the older inhabitants had been driven into the hill-country a short distance inland. The line of march between the two is clearly marked by nature. The inland hills for a good part of the distance, and notably in the northern part opposite Dardanos, form a marked shelf running roughly parallel to the shore at a distance of three or four miles. On the back of these hills the Gergithes—or Gergithai, for the form is doubtful—must have lived in small villages, partly on the produce of their flocks, partly perhaps, like the Yuruks to-day, on forestry. These lower hills are now mostly bare, but were doubtless once clothed with forests of oak or pine. In any case it is not likely that any town, or even large village, could have arisen here, unless in the neighbourhood of the gold-mines which Abydos

once possessed in this region, and which, though hardly paying, are still intermittently worked in the valley of the Rhodios.

The territory of the Gergithes must have extended a considerable distance to the north ; for in the district of Lampsakos was a region called Gergithion, famous for its vines (Strabo, xiii. 1. 19 ; *ἐν δὲ τῇ Λαμφρακηνῆι τόπος εὐάμπελος Γεργίθιον*). This may probably have lain somewhere in the upper valley of the Bergaz Chai (Praktios) which is cut off from the lower valley by a difficult defile, and is most easily accessible from Lampsakos across the hills. By this route Alexander marched from Abydos to the Granikos.

Their southern limit can only be guessed ; but it is likely that they extended to the Scamander valley in the neighbourhood of the gorge at Bunarbashi, and some little distance across it to the south-west, as the country here is all of the same bare hilly character.

So far there is little difficulty, though no actual certainty is attainable. But a problem arises when we come to deal with the town known by the name of Gergis or Gergitha. I propose here to collect the available literary information, and to offer not a solution of the problem, but a path by which a solution may possibly be attained.

That a town of the name of Gergis or Gergitha existed is quite certain ; for extant coins with the legend ΓΕΡ shew that it possessed a mint down to about 300 B.C. But Strabo seems to know little or nothing of it. Immediately after the mention of Gergithion in the territory of Lampsakos, quoted above, he continues *ἦν δὲ καὶ πόλις Γέργιθα, ἐκ τῶν ἐν τῇ Κυμαίαι Γεργίθων· ἦν γὰρ κακεῖ πόλις πληθυντικῶς καὶ θηλυκῶς λεγομένη αἱ Γέργιθες . . . καὶ νῦν ἔτι δείκνυται τόπος ἐν τῇ Κυμαίαι Γεργίθιον πρὸς Λαρίση* (xiii. 1. 19). But later on (70) he reverses the origins, deriving the Kymaeian from the Trojan town ; *ἐγγὺς δὲ τῶν πηγῶν (τοῦ Καΐκου) κώμη Γέργιθα ἔστιν, εἰς ἣν μετώκισεν Ἀτταλος τοὺς ἐν τῇ Τρωάδι, τὸ χωρίον ἐξελών*. Perhaps he is here speaking of a different place altogether, for it does not seem possible that any town can possibly have been described as 'near Kyme' in the Hermos valley, and at the same time as 'near the sources of the Kaikos.' The probable conclusion is that Strabo knew nothing of the country, and did not take the trouble to digest his materials. We need not however concern ourselves with the Mysian or Lydian Gergitha or Gergithes. We only note that Strabo gives us no hint as to the site of the Trojan town, and uses words as though with intent

to leave it doubtful whether 'the town Gergitha' had any connexion, other than similarity of name, with the Gergithion near Lampsakos. Nor does Stephanos of Byzantium offer any help; he knows of an Apollo Gergithius, but says nothing of Gergis itself.<sup>1</sup>

The territory of the town must have been adjacent to that of Ilion; for when the Romans gained a foothold in the district one of their first acts was to confer fresh territory on their ancestral home. After the treaty with Antiochus in 188 B.C. the Roman legates 'Iliensibus Rhoeteum et Gergithum addiderunt, non tam ob recentia merita quam originum memoria. Eadem et Dardani liberandi caussa fuit' (Livy, xxxviii. 39).

This, combined with the significant fact that the coins of Gergis are commonly found in the neighbourhood, led Calvert to fix the site of Gergis on the Bally Dagh.<sup>2</sup> The identification is I think almost certainly right. The place agrees with all the conditions so far. It lies at the southern extremity of the district which Herodotus assigns to the Gergithes, and might well take its name from them, like the vine-country at the northern end. It is adjacent to the territory of Ilion, in fact at much the same distance on the one side as Rhoiteion on the other. And it agrees quite well with what we hear of Gergis on the one occasion when anything occurred there important enough to be recorded in history.

In 399 B.C. Derkyllidas the Spartan general was in command of the Spartan army in Asia; Xenophon was serving under him. Anxious to pay off an old grudge against Pharnabazos, Derkyllidas determined to attack him in the Troad. This district had been for some time held, under Pharnabazos, by a lady called Mania, a very capable governor, it would seem; but she had recently been murdered by her enterprising son-in-law, Meidias, who had seized the fortresses of Skepsis and Gergis, where Mania kept the bulk of her treasures. Meidias was at the moment *de facto* ruler, but was awaiting with considerable apprehension the arrival of Pharnabazos, who was coming to enquire into the matter.

Derkyllidas landed on the west coast, and found himself welcomed by

<sup>1</sup> The long extract in Ath. vi. 255 from the work of Klearchos of Soloi entitled *Gergithios* is useless for topographical purposes. The legend that the town was founded by Teukros is doubtless a reminiscence of Herodotos. The only new statement in the passage is that the town was first called Gergina.

<sup>2</sup> I may add in confirmation that the only coin of Gergis noted in my diary was offered us at Ezine.



the Greeks. The coast towns, Larisa, Hamaxitos and Kolonai, opened their gates at once; Neandria, Ilion and Kokylion followed their example. The strong fortress of Kebren was however held against him; he waited four days for favourable omens before attacking, and was then admitted by the Greek inhabitants. He next attacked Skepsis, and again encountered no opposition; Meidias in the meantime had submitted, and accompanied him to Gergis, promising to obtain its surrender. "When the garrison on the walls, which were very high, saw Meidias with him, they did not shoot"; Derkylidias entered, and keeping Meidias at his side, went to the Acropolis, where he sacrificed to Athena, and obtained delivery of the treasure. He had thus conquered the whole Troad in eight days, and in addition had plunder enough to keep his army of 8000 men for the best part of a year. (*Xen. Hell.* iii. 1, 10-28.)

This narrative has sometimes been quoted as shewing that Gergis must have been beyond Kebren and Skepsis, *i.e.*, as Derkylidias came from the west, in the hill-country to the north or east of Skepsis. But no such conclusion is necessary or even likely. That district, as we have seen, had no economic or strategic importance. When Derkylidias entered the middle plain of the Scamander from the coast, he had in front of him the two chief towns of the central district. It was essential for his bold conception that he should strike straight at the heart, and not lose a moment, or Pharnabazos would be upon him. If Gergis was, as we seem to know, at the Bally Dagh, he had to take the risk of leaving it upon his flank. But as soon as he had occupied Kebren and Skepsis, he had to turn back to Gergis, not merely for the sake of the treasure stored in it, but because it was strategically vital. By taking it he at once saved the danger of an attack upon his communications—though these were covered to some extent by Neandria—and opened up the road to Ilion and the Hellespont, which was entirely blocked by Gergis. It is hardly necessary to add that the top of the Bally Dagh is admirably adapted for the purpose of a fort in which to store treasure. The steep and lofty precipices which surround it on three sides rendered it perfectly safe except from the slopes on the west; and these, when defended by 'very lofty walls,' would render the position an ideal stronghold, as no less an authority than Moltke long ago pointed out.

Another proof that Gergis must have been close to this point is to be found in the long inscription discovered by Schliemann and published

in *Ilios*, 627 ff. In this a grant of land is made by Antiochos to one Aristodikides, in order that he may present it to any town he pleases; it is in fact given to Ilion, and this was clearly the intention from the first. The land is to be taken from 'the land which borders on the territory of Gergis or of that of Skepsis, and to be added to the territory of the Skepsians or to that of the Ilians,' ἀπὸ τῆς ὁμορούσης τῆι Γεργιθίαι ἢ τῆι Σκηψίαι . . . καὶ προσορίσαι εἰς τὴν Ἰλιέων ἢ τὴν Σκηψίων. The territory of Skepsis lay, as we know, in the central plain along the north bank of the Scamander. As the land was to be taken from the border of Gergis and added either to Ilion or Skepsis, it must have been close to the only point where the two came into contact, that is in the neighbourhood of the defile over which towers the Bally Dagh.

A little further on in the same inscription we find that in the land which was first selected for the grant<sup>1</sup> was a place called Petra. It would seem that Petra was a hill-fort used as a refuge in times of trouble; for Aristodikides is ordered to reserve to the royal tenants their right to live in Petra if they wish, for the sake of safety. οἱ δὲ βασιλικοὶ λαοὶ οἱ ἐκ τοῦ τόπου ἐν ᾧ ἐστὶν ἡ Πέτρα ἐὰν βούλονται οἰκεῖν ἐν τῆι Πέτραι ἀσφαλείας ἕνεκε, συντετάχαμεν Ἀριστο(το)δικίδηι εἶαν αὐτοὺς οἰκεῖν. The name of Petra is given in Philippson's map to the Bally Dagh, which of course I cannot admit; but there are other hill fastnesses in the neighbourhood to which the name might apply. The Fulu Dagh on the eastern bank of the Scamander, immediately opposite the Bally Dagh, is crowned by walls which may well be those of such a rustic stronghold, and would fulfil all the conditions of the case.

Gergis, though so insignificant historically, had one claim to distinction: it disputed with Erythrae the honour of being the home of the Sibyl. Into the merits of that dispute it is not necessary to enter here. We are concerned only with the light which it may throw on the topography of the Troad.

The connexion of the Sibyl with Gergis or Gergithus is attested by Lactantius (i. 6), octauam (Sibyllam) Hellespontiacam in agro Troiano natam, uico Marpesso, circa oppidum Gergithum; by Steph. Byz., Γέργις, πόλις Τροίας . . . ὁ πολίτης Γεργίθιος. τὸ θηλυκὸν Γεργιθία. ἀφ' οὗ Γεργιθία ἢ χρησμολογὸς Σίβυλλα, ἣτις καὶ τετύπωτο ἐν τῶι νομίσματι τῶν

<sup>1</sup> Another estate had afterwards to be chosen, as the first had, it appeared, been already disposed of.

Γεργιθίων, αὐτὴ τε καὶ ἡ σφίγξ. ἐν δὲ τῶι ἱερῶι τοῦ Γεργιθίου Ἀπόλλωνος Σιβύλλης φασὶν εἶναι τάφον.—and by the contemporary evidence of the coins, which, as Stephanos says, always shew the head of the Sibyl as the type, with the sphinx on the reverse (Head, *H.N.* 472). It will be noticed that her birthplace is not Gergis itself, but Marpessos, or as Stephanos calls it, Mermessos: Μερμησσός, πόλις Τροϊκὴ, ἀφ' ἧς ἡ Ἐρυθραία Σίβυλλα. Ἦν καὶ ἡ πόλις αὐτὴ ἐρυθρὰ τῶι χρώματι.

Our principal authority for Marpessos however is the disquisition of Pausanias on the rock of the Sibyl in his description of Delphi (x. 12). The Sibyl known at Delphi was, he says, named Herophile. 'In her oracles she says that her mother was an immortal, one of the nymphs of Ida, but that her father was a man. The verses run thus :

εἰμὶ δ' ἐγὼ γεγαυῖα μέσον θνητοῦ τε θεᾶς τε,  
 νύμφης ἀθανάτης, πατρὸς δ' ἐκ σιτοφάγοιο,  
 μητρόθεν Ἰδογενῆς, πατρὶς δέ μοι ἔστιν ἐρυθρῆ  
 Μάρπησσοσ, μητρὸς ἱερῆ, ποταμός τ' Ἀιδωνεύς.

On the Trojan Ida there are still ruins of the city of Marpessos, with a population of about sixty souls. The soil of the country all round Marpessos is reddish and exceedingly parched ; and the fine and porous nature of the soil in this part of Ida is, as it seems to me, the cause why the river Aidoneus sinks into the earth, and rises again only to sink again till it finally disappears underground. Marpessos is distant 240 furlongs from Alexandria in the Troad. The people of this city of Alexandria say that Herophile was keeper of the temple of Sminthian Apollo . . . She dwelt most of her life in Samos . . . However she died in the Troad, and her tomb is in the grove of the Sminthian god . . . The Erythraeans, who urge their claim to Herophile with more warmth than any other Greek people, point to a mount Corycus and a cave in it, in which they say that Herophile was born, she being a child of Theodoros, a shepherd of the country, and a nymph. The only reason, they say, why the nymph got the surname of Idaean was that wooded places were called in those days *idae*. They strike out of the oracle the verse about Marpessus and the river Aidoneus' (Frazer's translation).

Reference may be made to Frazer's notes for most of the points raised in this passage ; all that concerns us is the detailed information about the topography of Marpessos—it will be noticed that Pausanias

does not mention Gergis at all ; and while Stephanos says that the tomb of Herophile was in the temple of the Gergithian Apollo, Pausanias connects her with the Sminthian. The worship of Apollo Smintheus was so common in the western Troad that there may be no real contradiction ; Pausanias is doubtless thinking of the famous Sminthion at Chrysa, but the real temple may actually have been some other Sminthion which could be more correctly described as Gergithian ; on no theory could the name be correctly applied to a spot so far as Chrysa from any possible site for Gergis. But we ought, I think, to infer that the connexion between Marpeessos and the town of Gergis itself cannot have been very close. The adjective Gergithian may be derived not from the town, but from the district where the Gergithes of Herodotos dwelt ; and this, as we have seen, covered a wide stretch of country.

A circle with a radius of 240 stades, with Alexandria Troas as its centre, passes roughly along the valley of the Rhodios, from the modern town of Dardanelles to Skepsis. On or inside this curve Marpeessos should lie. The distance is probably reckoned along a road, and in hilly countries the winding of roads counts for a good deal ; the site may therefore be some distance inside the curve. It should be somewhere among the hills running N.E. from the Bally Dagh ; and it does not seem impossible that it might be yet identifiable from the very definite marks which Pausanias gives—markedly red soil, with a river twice disappearing and coming to the surface between.

When at Thymbra, I enquired of Mr. Calvert, who of course knows the country better than anyone, if he could tell me of such a place. He told me that on his own property in the valley of the Thymbrios there were several patches of red earth, and the river in summer several times disappears and returns to the surface. But this is at a distance of little more than 100 stades from Alexandria—too near for our purpose. There are plenty of stretches of red soil in the Troad ; and almost all the streams disappear below the surface of their beds at various points during the dry season ; so it is hardly likely that any very overwhelming proof can be discovered. But some day an enterprising traveller may light upon a spot which will be reasonably convincing ; and I see on the map, overlooking the upper valley of the Dumbrek Su, about 180 stades from Alexandria, a Kizil Tepe, 'Red Hill,' which might be worth a visit.

THE GREAT PINE—*Καλή Πεύκη*.

In the first part of this paper I spoke of the Great Pine, of which 'we can only say that it must have stood on the hills somewhere at the head of Avunia' (vol. xvii. 281). It is spoken of as a well-known landmark, and it may be worth while to consider its locality more closely. But I do so only under all reserve, as the likeliest point did not come within the compass of our journey, and I have not been able to find any description of it. My arguments come only from a comparison of the text of Strabo with Kiepert's map, on which little reliance can be placed in detail.

The following is the passage on which our knowledge depends (Strabo, xiii. 1, 44). It is a quotation from Demetrios, apparently verbal. *πάλιν δ' οὕτως φησίν· ὁ μὲν Ῥῆσος ποταμὸς νῦν καλεῖται Ῥοεΐτης, εἰ μὴ ἄρα ὁ εἰς τὸν Γράνικον ἐμβάλλον Ῥῆσός ἐστιν. Ἐπτάπορος δέ, ὃν καὶ Πολύπορον λέγουσιν, ἐπτάκις διαβαινόμενος ἐκ τῶν περὶ τὴν καλὴν πεύκην χωρίων ἐπὶ Μελαινὰς κόμην ἰούσι καὶ τὸ Ἀσκληπίειον, ἴδρυμα Λυσιμάχου. περὶ δὲ τῆς καλῆς πεύκης Ἀτταλος ὁ πρῶτος βασιλεύσας οὕτως γράφει· τὴν μὲν περίμετρον εἶναί φησι ποδῶν τεττάρων καὶ εἴκοσι, τὸ δὲ ὕψος ἀπὸ μὲν ῥίζης ἀνιέναι ἐπὶ ἐξήκοντα καὶ ἐπτὰ πόδας, εἴτ' εἰς τρία σχιζομένην ἴσον ἀλλήλων διέχοντα, εἶτα πάλιν συναγομένην εἰς μίαν κορυφὴν, ἀποτελοῦσαν τὸ πᾶν ὕψος δυεῖν πλέθρων καὶ πεντεκαίδεκα πηχῶν· Ἀδραμυττίου δὲ διέχει πρὸς Ἄρκτον ἑκατὸν καὶ ὀγδοήκοντα σταδίου. Κάρησος δ' ἀπὸ Μαλοῦντος ῥεῖ, τόπου τινὸς κειμένου μεταξὺ Παλαισκήψεως καὶ Ἀχαιίου τῆς Τενεδίων περαιίας· ἐμβάλλει δὲ εἰς τὸν Αἴσηπον. Ῥοδῖος δὲ ἀπὸ Κλεανδρίας καὶ Γόρδου, ἃ διέχει τῆς καλῆς πεύκης ἐξήκοντα σταδίου· ἐμβάλλει δ' εἰς τὸν Αἴνιον.*

It is evident from the above that the Great Pine stood as a landmark on some mountain pass from which several roads diverged. But none of the names given are capable of identification from other sources. As to the rivers, it is obvious that Demetrios is only guessing at the Homeric names, and does not even pretend to be confident about his guesses. The most definite point is that one river seems to have been called Polyporos in his day, and this he takes to be identical with the Homeric Heptaporos. The other places, Melainai, the Asklepion, Malus, Kleandria, Gordos, are entirely unknown—probably mere villages; and the description of Malus as lying 'between Palaiskepsis and the Achaiion promontory opposite Tenedos' is so amazingly inept that one is almost inclined to abandon

Demetrios as an authority on topography. Possibly however Strabo is only epitomizing and misunderstanding. The reason for the mention of the Achaiion at this point is clear enough; it is the point at which the general description of the Troad, after following the coast from the northwards, left it in order to take in the Scamander valley. This has now been followed to its head, and a return is made to the coast in order to take up once more the itinerary southwards, as is seen from the opening of Strabo's chap. 46. Possibly Demetrios may have said 'it is now necessary to retrace our steps to the Achaiion where we left the coast. On the way we pass near a district called Malus,' or words to that effect.

There is however one definite statement—that the Great Pine lay 180 stades from Adramyttion to the north. This, if exact, brings us to a point on the hills just north of Avunia, on the ridge running eastwards from Kotylos, and about five miles from that point—almost due N. of the village of Chavush (see map in *B.S.A.* vol. xvii. Pl. XXI). At this point Kiepert marks some ancient remains, and attaches to them the name Egri Kabaagatsch. Let us see if this point will agree with what indications can be gained from Demetrios.

It would seem that from this neighbourhood the following streams took their rise. (1) 'Heptaporos,' flowing to Melainai and the Asklepieion. (2) Karesos, from Malus into the Aisepos. (3) 'Rhodios,' from a source about six miles from the Great Pine, and falling into the 'Ainios,' whatever that may be. Now there are three main streams on the northern side of the ridge which rise near one another, and seem to correspond with sufficient exactness to these. There is one which runs eastwards to the Aisepos—it is indeed the only considerable affluent which the Aisepos receives in its whole course. This then will do for the Karesos. There is the stream which flows northwards by Inova, and ultimately falls into the Granikos near its mouth; this will be the Heptaporos. And at the required distance, some five or six miles to the westward, lies the col at the head of the Scamander valley, the watershed whence flows the Gülle Chai, running north-westwards to the neighbourhood of Büyük Tepe Köi, where it joins the main system of the Granikos. This will serve for the Rhodios of this passage. The Rhesos or Rhocites, about which Demetrios is so uncertain, must be left out of the reckoning here, as it is not said that this enigmatical river was in any connexion with the Great Pine. But there is something to be said about each of the other three.

(1) Heptaporos, crossed seven times by travellers going to Melainai, and the Asklepicion founded by Lysimachos. Very little indeed is known of the stream which passes by Inova. Tschihatscheff seems to be the only recent traveller who has traversed this district, and Kiepert makes no pretence of mapping the greater portion of its course. He has however published Tschihatscheff's itinerary with notes, from which I take the following.

Leaving Biga on Oct. 14, 1847, he went across the main Granikos stream, up a narrow valley S. and S.S.E., across hills, and down to Inova. It was here that he reached the stream which we take to be the Heptaporos. The narrow valley up which he had come involved many crossings from side to side, and hence the stream in it was called the Kirk-gechid Su, the 'Forty Fords Water.' This however cannot have anything to do with the name of Heptaporos, which lies on the other side of the watershed. Above Inova he followed the valley upwards over wooded heights, then down to the village of Bekten in a narrow valley. The valley then widened to a plain, and the slopes bounding it were crossed to Meuris, called Navrus by the Turks. Here a rather high and steep ridge was crossed at the Assar Dagh to the Aisepos valley at Karabei.

Kiepert notes the name Meuris, more correctly Mavris, as being Greek, and moreover as the modern Greek equivalent of the ancient Melainai (*μαῦρες*, fem. plural of *μαῦρος*, black). The Assar Dagh where Tschihatscheff crossed, is not far east of Egri Kabaagach, so that, although it lies in the valley of what we have taken to be the Karesos, Mavris may have been on the natural road from the Great Pine to the Heptaporos valley. But Tschihatscheff's itinerary says nothing of any fords; if the Heptaporos is to claim its name, the fords must be looked for, it would seem, in the lower course, between Inova and Dimetoka.

With regard to the name Mavris, I may add that Mr. Hasluck and I met in the café at Chan Bazar a Greek who knew the place. He told us that there are no Greeks there now, and pronounced the name as a Turkish one, with the peculiar Turkish 'back' *i* in the second syllable, as required by the law of vowel harmony, and with the accent on the second syllable instead of the first. The name however seems not to be Turkish in origin, and comes from some older form. As Kiepert points out, the alternative form given by Tschihatscheff, Navrus, would be an instance of adaptation to a familiar word, in this case

the Persian Nau-Ruz, New Year's Day, a popular festival. There is therefore fairly good ground for believing in the survival of a mediaeval Greek name.

If it should turn out that the stream below Inova is several times forded by the path, and so corresponds to the name of the Heptaporos, it would follow that the Aklepicion of Lysimachos must have been somewhere on its lower course. Failing any remains of antiquity, an indication of its site might possibly be given by the existence of a hot spring. None is marked in the map, but this is only another reason for an exploration of this unknown country. Plenty of hot springs must remain to be discovered.

(2) Rhodios 'flows from Kleandria and Gordos, which are 60 stades from the Great Pine, and runs into the Ainios.' If the identification of the Rhodios with the Gülle Chai is correct, Kleandria and Gordos must have been small villages in the little plain at the head of the Kizil Elma district, and Ainios must be an error not for Aisepos, but for Granikos, unless we may take it to have been a separate name for the stream which flows past Chan Bazar and is commonly considered the main Granikos itself. Perhaps this is the likeliest hypothesis. The map will shew that the Granikos above Chan Bazar is formed by the confluence of several streams not greatly differing in length of course. It is likely enough that each of these had its own name, and that the river was called Granikos only below the junction of the last of them.

In the earlier part of this paper (*B.S.A.* xvii. p. 281) I quoted the passage from Strabo, xiii. 1. 28, where the words occur 'the Rhodios runs into the Hellespont opposite Kynossema; but others say that it runs into the Aisepos.' If the suggestion now made is correct, it will follow that the error is in that place, and that for Aisepos there we should read Ainios. The alteration from the less to the more familiar is natural, and as has been pointed out, there are other traces in the district of names which may be connected with that of Aineias. But there seems to be no test by which we can check the correctness of this identification.

(3) Karesos. This river is mentioned again in Strabo, xiii. 1. 44, in the lines which immediately precede those already cited. *συμπίπτει δ' εἰς αὐτὸν (Σκάμανδρον) ὁ Ἄνδιρος ἀπὸ τῆς Καρησηνῆς, ὀρεινῆς τινος πολλαῖς κόμαις συνοικουμένης καὶ γεωργουμένης καλῶς, παρακειμένης τῇ Δαρδανικῇ μέχρι τῶν περὶ Ζέλειαν καὶ Πιτύειαν τόπων. ὠνομάσθαι δὲ τὴν χώραν φασὶν*



ἀπὸ τοῦ Καρήσου ποταμοῦ, ὃν ὠνόμακεν ὁ ποιητής, “Ῥήσός θ’ Ἐπτάπορός τε Κάρησός τε Ῥοδίός τε.” τὴν δὲ πόλιν κατεσπᾶσθαι τὴν ὁμώνυμον τῷ ποταμῷ. And again in c. 45—εἶτα Κάρησος ἐρήμη καὶ ἡ Καρησηνὴ καὶ ὁμώνυμος ποταμὸς ποιῶν καὶ αὐτὸς αὐλῶνα ἀξιόλογον, ἐλάττω δὲ τοῦ περὶ τὸν Αἴσηπον.

It would seem from this that the name Karesene was given to the whole of the central hill country, including particularly the hills along the east side of the Granikos valley ; for in these Zeleia lay. Why the name of Pityeia, a little fishing village between Parion and Priapos, should be dragged in, it is hard to say ; we appear to have an exact parallel to the mention of the Achaion as a landmark to fix Malus. But apart from this the name is intelligible enough ; the Andiros is well enough identified in Philippon with the stream which flows from this hill country into the Scamander a little below Bairamich. To identify the Karesos we have only the statement that it flows into the Aisepos. But it would seem that this is enough ; for as has been said the words can be true only of the affluent which runs past Mavris on the north side of the Assar Dagh. Only a traveller who has seen the place could tell us whether it is further true that the upper course of this river ‘forms an important valley basin, though less than that of the Aisepos (*i.e.*, Avunia).’ On this head I can find no information.

It will follow that Malus must have been a hill village, like Kleandria and Gordos, lying rather east of them on the border of the Kizil Elma district. But no more can be said of it. It has left a single echo in the proper name Malusios, which occurs in an inscription found by Schliemann (*Ilios*, p. 833). This is supposed to date from about 225 B.C., and honours Μαλούσιος Βακχίου Γαργαρεὺς ἀνὴρ for his benefactions to Ilios.

A rather humble apology is needed for the space devoted to a region which is not strictly within the title of this paper, and which involves so much uncertainty that no real conclusion can be reached. All that I have endeavoured to do is to point out, very vaguely, the possibility that further knowledge may conceivably clear up some points, whether negatively or positively. But I cannot leave the subject without pointing out some curious coincidences which strike me all the more because they only occurred to me after I had worked out on other grounds what has been here set out.

The need of extreme scepticism in using modern Turkish nomenclature in the Troad as an argument for ancient sites has been already pointed out (*B.S.A.* xvii. p. 275). Hence I bring forward what follows only as a curiosity and not as a confirmation of anything I have said, unless it may be to strengthen the possibility that Mavris is identical with Melainai.

(1) Malus (*Μαλοῦς*) is evidently from *μᾶλον*, 'Apple country.' The Aeolic *a* persisted in Hellenistic times in the form *Σκᾶψις* found on coins beside the more usual *Σκῆψις*. Now Malus has been placed in or close to Kizil Elma; and Kizil Elma means 'Red Apple.'

(2) Rhodios, 'Rosy River,' has been conjecturally identified with the Gölle Çay; and Gölle means Rosy, being the adjectival form from *Gül*, Rose.

(3) The Great Pine has been placed at Egri Kabaagach; and Egri Kabaagach means 'Crooked Big Tree.'

This is surely an odd series of coincidences.

#### THE ACHAÏON.

We have already come across τὸ Ἀχαιῖον as the point at which Strabo, or Demetrios, after having taken us to the head waters of the Scamander, returns to the western coast, in order to follow it towards the south. It is mentioned in three other places.

Strabo, xiii. 1, 32. *μικρὸν δὲ προελθούσιν ἀπὸ τῆς παραλίας ταύτης ἐστὶ τὸ Ἀχαιῖον ἤδη τῆς Τενεδίων περαιῆς ὑπάρχον.*

46. *ἔστι δὲ μετὰ τὴν Σιγειαῖα ἀκρὰν καὶ τὸ Ἀχιλλεῖον ἢ Τενεδίων περαιῆ, τὸ Ἀχαιῖον καὶ αὐτὴ ἢ Τένεδος.*

47. *ἦν δὲ τῶν Ἀχαιῶν συνεχῆς ἢ τε Λάρισα καὶ Κολωναί, τῆς Τενεδίων περαιῆς οὐσαι πρότερον, καὶ ἢ νῦν Χρῦσα . . . νῦν δ' ἢ Ἀλεξάνδρεια συνεχῆς ἐστὶ τῶν Ἀχαιῶν.*

These passages shew clearly that it lay north of the site of Alexandria, and near it. It has therefore been identified with the promontory of Kum Burnu, the Yukyeri Point of the Admiralty charts. This is the natural limit of the stretch of shore which faces Tenedos. It will be seen that Strabo does not call it a promontory. The identification is however perfectly right, and the missing statement is found elsewhere, though in a form which, so far as I know, has caused it to escape observation so far.

Skyllax, 95 (*Geogr. Gr. Min.* i. p. 89). (After Dardanos, Rhoiteion, Iliion, Skamandros) *καὶ νῆσος κατὰ ταῦτα κείται Τένεδος καὶ λιμὴν . . . καὶ ἐν τῇ ἠπείρῳ Τοίχη καὶ Αἰγιαλείου καὶ κρατῆρες Ἀχαιῶν, Κολωναί, Λάρισα κ.τ.λ.* Editors have already corrected the unknown *Τοίχη* and *Αἰγιαλείου* into *Σίγη* and *Ἀχίλλειον*—rightly no doubt; at least I can suggest nothing better. But they have been willing to acquiesce in ‘Achaeans’ Goblets’ as a possible place-name. They have paid too much respect to the text of Skylax. The name cries out for a correction less violent than either of the other two: read *ἀκρωτήριον Ἀχαιῶν*, and all is in order. Our MS. of Skylax probably comes from a much contracted minuscule parent, in which the initial *a* was expressed by a short horizontal line.

## SIGEUM—SIGIA—SIGE.

The range of hills running southwards from Kum Kale along the western edge of the Plain of Troy is low and nearly level; but it shows two flat eminences rising sufficiently above the monotonous skyline to catch the eye. On the northern of these stands the modern village of Yeni Shehr. On the southern are obvious signs of a Greek town—the soil is full of sherds, the outlines of walls can still be clearly traced, and at least in one spot are vestiges of the foundations of a large building (Pl. XVI). There can be little doubt that this is the site of the Attic colony of Sigeion, while the northern site is the emplacement of the town of Achilleion, originally a fort built by the Mitylenaeans as an *epiteichisma* against the Athenians in the war which they waged for this piece of territory about 600 B.C. (Herod. v. 95—Strabo, viii. 1, 39).

Some have claimed Yeni Shehr for Sigeion. But as Achilleion must have been nearer to the mounds of which one is the legendary tomb of Achilles, by the fort of Kum Kale, this would bring the *epiteichisma* down to the low ground, while the fort to which it was opposed lay on the heights—an obviously absurd plan for aggression. The only ground for the attribution, so far as I know, is that the famous Sigeian inscription<sup>1</sup> was found in Yeni Shehr, serving as a seat in the village square. This counts for nothing; the stone may well have been moved with others brought for building purposes from the natural quarry of a large ancient town. It was doubtless the building of the Turkish fort at Kum Kale which made the

<sup>1</sup> Röhl, *J.G.A.* 492.

more northern position superior in modern times for the purposes of a village. The space is considerably smaller indeed, but quite sufficient for the needs of its present inhabitants.

The distance between the two is barely half a mile, and times must have been lively when active hostilities were in progress. 'All sorts of other things,' *παντοῖα καὶ ἄλλα*, as Herodotos says, must have happened in this narrow space, besides the most famous of all, the capture by the Athenians of the arms of the poet Alkaios, whose example led to Horace's unblushing *relicta non bene parmula*.

A closely allied form, Sigia, is attested by Strabo as belonging to the site where Alexandria afterwards stood (xiii. i. 47). This probably indicates that the name in pre-Hellenic times belonged to the whole of this western coast land. But there is still a third name, Sige, which is not so clear. Steph. Byz. gives

*Σίγειον* πόλις Τρωιάδος, ὡς Στράβων τρίτη. ὁ πολίτης Σιγειεύς, τὸ θηλυκὸν Σιγείας, καὶ Σιγειακός. Ἔστι καὶ ἄλλο ἔθνικὸν Σίγειος.  
*Σίγη* πόλις Τρωιάδος, ὡς Ἐκαταῖος Ἀσίαι. τὸ ἔθνικὸν Σιγίτης.

This seems to imply that the two were distinct places. But Damastes the historian and geographer, a contemporary, and apparently a follower, of Hellanikos, is called *Σιγειεύς ἀπὸ Σιγείου τῆς Τρωιάδος* by Suidas, while Avienus, *Orae mar.* 42, calls him *Damastem nobili natum Sige*. In this case the form is fixed by the metre. He is mentioned by Dion. Hal. *Ant. Rom.* i. 72, where MSS. seem to vary between *Σιγείας* and *Σιγειεύς*. It seems clear therefore that there is no Sige distinct from Sigeion; indeed it is hardly likely that two places with names so closely akin would have existed side by side in the Troad at the end of the fifth century. Probably Sige was the Ionic,<sup>1</sup> Sigeion the Attic, form of the name. The evidence will be found collected in *F.H.G.* ii. 64; iv. 654.

It would seem to follow that the correction *Σίγη* for *Τοίχη*, made by Gronovius in the text of Skylax (see above), hardly goes far enough, and that the further step to *Σίγειον* should be taken. Avienus is, or wants to be, a poet, and uses an archaic form; but one can hardly extend the same licence to Skylax.

WALTER LEAF.

<sup>1</sup> The Ionic portion of the Phanodikos inscription however has the odd form *Συκεεῦσιν*.

## TRADE ROUTES AND CONSTANTINOPLE.

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THE text for this paper is taken from a review of my *Troy* in the *Pall Mall Gazette* for December 21, 1912. One does not usually take notice of anonymous reviews in the daily press, or answer them at large; but in this case the article is signed by the initials H. A. O., which are transparently those of a serious scholar, entitled to all respect even when he is wrong; and his views have further been adopted and enforced in another review of *Troy* published in the current number of the *J.H.S.* under the equally transparent initials of T. W. A. This raises the question above the level of ordinary journalism, and may, I hope, justify further discussion. For both articles involve problems which go to the very root of the whole question of ancient trade routes; and the views of both scholars seem to me so fundamentally erroneous and misleading that they should not pass without challenge. It is my intention to leave out of sight all mere matters of detail in both reviews, and to confine myself to what is really vital. It is, I presume, the wish of both gentlemen that I should retain the pretence of anonymity, so I shall refer to them under the initials which they have themselves preferred.

My own theory is, of course, that the importance of Troy lay in its position on the waterway between the Aegean and the Euxine, which it was able to block, thus bringing the all-important traffic from the one sea to the other to a point where it could be controlled and taxed by King Priam. Against this view H. A. O. sets up another. According to him, 'the importance of Troy, in fact, as of modern Constantinople, depended upon its command of the route between Asia and Europe.' And, though his statements are not always lucidly made, and

occasionally leave one in some doubt as to his real meaning, in this case I think it is clear that he has in mind the command of a trade route by land from Thrace to Asia Minor, crossing either the Hellespont or the Bosphorus as the case may be.

So far as Troy is concerned, this is a mere defiance of simple facts, and may be dismissed at once. Troy commands no route across the Hellespont whatever. The nearest crossing place is at Abydos a long day's march from Troy, and quite out of the reach of any sort of 'command.' If my views are to be 'disproved,' as T. W. A. thinks, it must at least be not by bare assertion but by arguments which take into account elementary geographical facts to be learnt from any map.

With regard to Constantinople, however, the case is somewhat different, and raises points of wider interest than the correctness of any views of mine. There is a plausibility in the assumption that the importance of Constantinople arises, in part at least—for I do not suppose that H. A. O. would deny the value to that city of its position on the waterway—from its command of a trade route running across the Bosphorus from Europe to Asia. Yet this assumption defies facts as directly as the other. No such trade route has hitherto existed, or could have existed; it is an economical impossibility.

It is true that, for the first time in history, an attempt is now being made to form such a trade route, by the railway from Belgrade to Constantinople, and its extension, now rapidly progressing, to the Euphrates valley. How far the attempt will succeed, when the links are complete, is an interesting question. But that little has been done so far is plainly shewn by recent events. European commerce has viewed with indifference the interruption of train service to Constantinople through nine months already (July, 1913). But the moment Turkey closed the Dardanelles in the spring of 1912, every market was agitated, the Powers took instant action, and Turkey was given to understand, in the most peremptory manner, that this could not be permitted. The *Times* of April 20 had a special article describing the consternation caused in the City by the news, received the day before: the following extract must suffice—"The trade in grain from the Black Sea to Europe is so immense that the Great Powers, so the argument ran, could not allow the Dardanelles to be closed to shipping. From Sulima, Galatz, Braila and the other ports of the Danube, from Odessa and

Nikolaieff, from Varna, Bourgas and Kustendje, and all the ports in the Sea of Azoff, come vast quantities of wheat, maize, barley and oats. There is no outlet for the whole of the crops of Southern Russia so long as the Dardanelles are closed,<sup>1</sup> and the crops of Bulgaria and Rumania are also held up.<sup>2</sup> Trade by sea between the Black Sea and western Europe is only a degree less vital to the very existence of the western nations than it was in the days of Aegros Potami, and have I not a right to add, of Troy?

There is, I suppose, no great town in the world so wholly dependent on its water-way as Constantinople. It possesses, from the productive point of view, no hinterland. The streets of Pera end in a dreary and monotonous tract of barren stones and worthless scrub, occupying most of the undulating country westwards far beyond the now famous lines of Chatalja. Compared to this, even the dusty tea gardens of the 'Sweet Waters of Europe' pass for a pleasant oasis. On the land side there is no trade, and the country a few miles from the swarming harbour of the Golden Horn is practically deserted.

It was so in ancient times as well. Polybius has given a masterly though rhetorical account of the commercial geography of Byzantium and the Euxine Sea, and this is the keynote struck in the first words: *Βυζάντιοι κατὰ μὲν θάλατταν εὐκαιρότατον οἰκοῦσι τόπον καὶ πρὸς ἀσφάλειαν καὶ πρὸς εὐδαιμονίαν πάντη τῶν ἐν τῇ καθ' ἡμᾶς οἰκουμένῃ, κατὰ δὲ γῆν πρὸς ἀμφοτέρωθεν πάντων ἀφύεστατον* (iv. 38). They are, on the sea side, he continues, so situated at the mouth of the Black Sea that no merchantman can sail in or out without their permission. They are thus masters of all the products which the Black Sea provides for human life. For the primary needs of man it offers in profusion herds<sup>3</sup> and slaves; for luxuries, honey, wax and salt fish. Of the produce of the west they take in exchange oil and wine; of wheat they sometimes take and sometimes give. Of all these Hellas would be entirely deprived,

It will be noticed that the idea of transport by land is not, to the commercial mind, worthy of mention.

<sup>2</sup> The straits were reopened to navigation on May 1.

<sup>3</sup> *θρέμματα*. But the word must be wrong, unless Polybius used it in the general sense of 'food-stuffs,' which I cannot believe. Al. *δέρματα*, which is better though inadequate. Live animals are an instance where land transport has the advantage over sea, and are therefore almost entirely supplied by local and not by international traffic in early days. Steam of course has made a difference. In any case the Pontus hardly touches on pastoral districts; those in the centre of Asia Minor are cut off from it by difficult mountains.

or at least could carry on no profitable traffic, did the Byzantines either combine with their mischievous neighbours, the Thracians or Gauls, or abandon the post; in either case the narrowness of the strait and the swarms of barbarians who dwell near it would render the passage impossible for the Greeks. The Byzantines should therefore be looked upon as benefactors who have a right not merely to moral but to material support from the rest of Hellas.

After a long and interesting discussion of the geography of the Black Sea, and the cause of the current which flows out of it (*c.* 39-42), he gives a minute account of the Bosphorus itself and its currents, shewing the enormous advantage these give to Byzantium over its opposite neighbour Calchedon.

Then (*c.* 45) he turns to the opposite aspect of the picture: the relations of Byzantium with the land. Thrace surrounds the territory of the Byzantines from sea to sea, and with the Thracians there is continual and harassing war. The barbarians are divided into many tribes; if one chieftain is suppressed, three more arise in his place. Nor is anything gained by yielding to blackmail, and endeavouring to enter into engagements; any concession made to one tribe only leads to war with five others. The Byzantines are thus subjected to a perpetual torture of Tantalus; they possess a fair and rich land, but no sooner do they attempt to cultivate it, and see their crops flourishing, than the barbarians make a raid and rob them of the fruits of their labours.

This however they bore, from sheer force of habit, and remained faithful to the traditions of Hellenism, till the descent of the Gauls under Brennus. The Gauls conquered the Thracians, and settled on the back of Byzantium, imposing a tribute which was finally raised to 80 talents a year. This enormous sum finally broke the endurance of the city; they appealed to Greece for help, and when it was refused, they had no resource but to lay such tolls on all passing ships as practically stopped commerce. The great merchant community of Rhodes took up the common cause, and declared war to open the straits.—So far Polybius.

This must, without a doubt, be taken as proving that, in the classical period at least, any trade between Asia and Europe across the strait was non-existent. For the Roman period we can further add that Byzantium, though occasionally used for the passage of armies, formed no link in the main lines of communication between Rome and Asia. The great Thracian



road, the Via Egnatia, did not run to Byzantium at all, but to the Hellespont, to Callipolis, that is, and probably on to Sestos.<sup>1</sup>

The Via Egnatia did not however provide the main line of communication between Rome and Asia. That lay by sea to the western coast of Asia Minor, and thence by the elaborate road-system which centred in Smyrna and Ephesos, running north by Pergamos to Cyzicus, and east by various routes through the central plateau; it is sufficient here to refer to the investigations of Sir W. M. Ramsay<sup>2</sup> and his distinguished school, and to point out once more that in Roman times Byzantium owed no debt whatever to its position on a land route from Europe to Asia.

When, with the shifting of the centre of gravity of the empire eastwards, the capital was settled at Constantinople, the old Roman road system was linked up to the Bosphorus on either side, on the south by the road from Nicomedeia to Calchedon, on the north by alternative routes from the termination of the Via Egnatia. Thus Constantinople came into the inheritance of a network of roads which was of the first importance politically. Highroads are an essential for central government; armies must be able to march, and expresses to post, at all seasons and independently of the vagaries of wind and weather. But just because of this vital importance their creation and maintenance is governed by totally different conditions from trade routes, where economical transport is all in all. Byzantine history is beyond my ken—the history, I mean which is commonly, though rather oddly, so called, as it begins from the moment when Byzantium ceased to be Byzantium. But I have no hesitation in asserting that the conditions then were the same as they were before and after, and that the trade connexions by sea were everything, by land practically nothing.

Constantinople in the twentieth century—not of course literally at the present day, but up to twelve months ago, *τὸ πρὶν ἐπ' εἰρήνης, πρὶν ἐλθήμεν υἱας* of the Bulgars and the Serbs—has in its railways a far better means of communication with the continents on either side than it can ever have possessed in earlier days; yet even so its commerce, in any case not great,

<sup>1</sup> Cicero, *Prov. Cons.* 4, uia illa nostra quae per Macedoniam est usque ad Hellespontum militaris. Later on, when Byzantium became the centre, roads were made to the capital from Kypsela where it crossed the Hebrus, and the Hellespontine link became useless. Thus it is that the itineraries do not carry the road eastward beyond Kypsela. So at least I interpret the facts given by Oberhummer in Pauly-Wiss. v. 1989 ff.

<sup>2</sup> See *Historical Geography of Asia Minor*, p. 25.

remains as it has always been, almost purely sea-borne. The very globe-trotter sends home by sea the carpets and embroideries which he has purchased in the bazaars of Stambul and Brussa. A city of nearly 800,000 inhabitants can never be quite negligible as a centre of trade, for it has large internal needs which must be supplied; but the importance of the capital rests entirely on military, political and financial considerations; its commerce hardly counts. In order that I may not be suspected of overstating my case, I will quote a convenient summary of the position from the *Konstantinopler Handelsblatt* of Nov. 1904, as reproduced in the *Encyclopaedia Britannica* (vol. vii, p. 9).

“The capital produces very little for export, and its hinterland is small, extending on the European side only a few kilometres—the outlet for the fertile Eastern Rumelia is Dedeagach—and on the Asiatic side embracing the Sea of Marmora and the Anatolian Railway district. Even part of this will be lost to Constantinople when the Anatolian railway is connected to the port of Mersina and with the Kassaba-Smyrna railway.<sup>1</sup> Some 750 tons of the sweetmeat known as “Turkish delight” are annually exported to the United Kingdom, America and Rumelia; embroideries, &c., are sold in fair quantities to tourists. Otherwise the chief articles of Constantinople’s export trade consist of refuse and waste materials. . . . From the hinterland comes mostly raw produce such as grain, drugs, wool, silk, ores, and also carpets. The chief article is grain.”

Now it is certain that a port which cannot attract the commerce even of its nearest neighbour inland—which can offer Adrianople a railway and one of the finest harbours in the world, but sees these apparent advantages rejected in favour of the wretched roadstead<sup>2</sup> of Dedeagach—can be no station on a land route of international trade. And if it cannot allure the products of the Hebrus valley, still less can it hope to take the trade of

<sup>1</sup> It will be seen that the railway is expected actually to diminish the amount of such land-borne trade as there is.

<sup>2</sup> “Dede Agatch . . . is the principal port for the export of the products of the sandjak of Adrianople. The principal exports are cereals, hides, and tobacco. The small harbour is very shallow, only affording shelter for lighters and small vessels; it has silted up considerably since it was opened in 1872, and has not been dredged, consequently it is very difficult for lighters to load at the quay. . . . There is no protection from south-west winds, which occasionally blow with great violence, and cause a heavy sea. . . . The anchorage off Dede Agatch is not safe in a gale from S.E. round by south to W.S.W.; although the holding ground is not bad, an exceedingly disagreeable sea gets up with very little wind, and during a gale the whole place is one sheet of foam.” (*Medit. Pilot*, iv. 125.)

yet more distant regions. The commerce of Macedonia passes through Salonika, that of the intermediate regions is mostly shipped at Kavalla.

It is clear therefore, since we find at all periods the same phenomenon, since the inland commerce of Thrace goes by any way to Asia rather than across the Bosphorus or Hellespont, that we are face to face with some reason which goes deeper than the ordinary mutability of human effort. What that reason is can be seen at once ; it lies in the simple fact that carriage by water is very greatly cheaper than carriage by land. It is needless to offer evidence of this patent fact ; the example most prominent at the moment is the Panama Canal, which, by a *détour* reckoned in thousands of miles, will bring the products of the Pacific coast, from British Columbia to Chile, into European ports more cheaply than they can come by the great Transcontinental railways of North and South America.

It is not, of course, possible to express in definite figures the superiority of transport by sea. Too many varying factors have to be taken into account. One of the least important for the great mass of trade, and much less important in ancient days than now, is the factor of time. Yet even that counts for something. Mere distance too will count ; but as a rule sea-borne traffic will go with advantage, *caeteris paribus*, over several times as many miles as land-borne. Here again the disparity in ancient days was probably greater than now ; steam has on the whole brought land traffic into a relatively more favourable position. But more dominant factors are the physical conditions—hills, marshes, deserts on land, winds, currents, and promontories at sea. Political conditions, too, count for much—strong or weak government on land, piracy at sea. And the character of the goods to be carried makes a great difference. Articles of high value in proportion to their bulk and weight will go more easily by land than those which are heavy and cheap. It is possible that a combination of such conditions may, for short distances, but for short distances only, make transport by land, at certain times and places, even cheaper than by sea.

The course of trade may be roughly compared to an electric current. Water is a good conductor of trade, land a bad conductor—sometimes so bad as to act like an insulator. Where there is choice of paths, trade, like the electric current, will prefer not necessarily the shortest route, but the path of least resistance ; and for this purpose will always make where possible for as long a stretch of water carriage as will serve. All along the

south coast of Thrace and Macedonia lies the sea, parallel to the west-east route which leads from Europe to Asia. In the face of this rivalry, land-carriage must at all times give way; all traffic will make for the nearest port on the south coast, and a trade route by land, whether over the Bosphorus or the Hellespont, is an economic impossibility.

All this is so familiar and obvious that I took it for granted in *Troy*. Now H. A. O. and T. W. A. have come to remind me that I assumed too much. H. A. O. seems never to have grasped this law; and T. W. A., a declared believer in arm-chair theorizing to whom the problem is evidently novel, so completely ignores it as to land himself in a *reductio ad absurdum*, instructive enough to deserve brief consideration.

He writes in his review (*J.H.S.* xxxiii., 115), 'The list of Paphlagonian towns is regarded by H. A. O.<sup>1</sup> as the continuation by sea of the land-route which comes down to the shores of the Euxine in the neighbourhood of Sinope.<sup>2</sup> This is probable, but it lends no support to Mr. Leaf's view of a water-borne trade through the straits, for why does the list stop westwards with 'Ενεταί (= Heraclea, according to Mr. Leaf)? Why, but that the sea-route was short, and gave place to a land-route again at the mouth of the Sangarius? In this way an explanation is given, and for the first time, of the absence of Bithynia, Bosphorus, and Pontus in the catalogue.'<sup>3</sup>

Here it is clearly shewn that T. W. A. thinks a short sea-route more economical than a long one, and therefore better for trade. Has it ever occurred to him to enquire, when he is going to Paris, why a ticket will cost him most by Dover and Calais, less by Newhaven and Dieppe, least by Southampton and Havre? The short sea-route is of course an expensive luxury, which can be afforded only by well-to-do and eager travellers, or by the most costly and perishable goods.

<sup>1</sup> And also by myself: *Troy*, p. 295.

<sup>2</sup> Probably further east: W.L.

<sup>3</sup> The last sentence is wholly unintelligible to me. Bithynia is not absent 'in' (from?) the Catalogue; it appears under the name of Askanie, and is inhabited by the Phrygians, whose frontier extends to the Sangarius. If T.W.A. means not Bithynia but the Bithynians, their absence is accounted for by the fact that they had not yet crossed from Thrace. That is one of the signs of the genuine antiquity of the Catalogue. And why should the absence of Bithynia be explained by its position upon a trade-route? As for Pontus, I do not know whether T.W.A. means the country or the sea. In the former case it is not absent, but appears as Alybe, the country of the Halizones. If T.W.A. thinks that the Catalogue ought to give the name of the kingdom of Mithradates, he will further have to explain—again doubtless for the first time—the absence of the name of Alexandria Troas in the Catalogue. If he means the sea, will he give a list of the seas which the Catalogue does name, other than the Hellespont? And why should the absence of Bosphorus and Pontus from the Trojan Catalogue need more explanation than the absence of Euripus and Aegean from the Greek?

Let us try to imagine the Paphlagonian fleet at Heraclea, with the choice of the two routes before them. The distance to Troy is practically identical by either—300 miles, measured in straight lines ; but while ships can take the straight course, roads cannot ; the distance by land, allowing for détours enforced by hills and rivers, will probably be hardly less than 400 miles against 300 by sea. It is the sailing season ; the steady and favourable Etesians are blowing every day, the weather is fine, and for a great part of the distance sailors will have the help of a rapid current beneath their keels. Even the slow merchantman may hope to make 50 miles a day under these circumstances ; if the captain has the knowledge and courage to sail by night, he can double that. In any case he will be moored off the mouth of the Scamander in little more than a week ; perhaps in three days. The cost of the transport will be nominal—just the rations of the men for those few days, nothing more.

But, according to T. W. A., he is not tempted by this cheap and pleasant prospect. He will first set about landing all his goods, now safely stored in his holds. This process alone will cost him more than the sea-voyage to Troy, and probably take at least as long. He will then load them again on horses, mules, oxen, camels, hired, with their attendants, at famine prices—at least he will load all that can be loaded. But the best of his cargo consists of timber and slaves. How he will deal with the timber I fail even to guess. Light pine planks are now dragged down hill, two to a horse, to the nearest water, at a fair rate. But the oak ? It takes a team of oxen to drag an oak trunk downhill for a few miles a day in the modern Troad. Under what conditions such goods could be taken for 300 or 400 miles, as much uphill as down in a far from level country, I must leave to T. W. A. to consider. As for the slaves, they are of course driven in gangs on foot. Such of them as survive the process will hardly appear at Troy in very marketable condition. The lighter and more valuable goods will begin to straggle in to the market place some three weeks later than they could all have arrived by ship, and by no means improved in condition by daily loading and unloading. How much more the land journey will have cost is beyond estimation ; a large portion of the expense will consist in the tolls which each little chieftain who can command a ford or a hill pass on the road may have succeeded in extorting.

In short T. W. A.'s Paphlagonians seem to act like commercial lunatics. But T. W. A. says "Why not?" and so my theory is disproved—to the

satisfaction of the arm-chair. Let me assure T.W.A., in all friendliness, that he has much to learn before he can profitably discuss matters of commercial geography. Here random guessing does not count.

It is necessary to insist upon this, because I fancy that traces of the same misapprehension, more deftly concealed, are to be found in theories propounded by scholars and geographers of greater authority and more scientific mind. Some day I hope to approach the more difficult and fascinating problem of the trade-routes through the highlands of central Asia Minor. But for the present it is enough to point out that an archaeologist, dealing almost entirely with one class of objects, is likely to attribute to it disproportioned importance; and that, unless he is on his guard, it is very easy for him to fall into the error of thinking that he has found a trade-route when he has only traced a highroad. That highroads exist for quite other reasons than trade has already been pointed out. Whether trade in the large sense will follow them can only be deduced from a careful examination of possible competition by sea.

Local trade between neighbouring inland markets will of course be facilitated by such a road. In that sense it is a trade route, just as the country lane by which the farmer's wife takes her butter and eggs to the squire's is, in a sense, a trade route. And it is certainly true that an appreciable amount of trade, passing slowly from market to market, may gradually filter through a long distance. This applies chiefly to small and durable articles, mainly pottery and metal work. Mr. Hogarth, for instance, is quite within his right when, in his excellent and suggestive lectures on *Ionian and the East*, he supposes that eastern art types thus filtered through the Hittite dominions to the shores of the Aegean—the more so as he assumes, whether rightly or wrongly I do not know, that when the Hittite power was at its height there was no traffic by sea from Syria westwards.

But it is not with trade routes of that local sort that we have here to deal. To international traffic, objects of art are the merest trifle. If we want to explain by economic facts the greatness of a city, we must fix our minds on the staples of human intercourse—on the wheat and timber, the wine and oil, the hides, wool, linen and hemp, the metal ores, the fabrics, felted or woven, and the slaves who are the instruments of production. None of these, save by some rare and happy chance, come within the ken of the archaeologist outside Egypt. It is very natural for him to fancy that the objects that he does find are the whole of trade, and to deduce from

them conclusions as to trade routes which are wholly fallacious; the small things which go from hand to hand can find their way by routes which to the important staples are impenetrable.

Great national migrations too will move by paths which are entirely independent of all the economical considerations which determine the flow of trade. To them the Bosphorus and Hellespont have, even in historical times, been points of passage, but rather hindrances than helps—witness the invasion under Brennus. Yet there is some reason for holding that one at least of these invasions in prehistoric times chose the sea route rather than the land. Dardanos, the eponym of the Dardanians, is said by the legend to have landed on the southern shore of the Hellespont not from the northern side, but from Samothrace. In other words, this branch at least of the Phrygian invasion into Asia Minor from Macedonia took the more rapid and easier route by sea, just as the Saxons when they invaded Britain did not think it necessary to use the "short sea route" by Dover and Calais.

One more question to my critics. H. A. O. says, duly echoed by T. W. A., that of evidence 'for a route between the Aegean and the Euxine in the prehistoric age there is little or none.' There would be little to surprise one in this merely negative evidence, if it were correct. How many years did Schliemann excavate at Troy before he found the sherds which definitely establish Hissarlik as a Mycenaean station? But is it true? I am of course no authority on questions of pottery, and can only take what I find stated, without criticising. But I do find, in W. Leonhard's *Hettiter und Amazonen*, p. 203, a definite statement that Mycenaean pottery has been found at Ak-alan, the ancient site near Amisos, where I suppose a land route from the interior to have reached the sea in the country of the Halizones.<sup>1</sup> In my innocence I had taken this for conclusive evidence of what H. A. O. and T. W. A. are so eager to deny, trade with Mycenaean countries from the very end of the Euxine line of Trojan allies. But if H. A. O. and T. W. A. are right and Leonhard and Curtius wrong, I shall gladly accept the correction, only adding "Wait and see." If on the other hand Leonhard and Curtius are right, it would seem that H. A. O. and T. W. A. will have to reconsider their position on this material point.

<sup>1</sup> 'Einige neuerdings bei Akalan gefundene mykenische Gefässscherben bringen, da an eine spätere Verschleppung kaum zu denken sein wird, bereits den Beweis dass die mykenisch-ägäische Welt zu diesen Küsten Beziehungen hatte.' (Note). 'Ich verdanke die Nachricht von ihrem Vorkommen einer gütigen Mittheilung des Herrn. Prof. L. Curtius in Erlangen.'

Let me conclude with a word of apology to Mr. Myres for my complete ignorance of the fact that he had already suggested the idea of trade-routes as explaining the arrangement of the Trojan Catalogue. Since the publication of my book he has kindly sent me a copy of his paper, "Copper and Bronze in Cyprus and South-East Europe."<sup>1</sup> The title would hardly suggest this particular point of interest, and in the multiplication of scientific periodicals how can one keep pace with all that is published, unless one can depend on the kindness of authors in sending off-prints? Of course I gladly concede him the priority, while claiming my own independence; I only regret that he did not expand so valuable an idea. Oddly enough, as he frankly tells me, he is in the same position himself; for the idea had already been put forward a few years earlier in *La Science Sociale*—a periodical of which I had never heard, and which I understand from Mr. Myres is inaccessible to him.

In this paper Mr. Myres argues that the copper manufacture of Cyprus passed northward to Hissarlik by land and not by sea. Of the arguments he gives for this conclusion I have already dealt with the second: 'if Cyprus had reached the Dardanelles by sea nothing need have reached Hissarlik at all—whereas the whole *raison d'être* of Hissarlik is as a station commanding the Dardanelles ferry.' This is of course, as I have shown, an inversion of the facts; there was no Dardanelles ferry for trade, if there had been Hissarlik could not have commanded it, and it did in fact command the passage by water. In this I think Mr. Myres would now concur with me. The other reason is that 'if the communication had been by sea, Cypriote types would have been spread over the Aegean and over Greece. The imperfect state of the evidence does not permit of a definite statement; but so far as I am aware, Cypriote types of implements do not occur in the Upper Aegean.'

This is not strong; and I may add that it refers to a pre-Mycenaean stage, antedating by many centuries the Homeric period. But it is quite possible that the small bronze implements with which it is dealing may have gone by land and not by sea. At that early date there may have been no traffic by sea. We should therefore have again the conditions which Mr. Hogarth assumes, and which, as I have remarked, do facilitate the passage of small articles, valuable in proportion to their bulk, by a process of filtration from market to market by land.

<sup>1</sup> *Journal of the Archaeological Inst.*, Nov. 1897.



Nor am I even prepared to deny that even in times when oversea trade had been developed, such a land route may have run up the west of Asia Minor. The shore is so deeply indented that a coasting ship was estimated to travel four times as far as the direct route by land. Such a disparity, though it would not be enough to send heavy and bulky goods by land, might admit of competition in the carriage of more costly and lighter fabrics. The question would, I fancy, depend largely on the density of population and the nearness of important markets along the route, enabling the through traffic to be combined with the local. Through traffic, if independent of local markets, would of course not hug the coast, but take the much shorter line from promontory to promontory. What the conditions were in Mycenaean times we cannot yet say; evidence may some day be forthcoming, but as yet does not exist. In any case of course it would in no way affect the views taken in my book. So long as the trade came to Hissarlik, I am prepared to accept any route, only stipulating that the most probable be preferred, and the impossible excluded.

WALTER LEAF.

## ANNUAL MEETING OF SUBSCRIBERS.

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THE Annual Meeting of Subscribers to the School was held in the rooms of the Society of Antiquaries, Burlington House, on Tuesday, October 29th, 1912, MR. GEORGE A. MACMILLAN, Chairman of the Managing Committee, presiding.

The Secretary of the School (MR. J. ff. BAKER-PENOYRE) submitted the following report, on behalf of the Managing Committee, for the Session 1911-1912.

**The Twenty-fifth Anniversary of the Foundation of the School:—** Before this report is published the subscribers will have seen in the *Annual* an account of the highly successful festival dinner held to commemorate the twenty-fifth Anniversary of the foundation of the School.

**Excavations at Halos in Phthiotis:—**As a sequel to the researches of Messrs. Wace and Thompson in Thessaly, some experimental work was undertaken at Halos. The excavations were confined to a funereal tumulus and a group of tombs, the latter situated close to the city walls. The tombs except one, which was circular in plan and may have once been a tholos, were rectangular cists built of rough slabs. They are similar both in construction and contents to those which have been found in Skyros and at Theotokou. The vases found belong to an early phase of the Geometric style, in which the vases, although decorated with geometric designs, recall in type those of the preceding Bronze Age. The only metal object found was a bronze pin with a rolled head.

The tumulus, which forms one of a group of ten, about twenty minutes outside the city walls to the north, was found to be composed of earth packed up with large river-worn stones. It concealed sixteen burnt graves or pyres. Each pyre was covered by a cairn of very large unhewn slabs and beneath these in a disorderly mass was a heap of burnt potsherds, fragments of bone, iron weapons and bronze fibulae. Pottery occurred in all the pyres, but six of them also contained small iron knives, and bronze fibulae and bracelets. In all the other pyres were swords,

spear-heads, and long knives of iron. Thus the six seem to be those of women, while the other ten were those of men. A warrior's equipment seems to have been one long sword, a spear, and two or more long knives. The only traces of human remains found were small fragments of burnt bones.

All the pyres seem to have been of the same date, as no distinction could be seen in the pottery from any two. All the vases were of the Geometric style, but of a more developed period than those of the cist tombs.

The excavation lasted from April 21 to May 4 and another week was spent in cleaning, studying, and photographing the finds in the Halmyros Museum. This small but interesting excavation was carried out by Messrs. Wace and Thompson with funds placed at the disposal of the School by the Hon. J. Abercromby, Prof. Ridgeway, and Caius College, Cambridge.

**The Staff of the School:**—In pursuance of the arrangement that the Director, Mr. R. M. Dawkins, was to come out to the Levant this season to carry on the proposed excavation at Datcha, he left England for Constantinople shortly before Easter, travelling by way of Berlin, Vienna, the Danube and Sofia. On his arrival at Constantinople he found the Dardanelles closed, and after visiting the Embassy and Consulate left for Athens by way of Dedeagatch. He was very kindly received at the Imperial Ottoman Museum at Constantinople by the Director, H. E. Halil Bey, who promised to have the permission for the Datcha excavation deferred in the event of the war preventing work this year, and this was the course finally adopted. On the way to Athens he called at Smyrna and visited the Consulate, the Consul General kindly writing to the Vali of the province to learn his opinion as to the possibility of the excavation, which was distinctly unfavourable. He then went to Athens for a short stay, and then again to Smyrna, where the Consul General finally informed him that, owing to the state of war in the islands any work at Datcha would be impossible. He then returned to Athens and took the opportunity to go to Sparta with Mr. Droop, and worked for three weeks in the Museum on the finds from the Orthia sanctuary, particularly the ivories and terracotta figurines. Early in June he left Greece for Italy and thence returned to England.

He very much regrets that political events made excavation at Datcha impossible, but there is no reason to suppose that the site has suffered in any way. The most cordial thanks are due to the kind support of the authorities of the Imperial Museum at Constantinople, to the continuous assistance of Sir Edwin Pears, and lastly to the British Consular authorities at Constantinople and Smyrna.

Mr. F. W. Hasluck, M.A., late Fellow of King's College, Cambridge, Acting Director, arrived in Athens in November and remained there continuously till March, with the exception of short excursions to Santorin and Nauplia with members of the School. During the winter he was occupied in preparing papers for the *Annual* and in research work on the history of Athos, as well as in the ordinary routine work of the School and Library.

In March, leaving the conduct of the School in Mr. Wace's hands, he went to

Constantinople with the intention of travelling in Thrace. Difficulties were, however, put in his way by local officials at Viza, and he was eventually arrested and sent under escort to Adrianople, where redress was exacted through the energetic action of H.B.M. Consul (Major Rhys Samson).

After returning to Constantinople he visited Samos, Patmos, Leros, Didyma, Miletus, and Priene, returning to Samos *viâ* Scala Nuova and thence to Athens. In Samos Mr. Hasluck found Dr. Wiegand and his colleagues working at the Heraion, and was met with the greatest possible kindness and hospitality. He visited the sites at Didyma and Miletus, as well as at Tigani (Samos), in the company of the excavators.

Returning at the end of March to Athens he opened the Director's house to visitors, who were exceptionally numerous this year, partly on account of the Congress of Orientalists and of the commemoration of the seventy-fifth anniversary of the foundation of the University of Athens. Old students of the School present on this occasion and staying with Mr. Hasluck were Prof. E. Gardner, Mr. E. S. Forster, and Mr. T. E. Peet. The Acting Director represented the School at the University festivities, and corrected the proofs of the English articles for the festival publication *Ἔβρα*. Later in the year, leaving Mr. Thompson in charge of the School, he visited Megaspelaeon and Olympia, and paid his third visit to Athos, collecting additional notes and photographs.

The Committee wish to record their sense of the high ability shewn by Mr. Hasluck in the responsible charge entrusted to him. They take this opportunity of offering on behalf of all friends of the school their heartiest congratulations on his recent marriage.

The Secretary of the School had leave of absence for the greater part of the Session, during which time the work was carried on by Miss C. A. Hutton, to whom the Committee desire to record their sincere acknowledgment, both for this valued help and for having once more edited the *Annual* and other publications of the School.

**The Students** :—Mr. John Angell, Gold Medallist in Sculpture and Travelling Student of the Royal Academy, spent the spring in Greece. Besides studying in the museums at Athens, he paid special attention to the architecture of the Acropolis and to Mycenaean decorative art. He also visited, for purposes of study, Delphi, Olympia, Chaeronea, Thebes, and the Monastery of Hosios Loukas. Unlike the sister school at Rome, the British School at Athens has had few students of art upon its roll. The Committee are pleased to learn that Mr. Angell found the library of the School, and the help afforded him by the staff and his brother students of archaeology, of great use for his artistic work.

Miss M. M. Hardie, M.A. (Mrs. F. W. Hasluck), of Aberdeen University and Newnham College, Cambridge, the School Student of the year, spent the autumn writing, under Sir William Ramsay's supervision, a report on the Shrine of Mên Askaënos discovered by his expedition last year near the Pisidian Antioch. This report has since been published in the *Journal of Hellenic Studies*. During her stay in Greece she attended the two courses of epigraphical lectures in Athens and

made a special study of the topography and inscriptions of Smyrna with a view to researches on the spot, but her plans were unfortunately frustrated by the complications of the war. In the course of the season she visited the more important sites of the Peloponnese and Central Greece and made a ten days' tour in Crete, including the sites of Knossos, Gortyna, Phaistos, and Hagia Triada.

Mr. E. M. W. Tillyard of Jesus College, Cambridge, came out as Craven Student. He arrived in Athens at the beginning of November, and undertook a journey in the Cyclades with Mr. Toynbee, visiting among other islands, Thera, Paros and Delos. After work in Athens and the usual excursions in Greece, Mr. Tillyard went to Smyrna for the purpose of cataloguing the sculptures in the Ottoman Museum. He spent the next two months on this work, and after travel on the coast of Asia Minor, returned to England *viâ* Constantinople and Athens.

Mr. M. S. Thompson, M.A., of Corpus Christi College, Oxford, travelled during the summer with Mr. Wace in Macedonia, returning with him to Athens in October. During the winter he collaborated with Mr. Wace in summing up the results of their common journeys, and made excursions in Attica, Boeotia and Arcadia. In April he excavated at Halos, returning to Athens in May by a little-known route over Pindus into Aetolia and thence *viâ* Thermon, Loidoriki, Amphissa and Delphi to Livadia: in the course of this journey he visited several little-known sites in Aetolia and Doris. The proposed excavation in Macedonia (near Salonika) proving impracticable, he returned to England in June. The Committee learn with pleasure that Mr. Thompson has been invited to deliver a special course of lectures in Ancient Geography at Oxford.

Mr. A. J. Toynbee, B.A., Scholar of Balliol College, Oxford, spent eight months in Greece studying chiefly the historical geography of the country with a view to teaching ancient history on taking up his fellowship. His time was spent (the winter months included) almost entirely in travel, mostly alone and on foot, with the briefest possible intervals of rest. In his repeated journeys he covered the Peloponnese in great detail and most of Northern and Central Greece, penetrating into little-visited districts such as those of Maina, Kynouria, and Malea, and visiting almost every ancient site. He also travelled in the Cyclades, and E. Crete, where he spent three weeks and saw all the 'Minoan' excavations except Kato-Zakro and Pseira. Mr. Toynbee's record for travel is a remarkable one.

Mr. A. J. B. Wace, M.A., Senior Student (now Honorary Student) of the School, Fellow of Pembroke College, Cambridge, returned to Athens from Macedonia in October and spent three months in collaboration with Mr. M. S. Thompson correcting proofs of their joint book on Prehistoric Thessaly, preparing a projected work on the Vlachs, and arranging the Macedonian material collected last summer. After Christmas he went to Beroea, where he spent eight days observing the Christmas and New Year customs and searching for inscriptions: twenty-four new texts were discovered, the best and longest recording the dedication of a slave-girl to Artemis Agrotera. A short tour in Thessaly, made for topographical and epigraphical purposes, resulted in the discovery of a new decree at Phalanna: the important Latin boundary inscription found last year near Elassona

was revised. Mr. Wace then returned to Athens, where he remained till after Easter, taking charge of the School during March in the absence of the Acting Director. During this time he gave a series of popular lectures on the principal monuments of Athens, which were much appreciated by the members of the British Legation, the British Naval Mission, and other British residents. On Mr. Hasluck's return he assisted in the reception of those attending the Congress of Orientalists, and organised on behalf of the School the joint garden-party of April 11. After Easter he conducted with Mr. Thompson the excavation at Halos. He afterwards travelled in the districts of Pharsalus, Elassona, and Pelion, and left with Mr. Thompson in June to conduct an excavation for the Macedonian Exploration Fund at Sedes (Thermae), near Salonika. Owing to scarcity and dearness of labour it was found necessary to postpone this excavation, and Mr. Wace undertook a protracted tour in Macedonia, visiting Monastir, Tirnova, Resna, Ochrida, Kortsha, Moschopolis, Grevena, and Samarina. The results were topographically important, and several new inscriptions were found in the course of the journey. Mr. Wace returned overland by Grevena and Kalabaka, leaving Athens for England on August 14th.

The Committee trust that Mr. Wace's recent appointment as Lecturer in History and Archaeology in the University of St. Andrews (on which they offer their sincere congratulations) may not altogether sever his long connexion with the School which he has served so well and of which they have recently made him an Honorary Student.

**The Publications of the School :** (a) *The Annual*. Vol. XVII contains, in addition to an interesting and varied collection of archaeological papers, a reprint of the 'Short History of the School from 1886-1911,' and of the 'Bibliography,' prepared for the Anniversary Celebrations last year. They were then circulated in pamphlet form, but are included in this volume as the Committee felt that the many friends of the School would be glad to have them in a form less liable to be mislaid.

(b) Mr. Woodward's *Index* to Vols. I-XVI. of the *Annual*, published last Easter, has been warmly welcomed by Students and by the Archaeological Press. The sale to the outside public has surpassed the Committee's expectations, but so far, less than 100 subscribers have availed themselves of the exceptionally favourable terms on which it is at present offered to them. The publication, which was imperatively necessary for the proper understanding of the many excavation reports contained in the *Annual*, has been a severe strain on the limited resources of the School, and the Committee trust that every subscriber will help to relieve this strain both by purchasing a copy of the *Index* and by making it generally known. The Committee note with pleasure that the author has recently been appointed to a lectureship in the University of Leeds.

(c, d) *Palaikastro and Sparta*. All interested in Cretan problems will be glad to learn that the full Report of the important Palaikastro excavation is now nearing completion. The Committee are also glad to be able to announce that the Director and Students have made good progress this year with a book dealing in detail with the excavation and finds of the Temple of Artemis Orthia, at Sparta.

(e, f) Two publications by members of the School, the *Catalogue of the Acropolis Museum, Vol. I.* by Mr. Guy Dickins, and *Prehistoric Thessaly* by Messrs. Wace and Thompson, appeared during the early part of the year. Both works have met with an exceptionally flattering reception from archaeologists at home and abroad, and the Committee congratulate the authors on having so worthily maintained the high reputation of the School for exact scholarship and for original thought.

The Committee further congratulate their Honorary Student Professor A. van Millingen on the completion of his important and scholarly work on the *Byzantine Churches in Constantinople*. In this the School has a special interest, in that it subsidized Mr. Ramsay Traquair's share of the work, while many of the plans and illustrations it contains are by two old members of the School, Mr. A. E. Henderson and Mr. W. S. George.

**Plans for the coming Session** :—The excavation of Datcha, which the political conditions made impossible this spring, remains the principal task in the coming session. Some recent researches by Mr. Hasluck have added to the prospects of this site, by showing that the famous tomb, which the Knights of St. John first admired for its beauty and then destroyed for building material, was in all probability not, as has been always supposed, the Mausoleum at Halicarnassus, but another tomb at, or very near, Datcha. Although this monument is not likely to be on the area reserved for the work of the School, an examination of the neighbourhood should reveal its remains, which might be the object of some future campaign. In the present condition of the Levant, however, it is far from certain how far it may be possible to work at Datcha. Two alternatives are therefore contemplated. One of these is to find a town site in one of the Cyclades: this would be an excavation of the same character as Phylakopi, which is until now the only published account of an early Cycladic site. The other is to examine some of the early remains in Boeotia; this would be of much interest to the School because of its close connexion with Messrs. Wace and Thompson's work in Thessaly. Besides excavations the furthering of the publications in hand, amongst which may especially be mentioned the projected book on the Orthia Sanctuary, will be an important charge on the staff of the School.

**The Library** :—The problem of adequately heating the Library may fairly be looked on as solved by the substitution this winter of two German cast-iron stoves for the green-tiled open fireplaces used hitherto.

The Library has been enlarged by the addition of seventy-three complete books; thirty-four parts of books in the course of publication; eighty-two pamphlets and extracts; sixteen sheets of maps, including the (British) staff map of Thrace and the five sheets published of the Greek staff map of Greece; besides the usual periodicals. The following have been added to the periodical publications in the library: *Χιακά Χρονικά*, and *Χριστιανική Κρήτη*. A complete set of the *Μουσείον και Βιβλιοθήκη τῆς Εὐαγγελικῆς Σχολῆς* (Smirna) has been bought, and two volumes of the Constantinople *Sylogos* have been added.

With the collaboration of Messrs. Wace and Thompson the slides illustrating their Thessalian researches have been catalogued on cards. Slides from the Hutton collection illustrating Cretan culture have been lent to Dr. Soteriades for lecturing purposes and have been much appreciated. The 37 cases containing the large series of photographs of sculpture recently purchased have been finally labelled. Books have been borrowed by nineteen persons exclusive of members of our own and the American and Foreign Schools.

The following authors have presented copies of their works: Prof. A. Andreades, M. P. Apostolides, Prof. W. Dörpfeld, Mr. C. C. Edgar, Mr. Z. D. Ferriman, Mr. C. Foulkes, Mr. W. R. Halliday, Miss J. E. Harrison, Dr. M. Krispes, Prof. Kirsopp Lake, M. E. Malandrakes, Prof. G. Mistriotes, Dr. J. H. Mordtmann, Prof. F. F. Outes, Prof. G. Papageorgiou, Dr. K. Pavlides, M. J. Peristianes, Prof. L. Pigorini, Prof. A. von Premerstein, Mr. R. Seager, Dr. G. Soteriades, Mr. W. B. Squire, Prof. Svoronos, Dr. J. Thomopoulos, Dr. M. Triandaphyllides, Messrs. A. J. B. Wace and M. S. Thompson, Mr. A. E. Zimmern. We are indebted also for gifts of books to the following bodies: Archaeologische Gesellschaft, British Museum Trustees, French Ministry of Public Instruction, German Archaeological Institute, Government of India, Monastic Committee of Herakleion, Crete (*Μοναστηριακή Ἐπιτροπεία Ἡρακλείου*), and the Society of Dilettanti. This Society also presented separate plates from some of their more important architectural publications.

Individual donors are Mr. S. H. Atchley, Mr. R. S. Cole, the Director, M. J. Doucet, Miss C. A. Hutton, the Librarian, Mr. D. S. Petrocchino, Prof. J. Sterrett, Mr. M. N. Tod, Mr. A. J. B. Wace.

The Committee learn with gratification that the Library, which they have always considered one of the School's main assets, is considered to be in excellent working order and is highly appreciated by students and visitors.

**The School Premises, &c.** :—Friends of the School will learn with pleasure that the trees (mostly pines) planted by Prof. Bosanquet in the Hostel garden, have so grown that, from the balcony and common room, the unsightly back view of the *Marasleion* school is completely hidden. The garden has been further improved by a much appreciated gift of rose-trees from Mr. Wace.

The decayed wooden pillars of the balcony balustrade have been replaced by very simple monolithic pillars of Kalamaki stone; the woodwork of the balustrade between the pillars has been retained and repainted. The effect is a great improvement on the original design.

A garden party was given in connexion with the Congress of Orientalists, by the American and British Schools. This function, admittedly one of the pleasantest features of the Congress, was in great part organised by Mr. Wace in Mr. Hasluck's absence. Professor and Mrs. Gulick, of the American School, and Mr. Wace are to be congratulated on its success.

In the course of the session the Hostel has served as headquarters to Messrs. H. R. Hall and E. J. Forsdyke, of the British Museum, and to Mr. P. B. Haigh,



of St. John's College, Cambridge. A meeting was held on Friday, December 22, the *acta* being as follows:—The Acting Director: *The Year's Work of the School*; Mr. A. J. B. Wace: *An Archaeological Journey in Macedonia*.

During the Session the School has acted as intermediary in procuring a large series of casts for the University Galleries at Oxford and casts of the new fragments of the Phigaleian frieze for the British Museum. Further, through the agency of the School, an exchange of gifts has been arranged between the British Museum and the Greek Government, whereby a new weatherproof cast of the Elgin Caryatid will be sent to replace the existing dilapidated terracotta replica in the south porch of the Erechtheum.

**The University of Athens:**—In April last, the University of Athens celebrated the seventy-fifth Anniversary of its foundation. Among the many addresses of congratulation, none was more admired than that presented by the Acting Director on behalf of the School. It took the form of an Honorary Decree drawn up in Greek, by Mr. M. N. Tod, and beautifully illuminated on vellum by Mr. Walter S. George, who also placed at the head of the address a charming design in colours with the figures of Britannia and Athena. To the parchment roll was affixed an ivory seal bearing carved and incised patterns based on the ivories found at Sparta. The whole formed a genuine work of art which was greatly admired.

**Acknowledgments:**—The School is indebted, as always, specially to H.B.M.'s Minister, Sir Francis Elliot, G.C.V.O., for many acts of kindness; to the Embassy at Constantinople for facilities secured for Mr. Wace; to H.B.M.'s Consular representatives at Salonika, Adrianople, Monastir, Syra, and Volo for help of various kinds given to members of the School; to the Hellenic Ministry of Education, especially to Dr. V. Leonardos, *chef de section* of the Archaeological Dept, for courteous and ready help; to Dr. V. Stais, Ephor of the National Museum, for facilities granted to students; to H. E. Halil Bey, Director of the Imperial Museums, Constantinople, for facilities granted for study there and in the provinces, and to the Curator of the Ottoman Museum at Smyrna for help given to Mr. Tillyard; to M. Zerganos, Inspector of Schools for Eurytania, and the Othrys Society of Halmyro for kind help given to Mr. Thompson; to the excavators for the German Imperial Museums at Tigani (Samos), and to the Members of the French School excavating in Delos, for much kindness and hospitality; to the Pères Lazaristes at Santorin, and the Senate and Monasteries of Athos, for friendly reception and entertainment.

**Finance:**—The appeal for the Anniversary Fund, to commemorate the twenty-fifth anniversary of the foundation of the School, has brought in the sum of £287 *os. 6d.* This fund is still open for donations, and a special appeal is now made to raise it to a much larger figure before it is closed. The Revenue Account for the year shows a credit balance of £251 *1s. 4d.*, as compared with a debit balance of £247 *2s. 1d.* for the preceding year. The apparent improvement is mainly due to a decrease in expenditure on excavations, which have been reduced

to very small proportions by the unrest in the near East. The number of copies sold of the *Annual* shows a small decrease, while the cost of publication has increased by more than £100. The total of the annual subscriptions is £857, or £17 more than in the preceding year. This figure is considerably less than that of three and four years ago, and it is hoped that all subscribers will bring the School and its work to the notice of their friends. The Managing Committee feel confident that the excellent work done by the staff and students in excavation, research, and publication has only to be more widely known to obtain the needed support.

The adoption of the Report was moved by the CHAIRMAN, seconded by DR. FOTHERINGHAM and carried unanimously.

The following resolution was moved by MR. L. WHIBLEY, seconded by MR. T. FYFE and carried unanimously:—

That SIR ARTHUR EVANS, MR. D. G. HOGARTH, and SIR CECIL HARCOURT-SMITH be re-elected, and MR. A. E. ZIMMERN be elected, on the Managing Committee.

That MR. V. W. YORKE be re-elected Treasurer.

That MR. J. PENOYRE be re-elected Secretary.

A vote of thanks to the AUDITORS was moved by SIR JOHN SANDYS, seconded by MR. PENOYRE and carried unanimously.

A SPECIAL MEETING took place at 5 p.m., when LORD JUSTICE KENNEDY occupied the Chair.

PROFESSOR ERNEST GARDNER gave some information on the Sachs Memorial Studentship.

The CHAIRMAN delivered an address.

The DIRECTOR spoke on the Site of Datcha and on the Finlay Memorial.

MR. WACE then gave his communication, illustrated by lantern slides, on the excavations at Halos and on the ethnology of the Vlach race.

A vote of thanks to LORD JUSTICE KENNEDY for presiding was moved by SIR JOHN SANDYS, seconded by MR. MACMILLAN and carried unanimously.



## BALANCE ACCOUNT, 2ND OCTOBER, 1912.

	£	s.	d.		£	s.	d.	
Subscriptions paid in advance . . . . .		3	3	0	Investment—India 3% Stock, at par	2,000	0	0
Anniversary Fund . . . . .		287	0	6	Cash at Bank :			
Balance, representing the funds of the School other than in property, land, building, furniture, and library, as per last Account . . . . .	£		s.	d.	On Current Account	624	3	7
		2,789	0	4	On Deposit Account	700	0	0
<i>Add</i> Balance of Receipts over Expenditure . . . . .	251	1	4					1,324 3 7
	3,040	1	8		Sundry Debtors . . . . .			11 15 0
<i>Add</i> Capital as above . . . . .	5	13	5					
	3,045	15	1					
	£3,335	18	7					£3,335 18 7

Examined and found correct,

EDWIN WATERHOUSE, F.C.A.

## DONATIONS—1911-1912.

## ANNIVERSARY FUND.

	£	s.	d.
Abercromby, Hon. J. . . . .	50	0	0
Agg-Gardner, J. T. . . . .	5	5	0
Bywater, J. . . . .	5	5	0
Carr, Admiral . . . . .	1	1	0
Carrington, A. B. . . . .	10	10	0
Cooke, R. . . . .	1	1	0
Eumorfopoulos, G. . . . .	1	1	0
Eumorfopoulos, N. . . . .	1	0	0
Farside, Mrs. . . . .	1	1	0
Gooch, G. P. . . . .	5	0	0
Heathcote, W. E. . . . .	2	2	0
Hobhouse, Rt. Hon. H. . . . .	5	0	0
Keser, Dr. J. . . . .	1	1	0
Loewy, Dr. E. . . . .	2	2	0
Macmillan, G. A. . . . .	25	0	0
Miller, A. . . . .		10	6
Morrison, W. . . . .	100	0	0
Myers, E. . . . .	1	1	0
Mylne, Mrs. . . . .	10	0	0
Phillips, Mrs. H. . . . .	10	0	0
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 Johnston, Miss K., 4, Rue de Talleyrand, Paris, viii<sup>m</sup>.

- Jones, Ronald P., Esq., 208, Coleherne Court, S. Kensington, S.W.  
 Jones, H. Stuart, Esq., Glan-y-Mor, Saunders-foot, Pembrokeshire.
- Karo, Dr. G., 1, Rue Pheidias, Athens.  
 Kenyon, Sir Frederic, K.C.B., Litt.D., F.B.A., British Museum, W.C.  
 Keser, J., Esq., M.D., Grande Boissière, 62, Route de Chêne, Geneva.  
 King, Miss Catherine, Oxtou, Birkenhead.
- La Touche, C. D., Esq., 40, Merrion Square, Dublin.  
 Lanna, Baroness von, Hotel Laurati, Rome, Italy.  
 Lascelles, B. P., Esq., Harrow.  
 Lawrence, Aubrey, Esq., 13, Norfolk Crescent, Hyde Park, W.  
 Lawrence, Sir Edwin Durning, Bart., 13, Carlton House Terrace, S.W.  
 Leaf, Herbert, Esq., The Green, Marlborough.  
 Leaf, Mrs. Herbert, The Green, Marlborough.  
 Leaf, Walter, Esq., Litt.D., 6, Sussex Place, Regent's Park, N.W.  
 Lewis, Mrs. Agnes S., Ph.D., D.D., LL.D., Castle-brae, Chesterton Road, Cambridge.  
 Lindley, Miss Julia, 74, Shooter's Hill Road, Blackheath, S.E.  
 Lister, The Right Hon. Lord, F.R.S., K.C.M.G., 12, Park Crescent, Portland Place, W.  
 Livesay, William, Esq., M.D., The Pines, Bembridge, I. of Wight.  
 Llangatock, The Right Hon. Lord, The Hendre, Monmouth.  
 Lloyd, Miss A. M., Caythorpe Hall, Grantham.  
 Loewy, Prof. Dr. E., Via del Progresso, 23, Rome.  
 Lorimer, Miss H. L., Somerville College, Oxford.  
 Loring, W., Esq., Allerton House, Grote's Buildings, Blackheath.  
 Lucas, Rev. A., 3, Bina Gardens, South Kensington, S.W.  
 Lunn, W. Houldsworth, Esq., 10, Alexandra Grove, North Finchley, N.  
 Lynch, H. F., Esq., 33, Pont Street, S.W.  
 Lyttelton, Hon. and Rev. Canon E., The Cloisters, Eton College.
- Maberley, G. C., Esq., Wethersfield, Braintree, Essex.  
 Macan, R. W., Esq., Master of University College, Oxford.  
 McIver, D. R., Esq., 20, Fifth Avenue, New York, U.S.A.  
 MacLehose, James J., Esq., 61, St. Vincent Street, Glasgow.  
 Macmillan, G. A., Esq., D.Litt., St. Martin's Street, W.C.  
 Macmillan, & Co., Ltd., Messrs., St. Martin's Street, W.C.
- Macmillan, W. E. F., Esq., 27, Queen's Gate Gardens, S.W.  
 Marindin, G. E., Esq., Hammondswood, Frensham, Farnham.  
 Marshall, F. H., Esq., 144, Abbey Road, West Hampstead, N.W.  
 Matthews, Mrs., 15, Stanley Gardens, Bayswater, W.  
 Mayor, R. J. G., Esq., Board of Education, Whitehall, S.W.  
 Merriman, W. R. H., Esq.  
 Miller, The Rev. Alex., South United Free Church Manse, Buckie, N.B.  
 Miller, W., Esq., 36, Via Palestro, Rome.  
 Milne, J. G., Esq., Bankside, Goldhill, Farnham, Surrey.  
 Minturn, Miss E. T., 14, Chelsea Embankment, S.W.  
 Mitchell, Mrs., Jesmond Towers, Newcastle-on-Tyne.  
 Monk, The Misses, 4, Cadogan Square, S.W.  
 Montefiore, C. G., Esq., 12, Portman Square, W.  
 Morrison, Walter, Esq., 77, Cromwell Road, S.W.  
 Moss, Rev. Preb. H. W., Highfield Park, nr. Oxford.  
 Murray, Messrs. J. & H., 50, Albemarle Street, W.  
 Murray, Prof. G. G. A., 82, Woodstock Road, Oxford.  
 Murray, Hallam, Esq., The Home Farm, Sandling, Hythe, Kent.  
 Myers, Ernest, Esq., Brackenside, Chislehurst.  
 Mylne, Mrs., 145, Gloucester Terrace, Hyde Park, W.  
 Myres, Prof. J. L., 101, Banbury Road, Oxford.
- Newman, W. L., Esq., Litt.D., D.Litt., 1, Pittville Lawn, Cheltenham.  
 Nightingale, Mrs. H. Shore-, 1, Devonshire Place, W.
- Ogden, Mrs. P., Frogmal End, Hampstead, N.W.  
 Omodei-Curtis, Mrs., 13, Cumberland Terrace, Regent's Park, N.W.  
 Oswald, J. W. Gordon, Esq. (of Aigas), Beaulieu, Inverness-shire, N.B.
- Palli, Mrs. F. L., c/o London & Westminster Bank, St. James's Square, S.W.  
 Paton, W. R., Esq., Vathy, Samos.  
 Pears, Sir E., 2, Rue de la Banque, Constantinople.  
 Pearson, Miss E. R., M.A., Abbey Park South St. Andrews, N.B.  
 Pease, Wilson, Esq., 22, Mount Street, W.  
 Pease, Mrs. J. W., Pendower, Newcastle-on-Tyne.  
 Penoyre, J. ff. B., Esq., 8, King's Bench Walk, Inner Temple, E.C.  
 Penrose, Miss E., Somerville College, Oxford.

- Pesel, Miss Louisa, Oak House, Bradford, Yorks.  
 Phillimore, Prof. J. S., The University, Glasgow.  
 Phillips, Mrs. H., Sutton Oaks, Macclesfield, Cheshire.  
 Piddington, J. G., Esq., Holy Well, Hook Heath, Woking.  
 Pilkington, A. C., Esq., Rocklands, Rainhill, Lancashire.  
 Pilkington, R. A., Esq., Ecclestone Grange, Prescott, Lancs.  
 Pollock, The Right Hon. Sir F., Bart., 21, Hyde Park Place, W.  
 Powell, Miss E., 9, Norfolk St., Park Lane, W.  
 Poynter, Sir E. J., Bart., P.R.A., 70, Addison Road, S.W.  
 Pryor, Marlborough R., Esq., Weston Park, Stevenage, Herts.  
 Pyddoke, Miss Mary, The Rectory, Barwick-in-Elmet, Leeds.
- Rackham, H. Esq., Christ's College, Cambridge.  
 Radford, Miss E., 36, Moscow Court, Queen's Road, W.  
 Ralli, Mrs. S., St. Catherine's Lodge, Hove, Sussex.  
 Ralli, P., Esq., 17, Belgrave Square, S.W.  
 Reid, Prof. J. S., Litt.D., Cains College, Cambridge.  
 Rendall, The Rev. G. H., Litt.D., Dedham House, Dedham, Essex.  
 Richards, H. P., Esq., Wadham College, Oxford.  
 Richmond, The Right Rev. The Bishop of, The Rectory, Stanhope R.S.O., Co. Durham.  
 Ridgeway, Prof. W., Fen Ditton, Cambridge.  
 Roberts, Prof. W. Rhys, The University, Leeds.  
 Rodd, Sir Rennell, K.C.M.G., British Embassy, Rome.  
 Rosebery, The Right Hon. the Earl of, K.G., The Durdans, Epsom.  
 Rothschild, The Right Hon. Lord, 148, Piccadilly, W.  
 Rothschild, Messrs. N. M., and Sons, New Court, E.C.  
 Rothschild, The Hon. Walter, 148, Piccadilly, W.  
 Rotton, Sir J. F., Lockwood, Frith Hill, Godalming.
- Sandys, Sir John, Litt.D., St. John's House, Grange Road, Cambridge.  
 Saumarez, The Right Hon. Lord de, Shrubland Park, Coddendam, Suffolk.  
 Schultz, R. Weir, Esq., 14, Gray's Inn Square, W.C.  
 Scott, C. P., Esq., The Firs, Fallowfield, Manchester.  
 Scott-Moncrieff, Colonel Sir Colin, K.C.S.I., 11, Cheyne Walk, Chelsea, S.W.  
 Sconloui, Etienne, Esq., Athens, Greece.  
 Seaman, Owen, Esq., Tower House, Putney, S.W.  
 Searle, G. von U., Esq., 30, Edith Road, West Kensington, W.
- Seebohm, Hugh, Esq., Poynder's End, Hitchin.  
 Sharpe, Miss C., Stoneycroft, Elstree.  
 Shove, Miss E., 30, York Street Chambers, Bryanston Square, W.  
 Simpson, W. W., Esq., Winkley, Whalley.  
 Sloane, Miss E. J., 13, Welford Road, Leicester.  
 Smith, A. H., Esq., British Museum, W.C.  
 Smith, Sir Cecil H., LL.D., 62, Rutland Gate, S.W.  
 Smith-Pearse, Rev. T. N., The College, Epsom.  
 Strangeways, L. R., Esq., Mapperley Lodge, 540, Woodboro' Road, Nottingham.  
 Sullivan, John, Esq.,
- Tancock, The Rev. C. C., D.D., Little Casterton Rectory, Stamford, Rutland.  
 Thompson, Sir E. M., G.C.B., Mayfield, Sussex.  
 Thompson, F. E., Esq., 16, Primrose Hill Road, N.W.  
 Thompson, H. V., Esq., 19, Portman Square, W.  
 Tod, Mrs. Hedwig, 40, Inverleith Place, Edinburgh.  
 Tod, M. N., Esq., Oriel College, Oxford.  
 Tod, J. N. Esq., Wolstenholme Hall, nr. Rochdale.  
 Townshend, Brian, Esq., 13, Plantation Avenue, Oxford.  
 Tozer, The Rev. H. F., 18, Norham Gardens, Oxford.  
 Tuckett, F. F., Esq., Frenchay, Bristol.  
 Tuke, Miss Margaret, Bedford Coll., York Place, Baker Street, W.
- Vaughan, H., Esq.  
 Vaughan, E. L., Esq., Eton College.  
 Vince, J. H. Esq., Bradfield College, Berkshire.
- Wace, Mrs., Leslie Lodge, Hall Place, St. Albans.  
 Wagner, H., Esq., 13, Half Moon Street, W.  
 Waldstein, Sir Charles, Litt.D., Newton Hall, nr. Cambridge.  
 Wandsworth, The Right Hon. Lord, 10, Great Stanhope Street, W.  
 Wantage, The Lady, 2, Carlton Gardens, S.W.  
 Ward, Dr. A. W., Master of Peterhouse College, Cambridge.  
 Warren, T. H., Esq., President of Magdalen College, Oxford.  
 Waterhouse, Edwin, Esq., Feldemore, near Dorking.  
 Weber, Sir H., M.D., 10, Grosvenor Street, W.  
 Webster, E. W., Esq., Wadham College, Oxford.  
 Wells, J., Esq., Wadham College, Oxford.  
 Welsh, Miss Silvia M., Werneck-Strasse, 22 11, Munich, Bavaria.  
 West, H. H., Esq., Shide Villa, Newport, I.O.W.  
 Whibley, Leonard, Esq., Pembroke College, Cambridge.

- Williams, W. C. A., Esq., Garden House, Cornwall Gardens, S.W.  
Wilson, Major H. C. B., Crofton Hall, Crofton, Wakefield.  
Wilson, R. D., Esq., 38, Upper Brook Street, W.  
Wimborne, The Right Hon. Lord, 22, Arlington Street, S.W.  
Withers, J. J., Esq., Howard House, 4, Arundel Street, Strand, W.C.  
Woodhouse, Prof. W. J., The University, Sydney, N.S.W.  
Woodward, Prof. W. H., Crooksbury Hurst, Farnham.
- Woodward, A. M., Esq., 1, Grange Court, Headingley, Leeds.  
Wright, Dr. Hagberg, London Library, St. James's Square, W.  
Wright, C. T. H., Esq.,  
Wyndham, Hon. Margaret, 12, Great Stanhope Street, W.
- Vorke, V. W., Esq., 254 B, Gray's Inn Road, W.C.  
Vule, Miss A., Tarradale House, Ross-shire.

## DIRECTORS OF THE SCHOOL.

1886—1912.

F. C. PENROSE, M.A., D.C.L., LL.D., F.R.S., 1886—1887.

ERNEST A. GARDNER, M.A., 1887—1895.

CECIL H. SMITH, LL.D., 1895—1897.

DAVID G. HOGARTH, M.A., 1897—1900.

R. CARR BOSANQUET, M.A., 1900—1906.

R. McG. DAWKINS, M.A., 1906—

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## HONORARY STUDENTS OF THE SCHOOL.

1886—1912.

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|--|--|
| Prof. J. B. Bury,<br>LL.D., Litt.D., D.Litt.   | Trinity College, Cambridge. Elected 1805.  |
| Sir Arthur J. Evans,<br>LL.D., D.Litt., F.R.S. | Late Keeper of the Ashmolean Museum, Oxford. Elected<br>1895.                                  |
| Prof. J. Linton Myres,<br>M.A.                 | A former Student of the School. Elected 1896.  |
| Prof. Ernest Gardner,<br>M.A.                  | Formerly Director of the School. Elected 1897.   |
| Prof. A. van Millingen,<br>M.A., D.D.          | Professor of History at Robert College, Constantinople.<br>Elected 1904.                       |
| W. H. Forbes, M.A.                             | Late Fellow of Balliol College, Oxford. Elected 1906.  |
| Prof. W. J. Woodhouse.                         | Professor in the University of Sydney. Formerly Student of<br>the School. Elected 1908.        |
| Wace, A. J. B., M.A.                           | Lecturer in Ancient History and Archaeology at the University<br>of St. Andrews. Elected 1912. |



STUDENTS OF THE SCHOOL.<sup>1</sup>

1886—1912.

- Ernest A. Gardner. M.A., Litt. D. Formerly Fellow of Gonville and Caius College, Cambridge and Craven University Student. Yates Professor of Archaeology in the University of London. Admitted 1886—87. Director of the School, 1887—1895. Hon. Student of the School.
- David G. Hogarth. M.A. Fellow and formerly Tutor of Magdalen College, Oxford, and first Craven Fellow. Keeper of the Ashmolean Museum. Director of the School 1897—1900. Admitted 1886—87. Re-admitted (for work in Cyprus) 1887—88.
- Rupert C. Clarke. M.A. Exeter College, Oxford. Rector of Ellesborough, Bucks and Rural Dean of Wendover. Admitted 1886—87.
- F. H. H. Guillemard. M.A., M.D., F.L.S., etc. Gonville and Caius College, Cambridge. First University Reader in Geography. Admitted (for work in Cyprus) 1887—88.
- Montague R. James. Litt.D. Provost and late Tutor of King's College, Cambridge. Director of the Fitzwilliam Museum. Admitted (for work in Cyprus) 1887—88, with grant of £100 from the University.
- R. Elsey Smith. F.R.I.B.A. Professor of Architecture and Construction, King's College, London. Appointed to Studentship by Royal Institute of British Architects, 1887—88.
- Robert Weir Schultz. Admitted as Gold Medallist and Travelling Student in Architecture of the Royal Academy of Arts, 1887—88. Re-admitted 1888—89, 1889—90.
- Sidney H. Barnsley. Admitted as Student of the Royal Academy, 1887—88. Re-admitted 1889—90, 1890—91.
- J. A. R. Munro. M.A. Fellow and Lecturer of Lincoln College, Oxford. Admitted (for work in Cyprus) 1888—89. Re-admitted (for same purpose) 1889—90.
- H. Arnold Tabbs. M.A. Pembroke College, Oxford. Craven University Fellow. Professor of Classics at University College, Auckland, N.Z. Admitted (for work in Cyprus) 1888—89. Re-admitted (for same purpose) 1889—90.
- J. G. Frazer. M.A. Fellow of Trinity College, Cambridge. Admitted 1889—90, with grant of £100 from the University of Cambridge to collect material for commentary on Pausanias.<sup>2</sup>
- William Loring. M.A. Warden of Goldsmiths' College, New Cross. Late Fellow of King's College, Cambridge. Secretary of the School, 1897—1903. Appointed to Cambridge Studentship, 1889—90. Re-admitted as Craven University Student, 1890—91, 1891—92, and 1892—93.

<sup>1</sup> \* Before a name signifies "deceased."<sup>2</sup> This grant was afterwards returned to the University.

- W. J. Woodhouse. M.A. Queen's College, Oxford. Professor of Greek in the University of Sydney, N.S.W. Formerly Lecturer in Ancient History and Political Philosophy at the University of St. Andrews. Appointed to Oxford Studentship, 1889-90. Re-admitted as Craven University Fellow, 1891-92 and 1892-93.
- G. C. Richards. M.A. Late Fellow of Hertford College. Fellow and Tutor of Oriel College, Oxford. Formerly Professor of Greek at University College, Cardiff. Admitted as Craven University Fellow, 1889-90. Re-admitted 1890-91.
- O. H. Parry. M.A. Magdalen College, Oxford. Vicar of All Hallows, East India Dock. Formerly Archbishop's Missioner to the Nestorian Christians. Admitted 1889-90.
- J. F. R. Stainer. M.A., B.C.L. Magdalen College, Oxford. Admitted 1889-90.
- R. A. H. Bickford-Smith. M.A., F.S.A. Trinity College, Cambridge. Admitted 1889-90.
- A. G. Bather. M.A. Late Fellow of King's College, Cambridge. Assistant Master at Winchester College. Admitted 1889-90. Re-admitted 1891-92, on appointment to the Cambridge Studentship; 1892-93 as Prendergast Greek Student; and again, 1893-94, as Cambridge Student.
- E. E. Sikes. M.A. Fellow and Tutor of St. John's College, Cambridge. Appointed to Cambridge Studentship, 1890-91.
- J. G. Milne. M.A. Corpus Christi College, Oxford. Examiner in the Board of Education. Appointed to Oxford Studentship, 1890-91.
- H. Stuart Jones. M.A. Fellow and formerly Tutor of Trinity College, Oxford. Formerly Director of the British School at Rome. Admitted as Craven University Fellow, 1890-91. Re-admitted 1892-93.
- Miss Eugénie Sellers (Mrs. S. Arthur Strong). Girton College, Cambridge. Assistant Director of the British School at Rome. Formerly Keeper of the Duke of Devonshire's Collections. Admitted 1890-91.
- F. Brayne Baker. M.A. Sometime Scholar of Christ's College, Cambridge. Assistant Master at Malvern College. Admitted 1891-92.
- C. C. Inge. M.A. Magdalen College, Oxford. Vicar of Holmwood, Surrey. Appointed 1891-92 to the Oxford Studentship.
- E. F. Benson, M.A. King's College, Cambridge. Admitted 1891-92, with grant of £100 from the Worts Fund at Cambridge; 1892-93 on appointment to the Cambridge Studentship; 1893-94 as Craven Student; and 1894-95 as Prendergast Student.
- J. G. Piddington. B.A. (J. G. Smith) Magdalen College, Oxford. Admitted 1891-92. Re-admitted 1895-96.
- V. W. Yorke. M.A. Late Fellow of King's College, Cambridge. Admitted 1892-93. Re-admitted 1893-94.
- J. L. Myres. M.A. Wykeham Professor of Ancient History in the University of Oxford. Formerly Fellow of Magdalen College, Oxford. Student and Tutor of Christ Church. University Lecturer in Classical Archaeology. Gladstone Professor of Greek in the University of Liverpool. Admitted 1892-93 as Craven Fellow. Re-admitted 1893-94 and 1894-95. Hon. Student of the School.

- R. J. G. Mayor. M.A. Late Fellow of King's College, Cambridge. Assistant Secretary in the Board of Education. Admitted 1892—93.
- R. C. Bosanquet. M.A. Trinity College, Cambridge. Professor of Archaeology in the University of Liverpool. Assistant Director of the School, 1899—1900. Director 1900—1906. Admitted 1892—93. Re-admitted as Craven University Student 1894—95. Re-admitted as Craven Student 1895—96 and 1896—97.
- J. M. Cheetham, M.A. Christ Church, Oxford. Admitted on appointment to the Oxford Studentship. 1892—93.
- E. R. Bevan. M.A. New College, Oxford. Admitted 1893—94.
- A. F. Findlay. M.A. Sent out as holder of Browne-Downie Fellowship by the United Presbyterian Church, Divinity Hall, Edinburgh. Admitted 1894—95.
- J. G. Duncan. M.A., B.D. Sent out from Aberdeen by the Church of Scotland. Admitted 1894—95.
- J. E. Brooks. M.A. St. Peter's College, Cambridge. Admitted 1894—95. Re-admitted as Associate 1896—97.
- \*H. Awdry. M.A. New College, Oxford. Assistant Master at Wellington College. Admitted 1894—95.
- Duncan Mackenzie. M.A. (Edin.), Ph.D. (Vienna) Universities of Edinburgh and Vienna. Carnegie Fellow in History at the University of Edinburgh. Admitted 1895—6. Re-admitted 1896—97, 1897—98 and 1898—99.
- Archibald Paterson. University of Edinburgh. Admitted 1895—96.
- C. R. Rowland Clark. Student of the Royal Academy. Appointed 1895—96, and re-appointed 1896—97, by the Managing Committee to an Architectural Studentship.
- C. C. Edgar. B.A. Oriel College, Oxford. Inspector of Antiquities for Lower Egypt. Admitted 1895—96, and re-admitted 1896—97 (as Craven University Fellow), 1897—98 and 1898—99.
- F. R. Earp. M.A. Late Fellow of King's College, Cambridge. Admitted 1896—97.
- \*F. A. C. Morrison. M.A. Jesus College, Cambridge. Admitted (as Prendergast Greek Student) 1896—97.
- H. H. West. M.A. Formerly of Trinity College, Cambridge. Admitted 1896—97.
- Miss C. A. Hutton. Girton College, Cambridge. Admitted 1896—97.
- Pieter Rodeck. Architect, Cairo. Admitted 1896—97 as Travelling Student and Gold Medallist of the Royal Academy.
- J. G. C. Anderson. M.A. Formerly Fellow of Lincoln College. Student, Tutor, and sometime Senior Censor of Christ Church, Oxford. Admitted (as Craven University Fellow) 1896—97.
- J. W. Crowfoot. M.A. Brasenose College, Oxford. Inspector in the Ministry of Education, Cairo. Formerly Assistant Director of Education and Acting Curator of Antiquities, Sudan Government. Lecturer in Classics, Mason College and University, Birmingham. Admitted, on appointment to the Oxford Studentship, 1896—97. Re-admitted 1897—98.
- W. W. Reid. Universities of Aberdeen and Edinburgh. Admitted, as holder of Blackie Travelling Scholarship, 1896—97.

- A. E. Henderson. F.S.A. Owen Jones Student of Royal Institute of British Architects, R.B.A. 1897-98. Admitted 1897-98. Re-admitted 1898-99, 1901-02, and 1902-03.
- W. A. Curtis. Heriot Scholar of Edinburgh University. Admitted 1897-98.
- A. J. Spilsbury. M.A. Queen's College, Oxford. Senior Classical Master, City of London School. Admitted 1897-98, on appointment to the Oxford Studentship.
- E. B. Hoare. Magdalen College, Oxford. Admitted 1897-98, as Architectural Student.
- J. C. Lawson. M.A. Fellow and Lecturer of Pembroke College, Cambridge. Admitted as Craven University Student, 1898-99. Re-admitted 1899-1900.
- C. D. Edmonds. M.A. Emmanuel College, Cambridge. Assistant Master at Royal Naval College, Osborne. Formerly at Aldenham School. Admitted as Prendergast Student, 1898-99.
- J. H. Marshall. C.I.E., M.A., F.S.A. Scholar of King's College, Cambridge. Director-General of the Archaeological Survey of India. Admitted 1898-99. Re-admitted as Prendergast Student, 1900-01, Craven Student, 1901-2.
- \*Clement Gutch. M.A. King's College, Cambridge. Lecturer at St. John's College, Cambridge. Admitted, 1898-99, on appointment to the Cambridge Studentship.
- F. B. Welch. M.A. Magdalen College, Oxford. Second Master at Pocklington School. Admitted as Craven University Fellow, 1898-99. Re-admitted 1899-1900.
- T. D. Atkinson. F.R.I.B.A. Surveyor to the Dean and Chapter of Ely. Admitted as Architectural Student, 1898-99.
- J. K. Fotheringham. M.A., D.Litt. Merton and Magdalen Colleges, Oxford. Fellow of Magdalen College, Oxford. Lecturer in Ancient History at King's College, London. Examiner in the University of London; Brassey Research Student. Admitted on appointment to Oxford Studentship, 1898-99.
- J. H. Hopkinson. M.A. University College, Oxford. Warden of Hulme Hall and Lecturer in Classical Archaeology, University of Manchester. Formerly Lecturer in Greek, University of Birmingham. Admitted as Craven University Fellow, 1899-1900 and 1900-01.
- S. C. Kaines-Smith. Magdalene College, Cambridge. Admitted 1899-1900, on appointment to Cambridge Studentship.
- Miss O. C. Köhler (Mrs. Charles Smith). Girton College, Cambridge. Admitted 1899-1900.
- D. Theodore Fyfe. F.R.I.B.A. Architectural Association Travelling Student, 1899. Admitted 1899-1900, on appointment to Architectural Studentship.
- K. T. Frost. M.A., F.R.G.S. Brasenose College, Oxford. Lecturer at the Queen's University, Belfast. Formerly in Ministry of Public Instruction, Egypt. Lecturer in Classics at Isleworth. Officer of the Egyptian Exploration Fund, 1904-05. Admitted on appointment to the Oxford Studentship, 1900-01.
- R. D. Wells. M.A., A.R.I.B.A. Trinity College, Cambridge. Admitted on appointment to the Architectural Studentship, 1900-01.

- J. ff. Baker-Penoyre. M.A. Keble College, Oxford. Secretary and Librarian to the Society for Promoting Hellenic Studies. Secretary to the British School at Athens. Admitted 1900—01. Re-admitted 1906—7, 1907—8.
- Marcus N. Tod. M.A. Fellow of Oriel College, Oxford, and University Lecturer in Greek Epigraphy. Craven University Fellow. Assistant-Director of the School 1902—1904. Admitted on appointment to "Senior Studentship," 1901—02.
- F. W. Hasluck. M.A. Sometime Fellow of King's College, Cambridge. Assistant Director of the School from 1906. Admitted on appointment to Cambridge Studentship, 1901—02. Re-admitted 1902—03, 1904—05, 1905—06, 1906—07, 1907—8, 1908—9, 1909—10, 1910—11.
- C. Heaton Conyn. A.R.I.B.A., M.R.San.I. Admitted on appointment to the Architectural Studentship, 1901—02. Re-admitted 1903—04.
- Miss H. L. Lorimer. Girton College, Cambridge. Classical Tutor of Somerville College, Oxford. Admitted as Pfeiffer Travelling Student, 1901—02.
- Baroness E. Rosenörn-Lehn. Royal Holloway College, and University College, London. Admitted 1901—02.
- A. P. Oppé. B.A. New College, Oxford. Victoria and Albert Museum. Formerly Examiner in the Board of Education. Lecturer in Greek at St. Andrews University, and Lecturer in Ancient History at Edinburgh University. Admitted 1901—02.
- W. L. H. Duckworth. M.D., Sc.D., M.A. Fellow of Jesus College, Cambridge. University Lecturer in Physical Anthropology. Admitted 1902—03.
- C. T. Currelly. M.A., F.R.G.S. Victoria College, Toronto. Director of the Royal Museum, Ontario. Formerly Assistant to Professor Flinders Petrie, under the Egypt Exploration Fund. Admitted 1902—03. Re-admitted 1903—04.
- R. McG. Dawkins. M.A. Fellow of Emmanuel College, Cambridge. Director of the School from 1906. Admitted 1902—03. Re-admitted as Craven Student, 1903—04. Re-admitted 1904—05.
- E. S. Forster. M.A., F.S.A. Bishop Frazer's Scholar, Oriel College, Oxford. Lecturer in Greek in the University of Sheffield. Formerly Assistant Lecturer in the University College of N. Wales. Admitted on appointment to the Oxford Studentship, 1902—03. Re-admitted 1903—04, with grants from the Craven Fund and Oriel College.
- A. J. B. Wace. M.A. Fellow of Pembroke College, Cambridge. Lecturer in Ancient History and Archaeology at University of St. Andrews. Prendergast Student. Craven Student. Assistant Director of the British School at Rome, 1905. Admitted 1902—03. Re-admitted 1903—04, 1904—05, 1905—06, 1906—07, 1907—08, 1908—09, 1909—10, 1910—11.
- E. W. Webster. M.A. Fellow of Wadham College, Oxford. Taylorian Scholar in German, 1901. John Locke Scholar in Mental Philosophy, 1904. Admitted 1902—03.
- J. F. Fulton. Soane Student. Admitted 1902—03.
- E. F. Reynolds. Admitted 1902—03.
- M. O. B. Caspari. B.A. Late Scholar of Corpus Christi College, Oxford. University Scholar in German. Reader in Ancient History in the University of London. Admitted 1903—04.

- J. L. Stokes. B.A. Scholar of Pembroke College, Cambridge. Librarian of Charterhouse School. Admitted (as Holder of the Prior Scholarship from Pembroke College), 1903-04.
- Miss M. K. Welsh (Mrs. A. M. Daniel). Newnham College, Cambridge. Holder of the Marion Kennedy Studentship. Admitted 1903-04.
- G. Dickins. M.A. Fellow of St. John's College, Oxford. Craven Fellow. Admitted 1904-05. Re-admitted as School Student, 1905-06, 1906-07, 1907-08, 1908-09. Re-admitted 1912-13.
- C. C. T. Doll. M.A. Trinity College, Cambridge. Superintending Architect at the excavations at Knossos since 1905. Admitted 1904-05.
- C. H. Hawes. M.A. Trinity College, Cambridge. Professor of Anthropology Dartmouth College, U.S.A. Admitted 1904-05.
- W. A. Kirkwood. M.A. University College, Toronto. Admitted 1904-05.
- H. J. W. Tillyard. M.A. Caius College, Cambridge. Lecturer in Greek, University of Edinburgh. Admitted 1904-05 as Assistant Librarian. Re-admitted 1905-06 (on appointment to Studentship), 1906-07, 1908-09. Re-admitted 1912-13.
- Miss G. M. A. Richter. M.A. Girton College, Cambridge. Assistant Curator in Department of Classical Antiquities, Metropolitan Museum of Art, New York. Admitted 1904-05.
- J. P. Droop. B.A. Trinity College, Cambridge. Late Assistant to Dr. Stein in the arrangement of his collections. Admitted 1905-06. Prendergast Student 1906-07, 1907-08, 1908-09, 1910-11. Re-admitted 1912-13.
- Miss M. Hamilton. M.A. D.Litt. (Mrs. G. Dickins). University of St. Andrews. Holder of a Research Fellowship under the Carnegie Trust. Admitted 1905-06, 1906-07.
- A. C. B. Brown. B.A. Scholar of New College, Oxford. Fereday Fellow of St. John's College, Oxford. Formerly Assistant Lecturer in Classics, Manchester University. Assistant Master at Marlborough College. Admitted 1905-06.
- F. Orr. Admitted 1905-06.
- R. Traquair. A.R.I.B.A. Admitted 1905-06 (on appointment to an Architectural Studentship). Professor of Architecture, McGill University, Montreal. Student of the Byzantine Fund.
- Miss E. B. Abrahams. M.A. University College, London. Admitted 1905-06.
- J. Farrell. M.A. Fellow of Jesus College, Cambridge. Admitted 1906-07, 1907-08, 1908-09.
- Walter S. George. Travelling Student in Architecture of the Royal College of Art. Soane Medallist of Royal Institute of British Architects. Admitted 1906-07. Re-admitted 1908-9, 1909-10, as Student of the Byzantine Research Fund. Re-admitted 1912-13.
- T. E. Peet. B.A. Queen's College, Oxford. Officer of Egypt Explor. Fund. Admitted as Craven Fellow 1906-07, 1908-09.
- A. M. Woodward. M.A. Late Classical Demy of Magdalen College, Oxford. Lecturer in Ancient History, University of Liverpool. Assistant Director, 1909-10. Admitted 1906-7, 1907-08, 1908-09.
- W. M. Calder. B.A. Christ Church, Oxford. Professor of Greek in Victoria University, Manchester. Formerly Wilson Travelling Fellow, Aberdeen University. Research Student, Brasenose College, Oxford. Admitted 1907-08.

- W. Harvey. Gold Medallist and Travelling Student of the Royal Academy. Admitted 1907—08.
- H. Pirie-Gordon. M.A. Magdalen College, Oxford. Admitted 1907—08.
- M. S. Thompson. B.A. Corpus Christi College, Oxford. Reader in History, Newcastle University College. Holder of Chas. Oldham University Scholarship. Admitted 1907—08, 1908—09, 1909—10, 1910—11.
- A. C. Sheepshanks. B.A. Trinity College, Cambridge. Assistant Master at Eton. Admitted 1907—08.
- N. Whatley. M.A. Fellow of Hertford College, Oxford. Admitted 1907—08.
- G. L. Cheesman. M.A. Fellow and Lecturer of New College, Oxford. Admitted 1908—09.
- A. W. Gomme. B.A. Trinity College, Cambridge. Assistant Lecturer in Greek, University of Glasgow. Formerly Assistant Lecturer in Classics, Liverpool University. Prendergast Student. Admitted 1908—09.
- L. B. Budden. B.A. Travelling Student in Architecture of the University of Liverpool. Admitted 1909—10.
- S. W. Grose. B.A. Scholar of Christ's College, Cambridge. School Student. Admitted 1909—10.
- H. A. Ormerod. B.A. Queen's College, Oxford. Assistant Lecturer in Greek, University of Liverpool. Admitted 1909—10, 1910—11.
- H. H. Jewell. Royal Academy Gold Medallist. Admitted 1909—10.
- W. R. Halliday. B.A. New College, Oxford. Lecturer in Greek History and Archaeology, University of Glasgow. Craven Fellow. Admitted 1910—11. Re-admitted 1912—13.
- Miss D. Lamb. Newnham College, Cambridge. Admitted 1910—11.
- Miss L. E. Tennant. Admitted 1910—11.
- E. S. G. Robinson. B.A. Christ's College, Oxford. Assistant in the Coin and Medal Dept., British Museum. School Student. Admitted 1910—11.
- L. B. Tillard. B.A. St. John's College, Cambridge. Admitted 1910—11.
- A. J. Toynbee. M.A. Fellow of Balliol College, Oxford. Admitted 1911—12.
- B. V. Darbishire. B.A. Balliol College, Oxford. Admitted 1911—12.
- Miss M. M. Hardie. Newnham College, Cambridge. Admitted 1911—12.  
(Mrs. F. W. Hasluck.)
- E. M. W. Tillyard. B.A. Jesus College, Cambridge. Admitted 1911—12.
- W. M. Laistner. B.A. Jesus College, Cambridge. Craven Student. Admitted 1912—13.
- S. Casson. B.A. St. John's College, Oxford. School Student. Admitted 1912—13.
- R. S. Lambert. Repton School.
- Gordon Leith. Holder of Herbert Baker Studentship. Admitted 1912—13.

## ASSOCIATES OF THE SCHOOL.

Rev. A. H. Cruikshank.	Elected	1896.
Ambrose Poynter, Esq.	"	1896.
J. E. Brooks, Esq.	"	1896.
Miss Louisa Pesel.	"	1902.
J. F. Crace, Esq.	"	1902.
Miss Mona Wilson.	"	1903.
J. S. Carter, Esq.	"	1903.
B. Townsend, Esq.	"	1903.
A. M. Daniel, Esq.	"	1903.
H. W. Allen, Esq.	"	1906.
W. Miller, Esq.	"	1906.
George Kennedy, Esq.	"	1906.
A. E. Zimmern, Esq.	"	1910.
Miss Negreponte.	"	1912.
C. J. Ellingham, Esq.	"	1913.



## SUGGESTED PLAN OF STUDY.

Under an ideal system a student would spend two or three seasons in Greece, devoting *the first year to general studies, the second to some special subject.*

During the first year the student, while not losing sight of his special subject, might apportion his time thus:—

*August and September.*—Learn German in Berlin, Munich, or Dresden, and thus be able to profit by the three or four courses of lectures given by the Secretaries of the German and Austrian Institutes in Athens. For archaeological literature some knowledge of German is practically essential.

*October.*—Arrive in Greece. Acquire if possible some use of Modern Greek. See Olympia, Delphi, Mycenae, Epidaurus, the Argive Heraion, before the November rains.

*November (middle).*—Remain three or four months in Athens steadily working at sites and in Museums, attending courses of lectures and making frequent short excursions to points of interest by train, cycle, etc.

*March and April.*—Travel, study sites, join one of the Island cruises for students.

*May and June.*—Begin to concentrate on special work, *e.g.* assist in excavations, with a view to working upon the results during the coming year and excavating with more or less complete control in the second summer,

*or* explore a given district in Greece or Asia Minor, an island or a group of islands,

*or* work in museums in Italy, Austria, or Germany,

*or* attend lectures in Pompeii and spend some months in Rome and the cooler Etruscan cities. In this case the student is advised to attach himself to the British School at Rome (Palazzo Odescalchi), in order that he may be admitted to the Library, and have the right to attend the lectures (see rules of the School).

*The second year* should be devoted almost entirely to special work in a narrower field.

The course here suggested must be modified to suit each case. There will always be students who are already specialists in some branch of classical learning and only seek fresh material for research. There will be others who wish to see something of all sides of ancient life in order to illuminate their reading and fit themselves for general classical teaching, although they have not time for minute archaeological study.

# RULES AND REGULATIONS

OF THE

## BRITISH SCHOOL AT ATHENS.

### OBJECTS OF THE SCHOOL.

I. The first aim of the School shall be to promote the study of Greek archaeology in all its departments. Among these shall be (i) the study of Greek art and architecture in their remains of every period; (ii) the study of inscriptions; (iii) the exploration of ancient sites; (iv) the tracing of ancient roads and routes of traffic.

II. Besides being a School of Archaeology, it shall be also, in the most comprehensive sense, a School of Classical Studies. Every period of the Greek language and literature, from the earliest age to the present day, shall be considered as coming within the province of the School.

III. The School shall also be a centre at which information can be obtained and books consulted by British travellers in Greece.

IV. For these purposes a Library shall be formed, and maintained, of archaeological and other suitable books, including maps, plans, and photographs.

### THE SUBSCRIBERS.

V. The following shall be considered as Subscribers to the School:—

- (1) Donors, other than Corporate Bodies, of £10 and upwards.
- (2) Annual Subscribers of £1 and upwards during the period of their subscription.

VI. A corporate body subscribing not less than £50 a year, for a term of years, shall, during that term, have the right to nominate a member of the Managing Committee.

VII. A meeting of Subscribers shall be held in October of each year, at which each Subscriber shall have one vote. A subscribing corporate body may send a representative. At this meeting a report from the Managing Committee shall be presented, including a financial statement and selections from the reports of the Director and Students for the season. At this meeting shall also be annually elected or re-elected the Treasurer and the Secretary of the School, two Auditors, and four members of the Managing Committee, in place of those retiring under Rule XIII. (3).

VIII. Special meetings of Subscribers may, if necessary, be summoned by the Managing Committee.

IX. Subscribers shall be entitled to receive a copy of any reports that may be published by the School, to use the Library, and to attend the public meetings of the School, whenever they may be in Athens.

### THE TRUSTEES.

X. The property of the School shall be vested in three Trustees, who shall be appointed for life, except as hereinafter provided. Vacancies in the number of Trustees shall be filled up at the annual meeting of the Subscribers.

XI. In the event of a Trustee becoming unfit or incapable of acting, he may be removed from his office by a majority of three-fourths of those present at a special meeting of Subscribers summoned by the Managing Committee for that purpose, and another Trustee shall by the same majority be appointed in his place.

XII. In the event of the death or resignation of a Trustee occurring between two annual meetings, the Managing Committee shall have the power of nominating another Trustee to act in his place until the next annual meeting.

### THE MANAGING COMMITTEE.

XIII. The Managing Committee shall consist of the following:—

- (1) The Trustees of the School.
- (2) The Treasurer and Secretary of the School.
- (3) Twelve Members elected by the Subscribers at the annual meetings. Of these, four shall retire in each year, at first by lot, afterwards by rotation. Members retiring are eligible for re-election.
- (4) The members nominated by corporate bodies under Rule VI.

XIV. The Committee shall have control of all the affairs of the School, and shall decide any dispute that may arise between the Director and Students. They shall have power to deprive any Student of the use of the school-building.

XV. The Committee shall meet as a rule once in every two months; but the Secretary may, with the approval of the Chairman and Treasurer, summon a special meeting when necessary.

XVI. Due notice of every meeting shall be sent to each member of the Committee by a summons signed by the Secretary. Three members of the Committee shall be a quorum.

XVII. In case of an equality of votes, the Chairman shall have a second or casting vote.

XVIII. In the event of vacancies occurring among the officers or on the Committee between the annual elections, they may be provisionally filled up by the Committee until the next annual meeting.

HONORARY STUDENTS, STUDENTS, AND ASSOCIATES

XIX. The Students shall consist of the following :—

- (1) Holders of travelling fellowships, studentships, or scholarships at any University of the United Kingdom or of the British Colonies.
- (2) Travelling Students sent out by the Royal Academy, the Royal Institute of British Architects, the Byzantine Research and Publication Fund, or other similar bodies.
- (3) Other persons who shall satisfy the Managing Committee that they are duly qualified to be admitted to the privileges of the School.

XX. No person, other than a student of the British School at Rome, shall be admitted as a Student who does not intend to reside at least three months in Greek lands. In the case of Students of the British School at Rome, an aggregate residence of four months at the two Schools will be accepted as alternative to three months' residence in Greece.

XXI. Students attached to the School will be expected to pursue some definite course of study or research in a department of Hellenic studies, and to write in each season a report upon their work. Such reports shall be submitted to the Director, shall by him be forwarded to the Managing Committee, and may be published by the Committee if and as they think proper.

XXII. Intending Students are required to apply to the Secretary. They will be regarded as Students from the date of their admission by the Committee to the 31st day of October next following; but any Student admitted between July 1st and October 31st in any year shall continue to be regarded as a Student until October 31st of the following year.

XXIII. The Managing Committee may elect as Honorary Students of the School such persons as they may from time to time deem worthy of that distinction, and may also elect as Associates of the School any persons actively engaged in study or exploration in Greek lands.

XXIV. Honorary Students, Students, and Associates shall have a right to use the Library of the School and to attend all lectures given in connexion with the School, free of charge.

XXV. Students shall be expected to reside in the Hostel provided for them, except with the sanction of the Managing Committee. Priority of claim to accommodation in the Hostel shall be determined by the Committee.

THE DIRECTOR.

XXVI. The Director shall be appointed by the Managing Committee, on terms which shall be agreed upon at the time, for a period of not more than three years. He shall be eligible for re-election.

XXVII. He shall have possession of the school-building as a dwelling-house.

XXVIII. It shall be his duty (1) to guide and assist the studies of Students and Associates of the School, affording them all the aid in his power, and also to see that reports are duly furnished by Students, in accordance with Rule XXI., and placed in the hands of the Secretary before the end of June; (2) to act as Editor of the School Annual.

XXIX. (a) Public Meetings of the School shall be held in Athens during the season, at which the Director and Students of the School shall read papers on some subject of study or research, and make reports on the work undertaken by the School. (b) The Director shall deliver lectures to Students of the School. At least six of such meetings and lectures shall be held in the course of each session.

XXX. He may at his discretion allow persons, not Students of the School, to use the Library and attend his lectures.

XXXI. He shall be resident at Athens from the beginning of November in each year to the end of the following June, but shall be at liberty to absent himself for short periods for purposes of exploration or research.

XXXII. At the end of each season he shall report to the Managing Committee—(i) on the studies pursued during the season by himself and by each Student; (ii) on the state of the School-premises and the repairs needed for them; (iii) on the state of the Library and the purchases of books, &c. which he may think desirable; and (iv) on any other matter affecting the interests of the School.

XXXIII. In case of misconduct the Director may be removed from his office by the Managing Committee by a majority of three-fourths of those present at a meeting specially summoned for the purpose. Of such meeting at least a fortnight's notice shall be given.

## RULES FOR THE MACMILLAN HOSTEL.

XXXIV. The management of the Hostel shall be at the discretion of the Director and shall be subject to his control.

XXXV. The Director shall have power to exclude a Student from the Hostel in case of misconduct; but such exclusion must be immediately reported to the Managing Committee.

XXXVI. The Students shall, until further notice, pay a fixed charge of twelve shillings a week for the smaller, and fourteen shillings a week for the larger rooms in the Hostel. These payments shall include fire, lighting, and the necessary servants' wages.

XXXVII. Honorary Students, Associates, members of the Committee, and ex-directors may be admitted to residence in the Hostel. Other persons, if seriously engaged in study or research, may be admitted by the Director at his discretion. But no person shall reside in the Hostel under this rule to the exclusion of any Student desiring admission.

XXXVIII. The weekly charge for residents other than Students shall be seventeen shillings and sixpence until further notice.

XXXIX. The Director shall draw up further rules for the internal management of the Hostel; such rules to be subject to the approval of the Managing Committee.

## RULES FOR THE LIBRARY.

XL. The Director shall have power to make rules for the management of the Library, its use by Students, and the like; such rules to be subject to the approval of the Managing Committee.

## PUBLICATION.

XLI. No publication whatever, respecting the work of the School, shall be made without the previous approval of the Committee.

## THE FINANCES.

XLII. All money received on behalf of the School beyond what is required for current expenses shall be invested in the names and at the discretion of the Trustees.

XLIII. The banking account of the School shall be placed in the names of the Treasurer and Secretary, who shall sign cheques jointly.

XLIV. The first claim on the revenue of the School shall be the maintenance and repair of the School-building, and the payment of rates, taxes, and insurance.

XLV. The second claim shall be the salaries of the Director and Secretary, as arranged between them and the Managing Committee.

XLVI. In case of there being a surplus, a sum shall be annually devoted to the maintenance of the Library of the School and to the publication of a report; and a fund shall be formed from which grants may be made for travelling and excavation.

*Revised, 1908.*

## MANAGING COMMITTEE, 1912-1913.

EDWIN FRESHFIELD, ESQ., LL.D.

WALTER LEAF, ESQ., Litt.D.

GEORGE A. MACMILLAN, ESQ., D.Litt., *Chairman.*

PROFESSOR PERCY GARDNER, Litt.D. Appointed by the University of Oxford.

SIR JOHN SANDYS, Litt.D. Appointed by the University of Cambridge.

MISS JANE E. HARRISON, D.Litt., LL.D. Appointed by the Hellenic Society.

MISS C. A. HUTTON, *ex-officio* as joint editor of the *Annual*.

PROFESSOR R. C. BOSANQUET, M.A.

SIR ARTHUR J. EVANS, D.Litt., LL.D.

THEODORE FYFE, ESQ., F.R.I.B.A.

PROFESSOR ERNEST GARDNER, M.A.

D. G. HOGARTH, ESQ., M.A.

PROFESSOR J. LYNTON MYRES, M.A.

SIR CECIL HARCOURT-SMITH, LL.D.

M. N. TOD, ESQ., M.A.

A. J. B. WACE, ESQ., M.A.

SIR CHARLES WALDSTEIN, Litt.D.

L. WHIBLEY, ESQ., M.A.

A. E. ZIMMERN, ESQ., M.A.

V. W. YORKE, ESQ., M.A., *Hon. Treasurer*, 254B, Gray's Inn Road, W.C.

JOHN ff. BAKER-PENOVRE, ESQ., M.A., *Secretary*, 19, Bloomsbury Square W.C.

## DIRECTOR, 1912-1913.

R. M. DAWKINS, ESQ., M.A., Fellow of Emmanuel College, Cambridge.

*Assistant Director*:—F. W. HASLUCK, ESQ., M.A., Late Fellow of King's College, Cambridge.

## NOTICE TO CONTRIBUTORS.

CONTRIBUTORS to the *Annual of the British School at Athens* are requested to use the following systems of transliteration when writing in English such Greek words as have not become part of the English language :—

## ANCIENT GREEK.

*Vowels.*

$a = a :$  }  
 $\left\{ \begin{array}{l} \epsilon = e : \\ \eta = e : \end{array} \right.$  } krater, lekane.

$i = i :$  kalpis.

$\left\{ \begin{array}{l} o = o : \\ \omega = o : \end{array} \right.$  kothon, kantharos, Amyklaion.

$v = y$  after a consonant, as aryballos, kylix;  $u$  after another vowel, as boule.

$ai = ai :$  Aigion, Erythrai, except at the end of words, such as Mycenae, which are commonly Latinised in form, when *ae* may be used.

$ei = ei :$  Meidias.

$oi = oi :$  Chalkioikos.

$ui = ui :$  muia.

$av = au :$  Aulis.

$ev = eu :$  Eutychos.

$ov = ou :$  boule.

*Consonants.*

$\beta = b ; \gamma = g ; \delta = d ; \zeta = z ; \theta = th ; \kappa = k^1 ; \lambda = l ; \mu = m ; \nu = n ; \xi = x ;$   
 $\pi = p ; \rho = r ; \sigma, \varsigma = s ; \tau = t ; \phi = ph ; \chi = ch ; \psi = ps ; \gamma\gamma = ng ; \gamma\kappa = nk ;$   
 $\gamma\chi = nch ; \rho\acute{=} rh.$

<sup>1</sup>  $\kappa$  never = *c* except for place-names like Corinth, Mycenae, or some names of persons like Cleon, which have become English words.

*Accents.*

Contributors are requested to indicate accents and breathings very clearly and accurately.

MODERN GREEK.<sup>1</sup>*Vowels.*

$$\left. \begin{array}{l} a = a : \\ \epsilon = \epsilon : \\ \eta = \epsilon : \\ \iota = i : \end{array} \right\} \text{Πέντε Πηγάδια} = \text{Pénte Pegádia.}$$

$$\left\{ \begin{array}{l} \omicron \\ \omega = o : \end{array} \right\} \text{Γεώργιος} = \text{Geórgios.}$$

$v = \gamma$ : Μολάοι = Moláoi. But for *av*, *ev*, *ou* see below.

$ai = ai$ : Καισαριανή = Kaisariané.

$\epsilon i = \epsilon i$ : Ἁγία Εἰρήνη = Hagía Eiréne.

$oi = oi$ : Μύλοι = Mýloi.

$ui = ui$ : ψυχουῖός = psychoyiós.

$ou = ou$ : Σκριπού = Skripouí.

$\left\{ \begin{array}{l} av \\ ev \end{array} \right\} = af$  and  $ef$  before unvoiced consonants ( $\theta, \kappa (\xi, \psi), \pi, \sigma, \tau, \phi, \chi$ ) and  $av, ev$  before vowels and voiced consonants: Εἰθύμιος = Eifhýmios; Λάυρα = Lávra.

*Consonants.*

$\beta = v$ ;  $\gamma = g$ , but  $\gamma\gamma, \gamma\kappa$  and  $\gamma\chi$  as  $ng, nk$  and  $nch$ ;  $\delta = d$ ;  $\zeta = z$ ;  $\theta = th$ ;  $\kappa = k$ ;  $\lambda = l$ ;  $\mu = m$ ;  $\nu = n$ ;  $\xi = x$ ;  $\pi = p$ ;  $\rho = r$ ;  $\rho\rho = rrh$ ;  $\acute{\rho} = rh$ ;  $\sigma, \varsigma = s$ ;  $\tau = t$ ;  $\phi, \chi, \psi = ph, ch, ps$ .

The rough breathing to be written *h*: Ἁγιος Γεώργιος = H. Geórgios.

*Accents.*

Accents, in all cases to be written as acute, to be indicated.

In any case where the Greek form of the word is felt to be obscured it may be added in Greek letters (in brackets) the first time a word occurs, and conversely the exact pronunciation, if it should be of importance for any reason, may be specially indicated.

<sup>1</sup> The arguments in support of this system will be found in Mr. R. M. Dawkins' paper on 'The Transliteration of Modern Greek' in *B.S.A.* vol. xv.

## ABBREVIATIONS, ETC.

For the conventions respecting the indication of quotations from ancient and modern authorities, titles of periodical and collective publications, transliteration of inscriptions, and quotations from MSS. and literary texts, contributors are referred to the accompanying notes drawn up by the Editors of the *Journal of Hellenic Studies*, and kindly placed by them at the disposal of contributors to the *Annual*.

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[REPRINTED FROM *The Journal of Hellenic Studies*, VOL. XXIX., PART II., 1909, PP. LXXXVII—IX.]

*Quotations from Ancient and Modern Authorities.*

Names of authors should not be underlined; titles of books, articles, periodicals, or other collective publications should be underlined (for italics). If the title of an article is quoted as well as the publication in which it is contained, the latter should be bracketed. Thus:

Six, *Jahrb.* xviii. 1903, p. 34,

or—

Six, *Protogenes* (*Jahrb.* xviii. 1903), p. 34.

But as a rule the shorter form of citation is to be preferred.

The number of the edition, when necessary, should be indicated by a small figure above the line; e.g. Dittenb. *Syll.*<sup>2</sup> 123.

*Titles of Periodical and Collective Publications.*

The following abbreviations are suggested, as already in more or less general use. In other cases, no abbreviation which is not readily identified should be employed.

*A.-E.M.* = Archäologisch-epigraphische Mitteilungen.

*Ann. d. I.* = Annali dell' Istituto.

*Arch. Anz.* = Archäologischer Anzeiger (Beiblatt zum Jahrbuch).

*Arch. Zeit.* = Archäologische Zeitung.

*Ath. Mitt.* = Mitteilungen des Deutschen Arch. Inst., Athenische Abteilung.

Baumeister = Baumeister, Denkmäler des klassischen Altertums.

*B.C.H.* = Bulletin de Correspondance Hellénique.

- Berl. Vas.* = Furtwängler, Beschreibung der Vasensammlung zu Berlin.  
*B.M. Bronzes* = British Museum Catalogue of Bronzes.  
*B.M. Coins* = British Museum Catalogue of Greek Coins.  
*B.M. Rings* = British Museum Catalogue of Finger-Rings.  
*B.M. Inscr.* = Greek Inscriptions in the British Museum.  
*B.M. Jewellery* = British Museum Catalogue of Jewellery.  
*B.M. Sculpt.* = British Museum Catalogue of Sculpture.  
*B.M. Terracottas* = British Museum Catalogue of Terracottas.  
*B.M. Vases.* = British Museum Catalogue of Vases, 1893, etc.  
*B.S.A.* = Annual of the British School at Athens.  
*B.S.R.* = Papers of the British School at Rome.  
*Bull. d. I.* = *Bullettino dell' Istituto*.  
 Busolt = Busolt, Griechische Geschichte.  
*C.I.G.* = *Corpus Inscriptionum Graecarum*.  
*C.I.L.* = *Corpus Inscriptionum Latinarum*.  
*Cl. Rev.* = *Classical Review*.  
*C.R. Acad. Inscr.* = *Comptes rendus de l'Académie des Inscriptions*.  
*C.R. St. Pétersbourg.* = *Compte rendu de la Commission de St. Pétersbourg*.  
 Dar.-Sagl. = Daremberg-Saglio, *Dictionnaire des Antiquités*.  
 Dittenb. *O.G.I.* = Dittenberger, *Orientalis Graeci Inscriptiones Selectae*.  
 Dittenb. *Syll.* = Dittenberger, *Sylloge Inscriptionum Graecarum*.  
 'Εφ. 'Αρχ. = 'Εφημερίς 'Αρχαιολογική.  
*G.D.I.* = Collitz, *Sammlung der Griechischen Dialekt-Inschriften* (or Collitz-Bechtel).  
 Gerh. *A.V.* = Gerhard, *Auserlesene Vasenbilder*.  
*G.G.A.* = Göttingensche Gelehrte Anzeigen.  
 Head, *H.N.*<sup>2</sup> = Head, *Historia Numorum*. Revised Edition, 1910.  
*I.G.* = *Inscriptiones Graecae*.<sup>1</sup>  
*I.G.A.* = Röhl, *Inscriptiones Graecae antiquissimae*.  
*Jahrb.* = *Jahrbuch des Deutschen Archäologischen Instituts*.  
*Jahresh.* = *Jahreshefte des Oesterreichischen Archäologischen Instituts*.  
*J.H.S.* = *Journal of Hellenic Studies*.  
*Klio* = *Klio* (Beiträge zur alten Geschichte).  
 Le Bas-Wadd. = Le Bas-Waddington, *Voyage Archéologique*.  
*Liverpool Annals* = *Annals of Archaeology and Anthropology of University of Liverpool*.  
 Michel = Michel, *Recueil d'Inscriptions grecques*.  
*Mon. d. I.* = *Monumenti dell' Istituto*.  
 Müller-Wies. = Müller-Wieseler, *Denkmäler der alten Kunst*.  
*Mus. Marbles.* = *Collection of Ancient Marbles in the British Museum*.

<sup>1</sup> The attention of contributors is called to the fact that the titles of the volumes of the second issue of the *Corpus of Greek Inscriptions*, published by the Prussian Academy, have now been changed, as follows :—

- I.G.* I. = *Inscr. Atticae anno Euclidis vetustiores*.  
 „ II. = „ „ *aetatis quae est inter Eucl. ann. et Augusti tempora*.  
 „ III. = „ „ *aetatis Romanae*.  
 „ IV. = „ *Argolidis*.  
 „ VII. = „ *Megaridis et Boeotiae*.  
 „ IX. = „ *Graeciae Septentrionalis*.  
 „ XII. = „ *Insul. Maris Aegaei praeter Delum*.  
 „ XIV. = „ *Italiae et Siciliae*.



*Neue Jahrb. kl. Alt.* = Neue Jahrbücher für das klassische Altertum.

*Neue Jahrb. Phil.* = Neue Jahrbücher für Philologie.

Niese = Niese, Geschichte der griechischen u. makedonischen Staaten.

*Num. Chr.* = Numismatic Chronicle.

*Num. Zeit* = Numismatische Zeitschrift.

Pauly-Wissowa = Pauly-Wissowa, Real-Encyclopädie der classischen Altertumswissenschaft.

*Philol.* = Philologus.

Ramsay, *C.B.* = Ramsay, Cities and Bishoprics of Phrygia.

Ramsay, *Hist. Geog.* = Ramsay, Historical Geography of Asia Minor.

Reinach, *Rép. Sculpt.* = S. Reinach, Répertoire des Sculptures.

Reinach, *Rép. Vases* = S. Reinach, Répertoire des Vases peints

*Rev. Arch.* = Revue Archéologique.

*Rev. Ét. Gr.* = Revue des Études Grecques.

*Rev. Num.* = Revue Numismatique.

*Rev. Philol.* = Revue de Philologie.

*Rh. Mus.* = Rheinisches Museum.

*Röm. Mitt.* = Mitteilungen des Deutschen Archäologischen Instituts, Römische Abteilung.

Roscher = Roscher, Lexicon der Mythologie.

*S.M.C.* = Sparta Museum Catalogue.

*T.A.M.* = Tituli Asiae Minoris.

*Z.f.N.* = Zeitschrift für Numismatik.

#### *Transliteration of Inscriptions.*

[ ] Square brackets to indicate additions, *i.e.* a lacuna filled by conjecture.

( ) Curved brackets to indicate alterations, *i.e.* (1) the resolution of an abbreviation or symbol ; (2) letters misrepresented by the engraver ; (3) letters wrongly omitted by the engraver ; (4) mistakes of the copyist.

< > Angular brackets to indicate omissions, *i.e.* to enclose superfluous letters appearing on the original.

... Dots to represent an unfilled lacuna when the exact number of missing letters is known.

- - - Dashes for the same purpose, when the number of missing letters is not known.

Uncertain letters should have dots under them.

Where the original has iota adscript, it should be reproduced in that form ; otherwise it should be supplied as subscript.

The aspirate, if it appears on the original, should be represented by a special sign, <sup>h</sup>.

*Quotations from MSS. and Literary Texts.*

The same conventions should be employed for this purpose as for inscriptions, with the following *important exceptions*.

- ( ) Curved brackets to indicate only the resolution of an abbreviation or symbol.
- [[ ]] Double square brackets to enclose superfluous letters appearing in the original.
- <> Angular brackets to enclose letters supplying an omission in the original.

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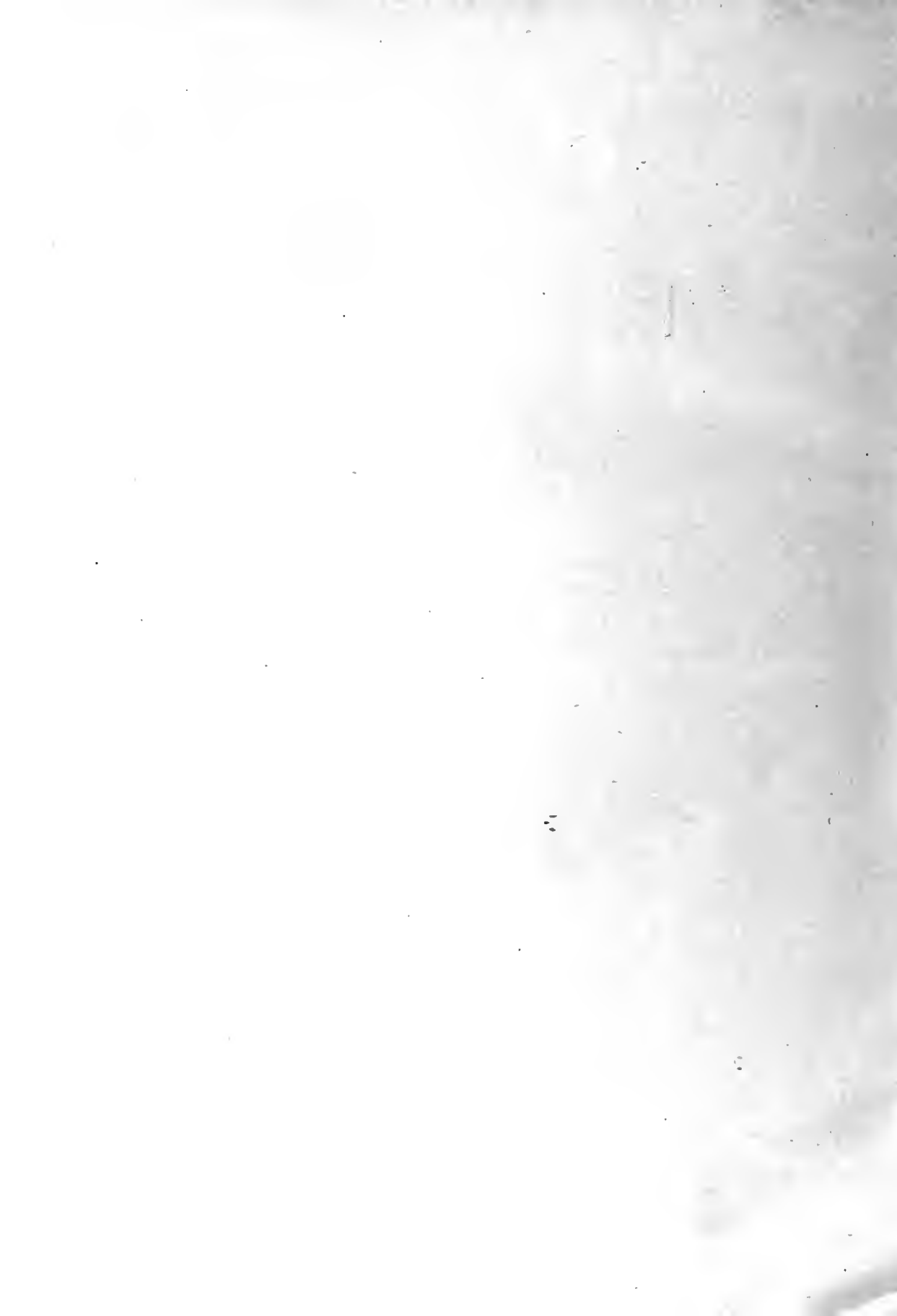
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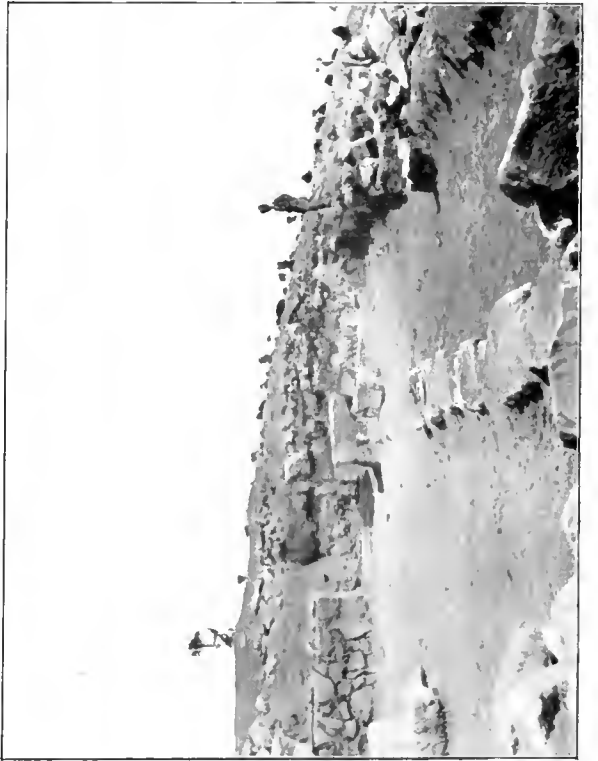
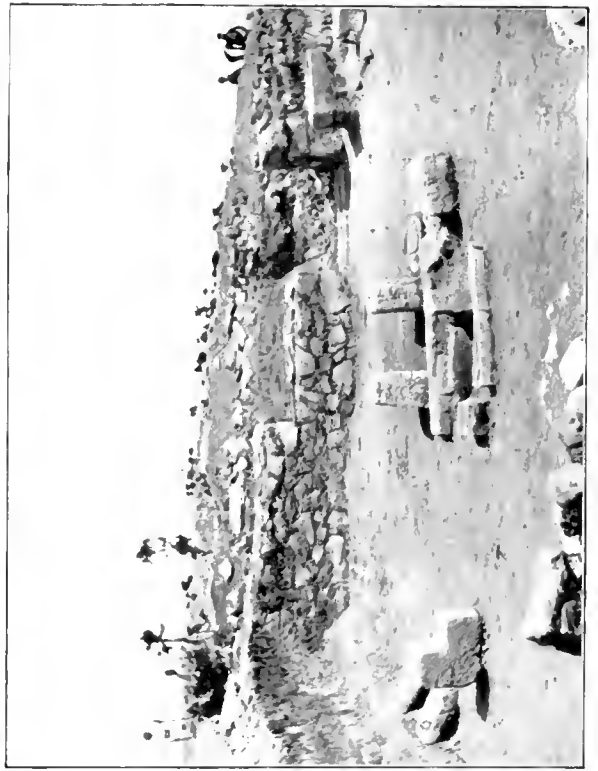


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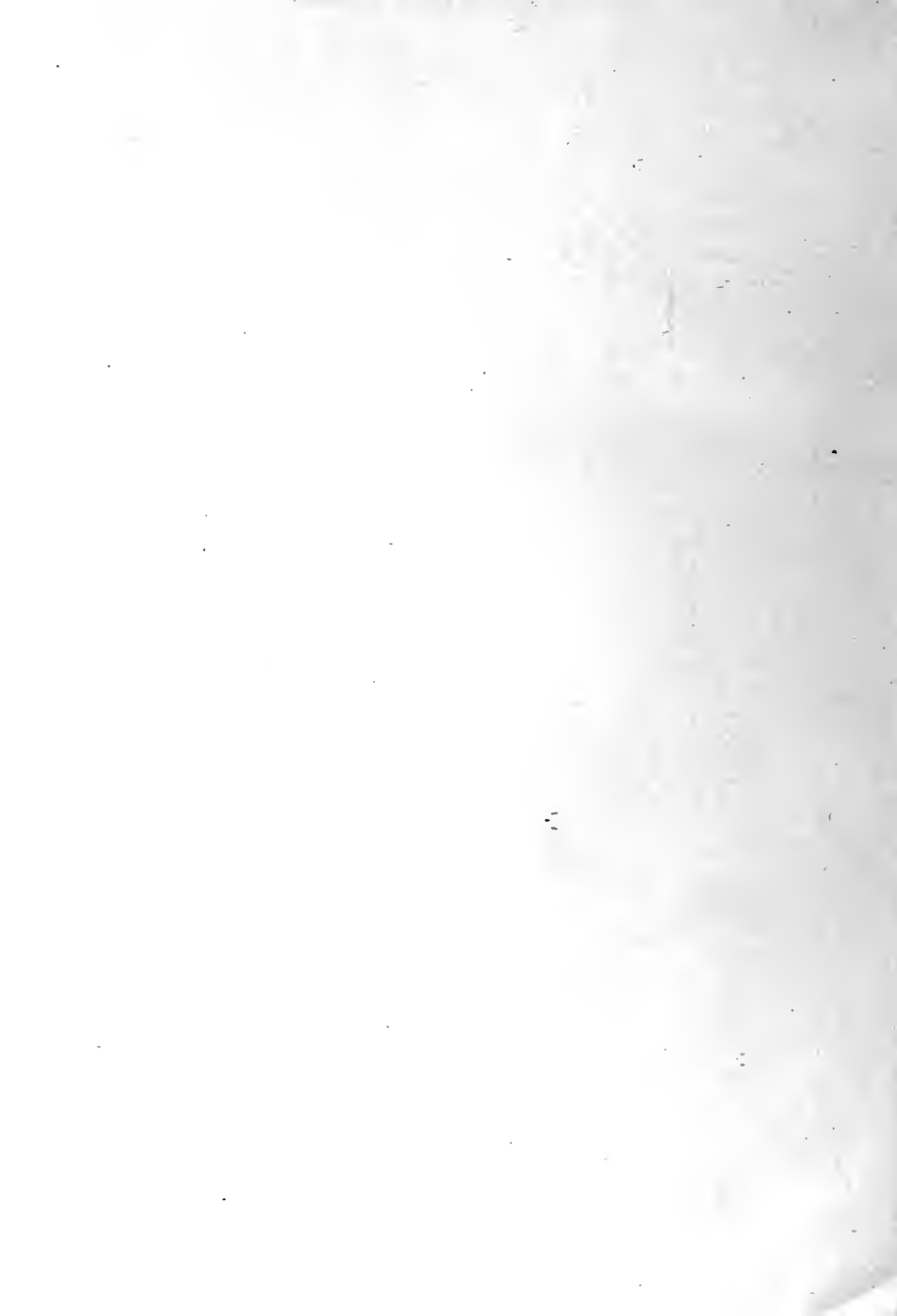


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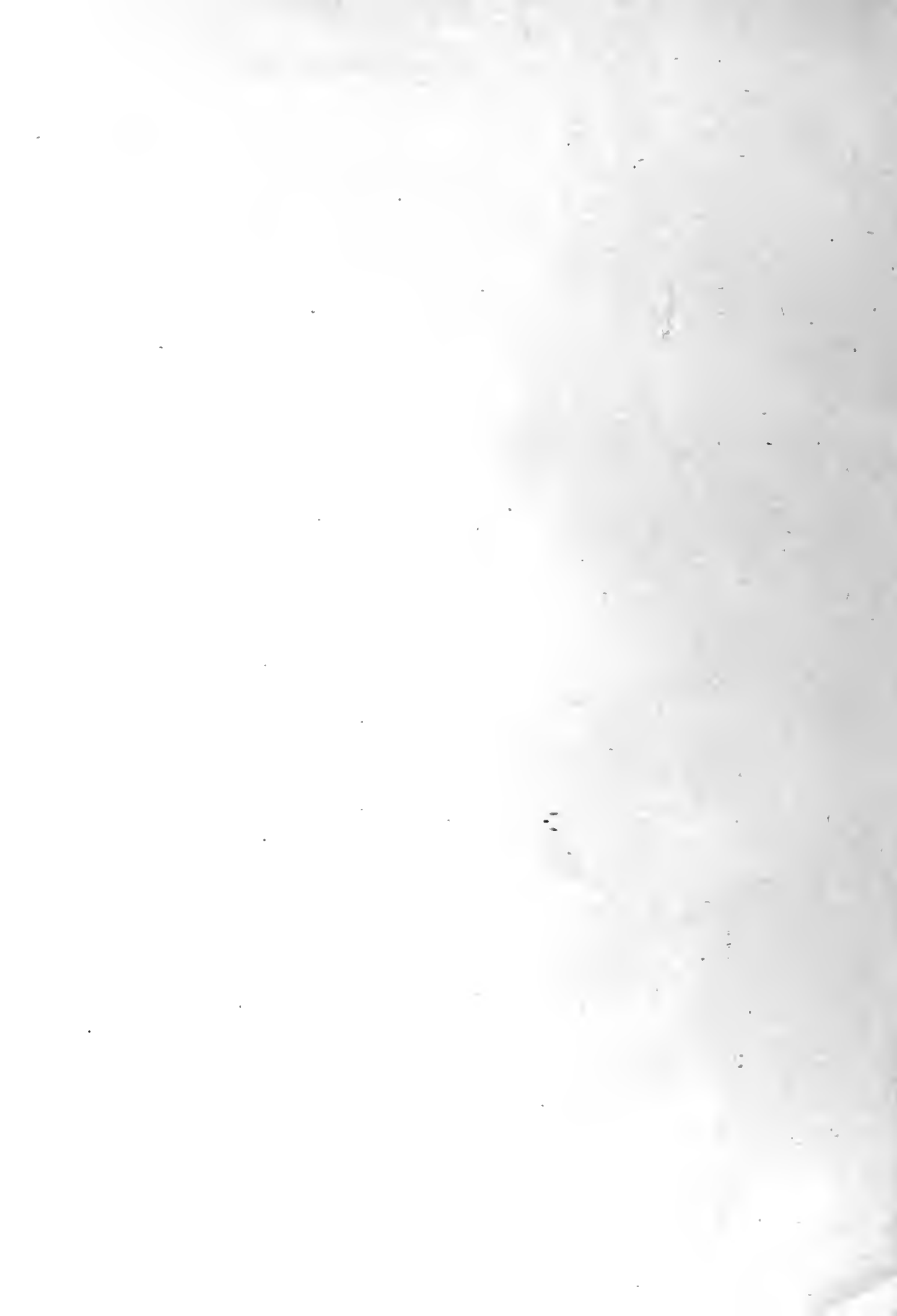
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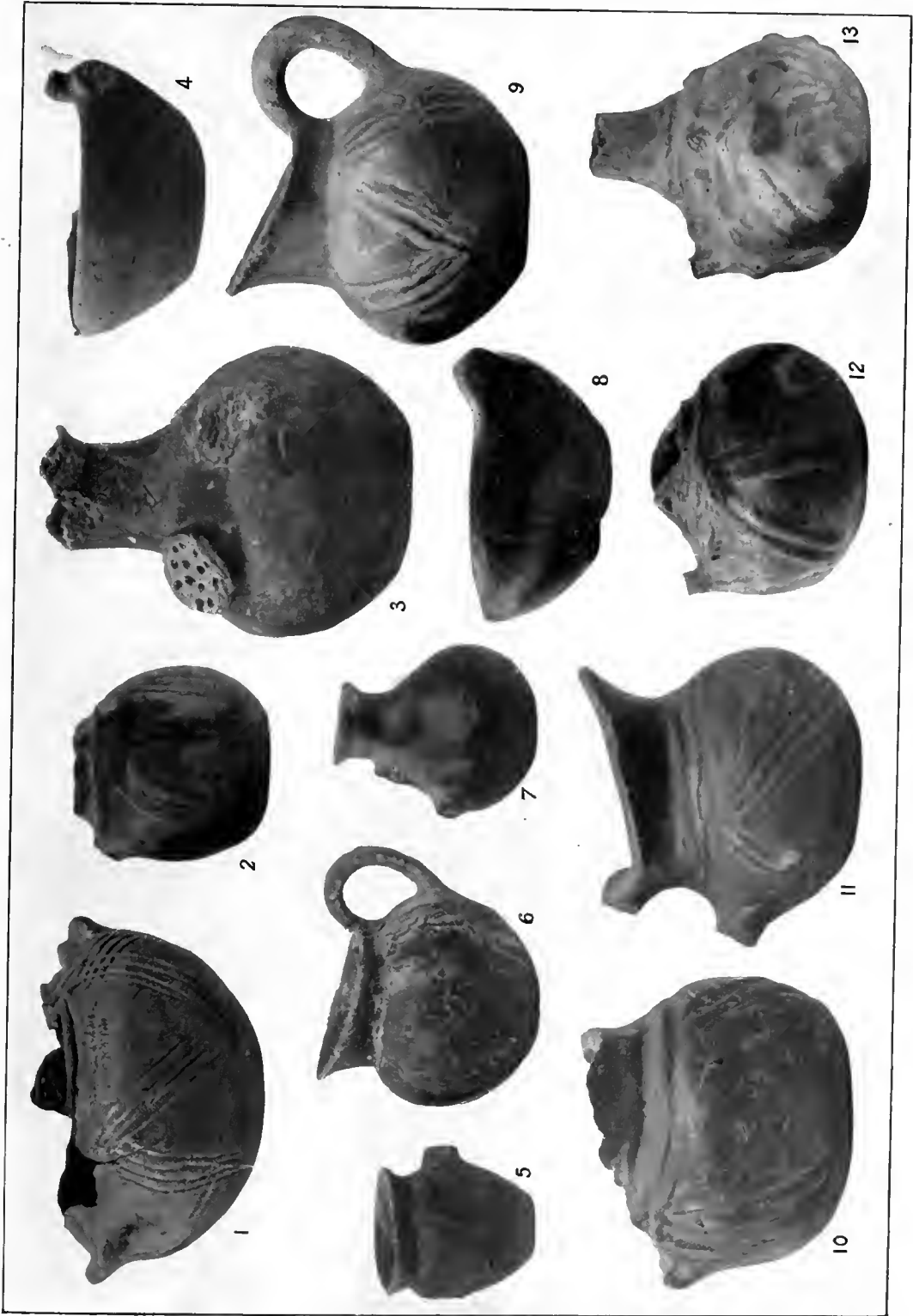




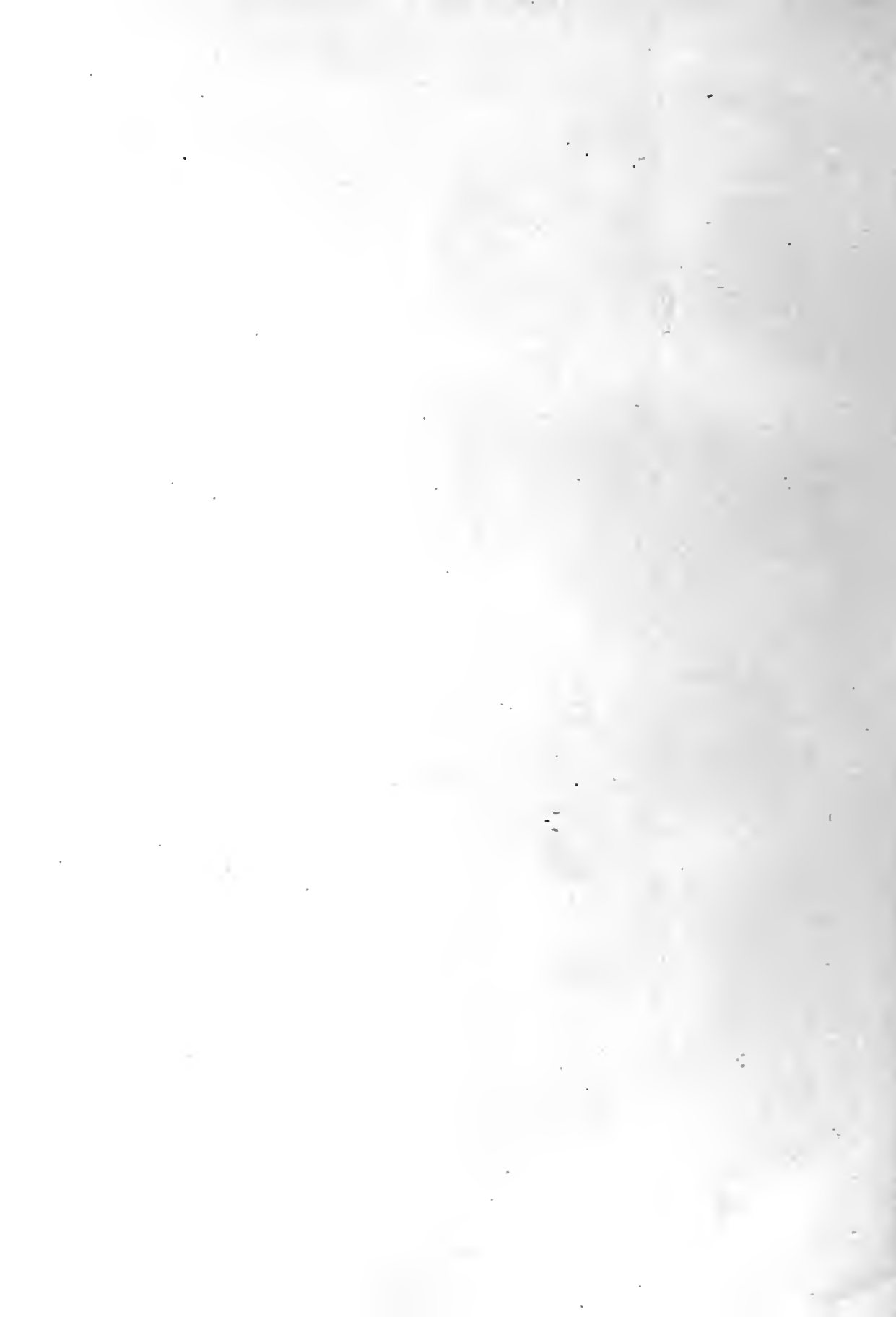
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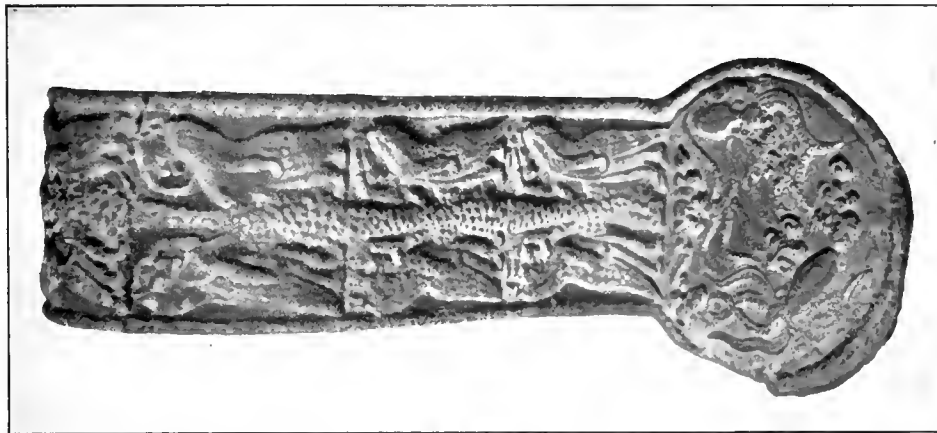






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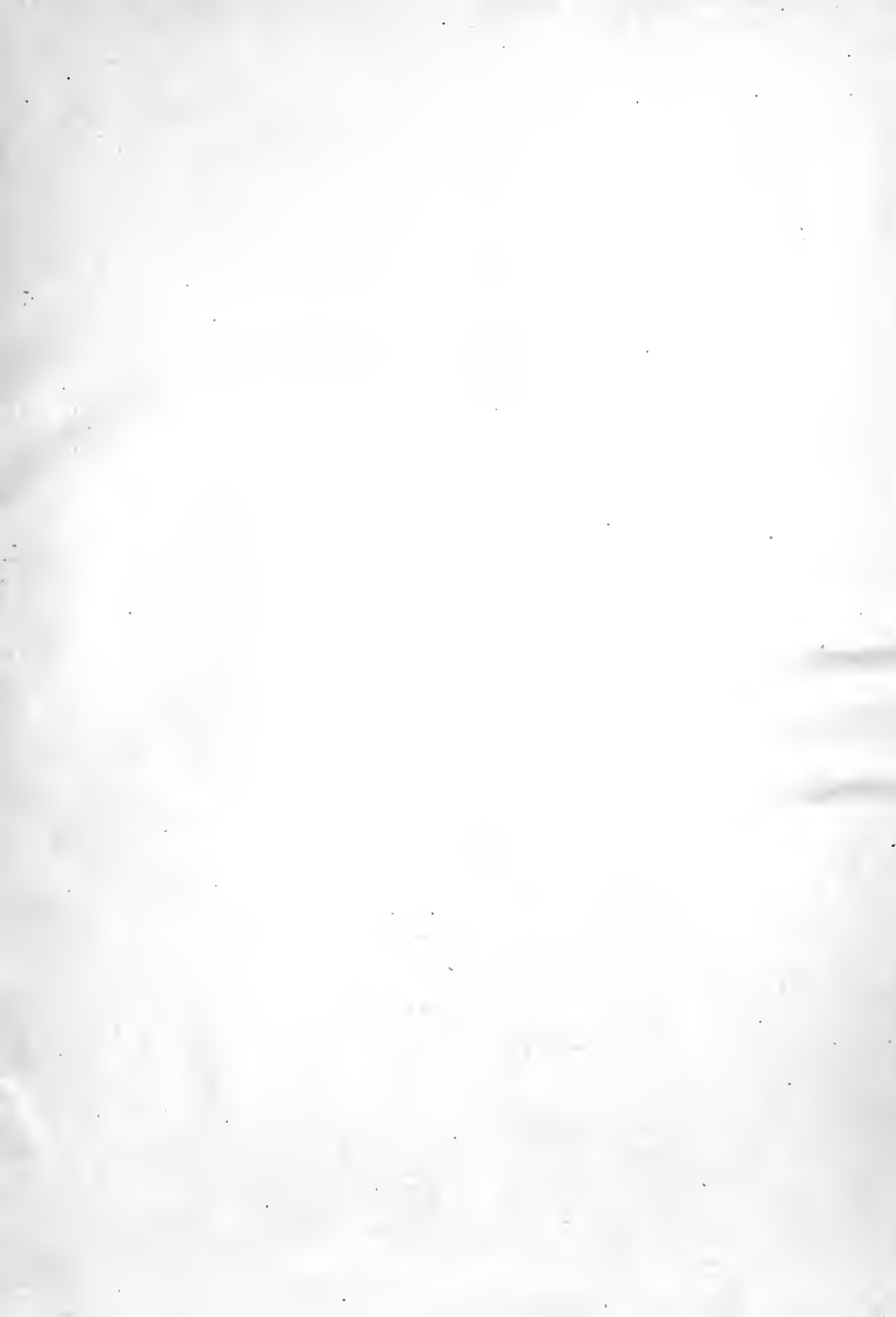
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